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## Version management

Publishing date	Applicant	Application item	Content
2017-12-01	Guo Tianyi	M7 benchmarking item	Increase chapters 2.15, 2.16, 2.1.4, 2.5.20, extend the fields of 1.5.14 and 2.8.1.
2017-12-05	Di Jingjing		Increase chapter 2.1.5, S+265
2017-12-14	Di Jingjing		Increase 1.1.36 obtain the setting template of the frame rate,
2017-12-18	Guo	M7	1. 2.3.31 extend S+, 2. increase 2.5.21, 2.16.4

	Tianyi	benchmarking item	2. Modify the protocol mode of 2.16.1, 2.16.2, 2.16.3
2017-12-18	Di Jingjin g		3. Update 1.1.36, increase video standard parameters
2017-12-26	Guo Tianyi	M7 benchmarking item	1. Extend 1.3.9, 1.3.11, 2.15.1, 2.15.4, 2.16.1 2. Modify 2.3.31
2017-12-26	Liu Jianfen g	Skyeye item	1. Increase 1.8.10, 2.14.47, 2.14.28, 2.14.49, 2.14.50 2. Modify 1.9.4, 1.9.5, 2.14.1, 2.14.2, 2.14.15, 2.14.16, 2.14.17, 2.14.19, 2.14.2, 2.14.22, 2.14.25, 2.14.36, 2.14.38, 2.14.39, 2.14.40, 2.14.42, 2.14.43
2017-12-28	Li Jingfan g		1. Modify 2.14.28 protocol head LicenseSetting spelling error
2018-01-05	Guo Tianyi	M7 benchmarking	1. Modify 1.3.12, 2.3.32, 2.4.1, 2.16.3 2. Increase 2.3.40, 2.5.22
2018-01-17	Guo Tianyi	M7 benchmarking	Modify 2.3.31, 2.3.32, 2.15.1
2018-01-23	Guo Tianyi	M7 benchmarking	Modify 2.3.31, 2.3.32
2018-01-23	Liu Jianfen g	Skyeye item	1. Modify 2.14.21, 2.14.22, increase non-snap lines 2. Increase 2.14.51 analogue trigger snap—use of traffic camera
2018-1-29	Guo Tianyi	M7 benchmarking	1. Increase 2.5.23
2018-2-5	Yang Pengfei	Skyeye item	1. Modify 1.1.35
2018-2-5	Liu Xiuqi	Skyeye item	1. Increase 2.14.0 type explanations 2. Modify 2.14.17, 2.14.18, 2.14.19, 2.14.20, 2.14.50
2018-2-5	Wang Huijie	Skyeye item	1. Modify 2.14.42, 2.14.43
2018-2-5	Guo Tianyi	M7 benchmarking	1. Increase 2.5.24
2018-2-9	Liu Jianfen g	Skyeye item	1. Modify 1.1.31, increase ITS information 2. Increase 1.14.52 3. Modify 2.14.46, 1.3.1 4. Modify 2.14.42, 2.14.43
2018-2-10	Liu Jianfen g	Skyeye item	1. 2.3.16 increase ITS_CHN ITS_SNAP, ITS_SYS, ITS_DOMDEV
2018-3-8	Liu Jianfen g	Skyeye item	1. Increase 2.14.53 2. Modify 2.14.37, 2.14.25, 2.14.32, 2.14.30, 2.14.46
2018-3-14	Liu Jianfen g	Skyeye item	1. cgi modify <analogTriggerInterval> analogue trigger interval range in 2.14.35 2. Increase 2.14.53 realize all coil trigger information default value as zero 3. Increase 2.14.54 set single coil trigger information default value as zero
2018-3-19	Guo Tianyi	M7 benchmarking item	1. Increase 2.1.6 2.1.7 2. Modify 2.15.1-2.15.5 support channel number
2018-3-21	Guo Tianyi	M7 benchmarking item	1. Modify 1.1.2 increase manually setting DNS field 2. Increase 2.1.8 increase obtaining results of video parameters



			3. Modify protocol format of 2.1.7, put keywords before channel No.
2018-3-26	Jiao Zan	Skyeye item	1. Increase 2.14.55 2. Modify 2.3.1, 2.14.0, 2.14.26, 2.14.36 Modify 2.14.38, 2.14.39, 2.14.40, 2.14.42, 2.14.43, 2.14.44 increase type
2018-3-28	Jiao Zan	Skyeye	1. Modify 2.14.26 two types of English translation 2. Modify 2.14.55 two types of English translation
2018-4-8	Jiao Zan	Skyeye	1. Modify 2.14.38 increase testSpeedEnabled 2. Modify 2.14.39 increase testSpeedEnabled 3. Modify 2.14.36 increase notes
2018-4-8	Guo Tianyi	M7 benchmarking	1. Whether IPC supports cloud upgrading 1.6.1 featured alert alarm interaction reuse old protocol 1.6.2 featured alert defense time reuse old protocol 2.3.31 featured alert capabilities and relevant contents, etc. 2. Increase 1.1.37 DHCP 2.3.41 obtain screen resolution list 2.3.42 obtain/set current resolution 2.7.41-47 featured alert and relevant contents
2018-4-11	Guo Tianyi	M7 benchmarking	1.1.11 extend manual DNS or not, 1.6.1 extend featured alert parameters under the white light interaction enabling, 2.3.18 reason for extending P2P not being on line 2.3.42 delete a useless XML field (voDevId), 2.7.47 delete two useless XML fields (channels)(scene), 2.3.43 increase obtaining all current screen resolution 2.3.44 increase IPC version information 2.7.43 increase explanations on key parameters
2018-4-12	Lin Yan	Skyeye	1. Modify 2.14.55 description
2018-4-16	Guo Tianyi	M7 benchmarking	1. 1.1.37 modify interface in URL to be interfaces 2. 2.3.31 extend capability set field 3. 2.7.46 delete the effective alert type field 4. 2.15.4 increase status code 5. 2.7.48 increase obtaining/setting currently effective alert type
2018-4-17	Guo Tianyi	M7 benchmarking	1. 2.7.46 url increases type
2018-4-17	Li Yunfei		1. Modify 1.1.31 increase 232 and 485 number
2018-4-19	Liu Xiuqi	Skyeye	1. Modify license plate supplementary lighting CGI protocol, increase exposure type
2018-4-25	Xu Xindi	Skyeye	1. Modify 2.2.16, 2.2.17, 2.2.18, 2.14.10 increase type
2018-4-25	Guo Tianyi	M7 benchmarking	1. Modify field: 2.7.43 mode under algorithm type; 2.7.46 distinguish target type and detection mode; 2. Modify notes: 1.1.10, 1.1.13, 1.1.27, 1.2.5, 1.5.2, 1.5.6, 2.3.5, 2.3.8, 2.3.27, 2.5.14, 2.5.17, 2.7.3, 2.7.17, 2.7.40, 2.7.45, 2.13.1 3. Increase notes: 1.1.1, 1.1.8, 2.12.11
2018-4-27	Jiao Zan	Skyeye	1. Increase 2.14.37 type
2018-5-2	Li Yunfei	Skyeye	Modify 2.14.5 protocol; the length limit of junction name characters is extended from 63 to 93
2018-5-2	Jiao Zan	Skyeye	1. Modify 2.14.44 protocol to obtain single-lane illegal parking region; 2. Increase 2.14.57 set obtaining multi-lane illegal parking region protocol

			3.Modify 2.14.25 increase vehicle type
2018-5-3	Wang Jiadong		1. Modify 2.14.55 and 2.14.26
2018-5-11	Jiao Zan	Skyeye item	1. Increase obtaining equipment registration status
2018-5-11	Guo Tianyi	Benchmarking	Increase: 1.1.38 obtain front-end basic properties, 2.7.49 intelligent analysis pause, 2.7.50 intelligent analysis recovery Modify: 1.5.14 increase two fields, 1.6.1 modify featured alert comment, 2.3.29 increase a hot standby status code, 2.3.32 increase a field, 2.7.46 modify and distinguish target fields
2018-5-14	Wang Jiadong	Skyeye	Modify: 2.14.26, increase vehicle front and rear detection Modify: 2.14.55, increase vehicle front and rear detection
2018-5-21	Guo Tianyi	M7	1. Modify 2.15.5 increase status description
2018-5-21	Wang Jiadong	Skyeye	1. 2.14.45 lane type increases pedestrian crossing
2018-5-21	Jiao Zan	Skyeye	1. 2.3.9 increase version type
2018-5-23	Han Yongqiang	V300 miniaturization item	1. Increase 2.2.43 image parameter summarization protocol
2018-5-24	Di Jingjing		1 Increase 1.7.3 obtain white light
2018-5-24	Jiao Zan	Skyeye	1. Increase 2.14.25 vehicle type
2018-5-29	Han Yongqiang	V300 miniaturization item	1. Update 2.2.43 protocol, increase Brightness field
2018-5-29	Di Jingjing	Universal	1、 Increase 2.2.44 minimum exposure time 2、 Extend 2.3.31 equipment channel capability set
2018-6-6	Di Jingjing	Universal	1、 Extend 1.7.2 obtain parameters of transferring color to black 2、 Extend 2.3.31 equipment channel capability set
2018-6-11	Di Jingjing	Alert gun item	1、 Increase 2.2.45 obtain/set equipment NP system
2018-06-12	Guo Tianyi	M7	1、 Increase video recording status notes of 2.5.1 2、 Extend 2.1.1 event parameter template enabling under audio and video parameters, 2.6.6 current mode under transferring color to black
2018-06-13	Guo Tianyi	M7	1、 Increase one XML field of 1.5.8 2、 Modify explanations on key parameters in 2.7.42, 2.7.46
2018-6-21	Di Jingjing	Universal	1、 Extend 2.1.1 meaning of SVC field 2、 Increase 2.7.9 target detection sensibility level
2018-6-22	Di Jingjing	Universal	1. Increase 2.13.2 manually control equipment status protocol
2018-6-27	Di	Universal	1. Supplement 2.7.9 explanations on scene field in

	Jingjin g		protocol
2018-6-29	Di Jingjin g	Universal	1、 Modify 1.7.2 obtain meaning of IR lamp control mode in parameters of transferring color to black
2018-07-3	Guo Tianyi	M7	3、 Increase type of obtaining alarm status, including: old alert, perimeter alert, trip-line alert, illegal parking, parking space guard, safety helmet.
2018-7-5	Xu Xindi	Skyeye	1、 Increase analogue trigger increase lane selection
2018-08-13 2018-08-13	Mao Heyu, Fan Dongdong	M7 super-fusion item	1、 Increase 2.3.47 typed equipment restart 2、 Increase 2.14.58 bayonet equipment parameters (single-channel) 3、 Increase 2.14.59 bayonet equipment parameters (multi-channel) 4、 Increase 2.14.60 lane management junction/place parameters (single-channel) 5、 Increase 2.14.61 lane management junction/place parameters (multi-channel) 6、 Increase 2.14.62 lane management lane/detection region parameters (single-channel) 7、 Increase 2.14.63 lane management lane/detection region parameters (multi-channel) 8、 Increase 2.14.64 upload setting parameters 9、 Increase 2.14.65 host machine No. 10、 Increase 2.14.66 picture deletion strategy 11、 Increase 2.14.67 query bayonet data 12、 Increase 2.14.68 total query bayonet data 13、 Increase 2.14.69 delete bayonet data 14、 Increase 2.14.70 modify bayonet query data 15、 Increase 2.14.71 obtain bayonet query condition capability set
2018-08-13	Fan Dongdong, Mao Heyu	M7 super-fusion item	1、 Extend 1.6.1 event interaction extension human face identification part 2、 Extend 1.6.2 event interaction extension human face identification part 3、 Extend 2.7.19 query statement 4、 Extend 2.7.23 export statement 5、 Increase 2.7.51 human face configuration channel enabling status 6、 Increase 2.7.52 human face identification alarm parameters 7、 Increase 2.7.53 human face identification base parameters 8、 Increase 2.7.54 batch obtain human face identification base parameters 9、 Increase 2.7.55 import human face base 10、 Increase 2.7.56 export human face base 11、 Increase 2.7.57 progress of importing/exporting human face base 12、 Increase 2.7.58 synchronize human face base to front-end for obtaining 13、 Increase 2.7.59 synchronize human face base to front-end for setting 14、 Increase 2.7.60 import human face basemap picture 15、 Increase 2.7.61 manage human face basemap picture 16、 Increase 2.7.62 query human face information

			<p>17、 Increase 2.7.63 identify human face import picture from group photo</p> <p>18、 Increase 2.7.64 identify human face identification results from group photo</p> <p>19、 Increase 2.7.65 map query human face information sending conditions</p> <p>20、 Increase 2.7.66 map query human face information obtaining results</p> <p>21、 Increase 2.7.67 export human face basemap</p> <p>22、 Increase 2.7.68 release transaction cache data</p> <p>23、 Increase 2.7.69 target alarm statistics</p> <p>24、 Increase 2.7.70 target alarm details</p> <p>25、 Increase 2.7.71 channel alarm statistics</p> <p>26、 Increase 2.7.72 obtain single-channel front-end human face identification capability set</p> <p>27、 Increase 2.7.73 obtain super-brain performance</p> <p>28、 Increase 2.7.74 obtain quantity of new alert sounds</p>
2018-8-22	Chang Guoxing	@XM20180111-TJ traffic management bureau guarantee item	1、 Extend 2.14.51, Type 2.
2018-9-4	Chang Guoxing	XM20180111-TJ traffic management bureau guarantee item	1、 Extend 2.14.24, 2.14.25 increase queuing length of flow statistics
2018-8-29	Chang Guoxing	XM20180111-TJ traffic management bureau guarantee item	1、 Extend 2.14.36 increase vertical snap enabling
2018-09-04	Mao Heyu	Chao Ronghe	Increase 2.7.75 and 2.7.76
2018-08-22	Jiao Zan	XM20180090-4K structured item	<p>1、 Extend 1.5.14, increase intelligent analysis type, structured algorithm.</p> <p>2、 Extend 1.6.1, increase defense and alarm interaction type, vehicle detection, mixed target detection, license plate shielding</p> <p>3、 Extend 1.7.2, increase setting of type of transferring color to black, supplementary lighting mode</p> <p>4、 Increase 2.7.75, structured algorithm protocol;</p> <p>5、 Increase 2.7.77, target picture protocol;</p> <p>6、 Increase 1.1.39, structured algorithm mode switchover protocol;</p> <p>7、 Extend 2.7.36, intelligent analysis algorithm start type, structured</p> <p>8、 Extend 2.3.31, increase channel capability level type, client side drawing human face</p> <p>9、 Extend 2.7.19 and 2.7.23, increase statement query and export type</p> <p>10、 Extend 2.3.1, increase character size type 128*128</p> <p>Extend 2.12, increase size properties</p>
2018-09-07	Jiao Zan	XM20180090-4K structured item	1. Extend 1.5.14, increase intelligent analysis type, increase algorithms of vehicle detection, mixed target detection, and license plate shade detection.

			<ul style="list-style-type: none"> <li>2. Extend 1.6.1 and 1.6.2, increase defense and alarm interaction type, vehicle detection, mixed target detection, license plate shielding, FTP server exception</li> <li>4. Extend 2.7.36, intelligent analysis algorithm start type, vehicle detection, mixed target detection, and license plate shade detection</li> <li>5. Increase 2.7.79 vehicle detection protocol</li> <li>6. Increase 2.7.80 mixed target detection protocol</li> <li>7. Increase 2.7.81 license plate shade detection protocol</li> <li>8. Extend 2.7.12, increase push graph strategy timing mode</li> </ul>
2018-09-10	Fan Dongdong, Mao Heyu	M7 super-fusion item	<ul style="list-style-type: none"> <li>1. Extend 2.7.1 obtain alarm information type</li> <li>2. Modify 2.7.56 human face base export</li> <li>3. Increase 2.7.81 human face base export is divided into two protocols</li> <li>4. Modify 2.7.59 increase deletion command</li> <li>5. Modify 2.7.61 increase human face picture path</li> <li>6. Extend 2.8.1 obtain alarm status type</li> </ul>
2018-09-13	Jiao Zan	XM20180090-4K structured item	<ul style="list-style-type: none"> <li>1. Extend 2.7.19, increase the type of query content being unknown</li> </ul>
2018-9-18	Jiao Zan	Structured	<ul style="list-style-type: none"> <li>1. Modify 2.7.36, 2.7.12, 2.7.78, 2.7.79, 1.5.14, 2.7.1, 2.8.1</li> </ul>
2018-09-10	Fan Dongdong	M7 super-fusion item	<ul style="list-style-type: none"> <li>1. Extend 1.5.1 set obtaining intelligent analysis algorithm start parameters</li> <li>2. Extend 1.5.14 set obtaining intelligent analysis algorithm capability set</li> <li>3. Extend 1.6.1 set obtaining alarm interaction parameters</li> <li>4. Extend 1.6.2 set obtaining defense time parameters</li> <li>5. Extend 2.3.9 obtain equipment version information</li> <li>6. Extend 2.7.1 obtain alarm information parameters</li> <li>7. Extend 2.7.2 set alarm information clearing</li> <li>8. Extend 2.7.6 set obtaining license plate identification parameters</li> <li>8. Extend 2.7.36 set obtaining intelligent analysis algorithm start parameters</li> <li>9. Extend 2.7.40 obtain intelligent analysis algorithm capability set</li> <li>10. Extend 2.7.54 batch obtain human face identification base parameters</li> <li>11. Increase 2.7.82 set obtaining safety helmet parameters</li> </ul>
2018-9-18	Jiao Zan	Structured	<ul style="list-style-type: none"> <li>1. Modify 1.5.14, increase structured algorithm mode type</li> <li>2. Delete 2.7.78 vehicle detection protocol</li> <li>3. Modify 2.7.79 mixed target detection protocol, extension mode type, comprehensive quality parameters</li> </ul>
2018-09-25	Fan Dongdong, Mao Heyu	M7 super-fusion item	<ul style="list-style-type: none"> <li>1. Modify 2.7.64 query analyzed human face results</li> <li>2. Modify 2.7.20 black and white license plate obtaining and setting</li> <li>3. Modify 2.7.7 parking space guard obtaining and setting</li> </ul>
2018-09-29	Ping Xinxin	XM20180090-4K structured item	<ul style="list-style-type: none"> <li>1. 2.7.23 Export list protocol increase export language field (language)</li> </ul>
2018-09-29	Fan	M7	<ul style="list-style-type: none"> <li>1. Extend 1.6.1 increase shm alarm</li> </ul>

	Dongdong	super-fusion item	
2018-10-11	Jiao Zan	XM20180090-4K structured item	1. Extend 2.8.1, increase FTP server exception alarm status type
2018-10-11	Ping Xinxin	XM20180090-4K structured	1. 2.3.31 whether support the illuminance of white light
2018-10-18	Jiao Zan	XM20180090-4K structured item	1. Extend 2.2.30, increase opt properties report exposure mode list 2. Extend 2.2.16, increase the maximum and minimum aperture setting
2018-11-02	Cai Zhaoxu	XM20180119-16CV500 front-end seriation	1. 2.7.53 Extend threshold and picstreamEnable fields 2. 2.7.25 Extend faceHeatMap 3. Increase 2.7.83 4. Increase 2.7.84 5. Increase 2.7.85 6. Increase 2.7.86
2018-11-03	Fan Dongdong		1、 1.1.31 Increase the maximum number of human face base and the maximum number of human face pictures
2018-11-07	Cai Zhaoxu	XM20180119-16CV500 front-end seriation	1. 2.7.83, 2.7.84 <responseStatus> change to standard mode
2018-11-09	Cai Zhaoxu	XM20180119-16CV500 front-end seriation	1. 2.3.32 Extend spaceHeatMap: space heat map. algoResourceProcess: algorithm resource distribution
2018-11-10	Fan Dongdong		1、 Increase 2.3.48, set the user name and password of enabling certification 2、 Increase 2.3.49, set and obtain enabling status of enabling certification 3、 Extend 2.7.55, increase password of importing human face base 4、 Extend 2.7.56, increase password of exporting human face base
2018-11-13	Guo Yongfang		1、 Modify 2.3.48, set the user name and password of enabling certification, word spelling error, increase length of user name
2018-11-15	Cai Zhaoxu		1、 2.7.83 Increase GET
2018-11-29	Cai Zhaoxu		1、 2.7.12 push graph strategy extension access (access control mode)
2018-12-07	Cai Zhaoxu		1、 Increase 2.3.50 port output current use
2018-12-12	Huang Kuifeng		1、 2.14.36 Increase <peopleRedSnapEnable> 2、 2.14.37 Extend 50: human face small picture, 3-human face small picture (pedestrian running red light mode), increase <picIndex>, <facePicSize>, <faceTargetFrame> 3、 1.1.35 Increase <smallFaceUpload> 4、 2.14.29 Increase <lightDetectTimeOut> 5、 2.14.46 Increase <productNumber>

			6、2.14.55 Increase running traffic jam 7、2.14.0 Increase running traffic jam 8、Increase 2.14.72, 2.14.73 9、2.14.7 Increase < flashStrobLampEnable >, < autoFlashStrobLampEnable >
2018-12-15	Guo Yongfang		1、Extend 1.6.1 increase interaction front-end port alarm output field
2018-12-19	Fan Dongdong	DZ18636-Dubai connection videoguard customization	1、Increase setting and obtaining Webservice information 2.3.51
2018-12-19	Wang Lijun	XM20180119-16CV500 front-end seriation	1、Increase modeling report progress protocol 2.7.87
2018-12-22	Yin Chong	XM20180135-skyeye series traffic camera upgrading	1、Increase 2.14.74 parameters of motor vehicles giving precedence to pedestrians
2019-01-01	Cai Zhaoxu	XM20180119-16CV500 front-end seriation	1、2.7.62 Increase <downloadfacePath> field, encrypt the file name, remove the digest certification to solve the CGI download
2019-01-09	Guo Yongfang		1、Modify 2.3.31, increase HD template in the capability set type 2、Increase setting and obtaining channel expansion way number protocol
2019-01-14	Guo Yongfang		1、Increase 2.3.53/2.3.54/2.3.55/2.2.46 2、2.3.31 Extend defaultSchedule: HD template recovery default
2019-01-15	Yin Chong		1、2.14.6 Extend 2-horizontally arrange two and close-up image; 3-vertically arrange two and close-up image
2019-01-19	Guo Yongfang		1、Increase 1.1.40
2019-03-06	Zhang Bao		1、2.3.31 Extend video turning: videoFlip, NP system setting: npModeSwitch
2019-03-013	Wang Lijun		1、2.7.12 Increase switches of transmitting big pictures and small pictures
2019-03-013	Liu Quanwei		1、2.3.31 Increase human face detection and demographics mutual exclusion FaceDetectDemographics
2019-03-018	Wang Lijun		1、Delete the contents of chapter 2.7.12 as below, including the example contents <BigPic> transmit big picture type enabling <SmallPic> transmit small picture type enabling <Feature> transmit picture feature data type enabling 2、Increase chapter 2.7.88, about snap extension parameters 3、Modify 2.7.12 snap times snapTimes notes 10 times
2019-03-028	Wang Shan	DZ19153	1、Increase 2.7.89 unlock human face base 2、Extend 2.7.53 3、Extend 2.7.54

			4、 Extend 2.7.62 5、 Extend 2.7.66
2019-4-02		DZ19163.4	1、 Increase type OSD line number 2、 Increase type OSD block number
2019-04-04	Jiao Zan	DZ18719.1	1、 Increase character size scale 72*72
2019-3-27	Liu Quanwei	DZ19079 Meituan customized	1、 Extend 2.7.11 demographics minimum target size (pixel)
2019-04-11	Wang Lijun	XM20190056-500W human face snap machine	1、 Increase 2.3.56 post focusing control 2、 Increase 2.3.57 ABF function switch Extend 2.3.31 ABF(AutoBackFocus) capability set
2019-04-17	Ma Ruichao	Universal	1、 Increase 2.7.89 human face detection region parameters 2、 Increase 2.7.90 human face detection region list 3、 Increase 2.7.91 intelligent analysis scene recovery time 4、 Increase 2.7.92 intelligent analysis cruise enabling type 5、 Increase 2.7.93 intelligent analysis cruise template 6、 Extend 2.3.31 equipment channel capability set 3、 7、 Extend 2.7.88 snap extension parameter
2019-04-17	Zhang Chenglun	Universal	1、 Delete 2.7.28 intelligent tracking parameters 2、 Extend 1.5.15 intelligent tracking parameters 3、 Extend 1.5.1 intelligent analysis algorithm start parameters 4、 4、 Extend 2.7.41 featured alert call scene
2019-04-17	Zhang Jianzhong	Universal	5、 1、 Extend 2.7.81 safety helmet detection parameters
2019-04-17	Yin Chong	Skyeye upgrading	1、 Increase 2.14.75 and 2.14.76
2019-4-15	Liu Jiaxing	Universal	1、 Increase 1.8.11 set the clearing setting 2、 Increase 1.8.12 clearing configuration item capability level 3、 Increase 1.8.13 acceleration sensor correction protocol 4、 Increase 1.8.14 obtain peripheral type list capability level 5、 Increase 1.8.15 peripheral type parameter protocol 6、 Increase 1.8.16 dome camera title name protocol 7、 Increase 1.8.17 dome camera menu parameter protocol 8、 Increase 1.8.18 dome camera PTZ relevant parameter protocol 9、 Extend 1.8.2 PTZ protocol setting WorkMode new peripheral mode type
2019-4-15	Zhang Jianzhong	Universal	1、 Increase 1.8.19 focusing mode parameters 2、 Increase 1.8.20 minimum focusing distance parameters
2019-4-18	Zhang Bao	Universal	1、 Increase shielding region protocol 2、 Extend capability level, increase support shielding area setting
2019-4-18	Zhang Jianzhong	XM20190041-5MP alert dome	1、 Increase 1.8.21 set focusing region
2019-4-23	Ma Ruichao	XM20190041-5MP alert	1、 Increase 2.7.96 calibrate tracking magnification



	o	dome	
2019-4-25	Zhang Bao	XM20190041-5MP alert dome	1、 Increase mutually exclusive function type when it is larger than 25 frames/30 frames
2019-4-24	Wang Shan	XM20190062 nvr compatible ipc three intelligent functions	1、 Extend 2.3.31 capability and type 2、 Extend 2.3.31 capability and type 3、 Increase 1.1.41 Increase 1.6.3
2019-4-26	Wang Lin	XM20190041-5MP alert dome	1、 Modify shielding region protocol, increase rule number and scene type
2019-4-28	Wang Shan	DZ19153.1	Increase 1.4.2
2019-04-25	Ping Xinxin	XM20190041	1、 Extend 2.3.31 equipment channel capability set Extend 2.1.2 key region parameters
2019-04-29	Yin Chong	Skyeye upgrading	1、 Supplement 2.14.0 type explanations
2019-05-06	Cheng Zhaoduan	XM20190041-5MP alert dome	1、 2.3.11 Extend gat1400
2019-05-01	Zhang Bao	XM20190041-5MP alert dome	1、 Increase supporting for setting electronic anti-shake class capability level; 2、 Extend electronic anti-shake class setting
2019-05-01	Zhang Bao	XM20190041-5MP alert dome	1、 Increase alarm type of alarm interaction parameter setting: temperature and humidity alarm type 2、 Increase defense time setting type: temperature and humidity alarm type; 3、 Increase temperature and humidity alarm parameters
2019-05-06	Ping Xinxin	XM20190041-5MP alert dome	1、 2.3.1/CGI/System/Video/inputs/channels/<ID>/overlays/types/<ID>increase Chinese date overlaying
2019-05-08	Zhang Jianzhong	XM20190041-5MP alert dome	1、 2.3.31 Extend system capability set, increase serial port mode, priority mode, and temperature control mode 2、 2.7.41 Extend scene call support privacy shielding
2019-05-08	Yin Chong	Skyeye upgrading	1、 Increase 2.14.77, 2.14.78 2、 2.3.16 Extend IMAGE: represent image parameters 3、 2.14.5 Increase <channelProperty>
2018-5-16	Wang Lijun	DZ19273.2-16 CV500 SenseTime human body algorithm import customization	1、 Increase 2.7.97 human shape snap parameters 2、 Modify 1.5.1 increase Human: human shape detection 3、 Modify 1.5.14 add human shape algorithm
2018-5-20	Ma Ruichao	XM20190041-5MP alert dome	1、 2.7.9 Advanced parameter extension SceneType
2019-05-20	Zhang Bao	XM20190041-5MP alert dome	1、 Increase alarm type of alarm interaction parameter setting: temperature and humidity alarm type 2、 Increase defense time setting type: temperature and humidity alarm type; 3、 Increase temperature and humidity alarm parameters
2019-05-20	Zhang Bao	XM20190041-5MP alert dome	1、 Extend 2.8.1 increase temperature and humidity alarm

2019-05-20	Zhang Bao	XM20190041-5MP alert dome	1、 1、 2.3.31 Capability level protocol increases Onvif support 265 video access, and modifies ture in description to be true 2、 2.3.11 Extend platform start information, increase whether onvif allows to access the H265 video;
2019-05-20	Ping Xinxin	XM20190041-5MP alert dome	1、 Extend 2.3.23 privacy shielding parameters
2019-5-21	Hou Xianglin	BD20190481	1、 2.7.12 Increase living body detection switch protocol
2019-5-24	Hua Qiang	DZ19221	1、 Extend type in Url for obtaining QR code/SN code protocol 2、 Extend type in Url for obtaining/setting reserved information
2019-5-29	Wang Jianlong	XM20190062 nvr compatible ipc three intelligent functions	1、 Extend 2.3.31 capability and type Intelligent alarm support multi areas: smartAlmMulArea,
2019-6-5	Qin Guiqian	XM20190080-water conservancy gun and water conservancy ball	1、 Extend 2.7.83 intelligent resource management switchover protocol
2019-6-19	Wang Xiaowei	DZ19176.2	1、 Increase RFID coil configuration protocol
2019-6-18	Xu Xindi	XM20190100	Increase protocol corresponding to setting IO converter IO port and flow camera lane No.;
2019-6-19	Liu Zhaoguang	XM20190100	Increase setting and obtaining flow camera connection information
2019-06-18	Zhang Bao	XM20190100	1、 Extend flow statistics parameter setting protocol 1.9.2 and 1.9.3 2、 Extend intelligent resource management switchover protocol 2.7.83 3、 Extend obtaining traffic flow statistics information protocol 2.14.25 4、 Extend traffic setting lane parameter protocol 2.14.5 5、 Increase setting lane trigger passing signal
2019-6-26	Jia Tinghe	BD20190607--1_2 disk position human face NVR increase outlet (universe, neutral) model patching	1、 Modify 2.7.61 certType field explanations, increase two types 2、 Extend 2.7.61 field Increase country, address, company name 3、 Modify 2.7.62 certType field explanations, increase two types 4、 Extend 2.7.62 field Increase country, address, company name 5、 Modify 2.7.66 certType field explanations, increase two types 6、 Modify 2.7.69 certType field explanations, increase two types
2019-06-18	Xu Xindi	XM20190100	1、 Extend protocol corresponding to setting IO converter IO port and flow camera lane No.;
2019-6-26	Wang	DZ19330.3	1、 Increase equipment automatic snap configuration

	Jiajing		protocol
2019-7-05	Jia Tinghe	BD20190607--1_2 disk position human face NVR increase outlet (universe, neutral) model patching	1、 Modify 2.7.62 certType field explanations, increase country, address, and company name
2019-7-10	Zhang Chenglun	DZ19310	1、 Increase 2.3.59 /CGI/System/Network/Tencent/<ID>
2019-07-6	Wang Xiaowei	DZ19473-Shanghai overload control station weighing instrument connection	1、 Extend peripheral serial port protocol 1.8.10 : 17, weighing instrument SH
2019-6-29	Wang Lijun	XM20190107-Tianjin oilfield pipeline monitoring	<ol style="list-style-type: none"> <li>1. Increase 2.7.98 oilfield monitoring protocol</li> <li>2. Increase 2.7.99 switchover scene snap protocol</li> <li>3. Modify 1.5.1 add Pept: oilfield monitoring</li> <li>4. Modify 1.5.14 add Pept oilfield monitoring algorithm</li> <li>5. Modify 1.6.1 add Pept oilfield monitoring alarm interaction</li> <li>6. Modify 1.6.2 add Pept oilfield monitoring defense time</li> <li>7. Modify 2.3.31 add switchover scene snap capability set</li> <li>8. Modify 2.7.1 add PeptIntrusion oilfield monitoring-defense region intrusion alarm PeptResident oilfield monitoring-exception settlement alarm</li> <li>9. Modify 2.7.2 add PeptIntrusion oilfield monitoring-defense region intrusion alarm PeptResident oilfield monitoring-exception settlement alarm clearing</li> </ol> Modify 2.8.1 add PeptIntrusion oilfield monitoring-defense region intrusion alarm PeptResident oilfield monitoring-exception settlement alarm
2019-7-15	Zhang Chenglun	DZ19502-KS ActiveSDK connection customization	1、 Add 2.3.60
2019-7-16	Di Jingjing Fan Dongdong	BD20190696C GI file test patching	<ol style="list-style-type: none"> <li>1、 Globally search Jiao Zan, Ping Xinxin, Yang Jianqiang, Guo Tianyi, Mao Heyu, Guo Yongfang, y3j, Han Yongqiang, remove annotation</li> <li>2、 .1.26 GeneralResource line feed</li> <li>3、 1.5.2 1.5.13 2.7.28 deleted, file deleted directly</li> <li>4、 1.2.1 modified to be /ISAPI/Security/adminAccesses</li> <li>5、 1.1.11 modified to be /ISAPI/System/Network/interfaces/IPandPort/&lt;ID&gt; Keep consistent with equipment realization.</li> <li>6、 1.1.4 Supplement explanations. Key parameters modified to be &lt;useSSL&gt; represented purpose, NVR: download: selected download, upgrade: selected upgrading, IPC: ture filling, not using this parameter</li> <li>7、 2.2.5 Key parameter &lt;id&gt; represents ID, modified &lt;id&gt; represents Schedule corresponding sequence</li> </ol>

			<p>number</p> <p>8、 1.5.1 2.7.36 Modify key parameter explanations to be &lt;enabled&gt; represents intelligent analysis enabling, IPC: true: open, false: close NVR: disable non-enabling, local intelligent analysis enabling, remoteIPC intelligent analysis enabling</p> <p>9、 2.13.1 Increase type, one is AllCapabilities , currently only supporting this type query</p> <p>10、 Delete repetitive protocol</p> <p>1.5.5 same as 2.7.32 1.5.9 same as 2.7.33 1.5.7 same as 2.7.34 1.5.10 same as 2.7.35 1.5.8 same as 2.7.37 1.5.2 same as 2.7.38 1.5.1 same as 2.7.36 Delete same consequential chapter</p>
2019-07-22	Wang Lijun	XM20190130-16CV500 full range human face product upgrading	1.Modify 2.7.61 extension document type, add passport and employee No.
2019-07-29	Di Jingjing	BD20190696	<p>1、 1.1.1 Modify initials of outputVolume and echoRestrain in case to be lowercase.</p> <p>2、 1.1.20 Improve type parameter introduction</p> <p>3、 1.1.28 Only requires explanations on agreement</p> <p>4、 1.1.29 Supplement explanations on agreement</p> <p>5、 1.1.31 Protocol only has get, modified to be response XML</p> <p>6、 1.1.36 Exchange request XML resolution height-width</p> <p>7、 1.1.39 Modify key parameter explanations to be type, modify hyperlink in XML BLOCK and put cases,</p>
2019-07-29	Di Jingjing	BD20190696	<p>1、 1.2.1 Supplement key parameter explanations</p> <p>2、 1.2.3 Supplement key parameter explanations</p> <p>3、 1.2.6 Response XML unified to be GET Supplement explanations on agreement</p>
2019-07-29	Di Jingjing	BD20190696	1、 1.6.1 Shielding alarm loss/
2019-07-29	Di Jingjing	BD20190696	<p>1、 1.7.2 The opt in mode supplements fillLight. The infraredLampMode in request case is modified to be 1 PUT and GET commands correspond to protocol The infraredLampMode in XML BLOCK supplements 1 Protocol is modified to be CGI, IE uses CGI</p> <p>2、 1.7.3 Request case removes blank space, and is modified to be contrltype.</p>
2019-07-29	Di Jingjing	BD20190696	<p>1、 2.1.1 The videoCodecType in StreamingChannelXML BLOCK removes HK.264 in opt Modify parameter explanations vbrLowerCap H264Profile np-Mode</p> <p>2、 2.1.2 Remove blank spaces before and behind dynamicEnable in request case</p> <p>3、 2.1.3 Supplement size explanations in key parameter explanation</p>

2019-07-29	Di Jingjing	BD20190696	<ul style="list-style-type: none"> <li>1、 2.2.1 Supplement key parameter explanations</li> <li>2、 2.2.6 Repetitive with 1.7.2, delete 2.2.6</li> <li>3、 2.2.8 Supplement explanations on agreement</li> <li>4、 2.2.9 Supplement key parameter explanations</li> <li>5、 2.2.10-14 Delete red font part</li> <li>6、 2.2.17 Title painter is black. Delete red font part.</li> <li>7、 2.2.18 Supplement key parameter explanations XML Block deletes red font part</li> <li>8、 2.2.19-25,28,31,33-39,41, delete currentTemplate in XML Block</li> <li>9、 Delete 2.2.29, because it is repeated with 2.2.13.</li> <li>10、 2.2.42 Delete red font.</li> <li>11、 2.2.44 Delete "speed" (two characters in Pinyin: Su Du) in key parameter explanations</li> <li>12、 2.2.46 Modify interface name.</li> </ul>
2019-07-29	Di Jingjing	BD20190696	<ul style="list-style-type: none"> <li>1、 2.3.1 Actually use type. Modify the protocol according to this field.</li> <li><b>Line feed General Resource v2.0</b></li> <li>2、 2.3.2 Delete redundant partial red font in key parameter explanations</li> <li>3、 2.3.3 Modify PrivacyMaskXML Block explanation, and key parameter explanations</li> <li>4、 2.3.6 Supplement key parameter explanations</li> <li>5、 2.3.7 2.3.8 Remove network in protocol</li> <li>6、 2.3.22 Modify key parameter explanations, remove red font</li> <li>7、 2.3.23 Modify test case</li> <li>8、 2.3.36 Protocol is repeated with 2.3.3, and is fully deleted.</li> </ul>
2019-07-29	Di Jingjing	BD20190696	<ul style="list-style-type: none"> <li>1、 2.9.5 Modify test case</li> </ul>
2019-07-29	Di Jingjing	BD20190696	<ul style="list-style-type: none"> <li>1、 2.13.1 2.13.2 Modify explanations on agreement</li> </ul>
2019-07-29	Hou Xianglin	BD20190696	<ul style="list-style-type: none"> <li>1、 1.5.11 Increase &lt;audioInputException&gt; field meanings</li> <li>2、 2.3.59 Increase meanings of id and key</li> <li>3、 2.3.60 Delete blank spaces</li> <li>4、 Delete blank spaces between fields</li> <li>5、 2.7.30 Increase &lt; sensitivityLevel &gt;&lt; invasionTime &gt; meanings and value range</li> </ul>
2019-07-29	Wang Lijun	BD20190696	<ul style="list-style-type: none"> <li>1、 Modify 1.5.12 modify xml element definition, delete useless contents</li> <li>2、 Modify 2.7.13, PUT case deletes redundant blank spaces, modify alarmrule to be displayRule</li> <li>3、 Modify 2.7.15 increase explanations on off-duty time and on-duty number of people</li> <li>4、 Modify 2.7.16 add explanations on illegal parking detection time and enabling time</li> </ul>
2019-07-29	Liu Quanwei	BD20190696-CGI	<ul style="list-style-type: none"> <li>1、 1.6.1 Modify /ISAPI/Event/triggers/alert -1 protocol, increase version explanations</li> <li>2、 2.7.7 Modify /CGI/Smart/GuardPark/protocol, improve protocol format</li> <li>3、 2.7.9 Modify /CGI/Smart/Advance/channels/, improve protocol format, increase explanations on protocol xml field enable.</li> <li>4、 2.7.11 Modify /CGI/Smart/Demographics, improve</li> </ul>

			<p>protocol format.</p> <p>5、2.7.12 Modify /CGI/Smart/FaceDetect/, improve protocol format, pushMode increases collision line opt collisionLine.</p> <p>6、1.5.3 Modify /ISAPI/Smart/DoubleLineDetection, delete useless xml field intelliBackSearch, normalizedScreenWidth, normalizedScreenHeight, and increase explanations on minObjectSize and maxObjectSize.</p> <p>7、1.5.10 Modify /ISAPI/Smart/AudioDetection/, delete PUT protocol.</p>
2019-07-29	Wang Jiajing	BD20190696	<p>1、2.14.13 Improve protocol file description and modify cases.</p> <p>2、2.14.15 Improve agreement file description and modify cases.</p> <p>3、2.14.16 Modify cases;</p> <p>4、2.14.24 Modify cases;</p> <p>5、2.14.25 Modify cases;</p> <p>6、2.14.26 Improve cases;</p> <p>7、2.14.27 Improve cases;</p> <p>8、2.14.28 Improve cases;</p> <p>9、2.14.29 Improve cases;</p>
2019-07-29	Zhang Jun	BD20190696	<p>1、2.14.2 Improve cases;</p> <p>2、2.14.8 Modify cases;</p> <p>3、2.14.11 Improve cases;</p> <p>4、2.14.12 Improve cases;</p> <p>5、2.14.13 Improve cases;</p> <p>6、2.14.31 Improve cases;</p> <p>7、2.14.32 Improve cases;</p> <p>8、2.14.33 Improve cases;</p> <p>9、2.14.34 Improve cases;</p> <p>10、2.14.35 Improve cases;</p> <p>11、2.14.36 Improve agreement file description and cases;</p> <p>12、2.14.37 Improve cases;</p> <p>13、2.14.39 Improve cases;</p>
2019-07-29	Zhang Bao	BD20190696	<p>1、1.8.10 Modify cases, modify Chinese quotation marks in English;</p>
2019-07-22	Zhang Bao	BD20190696	<p>1、1.1.24 Improve agreement file description, remove redundant blank spaces in cases</p> <p>2、1.1.26 Complete agreement file description and key field meanings;</p> <p>3、1.1.27 Improve agreement file description, remove redundant fields</p> <p>4、2.14.1 Improve agreement file description, remove redundant blank spaces</p> <p>5、2.14.73 Increase test cases</p> <p>6、2.14.76 Increase test cases</p> <p>7、2.14.80 Remove blank spaces in agreement cases</p> <p>8、2.14.81 Remove first line version information and other headers in cases</p> <p>9、2.14.82 Remove GET in cases</p>
2019-07-29	Xu Xindi	BD20190696	<p>1、2.14.18 Modify PUT response XML in cases to be ResponseStatus</p> <p>2、2.14.42 Supplement file parameter units, modify Chinese quotation marks in cases;</p> <p>3、2.14.44 Increase parameter explanations, remove redundant cases;</p>

			<p>4、2.14.47 Increase key parameter range;</p> <p>5、2.14.49 Delete PUT in cases, increase key parameter description</p> <p>6、2.14.50 Supplement cases;</p> <p>7、2.14.79 Modify cases and description;</p>
2019-07-29	Tang Qifu	BD20190696	<p>1、2.14.40 Supplement parameter range and case modification;</p> <p>2、2.14.43 Supplement parameter range and case modification;</p> <p>3、2.14.45 Supplement parameter range and case modification;</p> <p>4、2.14.46 Supplement parameter description and case modification;</p> <p>5、2.14.55 Supplement parameter description and case modification;</p> <p>6、2.14.56 Supplement parameter description and case modification;</p> <p>7、2.14.57 Supplement parameter description and case modification;</p>
2019-7-29	Ma Ruichao	BD20190696	<p>1.5.1 Modify table first line format; modify &lt;enabled&gt; field meanings; Remove blank cases in PUT case &lt;sceneName&gt;;</p> <p>2、1.5.3 Explain ID in URL; &lt;identifyType&gt; modify "human and vehicle" &lt;sensitivityLevel&gt; field to &lt;tripwireMinTimeInterval&gt; increase range explanations</p> <p>3、1.5.4 Explain ID in URL; &lt;alarmColor&gt;, &lt;noAlarmColor&gt;, &lt;invasionTime&gt; increase range; &lt;positionX&gt;, &lt;positionY&gt; increase range</p>
2019-7-29	Ma Ruichao	BD20190696	<p>1、2.7.3 &lt;alarmColor&gt;, &lt;noAlarmColor&gt; increase range</p> <p>2、2.7.4 Remove redundant &lt;id&gt; in AttendedBaggageXML; &lt;alarmColor&gt;, &lt;noAlarmColor&gt;, &lt;alarmTime&gt; increase range</p> <p>3、&lt;alarmColor&gt;, &lt;noAlarmColor&gt;, &lt;alarmTime&gt; increase range</p> <p>4、Increase PUT cases</p>
2019-7-29	Liu Zhaoguang	BD20190696	<p>1、Improve 1.1.2 &lt;ipAddress&gt; description in key parameter explanations</p> <p>2、Modify 1.1.4 describe error and test cases</p> <p>3、Modify 1.1.6 XMLBolck description</p> <p>4、Modify 1.1.7 key parameter explanations, delete redundant contents</p> <p>5、1.1.10 Agreement interface description format boldface, increasing put cases</p> <p>6、1.1.13 Increase description of key parameters to the supported login mode and encrypted modes</p> <p>7、1.1.16 Increase description of partial key parameter support types</p> <p>8、1.1.35 Increase description of meanings and range of key parameters contentType and contentDefine.</p> <p>9、1.8.2 Modify head description, supplement description of key parameters, modify Chinese quotation marks in xml description, delete redundant blank spaces in &lt;WorkMode&gt;</p> <p>10、1.8.3 Modify Chinese quotation marks in XML description, supplement lacked \ in test cases</p> <p>11、1.8.4 and 1.8.5 supplement test cases</p>

			<p>12、 1.8.6 and 1.8.7 supplement blank spaces of protocol head in tables, supplement test cases</p> <p>13、 Modify 1.8.8 function description in tables</p> <p>14、 Modify 1.8.9 protocol head contents in tables, modify Chinese quotation marks in xml description</p> <p>15、 Modify 1.8.11 and 1.8.12 test cases</p> <p>16、 Modify 1.8.13 table description, supplement explanations on key parameters, delete redundant blank spaces in test cases.</p> <p>17、 Delete 1.8.15 redundant blank spaces in xml description</p> <p>18、 Modify 1.8.16 test case use XML description, modify Chinese quotation marks, delete redundant blank spaces</p> <p>19、 Modify 1.8.17 test cases</p> <p>20、 Supplement 1.8.19, 1.8.20, 1.8.21 explanations on Template in key parameters</p> <p>21、 Supplement 2.12.1 explanations on agreement, supplement get test cases, modify protocol head of put test cases</p> <p>22、 Supplement 2.12.2 explanations on agreement, supplement get test cases</p> <p>23、 Modify 2.12.5 and 2.12.6 test cases</p> <p>24、 Modify 2.12.12 description of explanations on key parameters</p> <p>25、 Modify 2.12.18 function description in tables</p> <p>26、 Modify 1.8.17 and 1.8.18 contents of test cases</p> <p>27、 Modify 1.8.19, 1.8.20, 1.8.21 put protocol in test cases</p>
2019-7-29	Wei Shilin	BD20190696	<p>1、 1.1.1 Improve cases</p> <p>2、 1.1.4 Improve explanations on agreement</p> <p>3、 1.1.10 Improve explanations on agreement</p> <p>4、 1.1.14 Improve explanations on agreement;</p> <p>5、 1.1.23 Improve explanations on agreement and cases;</p> <p>6、 1.1.24 Improve cases;</p> <p>7、 1.1.25 Improve cases;</p> <p>8、 1.1.32 Improve explanations on agreement and cases;</p> <p>9、 1.1.39 Improve explanations on agreement</p> <p>10、 1.1.40 Improve explanations on agreement</p> <p>11、 1.2.7 Improve explanations on agreement and cases</p> <p>12、 1.3.1 Improve explanations on agreement</p> <p>13、 1.3.2 Improve explanations on agreement</p> <p>14、 1.3.3 Improve explanations on agreement and cases</p> <p>15、 1.3.4 Improve explanations on agreement</p> <p>16、 1.3.5 Improve explanations on agreement</p> <p>17、 1.3.6 Delete</p> <p>18、 1.3.9 Improve cases</p> <p>19、 1.3.10 Improve cases</p> <p>20、 1.3.11 Improve cases</p> <p>21、 1.3.16 Improve cases</p> <p>22、 1.3.18 Improve cases</p> <p>23、 1.3.19 Improve explanations on agreement and cases</p> <p>24、 1.3.20 Improve cases</p> <p>25、 1.3.25 Improve cases</p> <p>26、 1.3.26 Improve explanations on agreement and cases</p>



			<ul style="list-style-type: none"> <li>27、 1.4.1 Improve cases</li> <li>28、 1.4.2 Improve cases</li> <li>29、 1.5.1 Improve explanations on agreement</li> <li>30、 1.5.14 Improve explanations on agreement and cases</li> <li>31、 1.5.15 Improve cases</li> <li>32、 1.6.1 Improve explanations on agreement</li> <li>33、 1.7.2 Improve explanations on agreement and cases</li> <li>34、 1.7.3 Improve cases</li> <li>35、 1.8.9 Improve explanations on agreement and cases</li> <li>36、 1.8.11 Improve cases</li> <li>37、 1.8.12 Improve cases</li> <li>38、 1.8.13 Improve explanations on agreement and cases</li> <li>39、 1.8.15 Improve cases</li> </ul>
2019-7-29	Wei Shilin	BD20190696	<ul style="list-style-type: none"> <li>1、 2.3.5 Improve cases</li> <li>2、 2.3.17 Improve cases</li> <li>3、 2.3.18 Improve cases</li> <li>4、 2.3.21 Improve cases</li> <li>5、 2.3.24 Improve cases</li> <li>6、 2.3.25 Improve cases</li> <li>7、 2.3.26 Improve explanations on agreement and cases</li> <li>8、 2.3.27 Improve explanations on agreement and cases</li> <li>9、 2.3.29 Improve explanations on agreement</li> <li>10、 2.3.30 Improve cases</li> <li>11、 2.3.31 Improve explanations on agreement and cases</li> <li>12、 2.3.32 Improve cases</li> <li>13、 2.3.33 Improve cases</li> <li>14、 2.3.34 Improve cases</li> <li>15、 2.3.35 Improve cases</li> <li>16、 2.3.42 Improve cases</li> <li>17、 2.3.43 Improve explanations on agreement and cases</li> <li>18、 2.3.49 Improve cases</li> <li>19、 2.3.51 Improve explanations on agreement</li> <li>20、 2.3.52 Improve explanations on agreement and cases</li> <li>21、 2.3.53 Improve cases</li> <li>22、 2.3.54 Improve cases</li> <li>23、 2.5.5 Improve explanations on agreement and cases</li> <li>24、 2.5.8 Improve cases</li> <li>25、 2.5.9 Improve cases</li> <li>26、 2.5.10 Improve explanations on agreement and cases</li> <li>27、 2.5.14 Improve explanations on agreement</li> <li>28、 2.5.15 Improve explanations on agreement</li> <li>29、 2.5.16 Improve cases</li> <li>30、 2.5.17 Improve explanations on agreement and cases</li> <li>31、 2.5.18 Improve cases</li> <li>32、 2.5.19 Improve cases</li> <li>33、 2.5.21 Improve explanations on agreement and cases</li> <li>34、 2.6.2 Improve cases</li> <li>35、 2.7.2 Improve explanations on agreement and cases</li> <li>36、 2.7.14 Improve explanations on agreement and cases</li> <li>37、 2.7.18 Improve explanations on agreement and cases</li> <li>38、 2.7.19 Improve explanations on agreement and cases</li> <li>39、 2.7.22 Improve cases</li> <li>40、 2.7.23 Improve explanations on agreement and cases</li> <li>41、 2.7.24 Improve explanations on agreement</li> </ul>

			<p>42、2.7.27 Improve explanations on agreement</p> <p>43、2.7.43 Improve explanations on agreement</p> <p>44、2.7.46 Improve explanations on agreement</p> <p>45、2.7.61Improve cases</p> <p>46、2.7.64 Improve explanations on agreement</p> <p>47、2.7.65Improve cases</p> <p>48、2.7.66Improve cases</p> <p>49、2.8.3Improve cases</p> <p>50、2.14.71Improve cases</p>
2019-7-30	Jia Tinghe	BD20190696	<p>1、 Modify 2.7.63 cases</p> <p>2、 Modify 2.7.71 cases</p> <p>3、 Modify 2.7.22 cases</p> <p>4、 Modify 2.5.1 formats</p> <p>5、 Modify 2.8.5 explanations</p>
2019-07-30	Di Jingjin g	BD20190696	<p>1、 Modify the problem of wrong marking sequence</p> <p>2、 The file mixes int and integer, thus is replaced by integer uniformly. The XML uses full Pinyin.</p> <p>3、 Globally search "brick" (Brick with Pinyin Zhuan) and change to "transfer" (Brick with Pinyin Zhuan).</p>
2019-7-31	Liu Zhaog uang	BD20190696	<p>1、 Modify 1.8.1 request xml contents and test case content format</p> <p>2、 Modify the Chinese quotation marks in xml of 1.8.2, 1.8.17, 1.8.18, delete redundant blank spaces</p> <p>3、 Delete the redundant blank spaces in xml of 1.8.19</p> <p>4、 Modify the Chinese quotation marks in xml of 2.12.1 and 2.12.2</p>
2019-8-1	Zhang Chengl un	DZ19536	<p>1、 2.3.60 Increase IntelliFusion platform</p> <p>2、 2.3.11 Increase IntelliFusion platform</p>
2019-8-07	Liu Zhaog uang	DZ19579	<p>1、 Modify 2.3.7 equipment ID and name length description, extend maximum support 128 characters</p>
20190805	Jia Tinghe	XM20190139-f ull range human face NVR upgrading item	<p>1、 Increase 2.5.26 set/obtain picture storage setting parameters</p> <p>2、 Increase 2.5.27 set/obtain automatically access IPC switch of onvif</p> <p>3、 Increase 2.5.28 set/obtain NVR allowing onvif accessing the H265 switches</p> <p>4、 Increase 2.7.93 set/obtain in-vivo detection switches of super-brain NVR</p>
20190816	Jia Tinghe	XM20190133-2019Q3 hot NVR iteration upgrading	<p>1、 Modify 2.5.28 set/obtain NVR allowing onvif accessing the H265 switches</p>
20190820	Jia Tinghe	XM20190139-f ull range human face NVR upgrading item	<p>1、 Increase 1.1.42 set/obtain continued transmission center information</p>
2019-08-23	Han Yuejua n	DZ19617-custo mize as depicted	<p>2、 1、 Increase 2.3.59 obtain equipment IP address and gateway after successful PPPOE dialing, or obtain 28181 equipment online/offline status</p>
2019-08-23	Ping Xinxin	2MP international fixed focus upgrading	<p>1、 Extend protocol, increase max properties, control the maximum character length supporting input</p>

20190823	Jia Tinghe	XM20190139-f ull range human face NVR upgrading item	1、 Increase 2.7.** increase compressed export/import of human face basemap 2、 Increase protocol“obtain universal import/export progress” 3、 2.7.59 Result of searching by pictures, increase similarity field
20190826	Jia Tinghe	XM20190139-f ull range human face NVR upgrading item	1、 Increase 2.7.94 modify POST to be PUT, modify notes 2、 Modify 2.7.96
20190827	Zhang Chenglun	DZ19572	1、 2.3.58 Increase minimum human face alarm number of people
2019-5-29	Hou Xianglin	XM20190142 pandaeye	1、 Increase 2.7.97 number of people exception alarm 2、 Extend 1.6.1 number of people exception alarm interaction 3、 Extend 1.6.2 number of people exception alarm defense 4、 Extend 2.7.12 push graph strategy and time parameters 5、 Extend 1.5.1 intelligent analysis algorithm type 2、 Extend 1.5.12 intelligent analysis algorithm capability set
2019-5-29	Ping Xinxin	XM20190124	1、 Extend protocol, increase max properties, control the maximum code rate of support 2. Extend protocol, increase opt, report snap resolution list
2019-5-29	Hou Xianglin	XM20190142 pandaeye	1、 2.7.97 Increase sensibility level
2019-9-10	Hou Xianglin	Universal	1、 Extend Dzcommon protocol explanations, increase voluntary registration of Questyle
2019-9-10	Jia Tinghe	XM20190139-f ull range human face NVR upgrading item	1、 Modify 2.7.66, increase field “maximum opening quantity” 2、 Modify 2.3.60 increase field “result quantity” 3、 Modify 2.7.96 URL, modify ”PUT”to be ”POST” 4、 Increase feature statistics asynchronous request, asynchronous query result protocol 5、 Increase target alarm statistics asynchronous request, asynchronous query result protocol 6、 Increase channel alarm statistics asynchronous request, asynchronous query result protocol 7、 Increase asynchronous task status control request
2019-9-12	Hou Xianglin	Universal	1、 1. Extend 2.8.1 algorithm type
2019-9-12	Ping Xinxin	Universal	1、 Increase 1.1.34 2、 1.1.1 Extend double walkie-talkie channel
2019-09-23	Zhang Bao	DZ19699	1、 2.3.11 Platform start information extension increase imgupload; 2、 Increase 2.3.61 /CGI/System/ImgUpload/Info
2019-09-02	Wang Lijun	XM20190094- politics and law ball upgrading item	1. Add audio voice change (2.1.9), single interrogation/unattended (2.7.105), sleeping post (2.7.106), new fight (2.7.107), personnel stand up (2.7.108), height limit (2.7.109), new off-duty (2.7.110),

			<p>stranded (2.7.111), single stay alone (2.7.112), deliver goods through window (2.7.113), human face mosaic (2.7.114), color tracking (2.7.115), intelligent resource distribution timing switchover (2.7.116)</p> <p>2. Modify 1.5.1 add politics and law algorithm relevant enabling contents</p> <p>3. Modify 1.5.12 add politics and law relevant algorithm capability set</p> <p>4. Modify 1.6.1 add politics and law relevant alarm interaction</p> <p>5. Modify 1.6.2 add politics and law relevant monitoring defense time</p> <p>6. Modify 2.7.1 add politics and law relevant alarm information</p> <p>7. Modify 2.7.2 add politics and law relevant alarm clearing information</p> <p>8. Modify 2.7.76 increase intelligent supervisory committee, intelligent public security, intelligent education, intelligent control, with resource distribution timing switchover</p> <p>9. Modify 2.7.83 modify human face detection region parameters, add setting preset position mode</p> <p>10. Modify 2.7.97 number of people exception, add shielding region setting</p> <p>11. Modify 2.8.1 add politics and law relevant alarm information</p> <p>12. Modify 2.3.30 add politics and law relevant algorithm capability set</p> <p>Modify 2.3.31 add politics and law relevant algorithm capability set</p>
2019-09-18	Wang Lijun	XM20190094-politics and law ball upgrading item	<p>1. Add calibration relevant contents 2.12.20, 2.12.21</p> <p>2. Modify 2.3.31 add calibration capability set</p> <p>3. Modify 2.7.83 detection region setting preset position mode</p>
20191010	Jia Tinghe	XM20190139-full range human face NVR upgrading item	<p>1、 Increase 2.7.* human face basemap batch import progress</p> <p>2、 2.3.60 is useless and repetitive with 2.3.61, thus is deleted.</p>
2019-10-11	Jiao Zan	XM20190094-politics and law ball upgrading item	<p>1、 Increase 2.2.45, 2.2.46, 2.2.47, and 2.2.48 protocols</p> <p>2、 2.3.31 capability set extension</p>
2019-10-10	Xu Xindi	Universal	<p>1、 Extend 1.6.1 alarm interaction item, increase interaction red and blue lights</p> <p>2、 Extend 2.3.31, increase alarm light capability set</p>
2019-10-12	Wang Lijun	XM20190094-politics and law ball upgrading item	<p>1、 Modify 2.3.31, add human face detection and human face identification interaction alarm light capability set</p>
2019-10-13	Xu Xindi	DZ19479-signal converter	<p>1、 Increase 2.6.3 DZ19749 required access platform parameters in signal converter customization</p> <p>2、 Increase 2.14.83DZ19749 set and obtain parameters of access motor in signal converter customization</p>
2019-10-15	Wang Lei	Human face upgrading item	<p>1、 Modify 2.3.61 obtain increasing asynchronous export statement type in universal progress</p> <p>2、 Increase asynchronous export statement start request</p>

			3、 Increase asynchronous export statement result request
2019-10-15	Zhang Bao	XM20190087-4MP pan-intelligent item	1、 Extend 2.7.76, increase two modes as road monitoring and mixed detection
2019-10-15	Wang Jiajing	XM20190087-4MP pan-intelligent item	1、 Extend 2.14.56, newly extend types of motor vehicle detection, non-motor vehicle detection, and pedestrian detection 2、 Extend 2.14.27, newly extend types of motor vehicle detection, non-motor vehicle detection, and pedestrian detection
2019-10-16	Hou Xianglin	XM20190087-4MP pan-intelligent item	1. Extend 2.14.38, extend Type 2. Extend 2.14.78 extend character overlaying information
2019-10-17	Wang Lijun	XM20190094-politics and law ball upgrading item	1、 Modify 2.7.35, add text description of alert contingency plan template No.
2019-10-17	Zhang Kaifang	Universal	1、 Extend 2.3.31 increase scanning mode equipment capability level
2019-10-21	Wang Lei	XM20190139-1_2_8 disk human face NVR upgrading item	1、 Modify 2.7.118 increase type field in request XML 2、 Modify 2.7.119 increase request file name in URL, delete transaction ID in URL
2019-10-22	Qin Guiqian	XM20190094-politics and law ball upgrading	1、 2.3.12, 2.3.44 “set aperture correction” protocol extension channel number 2、 2.3.13 “set lens resetting” protocol extension channel number
2019-10-22	Ma Ruichao	XM20190094-politics and law ball upgrading item	1. 2.7.1, 2.7.2, 2.8.1 Delete: single query/unattended, increase: single query/unattended event type
2019-10-22	Zhang Bao	XM20190087-4MP pan-intelligent item	1、 Extend 2.14.11, increase template type description
2019-10-28	Wang Lei	XM20190173_analogue network mixed XVR	1、 Modify 1.1.31 increase analogue channel quantity, synthetic channel quantity field 2、 Modify 2.3.30 increase loop detection alarm field 3、 Modify 1.3.8 increase channel type field 4、 Modify 1.3.9 increase channel type field 5、 Modify 1.1.22 increase loop detection field 6、 Increase setting and obtaining protocol verification mode protocol 2.3.63
2019-10-28	Zhang Bao	XM20190087-4MP pan-intelligent item	1、 Extend 2.14.52, increase intelligent snap type
2019-10-29	Zhang Chenglun	XM20190094-politics and law ball upgrading item	1、 Increase 2.7.120 set/obtain cruise lock time
2019-10-30	Zhang Bao	XM20190087-4MP	1、 Extend 2.3.16, increase all traffic parameters

		pan-intelligent item	
2019-10-30	Zhang Chenglun	XM20190094-politics and law ball upgrading item	1、 Extend 2.7.34, type in newly extended xml 2、 Extend 2.7.44, extend url, increase scene
2019-10-30	Xu Xindi	XM20190087-4MP pan-intelligent item	1、 Extend 1.6.1, increase alarm interaction traffic external trigger 2、 Extend 2.3.31, increase alarm interaction supporting traffic external trigger capability set
2019-10-31	Jia Tinghe	XM20190201-universak nvr upgrading	1、 2.3.30 protocol increasing enumeration AutoTestClodeIPC, AutoChangeIPCTime 2、 2.3.31 protocol, increasing enumeration autoTestClode 3、 Increase protocol 2.3.64 obtain/set NVR automatic timing IPC time parameters 4、 Increase protocol 2.3.65 obtain/set universal parameters of equipments 5、 Increase protocol 2.3.66 obtain automatic detection status of cloud upgrading 6、 Increase protocol 2.3.67 obtain equipment information of cloud upgrading
2019-10-31	Wang Lijun	XM20190094-politics and law ball upgrading item	1、 Extend 2.3.31, newly extend resource distribution timing switchover capability set 2、 Extend 2.7.76, delete timing switchover contents
2019-11-04	Wang Lei	XM20190173-mixed XVR	1、 Extend 2.3.9 increase PUT method setting equipment name
2019-11-06	Jia Tinghe	XM20190201-universak nvr upgrading	1、 Newly extended bayonet capability set protocol 2.14.87 2、 2.14.68, increase vehicle sub-brand field 3、 2.14.71 increase vehicle sub-brand and license plate color field
2019-11-06	Zhang Bao	XM20190087-4MP pan-intelligent item	1、 Correct 2.14.38 time format interval to be 7 characters
2019-11-06	Xu Xindi	XM20190087-4MP pan-intelligent item	1、 Extend 2.3.31, increase structured property capability set
2019-11-06	Jia Tinghe	XM20190201-universak nvr upgrading	1、 1.3.7 increase IPv6 relevant fields 2、 1.3.13 Increase IPv6 relevant fields and error reason for returning to correct Ip 3、 Supplement 1.1.44 port mapping status information
2019-11-06	Jia Tinghe	XM20190201-universak nvr upgrading	1、 2.3.30 Extend NetCardGather: whether to support network card aggregation mode
2019-11-06	Tang Qifu	XM20190087-4MP pan-intelligent item	1、 Extend 1.8.10, increase supplementary light type LED-ZX-B1045-Z-KT
2019-11-09	Wang Li Jun	XM20190094-Political and Legal Sphere Upgrade Project	1、 Extension 1.5.1, add the main type of HeatMap Algorithm 2、 Extension 1.5.12, add the main type of HeatMap Algorithm

2019-11-09	Wang Shuo	DZ19811-ChuanSu radar supported by Skyeye	1、 Extension 2.14.47, newly expanded radar type and new equipment parameter serial number
2019-11-12	Xu Xin Di	XM20190087-4MP Extensive Intelligence Project	1、 Extension 2.3.31 Newly-added whether to support temperature and humidity alarm capability set
2019-11-12	Li Yun Fei	General	1、 Delete 2.3.30 regarding the acquisition method of device attributes 2、 Extension 2.3.31 regarding the acquisition method of device attributes 3、 Extension 1.1.37 Support IPv6
2019-11-12	Jia Ting He	XM20190201-General nvr upgrade	1、 Add description to the IPv6 field of the protocol, add the "DNS setting method to the field of IPv6"
2019-11-18	Jia Ting He	XM20190201-General nvr upgrade	1、 Newly added protocol 2.3.68 Get voltage alarm parameters
2019-11-20	Jia Ting He	XM20190201-General nvr upgrade	1、 2.14.87 Modify the main brand position of the returned XML 2、 1.6.1 Modify the voltage alarm that does not distinguish between channels 3、 2.8.1 Voltage alarm is divided into upper limit and lower limit
2019-11-25	Jia Ting He	XM20190201-General nvr upgrade	1、 2.14.88 Increase bayonet quota parameters
2019-11-28	Jia Ting He	XM20190173-Analog network hybrid XVR	1、 1.3.12 Add field-channel type 2、 1.3.10, 1.3.11 channel link error reasons add 2 types 3、 1.3.8 ~ 1.3.11 Add IPv6 type in connection mode
2019-11-29	Wang Shuo	BD20191196-TJ Skyeye supports voice broadcast	3、 Expansion 2.14.74, the related functions of newly expanded loop play type: 1. Play interval 2. Play by time period
2019-12-02	Xu Xin Di	DZ19081.1-YK customized 5 million 44 times warning ball	1、 Extend 1.6.1, Newly added alarm linkage PTZ is to support linkage intelligent analysis scenario
2019-12-02	Yang Yuan Jian	DZ19918-Eggs hell Hotel Customization	1. Newly added 2.7.121 Picture feature extraction 2. Newly added 2.7.122 check picture feature 3. Newly added 2.7.123 to obtain the similarity of two features
2019-12-18	Hou	DZ19163.11-KS	1、 Expand the face configuration interface parameters

	Xiang Lin	CV500 Upgrade	2、 Extend the external id field to report online and offline status 3、 Newly added Gat1400 parameter setting and acquisition
2019-12-18	Jia Ting He	XM20190173-Analog network hybrid XVR	1. 2.3.1 Modify the field supportSmartType, the added types : target box setting; trigger alarm target; whether the target type supports "people and vehicles" 2. 1.2.2 Add whether to support deletion
2019-12-20	Hou Xiang Lin	DZ19163.11-KS CV500 Upgrade	1. Change gat1400 to gatpicture 2. Add the enable field
2019-12-25	Jia Ting He	XM20190201-General nvr upgrade	1. 2.14.69 Add vehicle sub-brand
2020-01-03	Di Jing Jing	XM20190244-5 million electronic invigilation	1、 2.3.70 /CGI/System/Channels/<ID>/CharSet
2020-01-03	Wang Li Jun	DZ19617.26-400W YT import customization	1、 Modify 2.3.58 to add YT portrait platform parameter content
2020-01-07	Yu Yong Zhe	XM20190229 illegal parking ball stop project	1、 Extension 2.7.87, extended weekday parameters and time period number
2020-1-9	Liu Zhao Guang	XM20190223-The popular ball upgrade	1、 Add whether to support audio, support to display real-time brightness value, and support to display color to black threshold capability set
2020-1-11	Xu Xin Di	XM20190229-illegal parking ball upgrade	1、 Newly added 2.14.89, black and white list of illegal ball setting
2019-1-13	Wang Zhi Hong	XM20190229-illegal parking ball upgrade	1. Add whether to overlap security codes in the middle of four or three horizontally synthesized
2020-1-15	Wang Li Jun	DZ19617.26-400W YT import customization	1、 Modify 2.3.69 / CGI / System / GatPicture / protocol, add device name, administrative code, latitude and longitude, etc.
2020-1-15	Xu Xin Di	XM20190229-illegal parking ball upgrade	1、 Extension 2.3.16, export of black and white lists of illegal parking balls
2020-1-15	Fu Jun Meng	XM20190229_illegal parkign ball replacement upgrade project	1. Added the setting parameter 2.14.90 for illegal parking snapshots, including manual and automatic snapshots



2020-1-15	Hao Yun Long	BD20200026-T J Skyeye supports close-up separate output	1、 Added 2.14.91, newly added a separate close-up picture of the snapshot picture output
2020-1-15	Wang Shuo	Illegal parking ball replacement upgrade project	1、 Added 2.14.92 to distinguish whether buses and other vehicles are illegally parking according to week / time period
2020-1-15	Zhang Jun	XM20190229-illegal parking ball upgrade	1、 Added to obtain 2.14.93, the protocol of setting scene parameters 2、 Added to obtain 2.14.94, the protocol of setting application parameters for illegal parking
2020-1-16	Sun Bing	XM20190229-illegal parking upgrade	1、 Added 2.14.95 to set and obtain the trigger method of illegal parking snapshot 2、 Added 2.14.95 to set and obtain the manual snapshot area of illegal parking
2020-1-16	Xu Xin Di	XM20190229-illegal parking ball upgrade	1、 Extension 2.14.74, extended protocol adds linkage sound expelling 2、 Extension 2.14.56, extended protocol adds illegal alarm linkage audio capability set
2020-01-16	Fu Jun Meng	XM20190229_illegal parkign ball replacement upgrade project	1. Expansion 2.14.36, newly expanded filter repeat area and filter repeat area sensitivity
2020-01-17	Zhang Jun	XM0190229-III gel parking ball replacement upgrade project	1. Added 2.14.97 setting to get the parameters of illegal parking snapshot mode
2020-1-17	Fang Shi Qi	XM20190243-4 million is connected with 35114A	1. Extended SIP encryption mode protocol and newly added 35114 encryption mode 2. Add SIP to generate public key protocol 3. Extended platform activation information,newly added gb35114
2020-1-20	Chen Xue Chao	General	1. Extend 1.8.17 to set the dome camera menu parameters 33: Close 285
2020-2-12	Zhang Zi Kang	XM20190211 Water conservancy emergency usability improvement project	1. Extension 2.3.1 character overlap protocol

2020-02-13	Sun Bing	XM2019029-III egal parking upgrade project	1、 Extension 2.14.94, newly expanded the detection area of illegal parking or vehicle plate filtering parameters
2020-2-13	Yu Yong Zhe	BD20200052-F ace snapshot machine adds mask detection patch	1、 Extension 2.3.31, add the set of facial attribute linkage capabilities 2、 Extension 2.7.12, add face attribute linkage list 3、 Extension 1.6.1 to add the linkage parameters of face masks 4、 Extension 1.6.1 to add the linkage parameters of face without mask 5、 Extension 2.8.1, add mask and no mask on alarm condition
2020-02-15	Liu Zhao Guang	XM20190223- 2 million 20 times dome camera upgrade	1、 Newly added whether to support the set of capability about the power dissipation limitation of the fill light 2、 Add the report of the power dissipation limitation parameter protocol of the fill light
2020-02-18	Wang Zhi Hong	XM20190229 Illegal parking ball replacement upgrade project	1、 Newly added the overlap parts for the total duration of illegal parking
2020-2-19	Qin Gui Qian	XM20190242- Front-end smart product upgrade	1、 Extension 1.2.1, the new extension https service is enabled 2、 2. Extension 2.9.5, import of https service certificate file
2020-02-20	Zhang Bao	XM20190229-I llegal parking replacement upgrade project	1、 Extension 2.7.76 to add intelligent transportation mode 2、 Extension 2.14.56 newly add to support picture synthesis type and picture overlapping information capability set
2020-02-24	Wang Lei	XM20200012- The popular NVR upgrade project	1、 Extension 1.6.3 to add "smart scene" field
2020-3-3	Wang Zhi Hong	XM20190229 illegal parking replacement upgrade project	1、 Expansion 2.14.38, Newly added the overlap picture for the vehicle frame of whether illegal parking 2、 Extension 2.14.76, add the fourth, fifth and sixth pictures except picture overlap
2020-3-3	Zhang Zi Kang	XM20190245 International LITE upgrade project	1、 Extension 2.2.1 Video Flip Protocol 2、 Extension 2.3.11 platform enablement protocol
2020-3-3	Ping	XM20190245	1、 Modify 2.2.1 Video flip protocol

	Xin Xin Li Yun Fei	International LITE upgrade project	
2020-03-05	Jia Ting He	XM20200015-I nternational Lite_N_K series NVR upgrade	<ol style="list-style-type: none"> <li>1、 1.1.3 The protocol changes the meaning of the provider field and changes the test cases simultaneously</li> <li>2、 New protocol multi-channel passenger flow comparison protocol</li> <li>3、 New request and recovery protocol for DDNS device address detection</li> <li>4、 New DDNS device address online status detection protocol</li> <li>5、 New protocol to obtain EasyDDNS server address</li> </ol>
2020-03-18	Wang Li Jun	XM20200009- Monitoring Warehouse Monocular Upgrade	<ol style="list-style-type: none"> <li>1、 Added 2.7.125 smoking parameter acquisition settings</li> <li>2、 Added 2.7.126 call parameter acquisition settings</li> <li>3、 Modify 1.5.1 added smoking and call algorithm settings</li> <li>4、 Amend 1.5.12 to add subsequent modification instructions, this part of the content is added to chapter 2.3.31</li> <li>5、 Amend 1.6.1 and 1.6.2 to add smoking and call arming linkage</li> <li>6、 Modify 2.3.31 to add the ability set of mutually exclusive between resolution and other functions, merge 1.5.12 algorithm ability set</li> <li>7、 Revise 2.7.1 and 2.7.2 to add alarm and eliminate alarm for smoking and making phone calls</li> <li>8、 Modify 2.7.66 to add smoking and telephone, add model number (itemModelNo) and model computing power (modelProperty)</li> <li>9、 Modify 2.7.76 to add smart supervision mode</li> <li>10、 Modify 2.8.1 to add alarm status for smoking and calling</li> </ol>
2020-03-18	Zhang Zi Kang	XM20190242- Front-end smart product upgrade	<ol style="list-style-type: none"> <li>1、 Added protocol for obtaining module power consumption limitation parameter 2.3.76</li> </ol>
2020-03-19	Yang Shan	XM20190242-F ront-end smart product upgrade	<ol style="list-style-type: none"> <li>1、 Extension 2.3.31, extend the alarm input capability level, add linkage items-support linkage intelligent scenarios</li> </ol>
2020-03-20	Liu Zhao	XM20190223- 2 million 20	<ol style="list-style-type: none"> <li>1、 Extension 2.12.13, modify &lt;TaskNum&gt; parameter content, support setting multiple preset points</li> </ol>

	Guang	times dome camera upgrade	2、 Extension 2.3.31, increase the number of cruise capabilities supported by scheduled cruise ScheduleCruiseCounts
2020-03-27	Wang Lei	XM20200062-XVR Taiwan version upgrade project	1、 Extension 2.3.58 to increase the type of "Alarm Center"
2020-03-31	Wang Zhi Hong	XM201900229 illegal parking replacement upgrade project	1、 Expansion 2.14.26, newly expanded traffic statistics, and added scene number field
2020-3-31	Xu Shi Dian	DZ200209-Russian customization	1、 Extend Dzcommon protocol description, add Russian customized onvif user authentication switch
2020-03-31	Jia Ting He	XM20200015-International Lite_N_K series NVR upgrade	1、 The return status of 2.3.73 adds "Other clients are detecting"
2020-4-1	Fu Jun Meng	XM20190229_ illegal parkign ball replacement upgrade project	1. Added the setting and obtaining of the number and name of the illegal U-turn area 2.14.98
2020-04-02	Xu Xin Di	XM20190238-8 inch laser ball	1、 Extension 2.13.2, increase the type of warning lights 2、 Extension 2.3.31, added support for quick turn-on capability of warning lights
2020-04-02	Yan Zhen Tao	XM20190238-8 inch laser ball	1、 Extension 1.5.3 Add "Intrusion Alarm Mode" 2、 Extension 2.7.39 to add "intrusion alarm mode" 3、 Extension 2.7.8 to add "Size Scene Mode" Add the "dense reference value"
2020-4-12	Liu Xiong	XM20200009-Monitoring Warehouse Monocular Upgrade	1. Extension 2.3.71 put to generate encrypted public key and modify GET return value
2020-04-12	Wang Li Jun	XM20200045-International pro	1、 Revise 2.7.11 Add regional population statistics
2020-04-13	Fu Jun Meng	XM20190229_ illegal parkign ball replacement upgrade project	1、 Extension 2.14.98, add whether to output bayonet
2020-04-17	Zhang	XM20200045-	1、 Extension 2.3.31, add support for SFTP service

	Bao	International PRO project	capability set 2、 Added FTP service type setting / CGI / System / Network / FtpService
2020-4-20	Tian Zeng Hui	XM20190238-8 inch laser ball	1、 Extension 1.1.18, add Satellite time mode 2、 Extension 1.8.17, DomePara adds automatic wiper settings 3、 Expansion 2.3.31, add support for automatic wiper settings, satellite positioning, electronic compass capability set 4、 Increase the satellite positioning information acquisition protocol
2020-04-21	Li Wen Bo	XM20200098-H265 traffic host	1、 Expansion 2.14.56, add traffic host support bayonet equipment quantity capacity set
2020-04-22	Sun Bing	XM20200045-International Pro Project	1、 Added 1.1.45 802.1x parameter setting and acquisition 2、 Added 1.1.46 802.1x connection status acquisition
2020-04-26	Dong Chuan Shuai	XM20200045-International PRO product upgrade	1、 Modify 2.3.3, return the maximum number of supported blocks when the protocol is GET 2、 Amend 1.1.18, add ONVIF time calibration to the original type of timing 3、 Add 2.3.79 RTMP plug flow function to check or set parameters of the protocol
2020-4-27	Li Yu Qing	XM20200098-H265 traffic host	1、 Extension 2.14.71 / CGI / ITS / Capability, increase the acquisition of topic version and illegal topic version of Hisense MQ bayonet, and increase the acquisition of host synthesis resolution type. 2、 Added Hisense (cloud platform docking) configuration protocol 3、 New Hisense MQ configuration protocol 4、 Added Hikvision webservice configuration protocol
2020-04-27	Li Wen Bo	XM20200098-H265 traffic host	1、 Extension 2.14.56, add traffic host to support port mapping capability set
2020-04-28	Sun Bing	XM20200045-International Pro Project	1、 802.1x parameter setting and acquisition protocol, modify the keyword IEEE8021X to PNBAC 2、 802.1x connection status acquisition protocol, modify the keyword IEEE8021X to PNBAC 3、 Expand device channel capability set, add support for 802.1x
2020-04-29	Wang Lei	XM20200095-Multimedia HD encoder	1、 Expansion 2.3.59, add channel / <ID> to url, increase rtmp type 2、 Expansion 1.3.8 1.3.9, add "rtmp" protocol type,

			<rtmpURL> field
2020/04/22	Yu Xin	XM20200094-I nfrared Thermal Imaging Camera	<ol style="list-style-type: none"> <li>1. Added temperature detection enable</li> <li>2. New temperature detection function setting and query</li> <li>3. Extension 2.3.31 Add "temperature detection", "temperature detection sub-function" capability set and face line synchronous display capability set, face picture overlap attribute information increase "body temperature"</li> <li>4. Extension 1.6.1 Added "Human Body High Temperature Alarm" detection linkage</li> <li>5. Extension 2.8.1 Add "Human Body High Temperature Alarm" alarm status</li> <li>6. Extension 2.14.78 Add "Overlap Temperature Information" overlapping information</li> </ol>
2020-04-30	Wang Lei	XM20200095-Multimedia HD encoder	<ol style="list-style-type: none"> <li>1、 Expansion 1.1.11, add "RTMP" protocol type</li> </ol>
2020-05-04	Liu Xiong	XM20200045 international pro project	<ol style="list-style-type: none"> <li>1、 Expansion 2.3.31, whether the new expansion supports direction control, whether it supports zoom, focus, lens reset, one-key focusing, aperture capacity set</li> </ol>
2020-05-04	Qin Gui Qian	XM20200094-I nfrared Thermal Imaging Camera Project	<ol style="list-style-type: none"> <li>1、 New 2.3.80, add general temperature measurement parameter setting protocol</li> <li>2、 New 2.3.83, add temperature calibration parameter setting protocol</li> </ol>
2020-05-07	Liu Zhao Guang	XM20190238-8 inch thermal image ball project	<ol style="list-style-type: none"> <li>1、 Newly added 2.7.128 intelligent analysis scan area boundary setting</li> <li>2、 Added 2.7.129 intelligent analysis scan area parameter setting</li> <li>3、 Added 2.3.82 satellite time calibration time interval setting</li> <li>4、 Extension 2.3.31 capability set to expand similar perspective "similarvision"</li> <li>5、 Extension 1.8.17 extend Domepara, 42-similar perspective</li> </ol>
2020-05-07	Zhang Bao	XM20200097-Rayvision All-in-One	<ol style="list-style-type: none"> <li>1、 Extension 2.14.56, the location of the newly added event at the expansion capability level</li> <li>2、 Extension 2.14.38, extended location of overlapping event</li> <li>3、 Expansion 2.3.31, add radar remote service capability set radarDefend</li> <li>4、 Expansion 2.7.76, add two modes of road warning and event detection</li> </ol>

			<ul style="list-style-type: none"> <li>5、 Extension 2.3.48 Add peripheral power switch control</li> <li>6、 New radar calibration parameter protocol</li> </ul>
2020-05-07	Wang Jia Jing	XM20200097-Radar and video all-in-one machine project	<ul style="list-style-type: none"> <li>1、 Expansion 2.14.56, newly expanded parking, retrograde, lane change, serpentine, congestion events</li> <li>2、 Extension 2.14.27, newly expanded parking, retrograde, lane change, serpentine, congestion events</li> <li>3、 Extension 2.14.38, new expanded event type overlap</li> <li>4、 Extension 2.14.78, new expanded event type overlap</li> <li>5、 Add 2.14.111, added parking event parameters</li> </ul>
2020-05-07	Yu Yong Zhe	XM20200097-Rayvision All-in-One	<ul style="list-style-type: none"> <li>1、 Add/CGI/Device/Radar/channels/&lt;ID&gt;/Version</li> <li>2、 Add/CGI/Device/Radar/channels/&lt;ID&gt;/Para</li> </ul>
2020-05-07	Zhang Bao	XM20200097-Rayvision All-in-One	<ul style="list-style-type: none"> <li>1、 Extension 2.5.21, add radar peripheral mapping</li> <li>2、 Modify 2.3.31, remove iptables, add radarPort</li> </ul>
2020-5-9	Wang Jia Jing	XM20200097-Radar and video all-in-one machine project	<ul style="list-style-type: none"> <li>1、 Modify 2.14.27, add radar event list test case</li> </ul>
2020-5-9	Li Yu Qing	XM20200098-H.265 Transportation Host Project	<ul style="list-style-type: none"> <li>1、 Extension 2.14.63, 2.14.64 agreement, increase lane code</li> </ul>
2020-5-9	Wang Jia Jing	XM20200097-Radar and video all-in-one machine project	<ul style="list-style-type: none"> <li>1、 Modify 2.14.112, remove scene / scenes / &lt;ID&gt;</li> <li>2、 New expansion 2.17.2, newly expanded radar congestion event parameters</li> <li>3、 Add 2.14.136, add business congestion event parameters</li> </ul>
2020-05-09	Wang Li Jun	XM20190238-5 million 44 times super starlight thermal image warning ball	<ul style="list-style-type: none"> <li>1、 Added 2.7.130 Pyrotechnic detection parameter acquisition setting</li> <li>2、 Add 2.7.131 Smart Analysis 3D Shield Acquisition Settings</li> <li>3、 Modify 1.5.1 Add pyrotechnic detection and temperature detection algorithm settings, add scene application type</li> <li>4、 Amend 1.6.1 and 1.6.2 to add pyrotechnic detection</li> </ul>

			<p>and temperature detection arming linkage, add linkage close-up snapshot</p> <p>5、 Amend 2.3.31 to add the linkage close-up capability set, add the algorithm supported by area scan</p> <p>6、 Amend 2.7.1 and 2.7.2 to add alarms and alarms for pyrotechnic detection and temperature detection</p> <p>7、 Modify 2.7.66 to add pyrotechnic detection and temperature detection</p> <p>8、 Modify 2.8.1 Add alarm status of pyrotechnic detection and temperature detection</p>
2020-05-12	Wang Lei	XM20200062-XVR Taiwan version upgrade project	1、 Extension 1.1.36, add code stream type field in URL
2020-05-12	Li Yun Fei	General	1、 Separating capability level agreement 2.3.31 into a separate document
2020-05-12	Dong Chuan Shuai	XM20200045-International PRO product upgrade	<p>1、 Add protocol to get or set general enable parameters</p> <p>2、 Protocol for updating time information parameters</p> <p>3、 Modify access or settings to obtain platform enablement information</p> <p>4、 Increase the set of protocol status capabilities that allow time calibration</p>
2020-5-13	Liu Xiong	XM20190238-8 inch laser ball	1、 Expansion 1.1.31, add iMaxUserNums the maximum number of users
2020-5-13	Ping Xin Xin	XM20200045 International PRO product upgrade	<p>1、 Extension 2.9.2 Device Upgrade Agreement</p> <p>2、 Extension 2.11.1 The query of upgrade progress</p>
2020-5-13	Li Yun Qing	DZ200532-Sky eye 300W bayonet ETC customization	1、 Added 2.1.10 regional cropping coding protocol
2020-5-14	Wang Jia Jing	XM20200097-Radar and video all-in-one machine project	1、 Extension 2.17.2, the lane where the newly expanded isolation zone is located, the number of left lanes, and the description and range of the queue length threshold
2020-5-14	Zhang Bao	XM20200097-Rayvision All-in-One	1、 New application for peripheral radar control status agreement
2020-05-18	Hu Yi Fan	DZ200523	<p>1、 Extension 2.3.11, add "ksrx" platform;</p> <p>2、 Extension 2.3.58, add Kunshan portrait cloud platform;</p>
2020-5-20	Qin	XM20200094-I	1、 2.3.81, temperature correction parameter setting



	Gui Qian	nfrared Thermal Imaging Camera Project	protocol, blackbody correction type, extended "keep" type
2020-05-22	Zhang Jin Long	XM20200098-H .265 Transportation Host Project	1. Extension 2.14.134 / CGI / ITS / ShotPara / SnapPicMerge, add Kaka synthesis enable mark, electric card synthesis enable mark.
2020-05-22	Zhang Zi Kang	XM20190238-8 inch laser ball	1、 Extended acquisition module power dissipation limit parameter protocol
2020/05/23	Yu Xin	XM20200094-I nfrared Thermal Imaging Camera	1. 2.7.127 Add temperature abnormality alarm enable

## Schedule

### Schedule 1:

Explanations on transaction ID		
Definition	Type is unified as unsigned long long type (u64) .	
High 32-bit represents request source, client side generation	No. 61-64bit	4bit client side type (range 0-15) : 0-others 1-NVR main program 2-GUI 3-network client side 4-CGI client side 5-trade external hanging .....
	No. 33-60bit	28bit client side sole identification: when the request is initiated each time, the client side itself generates a non-repetitive identification code for distinguishing multiple client sides of same type.

Low 32-bit represents transaction, main program human face module distribution	No. 25-32bit	8bit transaction type (range 0-255) : 0-others 1-video stream analysis 2-picture stream analysis 3-single picture analysis 4-feature calculation .....
	No. 1-24bit	24bit (frame/picture/request) No.: cyclic increase

**Schedule 2: property description and use methods**

Property	Description	Method	Applied XML data type
min	Minimum character length of character string, or minimum numerical value of figures	Case: min="0" min="19" min="-74"(only figure) min="1.6"	All data types remove : fixed predefine data type 1)
max	Maximum character length of character string, or maximum numerical value of figures	Case: max="4" max="37" max="8192" max="14.61"	All data types remove : fixed predefine data type 1)
range	It indicates the range of numerical value in the "minimum" and "maximum" property of elements. This property is used only when the possible values of XML elements do not include the whole range of numerical value between the "minimum" and "maximum" property.	The range is listed in number sequence , and separated by “,”character. The form of range is“x~y”, including x as the lower limit of range, and y as the upper limit of range. Single number may also be used. Case: if the XML element support value is 0, 487, 1674~2009, 2012, then the grammar is : range =“0, 487, 1674~2009, 2012”.	All data types
opt	All data except for the fixed data types.	If all options are supported , the grammar is“all”. Otherwise , the listed supported options are separated by the “,” character. Case: opt="all" opt="1, 4, 6, 7"	All data types
def	It indicates the default value of the XML elements. If the elements do not have the default value, this property shall not be used.	Case: def="7416" def="ace"	All data types
reqReboot	It indicates whether the configuration of these XML elements can be effective only by restarting the equipments.	reqReboot="true"	All data types

Property	Description	Method	Applied XML data type
	If the elements do not need guidance, this property shall not be used.		
dynamic	It indicates whether the XML elements have the dynamic functions of relying on other XML configuration. For example, if the data range of some element changes according to the configuration value of another element, this property must be used. Under this condition, the function property of elements must always reflect the current equipment configuration.	dynamic="true"	All data types
size	It indicates the maximum item number in the XML list. This property only applies to the XML list elements. This property shall not be used for elements of any other type.	Case: in the equipment supporting 16 users, the case is <UserList size="16"> <User> ... </UserList>	It only supports the list elements.

1) The fixed predefined data types do not require some function properties, because their format/data range has been defined.

## 1/ISAPI

### 1.1/ISAPI/System

#### 1.1.1/ISAPI/System/TwoWayAudio/channels/<ID>

/ISAPI/System/TwoWayAudio/channels/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Obtain audio parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<TwoWayAudioChannel>	
<b>PUT</b>		
<b>Description</b>	Set audio parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<TwoWayAudioChannel>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is to realize the query and setting of the audio parameters, and realize the query and setting of the client sides or IE for the equipment audio parameters through the CGI protocol, including the parameters such as audio input (volume/audio encoding mode/sampling rate/noise reduction), audio output (audio output type/output volume/echo suppression), etc.		
<b>Explanations on key parameters:</b>		
Note: in the URL of all CGI protocols, if the ID introduction has the decimal points, it will be treated as reshaping.		
<enabled> represents whether the audio is opened, true: open, false: close		

<audioCompressionType> represents audio encoding type, including: G.711A, G.711U, ADPCM\_D, AAC\_LC  
 <speakerVolume> represents volume value, range 0-100  
 <noisereduce> represents audio noise reduction, 0: close, 1-9: scale range  
 <audioBitRate> represents audio sampling rate, including 8, 32, 48  
 <audioInputType > represents audio control type  
 <audioOutputType> represents audio output type  
 <outputVolume> represents output volume value, range 0-100  
 <echoRestrained> represents echo suppression, true: open, false: close  
 <speaker1> represents loudspeaker type 1, true: open, false: close  
 <speaker2> represents loudspeaker type 2, true: open, false: close

### TwoWayAudioChannelXML Block

```

<TwoWayAudioChannel version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <id><!-- req, xs:string;id --></id>
  <enabled><!-- req, xs:boolean --></enabled>
  <audioCompressionType opt=" G.711A, G.711U, ADPCM,AAC_LC"><!-- req, xs:string,
    "G.711alaw,G.711ulaw,G.726,G.729,G.729a,G.729b,PCM,MP3,AC3,AAC,ADPC"-->
</audioCompressionType>
  <audioInboundCompressionType><!-- opt, xs:string,
    "G.711alaw,G.711ulaw,G.726,G.729,G.729a,G.729b,PCM,MP3,AC3,AAC,ADPCM"-->
</audioInboundCompressionType>
  <speakerVolume><!-- opt, xs:integer--></speakerVolume>
  <microphoneVolume><!-- opt, xs:integer--></microphoneVolume>
  <noisereduce><!-- opt, xs: integer --></noisereduce>
  <audioBitRate opt="8, 16, 32,48"><!-- opt, xs:integer;kbs--></audioBitRate>//unit kbs 8
  represents 8k
  <audioInputType ><!-- opt, xs:string, "MicIn, LineIn"--></audioInputType>
  <audioOutputType><!-- opt, xs:string, "innerspeaker, audiodevice,
  close"--></audioOutputType>
  <outputVolume><!-- opt, xs:integer--></outputVolume>
  <echoRestrained><!-- opt, xs:boolean "true, false" --></echoRestrained>
  <associateVideoInputs><!-- opt -->
  <enabled><!-- req, xs:Boolean --></enabled>
  <videoInputChannelList><!-- req -->
  <videoInputChannelID><!-- opt, xs:string; id --></videoInputChannelID>
</videoInputChannelList>
</associateVideoInputs>
  <audioSamplingRate><!-- opt, xs:float, in kHz --></audioSamplingRate>
  <speaker1><!-- opt, xs:boolean "true, false" --></speaker1>
  <speaker2><!-- opt, xs:boolean "true, false" --></speaker2>
</TwoWayAudioChannel>
  
```

### Test cases

**GET /ISAPI/System/TwoWayAudio/channels/<ID>**

**Request XML:** none

**Response XML:** <TwoWayAudioChannel>

**PUT/ISAPI/System/TwoWayAudio/channels/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```

<?xml version="1.0" encoding="UTF-8"?>
<TwoWayAudioChannel>
<id>1</id>
<audioCompressionType>G.711U</audioCompressionType>
<audioBitRate>32</audioBitRate>
<audioInputType>MicIn</audioInputType>
<speakerVolume>67</speakerVolume>
<noisereduce>5</noisereduce>
<enabled>true</enabled>
  
```

```

<audioOutputType>innerspeaker</audioOutputType>
<outputVolume>30</outputVolume>
<echoRestrained>true</echoRestrained>
<speaker1> true</speaker1>
<speaker2> true</speaker2>
</TwoWayAudioChannel>

```

### 1.1.2/ISAPI/System/Network/interfaces/<ID>

/ISAPI/System/Network/interfaces/<ID>      General Resource    v2.0	
<b>GET</b>	
<b>Description</b>	Obtain wired network parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<NetworkInterface>
<b>PUT</b>	
<b>Description</b>	Set wired network parameters
<b>Query</b>	None
<b>Inbound Data</b>	<NetworkInterface>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol is to realize the query and setting of the wired network parameters, and realize the query and setting of the client sides or IE for the equipment wired network parameters through the CGI protocol, including the parameters such as IPv4 address/IPv6 address/IPv6 subnet mask/ipv4 gateway/DNS/physical address/network card rate/MTU, etc.	
<b>Explanations on key parameters:</b>	
The <ipAddress> in <addressingType> represents IPv4 address, with format as: 10.30.30.30	
<subnetMask> represents IPv4 subnet mask, with format as: 255.255.255.0	
<ipv6Address> represents IPv6 address (only supporting get)	
<bitMask> represents IPv6 subnet mask (only supporting get)	
The <ipAddress> in <DefaultGateway> represents ipv4 gateway	
The <ipAddress> in <PrimaryDNS> and <SecondaryDNS> represents DNS	
<MACAddress> represents physical address (only supporting get)	
<autoNegotiation> represents automatically obtaining the ip address, true: open, false: close	
<manualSetDns> true: open, false: close	
<speed> represents gateway rate (not used temporarily)	
<MTU> represents MTU, range: 500-1500	
<workmode> work mode, LoadBalance (load balance), MultiAddr (multi-address setting), NetFaultTolerant (network redundancy)	

#### NetworkInterfaceXML Block

```

<NetworkInterface version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<id><!--req, xs:string--></id>
<IPAddress version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<ipVersion><!--req, xs:string, "v4,v6,dual" --></ipVersion>
<addressingType><!--req, xs:string, "static,dynamic,apipa" --></addressingType>
<ipAddress><!--dep, xs:string --></ipAddress>
<subnetMask><!--dep, xs:string, subnet mask for IPv4 address --></subnetMask>
<ipv6Address><!--dep, xs:string --></ipv6Address>
<bitMask><!--dep, xs:integer, bitmask IPv6 address --></bitMask>
<DefaultGateway><!--dep -->
<ipAddress><!--dep, xs:string --></ipAddress>
<ipv6Address><!--dep, xs:string --></ipv6Address>
</DefaultGateway>
<PrimaryDNS><!--dep -->
<ipAddress><!--dep, xs:string --></ipAddress>

```

```

<ipv6Address><!--dep, xs:string --></ipv6Address>
</PrimaryDNS>
<SecondaryDNS><!--dep -->
<ipAddress><!--dep, xs:string --></ipAddress>
<ipv6Address><!--dep, xs:string --></ipv6Address>
</SecondaryDNS>
<Ipv6Mode><!--opt -->
<ipV6AddressingType>
<--dep, xs:string,"ra,manual,dhcp>
</ipV6AddressingType>
<ipv6AddressList>
<v6Address>
<id><!--dep, xs:string;id --></id>
<type><--dep, xs:string,"ra,manual,dhcp"></type>
<address><!--dep, xs:string --></address>
<bitMask><!--dep, xs:integer --></bitMask>
</v6Address>
</ipv6AddressList>
</Ipv6Mode>
</IPAddress>
<Wireless/><!--opt -->
<Discovery/><!--opt -->
<Link xmlns="http://www.isapi.org/ver20/XMLSchema">
<MACAddress><!--req, xs:string></MACAddress>
<autoNegotiation><!--req, xs:boolean></autoNegotiation>
< manualSetDns ><!--req, xs:boolean></manualSetDns >
<speed><!--req, xs:integer, "10, 100, 1000"--><speed>
<duplex><!--req, xs:string, "half, full"></duplex>
<MTU><!--req, xs:integer --></MTU>
<workmode><!--req, xs:string "LoadBalance, MultiAddr,
NetFaultTolerant"--></workmode>//work mode
</Link>
<defaultConnection><!--opt, xs:boolean--></defaultConnection>
</NetworkInterface>

```

**Test cases**

**GET /ISAPI/System/Network/interfaces/<ID>**

**Request XML:** none

**Response XML:** <NetworkInterface>

**PUT/ISAPI/System/Network/interfaces/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```

<?xml version="1.0" encoding="UTF-8"?>
<NetworkInterface>
<id>1</id>
<Link>
<autoNegotiation>false</autoNegotiation>
< manualSetDns >true</manualSetDns >
<MTU>1500</MTU>
<MACAddress>00:50:c2:28:1f:a1</MACAddress>
</Link>
<IPAddress>
<ipAddress>10.30.41.19</ipAddress>
<ipv6Address>fe80::250:c2ff:fe28:1fa1</ipv6Address>
<subnetMask>255.255.255.0</subnetMask>
<bitMask>64</bitMask>
<DefaultGateway>

```

```

<ipAddress>10.30.41.1</ipAddress>
</DefaultGateway>
<PrimaryDNS>
<ipAddress>192.168.1.1</ipAddress>
</PrimaryDNS>
</IPAddress>
<AdminAccessProtocolList>
<AdminAccessProtocol>
<protocol>HTTP</protocol>
<portNo>80</portNo>
</AdminAccessProtocol>
<AdminAccessProtocol>
<protocol>HTTPS</protocol>
<portNo>443</portNo>
</AdminAccessProtocol>
<AdminAccessProtocol>
<protocol>RTSP</protocol>
<portNo>554</portNo>
</AdminAccessProtocol>
<AdminAccessProtocol>
<protocol>DATA_PORT</protocol>
<portNo>3000</portNo>
</AdminAccessProtocol>
</AdminAccessProtocolList>
</NetworkInterface>

```

### 1.1.3/ISAPI/System/Network/DDNS/Type/<ID>

/ISAPI/System/Network/DDNS/Type/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Obtain DDNS parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<DDNS>	
<b>PUT</b>		
<b>Description</b>	Set DDNS parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<DDNS>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is to realize the query and setting of the DDNS parameters, and realize the query and setting of the client sides or IE for the equipment DDNS parameters through the CGI protocol, including the parameters such as equipment domain name/server address/port/account number/password, etc.		
<b>Explanations on key parameters:</b>		
url: Type represents the parameter type: 0, common domain name 1, EasyDDNS type; 2, current parameters (when obtaining current parameters, when obtaining other types, enabling is invalid)		
<enabled> represents start, true: start, false: not start		
<provider> stands for DDNS provider		
<hostName> represents equipment domain name, which is not in Chinese.		
<ipAddress> represents server address		
<portNo> represents port		
<userName> represents account number, which is not in Chinese.		
<password> represents password		

### DDNSXML Block

```
<DDNS version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<id><!-- req, xs:string -->
<enabled><!-- req, xs:boolean --></enabled>
<provider>
<!-- req, xs:string, "CommonDDNS, EasyDDNS..." -->
</provider>
<provider>
  <!-- req, xs:string, "IPServer, DynDNS, PeanutHall, HiDDNS ..." -->
</provider>
<serverAddress>
<addressingFormatType>
  <!-- req, xs:string, "ipaddress,hostname"-->
</addressingFormatType>
<hostName><!-- dep, xs:string --></hostName>
<ipAddress><!-- dep, xs:string --></ipAddress>
<ipv6Address><!-- dep, xs:string --></ipv6Address>
</serverAddress>
<portNo><!-- opt, xs:integer--></portNo>
<deviceDomainName><!-- dep, xs:string --></deviceDomainName>
<userName><!-- dep, xs:string --></userName>
<password><!-- wo, dep, xs:string --></password>
</DDNS>
```

#### Test cases

**GET /ISAPI/System/Network/DDNS**

**Request XML:** none

**Response XML:** <DDNS>

**PUT/ISAPI/System/Network/DDNS**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<DDNS>
<enabled>true</enabled>
<provider>DynDNS</provider>
<serverAddress>
<ipAddress>www.3322.org</ipAddress>
</serverAddress>
<userName>nvs</userName>
<password>nvs</password>
<portNo>80</portNo>
<deviceDomainName>nvs.3322.org</deviceDomainName>
</DDNS>
```

### 1.1.4/ISAPI/System/Network/ftp

/ISAPI/System/Network/ftp		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Obtain FTP server parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<FTPNotification>	
<b>PUT</b>		
<b>Description</b>	Set FTP server parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<FTPNotification>	



<b>Success Return</b>	<b>&lt;ResponseStatus&gt;</b>
-----------------------	-------------------------------

**Explanations on protocol:**

This protocol is to realize the query and setting of the FTP server parameters, and realize the query and setting of the client sides or IE for the equipment FTP server parameters through the CGI protocol, including the parameters such as server address/port/account number/password/path, etc.

**Explanations on key parameters:**

<useSSL> represents purpose

NVR: download: selected download, upgrade: selected upgrading, IPC: ture filling, not using this parameter

<ipAddress> represents server address--supporting IPv6 address

<portNo> represents port, range: 0-65535

<userName> represents account number

<password> represents password

<pathDepth> represents path

**FTPNotificationXML Block**

```
<FTPNotification version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<id><!-- req, xs:string;id --></id>
<enabled><!--req, xs:string--></enabled>
<useSSL><!--opt, xs:boolean></useSSL>
<addressingFormatType>
<!-- req, xs:string, "ipaddress,hostname" -->
</addressingFormatType>
<hostName><!-- dep, xs:string --></hostName>
<ipAddress><!-- dep, xs:string --></ipAddress>
<ipv6Address><!-- dep, xs:string --></ipv6Address>
<portNo><!-- opt, xs:integer --></portNo>
<userName><!-- req, xs:string --></userName>
<password><!-- wo, xs:string --></password>
<passiveModeEnabled><!-- opt, xs:boolean --></passiveModeEnabled>
<annoyftp><!--opt, xs:boolean --></annoyftp>
<uploadPicture><!--opt, xs:boolean --></uploadPicture>
<uploadVideoClip><!-- opt, xs:Boolean --></uploadVideoClip>
<uploadPath><!--req -->
<pathDepth><!--req, xs:string --></pathDepth>
<topDirNameRule>
<!-- dep, xs:string, "devName, devId, devIp, customize" -->
</topDirNameRule>
<topDirName/><!-- dep, xs:string-->
<subDirNameRule>
<!-- dep, xs:string, "chanName, chanId, customize"
</subDirNameRule>
<subDirName/><!-- dep, xs:string-->
</uploadPath>
</FTPNotification>
```

**Test cases**

**GET /ISAPI/System/Network/ftp**

**Request XML: none**

**Response XML: <FTPNotification>**

**PUT/ISAPI/System/Network/ftp**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<?xml version="1.0" encoding="UTF-8"?>
<FTPNotification>
<useSSL>true</useSSL>
<ipAddress>10.30.41.51</ipAddress>
<userName>admin</userName>
```

```

<password>1111</password>
<portNo>21</portNo>
<uploadPath>
<pathDepth>user\20161213</pathDepth>
</uploadPath>
</FTPNotification>

```

### 1.1.5/ISAPI/System/Network/PPPoE

/ISAPI/System/Network/PPPoE		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Obtain PPPoE parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<PPPoE>	
<b>PUT</b>		
<b>Description</b>	Set PPPoE parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<PPPoE>	
<b>Success Return</b>	<ResponseStatus>	
<p><b>Explanations on protocol:</b>            This protocol is to realize the query and setting of the PPPoE parameters, and realize the query and setting of the client sides or IE for the PPPoE parameters through the CGI protocol, including the parameters such as account number/password, etc.</p> <p><b>Explanations on key parameters:</b>            &lt;enabled&gt; represents start, true: start, false: not start            &lt;userName&gt; represents account number            &lt;password&gt; represents password</p>		

#### PPPoEXML Block

```

<PPPoE xmlns="http://www.isapi.org/ver20/XMLSchema">
  <id><!-- req, xs:string --></id>
  <enabled><!-- req, xs:boolean --></enabled>
  <ethernetIfId><!-- opt, xs:string; id --></ethernetIfId>
  <userName><!-- req, xs:string --></userName>
  <password><!-- wo, req, xs:string --></password>
</PPPoE>

```

#### Test cases

**GET /ISAPI/System/Network/PPPoE**

**Request XML:** none

**Response XML:** <PPPoE>

**PUT/ISAPI/System/Network/PPPoE**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```

<?xml version="1.0" encoding="UTF-8"?>
<PPPoE>
<id>0</id>
<enabled>true</enabled>
<userName>12345678</userName>
<password>12345678</password>
</PPPoE>

```

### 1.1.6/ISAPI/System/Network/UPnP

/ISAPI/System/Network/UPnP		General Resource v2.0
----------------------------	--	-----------------------

<b>GET</b>	
<b>Description</b>	Obtain UPnP parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<UPnP>
<b>PUT</b>	
<b>Description</b>	Set UPnP parameters
<b>Query</b>	None
<b>Inbound Data</b>	<UPnP>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

This protocol is to realize the query and setting of the UPnP parameters, and realize the query and setting of the client sides or IE for the UPnP parameters through the CGI protocol.

**Explanations on key parameters:**

- <enabled> means enable port mapping type, true: enabled, false: not enabled
- <mappingType> represents the port mapping type "manual, UPNP"
- <mapmode> stands for UPNP type "auto, manual"
- <enabled> represents starting UPnP, true: start, false: not start
- <natRouterLanAddr> represents external ip address
- <internalPort> represents port type
- <externalPort> represents external port No.

**UPnPXML Block**

```
<UPnP version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<enabled><!-- req --></enabled>
<mappingType><!-- req, xs:string, " manual,UPNP" --></mappingType>
<ports>
<enabled><!-- req --></enabled>
<mapmode><!-- req, xs:string, "auto,manual" --></mapmode>
<natRouterLanAddr><!-- opt -->
<ipVersion><!-- req, xs:string, "v4,v6,dual" --></ipVersion>
<ipAddress><!-- dep, xs:string --></ipAddress>
<ipv6Address><!-- dep, xs:string --></ipv6Address>
</natRouterLanAddr>
<portList><!-- req -->
<port>
<id><!--req, xs:integer --></id>
<enabled><!-- req --></enabled>
<internalPort><!-- req, xs:string, "http, admin, rtsp,https ..."></internalPort>
<externalPort><!--req, xs:integer --></externalPort>
</port>
</portList>
<natType><!--req, xs:string, "manual, auto" --></natType>
</ports>
</UPnP>
```

**Test cases**

**GET /ISAPI/System/Network/UPnP**

**Request XML:** none

**Answer XML:** <UPnP>

**PUT/ISAPI/System/Network/UPnP**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```

<?xml version="1.0" encoding="UTF-8"?>
<UPnP>
<enabled>true</enabled>
<mappingType>UPNP</mappingType>
<ports>
<mapmode>auto</mapmode>
<natRouterLanAddr>
<ipVersion>v4</ipVersion>
<ipAddress>0.0.0.0</ipAddress>
</natRouterLanAddr>
<portList>
<port>
<id>1</id>
<internalPort>HTTP</internalPort>
<externalPort>80</externalPort>
</port>
<port>
<id>2</id>
<internalPort>RTSP</internalPort>
<externalPort>554</externalPort>
</port>
<port>
<id>3</id>
<internalPort>HTTPS</internalPort>
<externalPort>443</externalPort>
</port>
<port>
<id>4</id>
<internalPort>DATA_PORT</internalPort>
<externalPort>3000</externalPort>
</port>
</portList>
</ports>
</UPnP>

```

### 1.1.7/ISAPI/System/Network/SNMP

/ISAPI/System/Network/SNMP		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Obtain SNMP parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<SNMP>	
<b>PUT</b>		
<b>Description</b>	Set SNMP parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<SNMP>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is to realize the query and setting of the SNMP parameters, and realize the query and setting of the client sides or IE for the SNMP parameters through the CGI protocol.		
<b>Explanations on key parameters:</b>		
<enabled> represents starting SNMP, true: start, false: not start		

### SNMPXML Block

```

<SNMP version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<SNMPv1c/>
<!-- dep, choose one mode in <SNMPv1c><SNMPv2c><SNMPAdvanced> is required-->
<enabled><!--req, xs:boolean; --></enabled>
<SNMPv2c/><!-- dep -->
<SNMPAdvanced/><!-- dep -->
<listenPort><!--opt, xs:integer ,snmp port--></listenPort>
</SNMP>
<SNMPv1c version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<notificationEnabled><!-- req, xs:boolean --></notificationEnabled>
<SNMPTrapReceiverList/><!-- opt -->
<enabled><!--req, xs:boolean; is enabled snmpv2c--></enabled>
<writeCommunity><!--req, xs:string --></writeCommunity>
<readCommunity><!-- req, xs:string --></readCommunity>
</SNMPv1c>
<SNMPv2c version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<notificationEnabled><!-- req, xs:boolean --></notificationEnabled>
<SNMPTrapReceiverList/><!-- opt -->
<enabled><!--req, xs:boolean; is enabled snmpv2c--></enabled>
<writeCommunity><!--req, xs:string --></writeCommunity>
<readCommunity><!-- req, xs:string --></readCommunity>
</SNMPv2c>
<SNMPAdvanced version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<localEngineID><!-- req, xs:hexBinary, see RFC2571 --></localEngineID>
<authenticationNotificationEnabled>
<!-- opt, xs:boolean -->
</authenticationNotificationEnabled>
<SNMPUserList/><!-- opt -->
<SNMPNotificationFilterList/><!-- opt -->
<notificationEnabled><!-- opt, xs:boolean --></notificationEnabled>
<SNMPNotificationReceiverList/><!-- opt -->
<enabled><!--req, xs:boolean --></enabled>
</SNMPAdvanced>

```

**Test cases**

**GET /ISAPI/System/Network/SNMP**

**Request XML:** none

**Response XML:** <SNMP>

**PUT/ISAPI/System/Network/SNMP**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```

<?xml version="1.0" encoding="UTF-8"?>
<SNMP>
<enabled>false</enabled>
</SNMP>

```

**1.1.8/ISAPI/System/Network/MUC**

<b>/ISAPI/System/Network/MUC</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Obtain multicast parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<MUC>	
<b>PUT</b>		

<b>Description</b>	Set multicast parameters
<b>Query</b>	None
<b>Inbound Data</b>	<MUC>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This protocol is to realize the query and setting of the multicast parameters, and realize the query and setting of the client sides or IE for the multicast parameters through the CGI protocol, including the parameters, including the parameters such as ip address/port, etc.  Note: this protocol is an IPC protocol, and temporarily does not support NVR.</p> <p><b>Explanations on key parameters:</b>  &lt;enabled&gt; represents multicast switch  &lt;ip&gt; represents ip address--supporting IPv6 address  &lt;port&gt; represents port, range: 70-65535</p>	

#### MUCXML Block

```
< MUC version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<enable><!-- opt, xs: boolean --></enable>
<ip><!-- req, xs:string;id --></ ip >
<port><!--req, xs:integer --></ port>
</ MUC >
```

#### Test cases

**GET /ISAPI/System/Network/MUC**

**Request XML:** none

**Response XML:** <MUC>

**PUT/ISAPI/System/Network/MUC**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<MUC>
<enable>true</enable>
<ip>224.255.255.255</ip>
<port>90</port>
</MUC>
```

#### 11.9/ISAPI/System/Network/ipFilter

/ISAPI/System/Network/ipFilter		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Obtain black and white list parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<IPFilter>	
<b>PUT</b>		
<b>Description</b>	Set black and white list parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<IPFilter>	
<b>Success Return</b>	<ResponseStatus>	

**Explanations on protocol:**

This protocol is to realize the query and setting of the black and white list parameters, and realize the query and setting of the client sides or IE for the equipment black and white list parameters through the CGI protocol, including the parameters such as black and white list type/ip No./ip permission/ip address, etc.

**Explanations on key parameters:**

<enabled> represents starting disabling, true: start black and white list, false: not start black and white list  
 <permissionType> represents black and white list type, deny: black list, allow: white list  
 <id> represents ip No., start from 1 as 1, 2, 3...  
 <permissionType> represents ip permission, deny: forbid, allow: permit  
 <ipAddress> represents ip address--supporting IPv6 address

**IPFilterXML Block**

```
<IPFilter version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<enabled><!-- req, xs:boolean --></enabled>
<permissionType><!-- opt, xs:string, "deny,allow" --></permissionType>
<IPFilterAddressList/><!-- opt -->
</IPFilter>
<IPFilterAddressList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<IPFilterAddress/><!-- opt -->
</IPFilterAddressList>
<IPFilterAddress version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<id><!-- req, xs:string;id --></id>
<permissionType><!-- dep, xs:string, "deny,allow" --></permissionType>
<addressFilterType><!-- req, xs:string, "mask,range" --></addressFilterType>
<AddressRange><!-- dep, depends on <addressFilterType> -->
<startIPAddress><!-- dep, xs:string --></startIPAddress>
<endIPAddress><!-- dep, xs:string --></endIPAddress>
<startIPv6Address><!-- dep, xs:string --></startIPv6Address>
<endIPv6Address><!-- dep, xs:string --></endIPv6Address>
</AddressRange>
<AddressMask><!-- dep, depends on <addressFilterType> -->
<ipAddress><!-- dep, xs:string --></ipAddress>
<ipv6Address><!-- dep, xs:string --></ipv6Address>
<bitMask><!-- req, xs:string --></bitMask>
</AddressMask>
</IPFilterAddress>
```

**Test cases**

**GET /ISAPI/System/Network/ipFilter**

**Request XML:** none

**Response XML:** <IPFilter>

**PUT/ISAPI/System/Network/ipFilter**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<IPFilter>
<enabled>true</enabled>
<permissionType>allow</permissionType>
<IPFilterAddressList>
<IPFilterAddress>
<id>0</id>
<permissionType>allow</permissionType>
<addressFilterType>mask</addressFilterType>
<AddressMask>
<ipAddress>192.168.1.51</ipAddress>
<bitMask>24</bitMask>
</AddressMask>
```

```

</IPFilterAddress>
<IPFilterAddress>
<id>1</id>
<permissionType>allow</permissionType>
<addressFilterType>mask</addressFilterType>
<AddressMask>
<ipAddress>10.30.41.51</ipAddress>
<bitMask>24</bitMask>
</AddressMask>
</IPFilterAddress>
</IPFilterAddressList>
</IPFilter>

```

### 1.1.10/ISAPI/System/Network/channels/<ID>/QoS

/ISAPI/System/Network/channels/<ID>/QoS		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Obtain QoS parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<QoS>	
<b>PUT</b>		
<b>Description</b>	Set QoS parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<QoS>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is to realize the query and setting of the QoS parameters, and realize the query and setting of the client sides or IE for the equipment QoS parameters through the CGI protocol, including the parameters such as code stream DSCP/signaling DSCP, etc.		
<b>Explanations on key parameters:</b>		
<ul style="list-style-type: none"> <li>&lt;streamDSCP&gt; represents code stream DSCP</li> <li>&lt;cmdDSCP&gt; represents signaling DSCP</li> </ul>		

#### QoSXML Block

```

<QoS version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <enable><!-- opt, xs: boolean --><enable>
  <streamDSCP><!-- req, xs:integer; --></streamDSCP>
  <cmdDSCP><!--req, xs:integer --></cmdDSCP>
</QoS>

```

#### Test cases

**GET /ISAPI/System/Network/channels/1/QoS**

**Request XML:** none

**Response XML:** <QoS>

**PUT /ISAPI/System/Network/channels/1/QoS**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```

<?xml version="1.0" encoding="UTF-8"?>
<QoS>
<enable>true</enable>
<streamDSCP>2</streamDSCP>
<cmdDSCP>3</cmdDSCP>
</QoS>

```



### 1.1.11/ISAPI/System/Network/interfaces/IPandPort/<ID>

/ISAPI/System/Network/interfaces/IPandPort/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Obtain IP and port parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<NetworkInterface>	
<b>PUT</b>		
<b>Description</b>	Set IP and port parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<NetworkInterface>	
<b>Success Return</b>	<ResponseStatus>	
<p><b>Explanations on protocol:</b>            This protocol is to realize the query and setting of the IP and port parameters, and realize the query and setting of the client sides or IE for the equipment IP and port parameters through the CGI protocol.</p>		

#### NetworkInterfaceXML Block

```

<NetworkInterface>
<id><!-- req, xs:string --></id>
<IPAddress /><!-- req -->
<Link /><!-- opt -->
  <AdminAccessProtocolList /><!--Req-->
<defaultConnection><!-- opt, xs:boolean--></defaultConnection>
</NetworkInterface>
<IPAddress />:
<IPAddress>
<ipVersion><!-- req, xs:string, "v4,v6,dual" -->ipVersion>
<addressingType><!-- req, xs:string, "static,dynamic,apipa" --></addressingType>
<ipAddress><!-- dep, xs:string --></ipAddress>
<subnetMask><!-- dep, xs:string, subnet mask for IPv4 address --></subnetMask>
<ipv6Address> <!--dep, xs: string-> </ ipv6Address> // Local link address
<bitMask> <!--dep, xs: integer, bitmask IPv6 address-> </ bitMask> // Subnet mask length of
the local link address
<DefaultGateway><!-- dep -->
<ipAddress><!-- dep, xs:string --></ipAddress>
<ipv6Address> <!--dep, xs: string-> </ ipv6Address> // IPv6 default gateway
</DefaultGateway>
<PrimaryDNS><!-- dep -->
<ipAddress><!-- dep, xs:string --></ipAddress>
<ipv6Address> <!--dep, xs: string-> </ ipv6Address> // IPv6 alternate DNS
</PrimaryDNS>
<SecondaryDNS><!-- dep -->
  
```

```

<ipAddress><!-- dep, xs:string --></ipAddress>
<ipv6Address><!-- dep, xs:string --></ipv6Address>
</SecondaryDNS>
<Ipv6Mode> <!--Opt--> // IPv6 address list
<ipV6AddressingType> <!--dep, xs: string, "ra, manual, dhcp"--> </ ipV6AddressingType> //
Current mode of IPv6 address
<ipv6AddressList>
<v6Address>
<id> <!--dep, xs: string, id--> </ id> // IPv6 address number 1 ~ N
<type><!-- dep, xs:string, "ra,manual,dhcp"--></type>
<address><!-- dep, xs:string --></address>
<bitMask><!-- dep, xs:integer --></bitMask>
</v6Address>
</ipv6AddressList>
</Ipv6Mode>
</IPAddress>

<Link />:
<Link>
<MACAddress><!-- req, xs:string--></MACAddress>
<autoNegotiation><!-- req, xs:boolean--></autoNegotiation>
<manualSetDns><!--req, xs:boolean></manualSetDns>
<manualSetIPv6Dns> <!--req, xs: boolean> </ manualSetIPv6Dns> // Add IPv6 DNS setting
method
<speed><!-- req, xs:integer, "10, 100, 1000" --></speed>
<duplex><!-- req, xs:string, "half, full"--></duplex>
<MTU><!-- req, xs:integer --></MTU>
<workmode><!--req, xs:string "LoadBalance, MultiAddr, NetFaultTolerant"-->
  </workmode>//work mode: LoadBalance (load balance), MultiAddr (multi-address setting),
NetFaultTolerant (network redundancy)
</Link>

< AdminAccessProtocolList />:
< AdminAccessProtocolList >
< AdminAccessProtocol />
</ AdminAccessProtocolList >

< AdminAccessProtocol /> :
<AdminAccessProtocol>
<id><!-- req, xs:string;id --></id>
<protocol><!--req, xs:string; "HTTP,HTTPS,RTSP,DEV_MANAGE,DATA_PORT,RTMP"
--></protocol>
  <portNo><!-- req, xs:integer --></portNo>
</AdminAccessProtocol>

```

#### Test cases

**GET /ISAPI/System/Network/interfaces/IPandPort/<ID>**

**Request XML:** none

**Response XML:** <NetworkInterface>

**PUT /ISAPI/System/Network/interfaces/IPandPort/<ID>**

**Response XML:** <ResponseStatus>

**Request XML: as below**

```
<?xml version="1.0" encoding="UTF-8"?>
<NetworkInterface>
<id>1</id>
<Link>
<autoNegotiation>false</autoNegotiation>
<manualSetDns>true</manualSetDns>
<MTU>1500</MTU>
<MACAddress>00:50:c2:28:10:15</MACAddress>
</Link>
<IPAddress>
<ipAddress>10.30.41.21</ipAddress>
<ipv6Address>fe80::250:c2ff:fe28:1015</ipv6Address>
<subnetMask>255.255.255.0</subnetMask>
<bitMask>64</bitMask>
<DefaultGateway>
<ipAddress>10.30.41.1</ipAddress>
</DefaultGateway>
<PrimaryDNS>
<ipAddress>192.168.1.1</ipAddress>
</PrimaryDNS>
</IPAddress>
<AdminAccessProtocolList>
<AdminAccessProtocol>
<protocol>HTTP</protocol>
<portNo>80</portNo>
</AdminAccessProtocol>
<AdminAccessProtocol>
<protocol>HTTPS</protocol>
<portNo>443</portNo>
</AdminAccessProtocol>
<AdminAccessProtocol>
<protocol>RTSP</protocol>
<portNo>554</portNo>
</AdminAccessProtocol>
<AdminAccessProtocol>
<protocol>DATA_PORT</protocol>
<portNo>3000</portNo>
</AdminAccessProtocol>
<AdminAccessProtocol>
<protocol>RTMP</protocol>
<portNo>1935</portNo>
</AdminAccessProtocol>
</AdminAccessProtocolList>
</NetworkInterface>
```

**1.1.12/ISAPI/System/Network/AlarmServer**

<b>/ISAPI/System/Network/AlarmServer</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Obtain alarm server parameters	
<b>Query</b>	None	

<b>Inbound Data</b>	None
<b>Success Return</b>	<AlarmServer>
<b>PUT</b>	
<b>Description</b>	Set alarm server parameters
<b>Query</b>	None
<b>Inbound Data</b>	<AlarmServer>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This protocol is to realize the query and setting of the alarm server parameters, and realize the query and setting of the client sides or IE for the equipment alarm server parameters through the CGI protocol, including the parameters such as alarm server/port, etc.</p> <p><b>Explanations on key parameters:</b>  &lt; IP&gt; represents alarm server, check whether IP is legal--supporting IPv6 address  &lt;port&gt; represents port, range prompt: 1-65535</p>	

#### AlarmServerXML Block

```
<?xml version="1.0" encoding="UTF-8"?>
< AlarmServer version="2.0">
  <IP1><!-- opt, xs:string --"0.0.0.0"></IP1>
  <Port1><!-- opt, xs:integer,></ Port1>
</ AlarmServer >
```

#### Test cases

**GET /ISAPI/System/Network/AlarmServer**

**Request XML:** none

**Response XML:** <AlarmServer>

**PUT/ISAPI/System/Network/AlarmServer**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<AlarmServer>
<IP>255.255.255.255</IP>
<port>0</port>
</AlarmServer>
```

#### 1.1.13/ISAPI/System/Network/mailing

<b>/ISAPI/System/Network/mailing</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Obtain email alarm parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<mailingList>	
<b>PUT</b>		
<b>Description</b>	Set email alarm parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<mailingList>	
<b>Success Return</b>	<ResponseStatus>	

**Explanations on protocol:**

This protocol is to realize the query and setting of the email alarm parameters, and realize the query and setting of the client sides or IE for the equipment email alarm parameters through the CGI protocol, including the parameters such as Email server address/port number/user name/password/main and carbon copy email address/login mode/encrypted mode/theme, etc.

**Explanations on key parameters:**

<enable> represents whether to start, true: start, false: not start  
 <hostName> represents Email server address, maximum 31 characters  
 <portNo> represents port number, range: 0-65535  
 <accountName> represents user name, solely inputting English or figures, maximum 31 characters  
 <password> represents password, solely inputting English or figures, maximum 31 characters  
 <emailAddress> represents main and carbon copy email address, maximum 31 characters  
 <emailMode> represents login mode, supporting mode: off, plain, cram-md5, digest-md5, gssapi, external, login, ntlm  
 <encryption> represents encryption mode, supporting encryption mode: NonePw, SSL, TLS  
 <emailSubject> represents theme, maximum 31 characters, and 15 Chinese characters

**mailingListXML Block**

```
<mailingList xmlns="http://www.isapi.org/ver20/XMLSchema">
<mailing xmlns="http://www.isapi.org/ver20/XMLSchema">
<id/><!-- req, xs:string, id -->
<enable><!-- req, xs:bool--></enable>
<sender><!-- req-->
  <name><!-- req, xs:string></name>
  <emailAddress><!-- req, xs:string --></emailAddress>
  <smtp><!-- req -->
  <enableAuthorization><!-- req, xs:boolean--></enableAuthorization>
  <enableSSL><!-- opt, xs:boolean--></enableSSL>
<addressingFormatType>
<!-- req, xs:string, "ipaddress,hostname" -->
</addressingFormatType>
<hostName><!-- dep, xs:string --></hostName>
<ipAddress><!-- dep, xs:string --></ipAddress>
<ipv6Address><!-- dep, xs:string --></ipv6Address>
<portNo><!-- opt, xs:integer --></portNo>
<accountName><!-- dep, xs:string --></accountName>
<password><!-- dep, xs:string --></password>
</smtp>
</sender>
<receiverList><!-- req -->
<receiver>
<id><!-- req, xs:string; id --></id>
<name><!-- req, xs:string --></name>
<emailAddress><!-- req, xs:string --></emailAddress>
</receiver>
</receiverList>
<attachment><!-- opt-->
<snapshot><!-- opt-->
<enabled ><!-- req, xs:boolean--></ enabled>
<interval><!-- req, xs:integer, seconds></interval>
</snapshot>
</attachment>
<emailMode><!-- req, xs:string --><emailMode>
<encryption><!-- req, xs:string -SSL,TLS,NonePw><encryption>
<emailSubject><!-- req, xs:string --><emailSubject>
</mailing>
</mailingList>
```

**Test cases****GET /ISAPI/System/Network/mailing****Request XML:** none**Response XML:** <mailingList>**PUT/ISAPI/System/Network/mailing****Response XML:** <ResponseStatus>**Request XML:** as below

```

<?xml version="1.0" encoding="UTF-8"?>
<mailingList>
<mailing>
<id>1</id>
<enable>true</enable>
<sender>
<smtp>
<hostName>smtp.163.com</hostName>
<accountName>test@163.com</accountName>
<portNo>25</portNo>
<password>test</password>
</smtp>
</sender>
<receiverList>
<receiver>
<emailAddress>test@163.com</emailAddress>
</receiver>
<receiver>
<emailAddress></emailAddress>
</receiver>
<receiver>
<emailAddress></emailAddress>
</receiver>
<receiver>
<emailAddress></emailAddress>
</receiver>
<receiverList>
<emailMode>login</emailMode>
<encryption>TLS</encryption>
<emailSubject>TEST</emailSubject>
</mailing>
</mailingList>

```

**1.1.14/ISAPI/System/Network/mailing/test**

<b>/ISAPI/System/Network/mailing/test</b>		<b>General Resource v2.0</b>
<b>PUT</b>		
<b>Description</b>	Set email test alarm	
<b>Query</b>	None	
<b>Inbound Data</b>	<mailingTestDescription>	
<b>Success Return</b>	<mailingTestResult>	
<b>Explanations on protocol:</b>		
This protocol is to realize the setting of the equipment email test alarm, and realize the setting of the client sides or IE for the equipment email test alarm through the CGI protocol.		

**mailingTestDescriptionXML Block**

```

<mailingTestDescription version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<sendName><!--opt, xs:string --></sendName>
<sendEmailAddress><!--req, xs:string --></sendEmailAddress>
<addressingFormatType>
<!-- req, xs:string, "ipaddress,hostname" -->
</addressingFormatType>
<hostName><!-- dep, xs:string --></hostName>
<ipAddress><!-- dep, xs:string --></ipAddress>
<ipv6Address><!-- dep, xs:string --></ipv6Address>
<portNo><!-- req, xs:integer --></portNo>
<enableSSL><!--opt, xs:boolean--></enableSSL>
<enableAuthorization><!--req, xs:boolean--></enableAuthorization>
<accountName><!-- dep, xs:string --></accountName>
<password><!-- dep, xs:string --></password>
<receiverList><!-- req -->
<receiver>
<id><!--req, xs:string; id --></id>
<name><!--req, xs:string --></name>
<emailAddress><!-- req, xs:string --></emailAddress>
</receiver>
</receiverList>
</mailingTestDescription>

<mailingTestResult version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<errorDescription><!-- req, xs:inter --></errorDescription>//test id, -1 is error
</mailingTestResult>

```

**Test cases**

**PUT/ISAPI/System/Network/mailing/test**

**Response XML: <ResponseStatus>**

**Request XML: None**

**1.1.15/ISAPI/System/Network/mailing/DelayTimeReset**

<b>/ISAPI/System/Network/mailing/DelayTimeReset</b>		<b>General Resource v2.0</b>
<b>PUT</b>		
<b>Description</b>	Set the email alarm email sending delay zero	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is to realize the setting of the equipment email alarm email sending delay zero, and realize the setting of the client sides or IE for the equipment email alarm email sending delay zero through the CGI protocol.		

**Test cases**

**PUT/ISAPI/System/Network/mailing/DelayTimeReset**

**Response XML: <ResponseStatus>**

**Request XML: None**

**1.1.16/ISAPI/System/Network/interfaces/<ID>/wireless**

<b>/ISAPI/System/Network/interfaces/&lt;ID&gt;/wireless</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Obtain wireless parameters	
<b>Query</b>	None	

<b>Inbound Data</b>	None
<b>Success Return</b>	<Wireless>
<b>PUT</b>	
<b>Description</b>	Set wireless parameters
<b>Query</b>	None
<b>Inbound Data</b>	<Wireless>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

This protocol is to realize the query and setting of the wireless parameters, and realize the query and setting of the client sides or IE for the equipment wireless parameters through the CGI protocol, including the parameters such as wireless status/ESSID/safety type/secret key type/password/secret key format selection/IP obtaining mode/ip address/subnet mask, etc.

**Explanations on key parameters:**

- <wireCard> represents wireless network card, true: have network card, false: have no network card
- <wireStatus> represents wireless status, true: online, false: offline
- <ssid> represents ESSID
- <securityMode> represents safety type, supporting type: WEP, WPA-PSK, WPA2-PSK, AUTO
- <algorithmType> represents secret key type, supporting type: TKIP、AES、AUTO
- <sharedKey> represents password
- <WPAFormat> represents secret key format selection, supporting format: HEX, ASCII, AUTO
- <wpaKeyLength> represents password length
- <ipVersion> represents IPV4 or IPV6
- <addressingType> represents IP obtaining mode, supporting mode: static, dynamic
- <ipAddress> represents IPV4 address
- <subnetMask> represents IPV4 subnet mask
- <ipAddress> represents IPV4 default gateway
- <DefaultGateway> represents default gateway (currently only using IPV4)
- <ipAddress> represents IPV4 DNS
- <PrimaryDNS> represents DNS (currently only using IPV4)

**WirelessXML Block**

```
<Wireless version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<enabled><!-- req, xs:boolean --></enabled>
<wirelessNetworkMode><!-- opt, xs:string, "infrastructure,adhoc" -->
</wirelessNetworkMode>
<channel><!-- opt, xs:string, "1-14,auto" --></channel>
<wireCard><!-- opt, xs:bool--><wireCard>
<wireStatus><!-- opt, xs:bool--></wireStatus>
<ssid><!-- opt, xs:string --></ssid> //ESSID
<wmmEnabled><!-- opt, xs:boolean --></wmmEnabled>
<WirelessSecurity><!-- opt -->
<securityMode><!-- opt, xs:string,
"disable,WEP,WPA-personal,WPA2-personal,WPA-RADIUS,
WPA-enterprise,WPA2-enterprise, AUTO, WPA-PSK, WPA2-PSK"-->
</securityMode>
<WEP><!-- dep, depends on <securityMode> -->
  <authenticationType><!-- req, xs:string, "open,sharedkey,auto" --></authenticationType>
<defaultTransmitKeyIndex><!-- req, xs:integer --></defaultTransmitKeyIndex>
<wepKeyLength><!-- opt, xs:integer "64,128" --></wepKeyLength>
<EncryptionKeyList>
<encryptionKey><!-- req, xs:hexBinary, WEP encryption key in hexadecimal format -->
</encryptionKey>
</EncryptionKeyList>
</WEP>
<WPA><!-- dep, depends on <securityMode> -->
```



```

<algorithmType><!-- req, xs:string, "TKIP,AES,TKIP/AES,AUTO"--></algorithmType>
<sharedKey><!-- req, xs:string, pre-shared key used in WPA --></sharedKey>
  <WPAFormat><!-- req, xs:string, "HEX,ASCII,AUTO"--></WPAFormat>
<wpaKeyLength><!-- req, xs:integer, "8-63"--></wpaKeyLength>
</WPA>
</WirelessSecurity>
<ipVersion> <!-- req, xs:string, "v4,v6,dual"--></ipVersion>
<addressingType> <!-- req, xs:string, "static,dynamic,apipa"--></addressingType>
<ipAddress> <!-- dep, xs:string --></ipAddress>
<subnetMask><!-- dep, xs:string, subnet mask for IPv4 address --> </subnetMask>
<ipv6Address><!-- dep, xs:string --> </ipv6Address>
<bitMask> <!-- dep, xs:integer, bitmask IPv6 address --></bitMask>
<DefaultGateway><!-- dep -->
<ipAddress><!-- dep, xs:string --></ipAddress>
<ipv6Address><!-- dep, xs:string --></ipv6Address>
</DefaultGateway>
<PrimaryDNS><!-- dep -->
<ipAddress><!-- dep, xs:string --></ipAddress>// IPV4 DNS
<ipv6Address><!-- dep, xs:string --></ipv6Address>
</PrimaryDNS>
<SecondaryDNS> <!-- dep -->
<ipAddress> <!-- dep, xs:string --> </ipAddress>
<ipv6Address><!-- dep, xs:string --> </ipv6Address>
</SecondaryDNS>
<Ipv6Mode><!-- opt -->
  <ipV6AddressingType>
    <-- dep, xs:string, "ra,manual,dhcp"
  </ipV6AddressingType>
  <ipv6AddressList>
    <v6Address>
      <id><!-- dep, xs:string;id --></id>
      <type><-- dep, xs:string, "ra,manual,dhcp" </type>
      <address><!-- dep, xs:string --> </address>
      <bitMask><!-- dep, xs:integer --> </bitMask>
    </v6Address>
  </ipv6AddressList>
</Ipv6Mode>
</IPAddress>
</Wireless>

```

**Test cases**

**GET /ISAPI/System/Network/interfaces/<ID>/wireless**

**Request XML: none**

**Response XML: <Wireless>**

**PUT/ISAPI/System/Network/interfaces/<ID>/wireless**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<?xml version="1.0" encoding="UTF-8"?>
<Wireless>
<enabled>true</enabled>
<channel>1</channel>
<wireCard>false</wireCard>
<wireStatus>false</wireStatus>
<ssid>0</ssid>
<WirelessSecurity>
<securityMode>
</securityMode>
<WEP>

```

```

<authenticationType>N/A</authenticationType>
<defaultTransmitKeyIndex>N/A</defaultTransmitKeyIndex>
<EncryptionKeyList>
<encryptionKey>
</encryptionKey>
</EncryptionKeyList>
</WEP>
<WPA>
<algorithmType>TKIP</algorithmType>
<sharedKey>123456</sharedKey>
<WPAFormat>ASCII</WPAFormat>
</WPA>
</WirelessSecurity>
<ipVersion>v4</ipVersion>
<addressingType>static</addressingType>
<ipAddress>192.168.0.2</ipAddress>
<subnetMask>255.255.255.0</subnetMask>
<ipv6Address>255.255.255.0</ipv6Address>
<bitMask>255.255.255.0</bitMask>
<DefaultGateway>
<ipAddress>192.168.0.1</ipAddress>
<ipv6Address>192.168.1.1</ipv6Address>
</DefaultGateway>
<PrimaryDNS>
<ipAddress>192.168.1.1</ipAddress>
<ipv6Address>192.168.1.1</ipv6Address>
</PrimaryDNS>
<SecondaryDNS>
<ipAddress>192.168.1.1</ipAddress>
<ipv6Address>192.168.1.1</ipv6Address>
</SecondaryDNS>
<Ipv6Mode>
<ipV6AddressingType>manual</ipV6AddressingType>
<ipv6AddressList>
<v6Address>
<id>0</id>
<type>manual</type>
<address>192.168.1.1</address>
<bitMask>255.255.255.0</bitMask>
</v6Address>
</ipv6AddressList>
</Ipv6Mode>
</Wireless>

```

### 1.1.17/ISAPI/System/Network/interfaces/<ID>/wireless/accessPointList

/ISAPI/System/Network/interfaces/<ID>/wireless/accessPointList	
General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Obtain wireless hot spot list parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<accessPointList>
<b>PUT</b>	
<b>Description</b>	Set wireless hot spot list parameters

<b>Query</b>	None
<b>Inbound Data</b>	<accessPointList>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This protocol is to realize the query and setting of the wireless hot spot list parameters, and realize the query and setting of the client sides or IE for the equipment wireless hot spot list parameters through the CGI protocol, including the parameters such as ESSID/safety type/whether safety setting is opened/, etc.</p> <p><b>Explanations on key parameters:</b>  &lt;channel&gt; represents communication channel (reserved)  &lt;ssid&gt; represents ESSID  &lt;speed&gt; represents rate (reserved)  &lt;signalStrength&gt; represents signal strength (reserved)  &lt;securityMode&gt; represents safety type (no shared memory, reserved)  &lt;securityEnable&gt; represents whether safety setting is opened</p>	

**accessPointListXML Block**

```
<accessPointList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<accessPoint/>
</accessPointList>
/ISAPI/System/Network/interfaces/ID/wireless/accessPointList/ID
<accessPoint version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<id><!-- req, xs:integer--></id>
<networkMode><!-- opt, xs:string, "infrastructure,adhoc" --></networkMode>
<channel><!-- opt, xs:string, "1-14,auto" --></channel>
<ssid><!-- req, xs:string --></ssid>
<speed><!-- opt, xs:Integer, in Mbps--></speed>
<signalStrength><!-- opt, xs:Integer,"0-100"></signalStrength>
<securityMode>
<!-- req, xs:string, "disable,WEP,WPA-personal,WPA2-personal,WPA-RADIUS,
WPA-enterprise,WPA2-enterprise, auto" -->
</securityMode>
<securityEnable><!-- opt, xs:bool--></securityEnable >
</accessPoint>
```

**Test cases**

**GET/ISAPI/System/Network/interfaces/<ID>/wireless/accessPointList**

**Request XML: none**

**Response XML: <accessPointList>**

**PUT/ISAPI/System/Network/interfaces/<ID>/wireless/accessPointList**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<?xml version="1.0" encoding="UTF-8"?>
<accessPointList>
<accessPoint>
<id>0</id>
<ssid>s6test</ssid>
<securityEnable>true</securityEnable>
</accessPoint>
<accessPoint>
<id>1</id>
<ssid>netipc</ssid>
<securityEnable>true</securityEnable>
</accessPoint>
<accessPoint>
<id>2</id>
<ssid>100000</ssid>
<securityEnable>true</securityEnable>
</accessPoint>
```

```

<accessPoint>
<id>3</id>
<ssid>tencent</ssid>
<securityEnable>true</securityEnable>
</accessPoint>
</accessPointList>

```

### 1.1.18/ISAPI/System/time

<b>/ISAPI/System/time</b>		<b>General Resource</b>	<b>v2.0</b>
<b>GET</b>			
<b>Description</b>	Obtain time information parameters		
<b>Query</b>	None		
<b>Inbound Data</b>	None		
<b>Success Return</b>	<Time>		
<b>PUT</b>			
<b>Description</b>	Set time information parameters		
<b>Query</b>	None		
<b>Inbound Data</b>	<Time>		
<b>Success Return</b>	<ResponseStatus>		
<b>Explanations on protocol:</b>			
This protocol is to realize the query and setting of the time information parameters, and realize the query and setting of the client sides or IE for the equipment time information parameters through the CGI protocol, including the parameters such as local time/time zone, etc.			
<b>Explanations on key parameters:</b>			
<localTime> represents local time			
<timeZone> represents time zone			

### TimeXML Block

```

<Time version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<timeMode><!-- req, xs:string, "NTP, manual,Satellite" --></timeMode>
<localTime><!-- req, xs:datetime --></localTime>
<timeZone><!-- req, xs:string, POSIX time zone string --></timeZone>
</Time>

```

### Test cases

#### GET /ISAPI/System/time

**Request XML:** none

**Response XML:** <Time>

#### PUT/ISAPI/System/time

**Response XML:** <ResponseStatus>

**Request XML:** as below

```

<?xml version="1.0" encoding="UTF-8"?>
<Time>
<timeModeopt="NTP, manual,Satellite">manual</timeMode>
<localTime>2016-12-14T09:24:19</localTime>
<timeZone>CST+8:00:00DST01:00:00,M2.1.3/08:00:00,M8.3.6/19:00:00</timeZone>
</Time>

```

### 1.1.19/ISAPI/System/time/ntpServers/test

<b>/ISAPI/System/time/ntpServers/test</b>		<b>General Resource v2.0</b>
<b>POST</b>		
<b>Description</b>	NTP timing test	
<b>Query</b>	None	
<b>Inbound Data</b>	<NTPTestDescription>	
<b>Success Return</b>	<ResponseStatus>	
<p><b>Explanations on protocol:</b>          This protocol is to realize the NTP timing test, and realize the NTP timing test of the client sides or IE for the equipments through the CGI protocol, including the parameters such as IP address/port number, etc.</p> <p><b>Explanations on key parameters:</b>          &lt;hostName&gt; represents hostname www.abc.com          &lt;ipAddress&gt; represents ipaddress IP address          &lt;portNo&gt; represents port number</p>		

#### NTPTestDescriptionXML Block

```
<NTPTestDescription version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<addressingFormatType>
<!--req, xs:string, "ipaddress,hostname"-->
</addressingFormatType>
<hostName><!--dep, xs:string --></hostName>
<ipAddress><!--dep, xs:string --></ipAddress>
<ipv6Address><!--dep, xs:string --></ipv6Address>
<portNo><!--req, xs:integer --></portNo>
</NTPTestDescription>
```

#### Test cases

**POST /ISAPI/System/time/ntpServers/test**

**Response XML:** <ResponseStatus>

**Request XML:** <NTPTestDescription> as below

```
<NTPTestDescription>
<addressingFormatType>ipaddress</addressingFormatType>
<hostName>
</hostName>
<ipAddress>10.30.41.51</ipAddress>
<ipv6Address>
</ipv6Address>
<portNo>123</portNo>
</NTPTestDescription>
```

### 1.1.20/ISAPI/System/factoryReset/type/<ID>

<b>/ISAPI/System/factoryReset/type/&lt;ID&gt;</b>		<b>General Resource v2.0</b>
<b>PUT</b>		
<b>Description</b>	Set recovery default	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<ResponseStatus>	

**Explanations on protocol:**

This protocol is to realize the setting of the equipment recovery default, and realize the setting of the client sides or IE for the equipment recovery default through the CGI protocol.

<type> represents type, IPC 0 –simple recovery, 1 –recovery to ex-factory setting  
NVR not parsing this field

**Test cases**

PUT/ISAPI/System/factoryReset/type/<ID>

Response XML: <ResponseStatus>

Request XML: None

**1.1.21/ISAPI/System/reboot**

/ISAPI/System/reboot		General Resource v2.0
<b>PUT</b>		
<b>Description</b>	Set restart	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is to realize the setting of the equipment restart, and realize the setting of the client sides or IE for the equipments through the CGI protocol.		

**Test cases**

PUT/ISAPI/System/reboot

Response XML: <ResponseStatus>

Request XML: None

**1.1.22/ISAPI/System/IO/inputs/<ID>**

/ISAPI/System/IO/inputs/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Obtain alarm input parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<IOInputPort>	
<b>PUT</b>		
<b>Description</b>	Set alarm input parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<IOInputPort>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is to realize the query and setting of the alarm input parameters, and realize the query and setting of the client sides or IE for the equipment alarm input parameters through the CGI protocol, including the parameters such as input port value/mode, etc.		
<b>Explanations on key parameters:</b>		
<id> represents the distinction of remote port and local port of the input port value: the ports within the channel number supported by NVR are the remote ports, and others are local ports; the No. starts from 1, and is arranged in sequence.		
<enabled> represents enabling, true: start, false: not start		
<triggering> represents mode setting, high: open-circuit alarm, low: closed-circuit alarm		
<accessAlm> represents loop detection alarm, true: open, false: start		

**IOInputPort XML Block**

```
<IOInputPort version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<id><!-- req, xs:string;id --></id>
<enabled><!--req,Boolean,"true,false"--></enabled>
<triggering><!-- req, xs:string, "high,low" --></triggering>
<accessAlm><!--req,Boolean,"true,false"--><accessAlm>
</IOInputPort>
```

**Test cases**

**GET /ISAPI/System/IO/inputs/<ID>**

**Request XML:** none

**Response XML:** <IOInputPort>

**PUT/ISAPI/System/IO/inputs/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<IOInputPort>
<id>1</id>
<enabled>true</enabled>
<triggering>low</triggering>
<accessAlm>true<accessAlm>
</IOInputPort>
```

**1.1.23/ISAPI/System/IO/inputs/name**

/ISAPI/System/IO/inputs/name		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Obtain alarm input port alias	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<IOInputPortNameList>	
<b>PUT</b>		
<b>Description</b>	Set alarm input port alias	
<b>Query</b>	None	
<b>Inbound Data</b>	<IOInputPortNameList>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b> This protocol is to obtain/set alarm input port alias.		
<b>Explanations on key parameters:</b> <name> port alias, maximum support of 60 characters		

**IOInputPortNameList XML Block**

```
<IOInputPortNameListversion="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<IOInputPort>
<id><!-- req, xs: integer;id --></id>
<name><!-- req, xs:string --></name>
</IOInputPort>
</IOInputPortNameList>
```

**Test cases**

**GET /ISAPI/System/IO/inputs/name**

**Request XML:** none

**Response XML:** <IOInputPortList>

**PUT/ISAPI/System/IO/inputs/name**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```

<IOInputPortNameListversion="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<IOInputPort>
<id>1</id>
<name>Remote Alarm Input 1</name>
</IOInputPort>
</IOInputPortNameList>

```

#### 1.1.24 /ISAPI/System/IO/outputs/<ID>

/ISAPI/System/IO/outputs/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Obtain alarm output parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<IOOutputPort>	
<b>PUT</b>		
<b>Description</b>	Set alarm output parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<IOOutputPort>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is to realize the query and setting of the alarm output parameters, and realize the query and setting of the client sides or IE for the equipment alarm output parameters through the CGI protocol, including the parameters such as output port value/mode/delay time, etc.		
<b>Explanations on key parameters:</b>		
<id> represents output port value <outputState> represents mode setting, high: open-circuit alarm, low: closed-circuit alarm <delayTime> represents delay time, unit: second, range: 0, 1, 2, 5, 10, 30 <clearType> represents alarm clearing mode: 0, manual alarm clearing; 1, delayed alarm clearing <pulseDuration> reserved, port output is trigger time of pulse signal time, unit: millisecond, the equipment does not support temporarily		

#### IOOutputPortXML Block

```

<IOOutputPort version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<id><!-- req, xs:string; id --></id>
<PowerOnState><!-- req -->
<defaultState><!--ro, req, xs:string, "high,low" --></defaultState>
<outputState><!--ro, req, xs:string, "high,low" --></outputState>
<clearType><!-- req, xs:integer; --></clearType>
<delayTime><!-- dep, xs:integer,seconds --></delayTime>
<pulseDuration><!-- dep, xs:integer, milliseconds --></pulseDuration>
</PowerOnState>
</IOOutputPort>

```

#### Test cases

**GET /ISAPI/System/IO/outputs/1**

**Request XML:** none

**Response XML:** <IOOutputPort>

**PUT/ISAPI/System/IO/outputs/1**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```

<?xml version="1.0" encoding="UTF-8"?>
<IOOutputPort>
<id>1</id>
<PowerOnState>
  <outputState>low</outputState>
  <clearType>1</clearType>

```



```

<delayTime>10</delayTime>
</PowerOnState>
</IOOutputPort>

```

### 1.1.25/ISAPI/System/IO/outputs/name

/ISAPI/System/IO/outputs/name		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Obtain alarm output port alias	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<IOOutputPortNameList>	
<b>PUT</b>		
<b>Description</b>	Set alarm output port alias	
<b>Query</b>	None	
<b>Inbound Data</b>	<IOOutputPortNameList>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b> This protocol is to realize obtaining/setting alarm output port alias.		
<b>Explanations on key parameters:</b> <id> represents output port value <name> port alias, maximum support of 60 characters		

#### IOOutputPortNameList XML Block

```

<IOOutputPortNameList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<IOOutputPort>
<id><!-- req, xs:integer; id --></id>
<name><!-- req, xs:string--></name>
</IOOutputPort>
</IOOutputPortNameList>

```

#### Test cases

**GET /ISAPI/System/IO/outputs/name**

**Request XML:** none

**Response XML:** <IOOutputPortNameList>

**PUT/ISAPI/System/IO/outputs/name**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```

<IOOutputPortNameList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<IOOutputPort>
<id>1</id>
<name>Local Alarm Output 1</name>
</IOOutputPort>
</IOOutputPortNameList>

```

### 1.1.26 /ISAPI/System/Video/inputs/channels/<ID>/motionDetection

/ISAPI/System/Video/inputs/channels/<ID>/motionDetection		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Obtain mobile alarm parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<MotionDetection>	
<b>PUT</b>		

<b>Description</b>	Set mobile alarm parameters
<b>Query</b>	None
<b>Inbound Data</b>	<MotionDetection>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

This protocol is to realize the query and setting of the mobile alarm parameters, and realize the query and setting of the client sides or IE for the equipment mobile alarm parameters through the CGI protocol, including the parameters such as value assignment/sensibility level/coordinates, etc.

**Explanations on key parameters:**

<enabled> represents whether to start, true: start, false: not start

<regionType> represents setting detection region type: grid: grid shape

<rowGranularity> represents the height of the whole video screen is divided into fixed 18 rows.

<columnGranularity> represents the width of the whole video screen is divided into fixed 22 columns.

<sensitivityLevel> represents sensibility level, range: 0-100s

<gridMap> represents screen region coordinates.

**ffffffcffffffcffffffcffffffcffffffcffffffcffffffcffffffcffffffcffffffcffffffcffffffcffffffcffffffc**

**c**  
It is totally divided into 18 groups corresponding 18 rows. Every three bytes are in one group, and treated by bits, and the high 22 bits correspond to 22 columns, for example, fffffc corresponds to one row full enabling, and the screen corresponds to each group bit24-bit2 from left to right.

**MotionDetectionXML Block**

```
<MotionDetection version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<enabled><!--req,Boolean,"true,false"--></enabled>
<regionType><!-- ro, req, xs:string, "grid" --></regionType>
<Grid>
<rowGranularity><!-- ro, req, xs:integer --></rowGranularity>
<columnGranularity><!-- ro, req, xs:integer --></columnGranularity>
</Grid>
<MotionDetectionLayout>
<sensitivityLevel><!-- ro, req, xs:integer --></sensitivityLevel>
<layout>
<gridMap><!--dep, xs:hexstring--></gridMap>
</layout>
</MotionDetectionLayout>
</MotionDetection>
```

**Test cases**

**GET /ISAPI/System/Video/inputs/channels/1/motionDetection**

**Request XML: none**

**Response XML: <MotionDetection>**

**PUT/ISAPI/System/Video/inputs/channels/1/motionDetection**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<?xml version="1.0" encoding="UTF-8"?>
<MotionDetection>
<enabled>true</enabled>
<regionType>grid</regionType>
<Grid>
<rowGranularity>18</rowGranularity>
<columnGranularity>22</columnGranularity>
</Grid>
<MotionDetectionLayout>
<sensitivityLevel>58</sensitivityLevel>
<layout>
```



<b>Description</b>	LOGO upload
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<TextOverlayLogo>
<b>PUT</b>	
<b>Description</b>	Set LOGO upload
<b>Query</b>	None
<b>Inbound Data</b>	<TextOverlayLogo>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This protocol is to realize the data LOGO upload, and realize the setting of the client sides or IE for the equipment LOGO upload through the CGI protocol.  <b>This protocol is not used temporarily.</b></p>	

### 1.1.29 /ISAPI/System/configData/import

<b>/ISAPI/System/configData/import</b>		<b>General Resource v2.0</b>
<b>POST</b>		
<b>Description</b>	Setting parameter import	
<b>Query</b>	None	
<b>Inbound Data</b>	File content	
<b>Success Return</b>	<ResponseStatus>	
<p><b>Explanations on protocol:</b>  This protocol is to realize the import of parameters other than IP and port, and realize the import of parameters other than IP and port of the client sides or IE for the equipments through the CGI protocol, which are realized in the url address.  The import file comes from the box file exported from the equipment parameters. Pay attention to distinguishing the upgrading file.</p>		

### 1.1.30 /ISAPI/System/updateFirmware

<b>/ISAPI/System/updateFirmware</b>		<b>General Resource v2.0</b>
<b>PUT</b>		
<b>Description</b>	Setting upgrading	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<ResponseStatus>	
<p><b>Explanations on protocol:</b>  This protocol is to realize the equipment upgrading, and realize the equipment upgrading of the client sides or IE through the CGI protocol.</p>		

**Test cases**

**PUT/ISAPI/System/updateFirmware**

**Response XML:** <ResponseStatus>

**Request XML:** None

### 1.1.31 /ISAPI/System/basic/capabilities

<b>/ISAPI/System/basic/capabilities</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Equipment basic capability set	

<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<BasicCap>
<b>Explanations on protocol:</b> This protocol is used to obtain the basic function capability set of equipments.	

### BasicCap XML Block

<pre> &lt;BasicCap&gt;   &lt;iChannelNums&gt;&lt;!--req, xs:integer --&gt;&lt;/iChannelNums&gt;//channel number   &lt;iAlarmInNums&gt;&lt;!--req, xs:integer --&gt;&lt;/iAlarmInNums&gt;//alarm input number   &lt;iAlarmOutNums&gt;&lt;!--req, xs:integer --&gt;&lt;/iAlarmOutNums&gt;//alarm output number   &lt;iLanNums&gt;&lt;!--req, xs:integer --&gt;&lt;/iLanNums&gt;//network card number   &lt;iSataDiskNums&gt;&lt;!--req, xs:integer --&gt;&lt;/iSataDiskNums&gt;//hard disk number   &lt;iHDDNums&gt;&lt;!--req, xs:integer --&gt;&lt;/iHDDNums&gt;//disk pack number   &lt;iESATANums&gt;&lt;!--req, xs:integer --&gt;&lt;/iESATANums&gt;//eSATA number   &lt;iCOMNums&gt;&lt;!--req, xs:integer --&gt;&lt;/iCOMNums&gt;//serial port number   &lt;iDigitalChanNums&gt;&lt;!--req, xs:integer --&gt;&lt;/iDigitalChanNums&gt;//digital channel number   &lt;iPseChanNums&gt;&lt;!-- req, xs:integer --&gt;&lt;/iPseChanNums &gt;//Pse channel number   &lt;iPsePower&gt;&lt;!-- req, xs:integer --&gt;&lt;/iPsePower&gt;//Pse total output power, unit W, send after multiplying 100   &lt;iIONums&gt;&lt;!--opt, xs:integer --&gt;&lt;/iIONums&gt;//traffic equipment IO number   &lt;iLaneNums&gt;&lt;!--opt, xs:integer --&gt;&lt;/iLaneNums&gt;//traffic equipment maximum lane number   &lt;iLoopNums&gt;&lt;!--opt, xs:integer --&gt;&lt;/iLoopNums&gt;//traffic equipment coil number   &lt;iCOM232Nums&gt;&lt;!--opt, xs:integer --&gt;&lt;/ iCOM232Nums &gt;//traffic equipment 232 serial port number   &lt;iCOM485Nums &gt;&lt;!--opt, xs:integer --&gt;&lt;/iCOM485Nums &gt;//traffic equipment 485 serial port number   &lt;iIOLinkIPCNums&gt;&lt;!--opt, xs:integer --&gt;&lt;/iIOLinkIPCNums&gt;//maximum support access flow camera number by the traffic equipment IO converter   &lt;iFaceLibNums&gt;&lt;!--opt, xs:integer --&gt;&lt;/iFaceLibNums&gt;//maximum number of human face bases   &lt;iFacePicNums&gt;&lt;!--opt, xs:integer --&gt;&lt;/iFacePicNums&gt;//maximum number of human face pictures   &lt;iAnalogChnNums&gt;&lt;!--opt, xs:integer --&gt;&lt;/iAnalogChnNums&gt;//analogue channel quantity   &lt;iMixtureChnNums&gt;&lt;!--opt, xs:integer --&gt;&lt;/iMixtureChnNums&gt;//synthetic channel quantity 0= not support, larger than 0=synthetic channel quantity   &lt;iMaxUserNums&gt; &lt;!--opt, xs: integer-&gt; &lt;/ iMaxUserNums&gt; // Represents the maximum number of users supported &lt;/BasicCap&gt; </pre>
---

### Test cases

**GET /ISAPI/System/basic/capabilities**

**Response XML: <ResponseStatus>**

**Response XML: <BasicCap>**

<pre> &lt;BasicCap&gt;   &lt;iChannelNums&gt;21&lt;/iChannelNums&gt;//channel number   &lt;iAlarmInNums&gt;4&lt;/iAlarmInNums&gt;//alarm input number   &lt;iAlarmOutNums&gt;16&lt;/iAlarmOutNums&gt;//alarm output number   &lt;iLanNums&gt;1&lt;/iLanNums&gt;//network card number   &lt;iSataDiskNums&gt;2&lt;/iSataDiskNums&gt;//hard disk number   &lt;iHDDNums&gt;2&lt;/iHDDNums&gt;//disk pack number   &lt;iESATANums&gt;0&lt;/iESATANums&gt;//eSATA number   &lt;iCOMNums&gt;1&lt;/iCOMNums&gt;//serial port number   &lt;iDigitalChanNums&gt;20&lt;/iDigitalChanNums&gt;//digital channel number   &lt;iPseChanNums&gt;0&lt;/iPseChanNums &gt;//Pse channel number </pre>
---

<iPsePower>0</iPsePower>//Pse total output power, unit W, send after multiplying 100 <iIONums>8</iIONums>//traffic equipment IO number <iLaneNums>4</iLaneNums>//traffic equipment maximum lane number <iLoopNums>3</iLoopNums>//traffic equipment coil number <iCOM232Nums>1</iCOM232Nums >//traffic equipment 232 serial port number <iCOM485Nums >7</iCOM485Nums >//traffic equipment 485 serial port number <iIOLinkIPCNums>8</iIOLinkIPCNums>//maximum support access flow camera number by the traffic equipment IO converter
<iFaceLibNums>32</iFaceLibNums>//maximum number of human face bases <iFacePicNums>5000</iFacePicNums>//maximum number of human face pictures <iAnalogChnNums>4</iAnalogChnNums>//analogue channel quantity <iMixtureChnNums>1</iMixtureChnNums>//synthetic channel quantity <iMaxUserNums> 32 </iMaxUserNums> // Represents the maximum number of users supported </BasicCap>

**1.1.32 /ISAPI/System/Video/inputs/channels/<ID>/videoLoss**

<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Obtain loss alarm parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<VideoLoss>
<b>PUT</b>	
<b>Description</b>	Set loss alarm parameters
<b>Query</b>	None
<b>Inbound Data</b>	<VideoLoss>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is to realize the query and setting of the loss alarm parameters, and realize the query and setting of the client sides or IE for the equipment loss alarm parameters through the CGI protocol, including the enabling.	
<b>Explanations on key parameters:</b> <enabled> represents whether to start, true: start, false: not start	

**VideoLoss XML Block**

<VideoLoss xmlns="http://www.isapi.org/ver20/XMLSchema"> <enabled>!-- req, xs:boolean --</enabled> </VideoLoss>
---

**Test cases**

**GET /ISAPI/System/Video/inputs/channels/<ID>/videoLoss**

**Request XML:** none

**Response XML:** <VideoLoss>

**PUT/ISAPI/System/Video/inputs/channels/<ID>/videoLoss**

**Response XML:** <ResponseStatus>

**Request XML:** as below

**VideoLoss XML Block**

<VideoLoss xmlns="http://www.isapi.org/ver20/XMLSchema"> <enabled>true</enabled> </VideoLoss>
---

**1.1.33 /ISAPI/System/Holidays**

<b>General Resource v2.0</b>
------------------------------

<b>GET</b>	
<b>Description</b>	Obtain holiday plan parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	< <b>HolidayList</b> >
<b>PUT</b>	
<b>Description</b>	Set holiday plan parameters
<b>Query</b>	None
<b>Inbound Data</b>	< <b>HolidayList</b> >
<b>Success Return</b>	< <b>ResponseStatus</b> >
<p><b>Explanations on protocol:</b>  This protocol is to realize the query and setting of the holiday plan parameters, and realize the query and setting of the client sides or IE for the equipment holiday plan parameters through the CGI protocol, including the parameters such as enabling, serial number, start time, end time, etc.</p> <p><b>Explanations on key parameters:</b>  None</p>	

**HolidayList XML Block**

```

<HolidayList version="2.0" xmlns="http://urn:selfextension:ISAPIext-ver10-xsd">
<holiday>
<id><!-- req, xs:string;id --></id>//holiday plan serial number 1,2, .....
<enabled><!-- req, xs:boolean --></enabled>//start: true, not start: false
<holidayMode><!-- req, xs:string, "date, week, month" --></holidayMode>//type: by date: date,
by week: week, by month: month
<holidayName><!--req, xs:string --></holidayName>//holiday name maximum support of 30
characters
//by date
<holidayDate><!-- dep -->
  <startDate><!-- req, xs:date --></startDate>//start date
  <endDate><!-- req, xs:date --></endDate>//end date
</holidayDate>
//by week
<holidayWeek><!-- dep -->
  <startWeek><!-- req -->
    <monthOfYear><!-- req --></monthOfYear>//month of year
    <sequence><!-- req, xs:integer, 1...5 --></sequence>//week of month
    <dayOfWeek><!-- req, ISO8601 weekday number, 1=Monday"
--></dayOfWeek>//day of week
  </startWeek>
  <endWeek><!-- req -->
    <monthOfYear><!-- req --></monthOfYear>
    <sequence><!-- req, xs:integer, 1...5 --></sequence>
    <dayOfWeek><!-- req, ISO8601 weekday number, 1=Monday" --></dayOfWeek>
  </endWeek>
</holidayWeek>
//by month
<holidayMonth><!-- dep -->
  <startMonth><!-- req --><monthOfYear><!-- req, xs:integer, "1...12" --></monthOfYear>
  <monthOfYear><!-- req, xs:integer, "1...12" --></monthOfYear>//month of year
  <dayOfMonth><!-- req, xs:integer, "1...31" --></dayOfMonth>//day of month
</startMonth>
  <endMonth><!-- req -->
    <monthOfYear><!-- req, xs:integer, "1...12" --></monthOfYear>
    <dayOfMonth><!-- req, xs:integer, "1...31" --></dayOfMonth>
  </endMonth>
</holidayMonth>
</holiday>
</HolidayList>

```

#### Test cases

**GET /ISAPI/System/Holidays**

**Request XML:** none

**Response XML:** <HolidayList>

**PUT /ISAPI/System/Holidays**

**Response XML:** <HolidayList>

**Request XML:** as below

```

<HolidayList version="1.0" >
<holiday version="1.0" >
  <id>1</id>
  <enabled>true</enabled>
  <holidayName>Holiday1</holidayName>
  <holidayMode opt="date,week,month">date</holidayMode>
  <holidayDate>
    <startDate>2017-07-04</startDate>
    <endDate>2017-07-04</endDate>
  </holidayDate>

```



```

</holiday>
<holiday version="1.0">
  <id>2</id>
  <enabled>true</enabled>
  <holidayName>Holiday2</holidayName>
  <holidayMode opt="date,week,month">week</holidayMode>
  <holidayWeek>
    <startWeek>
      <monthOfYear>1</monthOfYear>
      <sequence>2</sequence>
      <dayOfWeek>2</dayOfWeek>
    </startWeek>
    <endWeek>
      <monthOfYear>1</monthOfYear>
      <sequence>3</sequence>
      <dayOfWeek>0</dayOfWeek>
    </endWeek>
  </holidayWeek>
</holiday>
<holiday version="1.0" >
  <id>3</id>
  <enabled>false</enabled>
  <holidayName>Holiday3</holidayName>
  <holidayMode>month</holidayMode>
  <holidayMonth>
    <startMonth>
      <monthOfYear>1</monthOfYear>
      <dayOfMonth>1</dayOfMonth>
    </startMonth>
    <endMonth>
      <monthOfYear>1</monthOfYear>
      <dayOfMonth>1</dayOfMonth>
    </endMonth>
  </holidayMonth>
</holiday>
</HolidayList>

```

#### 1.1.34/ISAPI/System/Network/mailing/<ID>/Status

/ISAPI/System/Network/mailing/<ID>/Status		General Resource	v2.0
<b>GET</b>			
<b>Description</b>	Asynchronous obtaining of email test results		
<b>Query</b>	None		
<b>Inbound Data</b>	None		
<b>Success Return</b>	<MailingStatus>		
<b>Explanations on protocol:</b>			
This protocol is to realize the query and setting of the time information parameters, and realize the query and setting of the client sides or IE for the equipment time information parameters through the CGI protocol, including the parameters such as local time/time zone, etc.			
<b>Explanations on key parameters:</b>			
<ID> represents test ID, non negative integer, reserved, temporarily no actual effects			
<status> represents test status			
<process> represents process, currently fixed to be 0, reserved			

#### MailingStatus XML Block

```
<MailingStatus version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<status><!-- req, xs:string: success, fail, testing --></status>
<process><!-- req, xs:integer, 0-100 --></process>
</MailingStatus>
```

**Test cases**

**GET /ISAPI/System/Network/mailing/<ID>/Status**

**Request XML:** none

**Response XML:** <MailingStatus>

**Response XML:** as below

```
<MailingStatus version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<status>testing</status>
<process>0</process>
</MailingStatus>
```

**1.1.35/ISAPI/System/Network/FTPAdvance**

/ISAPI/System/Network/FTPAdvance		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Obtain FTP upload picture stream server parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<FTPAdvanceList>	
<b>PUT</b>		
<b>Description</b>	Set FTP upload picture stream server parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<FTPAdvanceList>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is to realize the query and setting of the FTP upload picture stream server parameters, and realize the query and setting of the client sides or IE for the FTP upload picture stream server parameters through the CGI protocol, including the parameters such as server address/port/account number/password/path/upload picture naming rule, etc.		
<b>Explanations on key parameters:</b>		
<ftpEnable> represents the upload server enabling, true: enable, false: not enable		
<ftpNum> represents ftp mark number, 0: keep, 1: ftp1, 2: ftp2		
<ipAddress> represents server address, maximum not exceeds 63 bytes -- supporting IPv6 address		
<portNo> represents port, range: 0-65535		
<userName> represents account number, maximum not exceeds 16 bytes		
<password> represents password, maximum not exceeds 16 bytes		
<ftpType> represents ftp type, 0: keep, 1: bayonet, 2: violation of regulations (mutual exclusion between two ftp types), 3: human face		
<listCount> represents catalogue level, 0: root directory, 1~n: represents the used catalogue level		
<contentList> represents catalogue list, 0-blank, 1-equipment No., 2-equipment IP, 3-junction No., 4-junction name, 5-time(year and month), 6-time(year, month, and day), 7-illegal type, 8-lane direction, 9-lane No., 10-channel name, 11-channel No., 12 -human face property, 65535-self defined		
<picNameCount> represents picture naming count		
<picNameList> represents picture naming rules, 0-blank, 1-equipment No., 2-equipment IP, 3-junction No., 4-junction name, 5-snap time, 6-red light start time, 7-time after red light, 8-license plate number, 9-license plate color, 10-vehicle body color, 11-vehicle type, 12-vehicle brand, 13-safety belt, 14-lane No., 15-lane name, 16-lane direction, 17-vehicle speed, 18-speed restriction mark, 19-illegal code,		

20-illegal type, 21-license plate coordinates, 22-sex, 23-age, 24-race, 25-eye, 26-breathing mask, 27-backpack, 28-wearing hat, 65535 self defined

<plateUpload> represents upload of license plate small picture, false: not upload, true: upload

<iniUpload> represents upload of ini file, false: not upload, true: upload (default upload)

<filterEnable> represents filtering of unrecognized license plate, false: not filter, true: filter (unrecognized vehicles not uploading FTP)

<faceUpload> represents upload of human face big picture, false: not upload, true: upload

<contentType> parameter type definitions: 1: equipment No., 2: equipment IP, 3: junction No., 4: junction name, 5: time--year and month, 6: time--year, month, day, 7: illegal type, 8: lane direction, 9: lane number, 10: channel name, 11: channel number, 12-human face property, 65535-self defined

<contentDefine> corresponds to parameter contents defined by different parameter type

<smallFaceUpload> represents upload of human face small picture, which used by traffic equipments. false: not upload, true: upload

### FTPAdvanceListXML Block

```
<FTPAdvanceList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
```

```
<FTPInfo>
```

```
<ftpEnable><!--opt, xs:boolean--></ftpEnable>
```

```
<ftpNum><!-- opt, xs:integer --></ftpNum>
```

```
<ftpType><!-- opt, xs:integer --></ftpType>
```

```
<ipAddress><!-- dep, xs:string --></ipAddress>
```

```
<portNo><!-- opt, xs:integer --></portNo>
```

```
<userName><!-- req, xs:string --></userName>
```

```
<passWord><!-- wo, xs:string --></passWord>
```

```
<passiveModeEnabled><!-- opt, xs:boolean --></passiveModeEnabled>
```

```
<annoyftp><!--opt, xs:boolean --></annoyftp>
```

```
<listCount><!-- opt, xs:integer --></listCount>
```

```
<FTPContentList>
```

```
<FTPContent ><!-- req, -->
```

```
<contentType><!-- opt, xs:integer --></contentType>
```

```
<contentDefine><!-- req, xs:string --></contentDefine>
```

```
</FTPContent>
```

```
</FTPContentList>
```

```
<picNameCount><!-- opt, xs:integer --></picNameCount>
```

```
<PicNameList>
```

```
<PicName><!-- req, -->
```

```
<nameType><!-- opt, xs:integer --></nameType>
```

```
<nameDefine><!-- req, xs:string --></nameDefine>
```

```
</PicName>
```

```
</PicNameList>
```

```
<plateUpload><!--opt, xs:boolean --></plateUpload>
```

```
<iniUpload><!--opt, xs:boolean --></iniUpload>
```

```
<filterEnable><!--opt, xs:boolean --></filterEnable>
```

```
<faceUpload><!--opt, xs:boolean --></faceUpload>
```

```
< smallFaceUpload><!--opt, xs:boolean --></ smallFaceUpload>
```

```
</FTPInfo>
```

```
</FTPAdvanceList>
```

### Test cases

**GET /ISAPI/System/Network/FTPAdvance**

**Request XML:** none

**Response XML:** <FTPAdvanceList>

**PUT /ISAPI/System/Network/FTPAdvance**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
```

```
<FTPAdvanceList>
```

```
<FTPInfo>
<ftpEnable>true</ftpEnable>
<ftpNum>2</ftpNum>
<ftpType>1</ftpType>
<ipAddress>10.30.41.51</ipAddress>
<userName>admin</userName>
<password>1111</password>
<portNo>21</portNo>
<listCount>4</listCount>
<FTPContentList>
<FTPContent>
<contentType>3</contentType>
<contentDefine> junction No. </contentDefine>
</FTPContent>
<FTPContent>
<contentType>2</contentType>
<contentDefine> equipment IP </contentDefine>
</FTPContent>
<FTPContent>
<contentType>12</contentType>
<contentDefine> channel name </contentDefine>
</FTPContent>
</FTPContentList>
<picNameCount>3</picNameCount>
<PicNameList>
<PicName>
<nameType>1</nameType>
<nameDefine> equipment No. </nameDefine>
</PicName>
<PicName>
<nameType>4</nameType>
<nameDefine> junction name </nameDefine>
</PicName>
<PicName>
<nameType>15</nameType>
<nameDefine> lane name </nameDefine>
</PicName>
<PicName>
<nameType>22</nameType>
<nameDefine> sex information </nameDefine>
</PicName>
<PicName>
<nameType>23</nameType>
<nameDefine> age information </nameDefine>
</PicName>
<PicName>
<nameType>24</nameType>
<nameDefine> race information </nameDefine>
</PicName>
</PicNameList>
<plateUpload>false</plateUpload>
<iniUpload>true</iniUpload>
<filterEnable>true</filterEnable>
<faceUpload>false</faceUpload>
< smallFaceUpload>false</ smallFaceUpload>
</FTPInfo>
</FTPAdvanceList>
```

### 1.1.36 /ISAPI/Streaming/channels/<ID>/dynamicCap/type/<ID>

<b>/ISAPI/Streaming/channels/&lt;ID&gt;/dynamicCap/type/&lt;ID&gt;</b>	
<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Batch, different resolution corresponds to frame rate list
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ResolutionAvailableDescriptorList>
<p><b>Explanations on protocol:</b> This protocol is to obtain the setting template of frame rate, and report the corresponding frame rate list according to different resolution.</p> <p><b>Explanations on key parameters:</b> type &lt;id&gt; represents the code stream type, including: 1: main code stream 2: auxiliary code stream 3: three code stream 4: main code stream regular 5: main code stream alarm 6: custom 1 7: custom 2</p> <p>&lt;ResolutionAvailableDescriptor&gt; &lt;np-Mode&gt; represents standard &lt;videoResolutionWidth&gt; represents video resolution width &lt;videoResolutionHeight&gt; represents video resolution height &lt;supportedFrameRate&gt; represents supported frame rate</p>	

#### ResolutionAvailableDescriptorList XML Block

<pre>&lt;ResolutionAvailableDescriptorList xmlns="http://www.isapi.org/ver20/XMLSchema" version="2.0" &lt;ResolutionAvailableDescriptor&gt; &lt;np-Mode &gt;&lt;!-- opt, ro, xs:string, "NTSC,PAL"&gt;&lt;/ np-Mode &gt; &lt;videoResolutionWidth&gt;&lt;!-- req, xs:integer --&gt;&lt;/videoResolutionWidth&gt; &lt;videoResolutionHeight&gt;&lt;!-- req, xs:integer --&gt;&lt;/videoResolutionHeight&gt; &lt;supportedFrameRate&gt;&lt;!-- req, xs:string, in kbps --&gt;&lt;/supportedFrameRate&gt; &lt;/ResolutionAvailableDescriptor&gt; &lt;/ResolutionAvailableDescriptorList&gt;</pre>
--

#### Test cases

**GET /ISAPI/Streaming/channels/<ID>/dynamicCap**

**Request XML: none**

**Response XML: <ResolutionAvailableDescriptorList>**

**Response XML: as below**

<pre>&lt;ResolutionAvailableDescriptorList xmlns="http://www.isapi.org/ver20/XMLSchema" version="2.0" &lt; ResolutionAvailableDescriptor &gt; &lt;np-Mode&gt;NTSC&lt;/np-Mode&gt; &lt;videoResolutionWidth&gt;1280&lt;/videoResolutionWidth&gt; &lt;videoResolutionHeight&gt;960&lt;/videoResolutionHeight&gt; &lt;supportedFrameRate&gt;30,25,20,15,10,5,1&lt;/ supportedFrameRate &gt; &lt;/ ResolutionAvailableDescriptor &gt; &lt;/ ResolutionAvailableDescriptorList &gt;</pre>
--

### 1.1.37 /ISAPI/System/Network/interfaces/<ID>/dhcp

<b>/ISAPI/System/Network/interface/&lt;ID&gt;dhcp</b>	<b>General Resource v2.0</b>
<b>GET</b>	
<b>Description</b>	Obtain DHCP status
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<DHCPStatus>

**Explanations on protocol:**

This protocol is to obtain the DHCP status and IP address by the client sides through the CGI protocol.

explanations on important parameters:

ID: network card No., start from 1

status: 0: not obtained, 1: obtained

ipAddr: in case of being obtained, it is a new ip address, otherwise is blank.

statusIPV6: 0 has not been obtained, 1 has been obtained

ipV6Addr: If it has been obtained, it is the new ipV6 address

**DHCPStatus XML Block**

```
<?xml version="1.0" encoding="UTF-8" ?>
<DHCPStatus>
<lanNo><!--req, xs:integer --></lanNo>
  <status><!--req, xs:integer --></status>
  <ipAddr><!--req, xs:string --></ipAddr>
  <statusIPV6><!--req, xs:integer --></ statusIPV6>
  <ipV6Addr><!--req, xs:string --></ ipV6Addr >
</DHCPStatus>
```

**Test cases**

**GET /ISAPI/System/Network/interface/<ID>/dhcp**

**Request XML: none**

**Response XML: <DHCPStatus>**

```
<DHCPStatus>
<lanNo>1</lanNo>
  <status>1</status>
  <ipAddr>192.168.15.24</ipAddr>
  <statusIPV6>1</ statusIPV6>
  <ipV6Addr>2001:db8:0:f101::141</ ipV6Addr >
</DHCPStatus>
```

**1.1.38/ISAPI/System/Basic/Capabilities/channels/<ID>**

<b>/ISAPI/System/Basic/Capabilities/channels/&lt;ID&gt;</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Equipment channel specific capability set	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<BasicCap>	
<b>Explanations on protocol:</b>		
This protocol is used to obtain the specific capability set of some channel of equipment.		

**BasicCap XML Block**

```
<BasicCap>
  <iChannelNums><!--req, xs:integer --></ iChannelNums >//channel number
  <iAlarmOutNums><!--req, xs:integer --></iAlarmOutNums>//alarm output number
</BasicCap>
```

**Test cases**

**GET /ISAPI/System/Basic/Capabilities/channels/<ID>**

**Request XML: none**

**Response XML: <BasicCap>**

```
<BasicCap>
  <iChannelNums>21</ iChannelNums >//channel number
  <iAlarmOutNums>16</iAlarmOutNums>//alarm output number
</BasicCap>
```

### 1.1.39/ISAPI/System/Video/inputs/channels/<ID>/VCAResource

<b>/ISAPI/System/Video/inputs/channels/&lt;ID&gt;/VCAResource</b>	
<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Obtain structured algorithm mode
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<VCAResource>
<b>PUT</b>	
<b>Description</b>	Set structured algorithm mode
<b>Query</b>	None
<b>Inbound Data</b>	<VCAResource>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b> This protocol is to realize the query and setting of the structured algorithm modes, and realize the query and setting of the client sides or IE for the equipment structured algorithm modes through the CGI protocol.</p> <p><b>Explanations on key parameters:</b> &lt;type&gt; represents structured algorithm modes. faceDetect-human face, vehicleDetect-vehicle, MixedTargetDetect-mixed target detection</p>	
<p><b>VCAResource XML Block</b></p> <pre>&lt; VCAResource version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema"&gt; &lt;type&gt;&lt;!-- req, xs:string --&gt;&lt;/type&gt; &lt;/VCAResource&gt;</pre>	

#### Test cases

**GET /ISAPI/System/Video/inputs/channels/1/VCAResource**

**Request XML:** none

**Response XML:** <VCAResource>

**PUT /ISAPI/System/Video/inputs/channels/1/VCAResource**

**Response XML:** <ResponseStatus>

**Request XML:** as below

<pre>&lt;VCAResource&gt; &lt;type&gt;faceDetect&lt;/type&gt; &lt;/VCAResource&gt;</pre>
---

### 1.1.40 /ISAPI/System/Network/State/test

<b>/CGI/System/Net/Test</b>	
<b>General Resource v2.0</b>	
<b>POST</b>	
<b>Description</b>	Network test
<b>Query</b>	None
<b>Inbound Data</b>	<netStateTestDescription>
<b>Success Return</b>	<netStateTestResult>
<p><b>Explanations on protocol:</b> Network test.</p> <p><b>Explanations on key parameters:</b> &lt;cardNum&gt; network card No., 0: keep, 1, 2, 10 represents the PPPoE type external USB network card(PPPoE, the point-to-point protocol on the Ethernet, is a kind of network tunnel protocol encapsulating the point-to-point protocol (PPP) in the Ethernet framework) . 11 represents the USB0 type external USB network card &lt;ipAddress&gt; purpose IP address--supporting IPv6 address</p>	

<reachable>0 reachable, others not reachable  
 <delayTime> network delay, unit ms  
 <lostRate> lost rate 0-100, the value of 50 indicates that the lost rate is 50%.

**netStateTestDescription XML Block**

```
<?xml version="2.0" encoding="UTF-8"?>
<netStateTestDescription>
  <cardNum><!--req,xs: integer --></cardNum>
  <ipAddress><!--req,xs:string --></ipAddress>
</netStateTestDescription>
```

**netTestRsp XML Block**

```
<?xml version="2.0" encoding="UTF-8"?>
<netStateTestResult>
  <reachable><!--req,xs: integer --></reachable>
  <delayTime><!--req,xs: integer --></delayTime>
  <lostRate><!--req,xs: integer --></lostRate>
</netStateTestResult>
```

**Test cases**

**POST /CGI/System/Net/Test**

**Request XML: <netStateTestDescription>**

```
<netStateTestDescription>
  <cardNum>1</cardNum>
  <dstIp>192.168.1.1</dstIp>
</netStateTestDescription>
```

**Response XML: <netStateTestResult>**

```
<netStateTestResult>
  <reachable>0</reachable>
  <delayTime>10</delayTime>
  <lostRate>50</lostRate>
</netStateTestResult>
```

**1.1.41/CGI/SmartAlarmArea/channels/<ID>**

/CGI/SmartAlarmArea/channels/<ID> <b>General Resource   v2.0</b>	
<b>GET</b>	
<b>Description</b>	Obtain intelligent alarm region parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<SmartAlarmArea>
<b>PUT</b>	
<b>Description</b>	Set intelligent alarm region parameters
<b>Query</b>	None
<b>Inbound Data</b>	<SmartAlarmArea>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is to realize the query and setting of the client sides or IE for the equipment intelligent configuration region through the CGI protocol.	
<b>Explanations on key parameters:</b> <RegionCoordinatesList> represents two coordinates, upper left corner and lower right corner	

**SmartAlarmArea XML Block**



```

< SmartAlarmArea version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<id><!--req:integer --></id>
<RegionCoordinatesList>//detection region coordinate list
<RegionCoordinates><!-- req, -->//detection region coordinates
<leftpositionX><!-- req, xs:integer;coordinate --></leftpositionX>//upper left corner x-point
coordinate, per 10,000
<leftpositionY><!-- req, xs:integer;coordinate --></leftpositionY>//upper left corner y-point
coordinate Per 10,000
<rightpositionX><!-- req, xs:integer;coordinate --></rightpositionX>//lower right corner
x-point coordinate, per 10,000
<rightpositionY><!-- req, xs:integer;coordinate --></rightpositionY>//lower right corner
y-point coordinate, per 10,000
</RegionCoordinates>
</RegionCoordinatesList>
</SmartAlarmArea >

```

**Test cases**

**GET /CGI/SmartAlarmArea/channels/<ID>**

**Request XML: None**

**Response XML: < SmartAlarmArea>**

**PUT/CGI/SmartAlarmArea/channels/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<SmartAlarmArea>
<id>1</id>
<RegionCoordinatesList>
<RegionCoordinates>
<leftpositionX><0></leftpositionX>
<leftpositionY><0></leftpositionY>
<rightpositionX><1></rightpositionX>
<rightpositionY><1></rightpositionY>
</RegionCoordinates>
</RegionCoordinatesList>
</SmartAlarmArea>

```

**1.1.42/ISAPI/System/Network/ReTransInfo/SessionId/<ID>**

/ISAPI/System/Network/ReTransInfo/SessionId/<ID>		General Resource	v2.0
<b>GET</b>			
<b>Description</b>	Obtain continuous transmission center information		
<b>Query</b>	None		
<b>Inbound Data</b>	None		
<b>Success Return</b>	<ReTransInfoList>		
<b>PUT</b>			
<b>Description</b>	Set continuous transmission center information		
<b>Query</b>	None		
<b>Inbound Data</b>	<ReTransInfoList>		
<b>Success Return</b>	<ResponseStatus>		
<b>Explanations on protocol:</b>			
This protocol is to realize the setting and obtaining of the continuous transmission center information.			
<sessionId> client side and equipment interaction ID, refer to Schedule 1			
Explanations on specific parameters:			
id: continuous transmission center serial number, 0~3			
ip: ip or domain name information corresponding to the continuous transmission center, maximum length 64 bytes, transmitting empty character string when cancelled			

**ReTransInfoList XML Block**

```

<ReTransInfoList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<InfoItem>
  <id><!-- req, xs:integer --></id>
  <ip><!-- req, xs:string --></ip>
</InfoItem>
</ReTransInfoList>

```

**Test cases**

**GET** /ISAPI/System/Network/ReTransInfo/SessionId/0

**Request XML:** None

**Response XML:** <ReTransInfoList>

**PUT** /ISAPI/System/Network/ReTransInfo/SessionId/0

**Request XML:** <ReTransInfoList>

**Response XML:** <ResponseStatus>

```

<ReTransInfoList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<InfoItem>
  <id>0</id>
  <ip>192.168.1.68</ip>
</InfoItem>
<InfoItem>
  <id>1</id>
  <ip>192.168.1.78</ip>
</InfoItem>
<InfoItem>
  <id>2</id>
  <ip>192.168.1.78</ip>
</InfoItem>
<InfoItem>
  <id>3</id>
  <ip>192.168.1.88</ip>
</InfoItem>
</ReTransInfoList>

```

**1.1.43/ISAPI/System/lcd/channels/<ID>**

/ISAPI/System/lcd/channels/<ID>		General Resource v2.0
<b>PUT</b>		
<b>Description</b>	Set distortion correction value	
<b>Query</b>	None	
<b>Inbound Data</b>	<LdcData>	
<b>Success Return</b>	<ResponseStatus>	
<b>GET</b>		
<b>Description</b>	Obtain distortion correction value	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<LdcData>	
<b>Explanations on protocol:</b>		
This protocol is to set the distortion correction and obtain the current distortion correction strength value.		

**LdcData XML Block**

```

<LdcData version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
< LdcStrength ><!-- req, xs:intger --></ LdcStrength >
</LdcData >

```

**Test cases**

**PUT**/ISAPI/System/lcd/channels/<ID>

**Request XML: <LdcData>**

```
<LdcData version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<LdcStrength>20</ LdcStrength >
</LdcData>
```

**Response XML: <ResponseStatus>****1.1.44 /ISAPI/System/Network/UPnP/ports/status**

<b>/ISAPI/System/Network/UPnP/ports/status</b> <b>General Resource</b> <b>v2.0</b>	
<b>GET</b>	
<b>Description</b>	Port mapping status information
<b>Query</b>	None
<b>Inbound Data</b>	<b>None</b>
<b>Success Return</b>	<b>&lt;portsStatus&gt;</b>
<b>Explanations on protocol:</b> Obtain port mapping status information	
<b>Explanations on key parameters:</b>	

**portsStatus XML Block**

```
<portsStatus version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<natRouterLanAddr><!-- req -->
<ipVersion><!-- req, xs:string, "v4,v6,dual" --></ipVersion>
<ipAddress><!-- dep, xs:string --></ipAddress>
<ipv6Address>      <!-- dep, xs:string --></ipv6Address>
</natRouterLanAddr>
<portStatusList><!-- req -->
<portStatus/>
    <id><!--req,xs: integer --></id>
    internalPort<!--req,xs:string,HTTP,RTSP,                    HTTPS,                    DATA_PORT,
RTMP"--></internalPort>
    <externalPort><!--req,xs: integer --></externalPort>
    <internalePortNum><!--req,xs: integer --></internalePortNum>
    <status><!-- req, xs:string, "inactive, active, conflict"--></status>
</portStatus>
</portStatusList>
</portsStatus>
```

**Test cases****GET /ISAPI/System/Network/UPnP/ports/status****Request XML: none****Response XML: <portsStatus>**

```
<portsStatus>
<natRouterLanAddr>
<ipVersion>v4</ipVersion>
<ipAddress>10.30.41.1</ipAddress>
</natRouterLanAddr>
<portStatusList>
<portStatus>
<id>1</id>
<internalPort>HTTP</internalPort>
<externalPort>80</externalPort>
<internalePortNum>80</internalePortNum>
<status>inactive</status>
</portStatus>
<portStatus>
<id>2</id>
<internalPort>RTSP</internalPort>
```

```

<externalPort>554</externalPort>
<internalePortNum>554</internalePortNum>
<status>inactive</status>
</portStatus>
<portStatus>
<id>3</id>
<internalPort>DATA_PORT</internalPort>
<externalPort>3000</externalPort>
<internalePortNum>3000</internalePortNum>
<status>inactive</status>
</portStatus>
<portStatus>
<id>4</id>
<internalPort>HTTPS</internalPort>
<externalPort>443</externalPort>
<internalePortNum>443</internalePortNum>
<status>inactive</status>
</portStatus>
<portStatus>
<id>5</id>
<internalPort>RTMP</internalPort>
<externalPort>1935</externalPort>
<internalePortNum>1935</internalePortNum>
<status>inactive</status>
</portStatus>
</portStatusList>
</portsStatus>

```

**1.1.45/ISAPI/System/Network/PBNAC/channels/<ID>/interfaces/<ID>**

<b>/ISAPI/System/Network/PBNAC</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Get 802.1x parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<PBNAC>	
<b>PUT</b>		
<b>Description</b>	Set PNBAC parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<PBNAC>	
<b>Success Return</b>	<ResponseStatus>	

**Protocol description:**

This protocol is to realize the query and setting of 802.1x parameters, and the client or IE can query and set the device 802.1x parameters through CGI protocol, including account / password and other parameters.

802.1x is called Port-Based Networks AccessControl, using the abbreviation PNBAC.

**URL parameter description:**

Interfaces: network card number

**Key parameter description:**

<enabled> stands for enabled, true: enabled, false: not enabled  
 <connectType> represents the connection method, 0: automatic connection; 1: manual connection, single time is valid without configuration;  
 <protocolType> stands for verification method, currently supports EAP-MD5  
 <eapolVersion> represents the protocol version, 1: 802.1x-2001; 2: 802.1x-2004;  
 <userName> stands for account, plain text  
 <password> stands for password, encrypted  
 <access> stands for random information, used for verification

**PBNAC XML Block**

```
<PBNAC xmlns="http://www.isapi.org/ver20/XMLSchema">
  <enabled><!-- opt, xs:boolean "true,false,"--></enabled>
  <connectType><!-- opt, xs:string; "0,1,"--></connectType>
  <protocolType><!-- opt, xs:string;"EAP-MD5" --></protocolType>
  <eapolVersion><!-- opt, xs:string; "1,2,"--></eapolVersion>
  <userName><!-- req,xs:string --></userName>
  <password><!-- req, xs:string --></password>
  <access><!-- req, xs:string --></access>
</PBNAC>
```

**Test case**

**GET /ISAPI/System/Network/PBNAC/channels/1/interfaces/1**

**Request XML: None**

**Response XML: <PBNAC>**

**PUT/ISAPI/System/Network/PBNAC/channels/1/interfaces/1**

**Response XML: <ResponseStatus>**

**Request XML: as follows**

```
<?xml version="1.0" encoding="UTF-8"?>
<PBNAC>
<enabled>true</enabled>
<connectType>0</connectType>
<protocolType>EAP-MD5</protocolType>
<eapolVersion>1</eapolVersion>
<userName>admin</userName>
<password>T6g05arqzu4=</password>
<access>94AAABB419A9820DC171B43240CEEF41</access>
</PBNAC>
```

## 1.1.46/ISAPI/System/Network/PBNAC/State/channels/<ID>/interfaces/<ID>

<b>/ISAPI/System/Network/PBNAC/State</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Get 802.1x connection status	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<PBNACState >	
<p><b>Protocol description:</b>  This protocol is to realize the inquiry of the 802.1x connection status of the device by the client or IE through the CGI protocol. 802.1x is called Port-Based Networks AccessControl, using the abbreviation PNBAC.</p> <p><b>URL parameter description:</b>  Interfaces: network card number</p> <p><b>Key parameter description:</b>  &lt;connectState&gt; represents the connection state, 0, not connected; 1, connected; 2, connecting; 3, connection failed;</p>		

### State XML Block

```
< PBNACState xmlns="http://www.isapi.org/ver20/XMLSchema">
  <connectState ><!-- opt, xs:string; "0,1,2,3"--></ connectState >
</ PBNACState>
```

### Test case

**GET /ISAPI/System/Network/PBNAC/State/channels/1/interfaces/1**

**Request XML: None**

**Response XML: <PBNACState>**

**PUT /ISAPI/System/Network/PBNAC/State/channels/1/interfaces/1**

**Response XML: <ResponseStatus>**

**Request XML: as follows**

```
<?xml version="1.0" encoding="UTF-8"?>
< PBNACState>
<connectState>0</connectState>
</ PBNACState>
```

## 1.2/ISAPI/Security

### 1.2.1/ISAPI/Security/adminAccesses

<b>/ISAPI/Security/adminAccesses</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Obtain port parameters	

<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<AdminAccessProtocol>
<b>PUT</b>	
<b>Description</b>	Set port parameters
<b>Query</b>	None
<b>Inbound Data</b>	<AdminAccessProtocol>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

This protocol is to realize the query and setting of the port parameters, and realize the query and setting of the client sides or IE for the equipment port parameters through the CGI protocol, including the parameters such as port type/port No., etc.

**Explanations on key parameters:**

<protocol> represents port type, HTTP, HTTPS, RTSP, DATA\_PORT available

<enabled> means whether it is enabled, true: enabled, false: not enabled, empty means no settings are supported

<portNo> represents port NO., range: 80-65535

**AdminAccessProtocolXML Block**

```
<AdminAccessProtocol version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <protocol><!-- req, xs:string; "HTTP, HTTPS,RTSP,DATA_PORT" --></protocol>
  <enabled><!-- req, xs:bool--></enabled>
  <portNo><!-- req, xs:integer --></portNo>
</AdminAccessProtocol>
```

**Test cases**

**GET/ISAPI/Security/adminAccesses**

**Request XML:** none

**Response XML:** <AdminAccessProtocol>

**PUT/ISAPI/Security/adminAccesses**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<AdminAccessProtocolList>
  <AdminAccessProtocol>
  <protocol>HTTP</protocol>
  <portNo>80</portNo>
  </AdminAccessProtocol>
  <AdminAccessProtocol>
  <protocol>HTTPS</protocol>
  <portNO>443</portNO>
  </AdminAccessProtocol>
  <AdminAccessProtocol>
  <protocol>RTSP</protocol>
  <portNO>554</portNO>
  </AdminAccessProtocol>
  <AdminAccessProtocol>
  <protocol>DATA_PORT</protocol>
  <portNO>3000</portNO>
  </AdminAccessProtocol>
</AdminAccessProtocolList>
```

**1.2.2/ISAPI/Security/users**

<b>/ISAPI/Security/users</b>	<b>General Resource v2.0</b>
<b>GET</b>	
<b>Description</b>	Obtain user management information

<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<UserList>
<b>PUT</b>	
<b>Description</b>	Set user management information
<b>Query</b>	None
<b>Inbound Data</b>	<UserList>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This protocol is to realize the query and setting of the user management information parameters, and realize the query and setting of the client sides or IE for the equipment user management information parameters through the CGI protocol, including the parameters such as user id/user name/password/permission, etc.</p> <p><b>Explanations on key parameters:</b>  &lt;id&gt; represents user id  &lt;userName&gt; represents user name, encrypted  &lt;password&gt; represents password, maximum 15 characters, encrypted  &lt;userLevel&gt; represents permission, Administrator: administrator, Viewer: view (NVR: ordinary users), ViewerControl: view+control (NVR: privilege user), Operator: view+control+setting (NVR: super user), Default(NVR: default user), encrypted  &lt;access&gt; represents random information, for correction  &lt;delsupport&gt; indicates whether the user supports deletion, true supports deletion, false does not support deletion</p>	

#### UserListXML Block

```

<UserList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<User/><!-- opt -->
< access ><!-- req, xs:string --></access>
</UserList>
<User version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<id><!-- req, xs:integer, "1-16" --></id>
<userName><!-- req, xs:string --></userName>
<password><!-- wo, req, xs:string --></password>
<bondIpAddressList>
<bondIpAddress>
<id><!-- req, xs:integer --></id>
<ipAddress><!-- dep, xs:string --></ipAddress>
<ipv6Address><!--dep, xs:string --></ipv6Address>
</ bondIpAddress>
</ bondIpAddressList>
<bondMacAddressList>
<bondMacAddress>
<id><!-- req, xs:integer --></id>
<macAddress><!-- opt, xs:string --></macAddress>
</ bondMacAddress>
</ bondMacAddressList>
<userLevel><!--opt,xs:string,"Administrator,Operator,Viewer,ViewerControl,Default"--></user
Level>
<attribute><!-- opt -->
<inherent><!--xs:boolean --></inherent>
</attribute>
<delsupport><!-- req, xs:bool,"true,false" --></delsupport>
</User>

```

#### Test cases

**GET/ISAPI/Security/users**

**Request XML: none**

**Response XML: <UserList>**



### PUT/ISAPI/Security/users

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<UserList>
<access>94AAABB419A9820DC171B43240CEEF41</access>
<User>
<id>1</id>
<userName>O6kFrDKpCsk=</userName>
<password>T6g05arqzu4=</password>
<userLevel>BrLFMLPkEnIp4T8s3O+sUw==</userLevel>
</User>
<User>
<id>2</id>
<userName>J6kFrFKpCsk=</userName>
<password>U8g05arqil6=</password>
<userLevel>BrLFMLPkEnIp4T8s3O+sUw==</userLevel>
<delsupport>>true</delsupport>
</User>
</UserList>
```

### 1.2.3/ISAPI/Security/userCheck

/ISAPI/Security/userCheck		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Obtain user login information	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<userCheck>	
<b>Explanations on protocol:</b> This protocol is to realize the query of the user login information, and realize the query of the client sides or IE for the equipment user login information through the CGI protocol.		
<b>Explanations on key parameters:</b> < passwdLeftValue > represents the remaining number of times for tried login, decrease progressively		

#### userCheckXML Block

```
<userCheck version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <statusValue><!--req, xs:integer, '200, 401' --></statusValue>
  <statusString><!--opt, xs:string, 'OK, Unauthorized--></statusString>
  <passwdLeftValue><!-- opt, xs:integer, '5' --></passwdLeftValue>
</userCheck>
```

#### Test cases

##### GET/ISAPI/Security/userCheck

**Request XML:** none

**Response XML:** <userCheck>

```
<?xml version="1.0" encoding="UTF-8"?>
<userCheck>
<statusValue>200</statusValue>
<statusString>OK</statusString>
<passwdLeftValue>5</passwdLeftValue>
</userCheck>
```

### 1.2.4/ISAPI/Security/logout

<b>/ISAPI/Security/logout</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Obtain user logout information	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<logout>	
<p><b>Explanations on protocol:</b>          This protocol is to realize the query and setting of the user logout information parameters, and realize the query and setting of the client sides or IE for the equipment user logout information parameters through the CGI protocol.</p>		

#### logoutXML Block

```
<logout version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <statusValue><!--req, xs:integer, '200, 401' --></statusValue>
  <statusString><!--opt, xs:string, 'OK, Unauthorized--></statusString>
</logout>
```

#### Test cases

##### GET/ISAPI/Security/logout

**Request XML:** none

**Response XML:** <logout>

```
<?xml version="1.0" encoding="UTF-8"?>
<logout>
<statusValue>200</statusValue>
<statusString>OK</statusString>
</logout>
```

### 1.2.5/ISAPI/Security/onlineUser

<b>/ISAPI/Security/onlineUser</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Obtain online user information	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<OnlineUserList>	
<p><b>Explanations on protocol:</b>          This protocol is to obtain the online user information, and realize the query of the client sides or IE for the equipment online user information through the CGI protocol.</p> <p><b>Explanations on key parameters:</b>          &lt;name&gt; represents user name.          &lt;type&gt; represents user type, administrator, super users, privilege users, ordinary users          &lt;loginTime&gt; represents user final operation time          &lt;ipAddress&gt; represents ip address used by the operation user -- supporting IPv6 address</p>		

#### OnlineUserList xml Block

```
< OnlineUserList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <OnlineUser>
    <id><!--req, xs:integer--></id>
    <name><!-- req, xs:string--></name>
    <type><!-- req, xs:string, "admin,super,common,privilege"--></type>
    <loginTime><!-- req, xs:string--></loginTime>
    <clientAddress>
      <ipAddress><!-- req, xs:string--></ipAddress>
```

```

    </clientAddress>
  </OnlineUser>
</OnlineUserList>

```

**Test cases**

**GET/ISAPI/Security/userCheck**

**Request XML: none**

**Response XML: <OnlineUserList>**

```

<OnlineUserList version="2.0">
  <OnlineUser>
    <id>1</id>
    <name>admin</name>
    <type>admin</type>
    <loginTime>2017-07-01T00:00:00Z</loginTime>
    <clientAddress>
      <ipAddress>10.30.31.44</ipAddress>
    </clientAddress>
  </OnlineUser>
</OnlineUserList>

```

**1.2.6/ISAPI/Security/UserGroupPermission**

<b>/ISAPI/Security/UserGroupPermissionGeneral Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Obtain user group permission configuration
<b>Query</b>	None
<b>Inbound Data</b>	<b>None</b>
<b>Success Return</b>	<b>&lt;UserGroupPermissionList&gt;</b>
<p><b>Explanations on protocol:</b>  <b>This protocol is to realize the query of user group permission, and realize the query of the client sides or IE for the equipment user group permission parameters through the CGI protocol, including the user local/remote/channel permission. This protocol is not used temporarily.</b></p> <p><b>Explanations on key parameters:</b>        &lt;userType&gt; represents user group, Administrator: administrator, Viewer: view (NVR: ordinary user), ViewerControl: view+control (NVR: privilege user), Operator: view+control+setting (NVR: super user), Default        &lt;clearAlarm&gt; manual alarm clearing        &lt;restartOrShutdown&gt; shutdown restart        &lt;logOrStateCheck&gt; log check        &lt;manageChannel&gt; channel management        &lt;parameterConfig&gt; parameter setting        &lt;SetAlarm&gt; alam setting        &lt;SetSystem&gt; system setting        &lt;manageUser&gt; user management        &lt;talk&gt; voice walkie-talkie        &lt;playBack&gt; playback video recording/picture        &lt;record&gt; manual video recording/snap picture        &lt;preview&gt; preview        &lt;ptzControl&gt; camera platform control</p>	
<b>UserGroupPermissionXML Block</b>	
<pre> &lt;UserGroupPermissionList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema"&gt;   &lt; UserGroupPermission/&gt;&lt;!--opt --&gt; &lt;/UserGroupPermissionList&gt;  &lt;UserGroupPermission version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema"&gt; </pre>	

```

    <id><!--req, xs:string !--></id>
    <userType><!--req, xs:string,
"Administrator,Operator,Viewer,ViewerControl,Default"--></userType>
    <localPermission/><!--opt -->
    <remotePermission/><!--opt -->
</UserGroupPermission>

<localPermission version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <clearAlarm><!--opt, xs:boolean --></clearAlarm>
  <restartOrShutdown><!--opt, xs:boolean --></restartOrShutdown>
  <logOrStateCheck><!--opt, xs:boolean --></logOrStateCheck>
  <manageChannel><!--opt, xs:boolean --></manageChannel>
  <parameterConfig><!--opt, xs:boolean --></parameterConfig>
  <SetAlarm><!--opt, xs:boolean --></SetAlarm>
  <SetSystem><!--opt, xs:boolean --></SetSystem>
  <manageUser><!--opt, xs:boolean --></manageUser>
  <PreviewPermission><!--opt, xs:boolean --></videoChannelPermission>
  <PlaybackPermission><!--opt, xs:boolean --></videoChannelPermission>
  <ptzChannelPermission><!--opt, xs:boolean --></ptzChannelPermission>
</localPermission>

<remotePermission version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <clearAlarm><!--opt, xs:boolean --></clearAlarm>
  <restartOrShutdown><!--opt, xs:boolean --></restartOrShutdown>
  <logOrStateCheck><!--opt, xs:boolean --></logOrStateCheck>
  <manageChannel><!--opt, xs:boolean --></manageChannel>
  <parameterConfig><!--opt, xs:boolean --></parameterConfig>
  <SetAlarm><!--opt, xs:boolean --></SetAlarm>
  <SetSystem><!--opt, xs:boolean --></SetSystem>
  <manageUser><!--opt, xs:boolean --></manageUser>
  <talk><!--opt, xs:boolean --></talk>
  <PreviewPermission><!--opt, xs:boolean --></videoChannelPermission>
  <PlaybackPermission><!--opt, xs:boolean --></videoChannelPermission>
  <ptzChannelPermission><!--opt, xs:boolean --></ptzChannelPermission>
</remotePermission>

```

#### Test cases

#### GET/ISAPI/Security/UserGroupPermission

**Request XML:** None

**Response XML:** <UserGroupPermissionList>

**<UserGroupPermissionList>XML:** as below

```

<UserGroupPermissionList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <UserGroupPermission>
    <id>3</id>
    <userID>admin</userID>
    <userType>Administrator</userType>
    <localPermission>
      <clearAlarm>false</clearAlarm>
      <parameterConfig>false</parameterConfig>
      <restartOrShutdown>false</restartOrShutdown>
      <logOrStateCheck>true</logOrStateCheck>
      <manageChannel>false</manageChannel>
      <SetAlarm>true</SetAlarm>
      <SetSystem>true</SetSystem>
      <manageUser>true</manageUser>
      <videoChannelPermission>true</videoChannelPermission>
      <ptzChannelPermission>true</ptzChannelPermission>
    </localPermission>
  </UserGroupPermission>
</UserGroupPermissionList>

```

```

    <remotePermission>
      <clearAlarm>false</clearAlarm>
      <parameterConfig>false</parameterConfig>
      <restartOrShutdown>false</restartOrShutdown>
      <logOrStateCheck>true</logOrStateCheck>
      <manageChannel>false</manageChannel>
      <SetAlarm>true</SetAlarm>
      <SetSystem>true</SetSystem>
      <manageUser>true</manageUser>
      <talk>false</talk>
      <videoChannelPermission>true</videoChannelPermission>
      <ptzChannelPermission>true</ptzChannelPermission>
    </remotePermission>
  </ UserGroupPermission>
</ UserGroupPermissionList >

```

### 1.2.7/ISAPI/Security/UserPermission

/ISAPI/Security/UserPermission General Resource v2.0	
<b>POST</b>	
<b>Description</b>	Obtain user permission configuration
<b>Query</b>	None
<b>Inbound Data</b>	<User>
<b>Success Return</b>	<UserPermission>
<b>PUT</b>	
<b>Description</b>	Set user permission
<b>Query</b>	None
<b>Inbound Data</b>	<UserPermission>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol is to realize the query and setting of the user permission, and realize the query and setting of the client sides or IE for the equipment user permission parameters through the CGI protocol, including user local/remote/channel permission.	
<b>Explanations on key parameters:</b>	
<userID> represents user name	
<userType> represents user group, Administrator: administrator, Viewer: view (NVR: ordinary user), ViewerControl: view+control (NVR : privilege user), Operator: view+control+setting (NVR: super user), Default	
<clearAlarm> manual alarm clearing	
<restartOrShutdown> shutdown restart	
<logOrStateCheck> log check	
<manageChannel> channel management	
<parameterConfig> parameter setting	
<SetAlarm> alam setting	
<SetSystem> system setting	
<manageUser> user management	
<talk> voice walkie-talkie	
<playBack> playback video recording/picture	
<record> manual video recording/snap picture	
<preview> preview	
<ptzControl> camera platform control	

#### User XML Block

```

<User>
  <userName><!--req, xs:string !--></userName>
</User>

```

#### UserPermissionXML Block

```

<UserPermission version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <id><!--req, xs:string !--></id>
  <userID><!--req, xs:string; id --></userID>
  <userType><!--req, xs:string,
"Administrator,Operator,Viewer,ViewerControl,Default"--></userType>
  <localPermission/><!--opt -->
  <remotePermission/><!--opt -->
</UserPermission>

<localPermission version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <clearAlarm><!--opt, xs:boolean --></clearAlarm>
  <restartOrShutdown><!--opt, xs:boolean --></restartOrShutdown>
  <logOrStateCheck><!--opt, xs:boolean --></logOrStateCheck>
  <manageChannel><!--opt, xs:boolean --></manageChannel>
  <parameterConfig><!--opt, xs:boolean --></parameterConfig>
  <SetAlarm><!--opt, xs:boolean --></SetAlarm>
  <SetSystem><!--opt, xs:boolean --></SetSystem>
  <manageUser><!--opt, xs:boolean --></manageUser>
  <videoChannelPermissionList><!--opt -->
    <videoChannelPermission><!--opt -->
      <id><!--req, must correspond to the video input channel id --></id>
      <playBack><!--opt, xs:boolean --></playBack>
      <record><!--opt, xs:boolean --></record>
      <preview><!--opt, xs:boolean --></preview>
    </videoChannelPermission>
  </videoChannelPermissionList>
  <ptzChannelPermissionList><!--opt -->
    <ptzChannelPermission><!--req -->
      <id><!--req, must correspond to ptz id, see /ISAPI/PTZCtrl/channels/ID--></id>
      <ptzControl><!--opt, xs:boolean --></ptzControl>
    </ptzChannelPermission>
  </ptzChannelPermissionList>
</localPermission>

<remotePermission version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <clearAlarm><!--opt, xs:boolean --></clearAlarm>
  <restartOrShutdown><!--opt, xs:boolean --></restartOrShutdown>
  <logOrStateCheck><!--opt, xs:boolean --></logOrStateCheck>
  <manageChannel><!--opt, xs:boolean --></manageChannel>
  <parameterConfig><!--opt, xs:boolean --></parameterConfig>
  <SetAlarm><!--opt, xs:boolean --></SetAlarm>
  <SetSystem><!--opt, xs:boolean --></SetSystem>
  <manageUser><!--opt, xs:boolean --></manageUser>
  <talk><!--opt, xs:boolean --></talk>
  <videoChannelPermissionList><!--opt -->
    <videoChannelPermission><!--opt -->
      <id><!--req, must correspond to the video input channel id --></id>
      <preview><!--opt, xs:boolean --></preview>
      <palyBack><!--opt, xs:boolean --></palyBack>
      <record><!--opt, xs:Boolean--></record>
    </videoChannelPermission>
  </videoChannelPermissionList>
  <ptzChannelPermissionList><!--opt -->
    <ptzChannelPermission><!--opt -->
      <id><!--req, must correspond to ptz id, see /ISAPI/PTZCtrl/channels/ID--></id>
      <ptzControl><!--opt, xs:boolean --></ptzControl>
    </ptzChannelPermission>
  </ptzChannelPermissionList>

```

```
</remotePermission>
```

**Test cases**

**POST/ISAPI/Security/UserPermission**

**Request XML:** <User>

**Response XML:** <UserPermission>

**PUT/ISAPI/Security/UserPermission**

**Response XML:** <ResponseStatus>

**<User>XML:** as below

```
<User>
  <userName>aaa</userName>
</User>
```

**<UserPermission>XML:** as below

```
<UserPermission>
  <id>3</id>
  <userID>aaa</userID>
  <userType>Operator</userType>
  <localPermission>
    <clearAlarm>false</clearAlarm>
    <parameterConfig>false</parameterConfig>
    <restartOrShutdown>false</restartOrShutdown>
    <logOrStateCheck>true</logOrStateCheck>
    <manageChannel>false</manageChannel>
    <SetAlarm>true</SetAlarm>
    <SetSystem>true</SetSystem>
    <manageUser>true</manageUser>
    <videoChannelPermissionList>
      <videoChannelPermission>
        <id>1</id>
        <playBack>true</playBack>
        <record>true</record>
        <preview>true</preview>
      </videoChannelPermission>
      <videoChannelPermission>
        <id>2</id>
        <playBack>true</playBack>
        <record>true</record>
        <preview>true</preview>
      </videoChannelPermission>
      <videoChannelPermission>
        <id>3</id>
        <playBack>true</playBack>
        <record>true</record>
        <preview>true</preview>
      </videoChannelPermission>
      <videoChannelPermission>
        <id>4</id>
        <playBack>true</playBack>
        <record>true</record>
        <preview>true</preview>
      </videoChannelPermission>
    </videoChannelPermissionList>
    <ptzChannelPermissionList>
      <ptzChannelPermission>
        <id>1</id>
        <ptzControl>true</ptzControl>
      </ptzChannelPermission>
```

```
<ptzChannelPermission>
  <id>2</id>
  <ptzControl>true</ptzControl>
</ptzChannelPermission>
<ptzChannelPermission>
  <id>3</id>
  <ptzControl>true</ptzControl>
</ptzChannelPermission>
<ptzChannelPermission>
  <id>4</id>
  <ptzControl>true</ptzControl>
</ptzChannelPermission>
</ptzChannelPermissionList>
</localPermission>
<remotePermission>
  <clearAlarm>false</clearAlarm>
  <parameterConfig>false</parameterConfig>
  <restartOrShutdown>false</restartOrShutdown>
  <logOrStateCheck>true</logOrStateCheck>
  <manageChannel>false</manageChannel>
  <SetAlarm>true</SetAlarm>
  <SetSystem>true</SetSystem>
  <manageUser>true</manageUser>
  <talk>false</talk>
<videoChannelPermissionList>
  <videoChannelPermission>
    <id>1</id>
    <preview>true</preview>
    <record>true</record>
    <playBack>true</playBack>
  </videoChannelPermission>
  <videoChannelPermission>
    <id>2</id>
    <preview>true</preview>
    <record>true</record>
    <playBack>true</playBack>
  </videoChannelPermission>
  <videoChannelPermission>
    <id>3</id>
    <preview>true</preview>
    <record>true</record>
    <playBack>true</playBack>
  </videoChannelPermission>
  <videoChannelPermission>
    <id>4</id>
    <preview>true</preview>
    <record>true</record>
    <playBack>true</playBack>
  </videoChannelPermission>
</videoChannelPermissionList>
<ptzChannelPermissionList>
  <ptzChannelPermission>
    <id>1</id>
    <ptzControl>true</ptzControl>
  </ptzChannelPermission>
  <ptzChannelPermission>
    <id>2</id>
    <ptzControl>true</ptzControl>
  </ptzChannelPermission>
```



```

        </ptzChannelPermission>
        <ptzChannelPermission>
            <id>3</id>
            <ptzControl>true</ptzControl>
        </ptzChannelPermission>
        <ptzChannelPermission>
            <id>4</id>
            <ptzControl>true</ptzControl>
        </ptzChannelPermission>
    </ptzChannelPermissionList>
</remotePermission>
</UserPermission>

```

**1.2.8/ISAPI/Security/users/active**

/ISAPI/Security/users	General Resource v2.0
-----------------------	-----------------------

<b>PUT</b>	
<b>Description</b>	Activate user
<b>Query</b>	None
<b>Inbound Data</b>	<ActiveInfo>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**  
 This protocol is to realize the user activation. Although this protocol is very similar with the put protocol for user management, it can only be used for the activation of the non-activated equipments, but cannot be used for the user management of the activated equipments. All the user names, passwords and permission fields are sent by encryption.

**Explanations on key parameters:**  
 <userName> represents user name, which is fixed to be admin.  
 <password> represents password, which has the longest 15 characters.  
 <userLevel> represents permission, which is fixed to be Administrator: administrator.

**UserListXML Block**

```

<ActiveInfoversion="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<userName><!-- req, xs:string --></userName>
<password><!-- wo, req, xs:string --></password>
<userLevel><!--opt,xs:string --></userLevel>
</ActiveInfo>

```

**Test cases**

**PUT/ISAPI/Security/users/active**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```

<?xml version="1.0" encoding="UTF-8"?>
<ActiveInfo>
<userName>O6kFrDKpCsk=</userName>
<password>T6g05arqzu4=</password>
<userLevel>BrLFMLPkEnIp4T8s3O+sUw==</userLevel>
</ActiveInfo>

```

**1.3/ISAPI/ContentMgmt**

**1.3.1/ISAPI/ContentMgmt/search**

/ISAPI/ContentMgmt/search	General Resource v2.0
<b>POST</b>	
<b>Description</b>	Obtain playback parameters

<b>Query</b>	None
<b>Inbound Data</b>	<CMSearchDescription>
<b>Success Return</b>	<CMSearchResult>

**Explanations on protocol:**

This protocol is to realize the query of the video recording or pictures, including the parameters such as start time/end time/file type/query number, etc. The parameters such as traffic equipment illegal type, vehicle type, lane No. are increased.

**Explanations on key parameters:**

Query xml:

<startTime> represents start time

<endTime> represents end time

<contentType> represents file type, video: video recording, picture: picture

<recType> represents video recording type, ALL: all, Manual: manual, Timer: timing, Alarm: alarm

(Note: if <contentType> is picture, this place only supports filling ALL query all types)

<streamType> code stream type, main: main code stream, sub: sub code stream

<maxResults> represents query number, range: <=40

<searchResultPosition> represents search result position, range: >=1

<queryType> query type, 0-basic query, 1-ATM query, 2-ITS query

<laneNo> lane No.: 1,2,3... 255-all

<illegalType> illegal type : 0--bayonet 1--run red light, 2--go in wrong direction, 3--overspeed, 4--forbid left driving, 5--forbid right driving, 6--press yellow line, 7--non-motor vehicle, 8--not drive according to the regulated lane (not drive according to the guidance), 9--forbid going straight, 10--bus lane, 11--press lane line, 12--run red light in the pending turning region, 13--illegal parking, 14--enabling of video snap overspeed function under mixed trigger, 15--back a vehicle, 16--turn around, 17--press lane line (riding line snap), 18--run forbidden passing, 19--not wear safety belt, 20--answer or make call, 21--motor vehicle not avoid pedestrian, 22--left turning vehicle not avoid going straight vehicle, 23--zebra crossing, 255-all

<vehicleType> vehicle type, 0-unknown type, 1-passenger coach, 2-car, 3-truck (including big truck and small truck), 4-van, 5-heavy and medium truck, 6-light and mini truck, 7-motorcycle, 8, pedestrian, 9-SUV, 10-medium passenger coach, 11-trailer, 12-hazardous chemical vehicle, 255-all

Reply xml:

<numOfMatches> represents number of matches

<chanNo> represents channel No.

<startTime> represents start time

<endTime> represents end time

<type> represents file type, ALL: all, Manual: manual, Timer: timing, Alarm: alarm

<streamType> code stream type, main: main code stream, sub: sub code stream

<fileName> represents file name

**CMSearchDescriptionXML Block**

```
<?xml version="1.0" encoding="UTF-8"?>
<CMSearchDescription version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<timeSpanList>
<timeSpan>
<startTime>2013-06-10T12:00:00Z</startTime>
<endTime>2013-06-10T13:30:00Z</endTime>
</timeSpan>
</timeSpanList>
<contentTypeList>
<contentType><!--req:string "video,picture"--></contentType>
</contentTypeList>
<RecTypeList>
<recType><!--req:string ALL, Manual, Timer, Alarm--></recType>
```

```

</RecTypeList>
<streamType><!--req:string ,"main,sub"--></contentType>
<maxResults><!--req,sx:integer-- ></maxResults>
<searchResultPostion><!--req,sx:integer-- ></searchResultPostion>
<channelID><!--req,sx:integer-- ></channelID> //channel No. is consistent with ie, start from
0
<queryType><!--req,sx:integer--></queryType>
<laneNoList>
<laneNoItem>
<laneNo><!--req,sx:integer--></laneNo>
</laneNoItem>
</laneNoList>
<vehicleTypeList>
<vehicleTypeItem>
<vehicleType><!--req,sx:integer--></vehicleType>
</vehicleTypeItem>
</vehicleTypeList>
<illegalTypeList>
<illegalTypeItem>
<illegalType><!--req,sx:integer--></illegalType>
</illegalTypeItem>
</illegalTypeList>
</CMSearchDescription>

```

#### **CMSearchResultXML Block**

```

<CMSearchResult version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<numOfMatches><!--req:inter ></numOfMatches>
<matchList>
<matchElement>
<chanNo><!--req:inter ></chanNo >
<streamType><!--req:string ,"main,sub"--></contentType>
<timeSpan>
<startTime>2013-05-18T10:31:26Z</startTime>
<endTime>2013-05-18T10:32:54Z</endTime>
</timeSpan>
<type><!--opt:String ALL, Manual, Timer, Alarm--></type>
<fileName><!--req:string ></fileName>
</matchElement>
</matchList>
</CMSearchResult>

```

#### **Test cases**

##### **POST/ISAPI/ContentMgmt/search**

**Request XML: <CMSearchDescription> as below**

```

<CMSearchDescription>
<timeSpanList>
<timeSpan>
<startTime>2016-12-25T00:00:00Z</startTime>
<endTime>2016-12-26T23:59:59Z</endTime>
</timeSpan>
</timeSpanList>
<contentTypeList>
<contentType>video</contentType>
</contentTypeList>
<RecTypeList>
<recType>ALL</recType>
</RecTypeList>
<streamType>main</contentType>
<maxResults>20</maxResults>

```

```

<searchResultPostion>1</searchResultPostion>
<queryType>0</queryType>
<laneNoList>
<laneNoItem>
<laneNo>2</laneNo>
</laneNoItem>
</laneNoList>
<vehicleTypeList>
<vehicleTypeItem>
<vehicleType>5</vehicleType>
</vehicleTypeItem>
</vehicleTypeList>
<illegalTypeList>
<illegalTypeItem>
<illegalType>3</illegalType>
</illegalTypeItem>
<illegalTypeItem>
<illegalType>6</illegalType>
</illegalTypeItem>
</illegalTypeList>
</CMSearchDescription>

```

**Response XML: <CMSearchResult>**

```

<?xml version="1.0" encoding="UTF-8"?>
<CMSearchResult>
<numOfMatches>3</numOfMatches>
<matchList>
<matchElement>
<chanNo>1</chanNo>
<streamType>main</contentType>
<type>Timer</type>
<fileName>H600018B000499560000C00.dat</fileName>
<timeSpan>
<startTime>2017-07-07T00:05:55Z</startTime>
<endTime>2017-07-07T01:04:47Z</endTime>
</timeSpan>
</matchElement>
<matchElement>
<chanNo>1</chanNo>
<streamType>main</contentType>
<type>Timer</type>
<fileName>H60000F10001D3DD0000C00.dat</fileName>
<timeSpan>
<startTime>2017-07-07T01:04:47Z</startTime>
<endTime>2017-07-07T02:04:48Z</endTime>
</timeSpan>
</matchElement>
</matchList>
</CMSearchResult>

```

**1.3.2/ISAPI/ContentMgmt/Storage/hdd/<ID>/formatStatus**

<b>/ISAPI/ContentMgmt/Storage/hdd/&lt;ID&gt;/formatStatus</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Obtain formatted disk status	
<b>Query</b>	None	
<b>Inbound Data</b>	None	

<b>Success Return</b>	<b>&lt;formatStatus&gt;</b>
<b>Explanations on protocol:</b> This protocol is to realize the query of the formatted disk status, and realize the query of the client sides or IE for the equipment formatted disk status through the CGI protocol.	
<b>Explanations on key parameters:</b> <formatting> represents formatted status, FORMAT_ERROR: error, FORMAT_DOING: formatting is doing, FORMAT_DONE: formatting is done, NOT_FORMAT: unformatted	

**formatStatusXML Block**

```
<formatStatus version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<formatting><!-- ro, req, xs:string FORMAT_ERROR , FORMAT_DOING ,
FORMAT_DONE, NOT_FORMAT--></formatting>
<percent><!-- ro, req, xs:integer "0-100" --></percent>
</formatStatus>
```

**Test cases**

**GET/ISAPI/ContentMgmt/Storage/hdd/<ID>/formatStatus**

**Request XML: none**

**Response XML: <formatStatus>**

```
<?xml version="1.0" encoding="UTF-8"?>
<formatStatus>
<formatting>FORMAT_ERROR</formatting>
<percent>-1</percent>
</formatStatus>
```

### 1.3.3/ISAPI/ContentMgmt/Storage/hdd/<ID>/format

<b>/ISAPI/ContentMgmt/Storage/hdd/&lt;ID&gt;/format</b>		<b>General Resource v2.0</b>
<b>PUT</b>		
<b>Description</b>	Set formatted disk	
<b>Query</b>	None	
<b>Inbound Data</b>	<formatInfo>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b> This protocol is to realize the setting of the formatted disk, and realize the setting of the client sides or IE for the disk formatting of equipments through the CGI protocol. <formatType> represents formatted target format, 0: ext3, 1: ext2, 2: fat32, 3: tdfs, 4: ntfs		

**formatInfo XML Block**

```
<formatInfo version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<formatType><!-- req, xs:integer--></formatType>
</formatInfo>
```

**Test cases**

**PUT/ISAPI/ContentMgmt/Storage/hdd/<ID>/format**

**Response XML: <ResponseStatus>**

**Request XML: <formatInfo>**

```
<formatInfo version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<formatType>0</formatType>
</formatInfo>
```

### 1.3.4/ISAPI/ContentMgmt/Storage/hdd/

<b>/ISAPI/ContentMgmt/Storage/hdd/</b>	<b>General Resource v2.0</b>
--	------------------------------

<b>GET</b>	
<b>Description</b>	Obtain disk management information
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<hddList>

**Explanations on protocol:**

This protocol is to realize the query of the disk management information, and realize the query of the client sides or IE for the equipment disk management information through the CGI protocol, including the parameters such as start time/end time/file type/query number, etc.

**Explanations on key parameters:**

- <id> represents sole disk No.
- <hddName> represents disk name
- <status> represents disk status, unformatted: unformatted, formating: formatted, mount: mounted, readwrite: in reading and writing
- <capacity> represents capacity
- <usedSpace> represents used space
- <freeSpace> represents free space
- <property> represents purpose, Record: video recording, backups: backup, Redund: redundant, readonly: read-only
- <hddType> represents disk type, IPC only had SD, NFS, NVR type is classified as: USB, ESATA, RCD, NFS, VD, IPSAN, SATA

**hddListXML Block**

```
<hddList version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<hdd><!-- opt --></hdd>
</hddList>
<hdd version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<id><!-- ro, req, xs:string;id --></id>
<hddName><!-- ro, req, xs:string --></hddName>
<hddPath><!-- ro, opt, xs:string --></hddPath>
<hddType>
<!-- ro, req, xs:string, "SD,IDE,RCD ,SATA,ESATA, NFS,USB, iSCSI, VD,IPSAN,", etc -->
</hddType>
<status><!--ro, req, xs:string "unformatted, formating, mount, readwrite" --></status>
<capacity><!-- ro, req, xs:integer, in MB --></capacity>
<usedSpace><!-- req,xs: integer --></usedSpace>
<freeSpace><!-- ro, req, xs: integer, in MB --></freeSpace>
<property><!--req, xs:string "RW, RO, Redund, Record, backups, readonly"--></property>
<group><!-- opt, xs:string; id --></group>
</hdd>
```

**Test cases**

**GET/ISAPI/ContentMgmt/Storage/hdd/**

**Request XML: none**

**Response XML: <hddList>**

```
<?xml version="1.0" encoding="UTF-8"?>
<hddList>
<hdd>
<id>10</id>
<hddName>USB1</hddName>
<hddType>USB</hddType>
<capacity>6144</capacity>
<usedSpace>4608</usedSpace>
<freeSpace>1536</freeSpace>
<status>mount</status>
<property>Record</property>
</hdd>
</hddList>
```

### 1.3.5/ISAPI/ContentMgmt/logSearch

<b>/ISAPI/ContentMgmt/logSearch</b>		<b>General Resource v2.0</b>
<b>POST</b>		
<b>Description</b>	Log query	
<b>Query</b>	None	
<b>Inbound Data</b>	<CMSearchDescription>	
<b>Success Return</b>	<CMSearchResult>	
<p><b>Explanations on protocol:</b>  This protocol is to realize the query of logs, and realize the query of the client sides or IE for the equipment logs through the CGI protocol, including the parameters such as language/channel No./start time/end time, etc.</p> <p><b>Explanations on key parameters:</b>  &lt;languageID&gt; represents language, 0: English; 1: Chinese; 2: traditional Chinese; 3: Korean; 4: Spanish; 5: Italian; 6: Russian; 7: Turkish; 8: Thai; 9: Polish; 10: Hebrew; 11: French; 12: German; 13: Slovenian; 14: Japanese  &lt;channelID&gt; represents channel No., 0 is acceptable  &lt;logType&gt; represents log type, ALL: all, System: system, Warning: warning, Alarm: alarm, Operation: operation, User: user, Other: other  &lt;startTime&gt; represents start time  &lt;endTime&gt; represents end time  &lt;searchResultPostion&gt; represents search result position. This field cannot be omitted, (when searching from the 1st log, the assigned value is 1, not 0)  &lt;maxResults&gt; represents query number (not exceeding 40). This field cannot be omitted.  &lt;numOfMatches&gt; represents number of matches  &lt;chanNo&gt; represents channel No.  &lt;type&gt; represents type, log type, ALL: all, System: system, Warning: warning, Alarm: alarm, Operation: operation, User: user, Other: other  &lt;user&gt; represents user  &lt;content&gt; represents content  ID is not used temporarily, and has no actual meaning</p>		
<b>CMSearchDescriptionXML Block</b>		
<pre>&lt;?xml version="1.0" encoding="UTF-8"?&gt; &lt;CMSearchDescription version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema"&gt; &lt;searchID&gt;&lt;!--req,sx:string--&gt;&lt;/searchID&gt; &lt;languageID&gt;&lt;!--opt,sx:integer--&gt;&lt;/languageID&gt; &lt;channelID&gt;&lt;!--req,sx:integer--&gt;&lt;/channelID&gt; &lt;LogTypeList&gt; &lt;logType&gt;&lt;!--req:String ALL,System,Warning,Alarm,Operation,User,Other --&gt;&lt;/logType&gt; &lt;/LogTypeList&gt; &lt;timeSpanList&gt; &lt;timeSpan&gt; &lt;startTime&gt;2013-05-18T10:31:26Z&lt;/startTime&gt; &lt;endTime&gt; 2013-05-18T10:31:26Z&lt;/endTime&gt; &lt;/timeSpan&gt; &lt;/timeSpanList&gt; &lt;metaID&gt;&lt;!--opt,sx:integer--&gt;&lt;/metaID&gt; &lt;searchResultPostion&gt;&lt;!--opt,sx:integer--&gt;&lt;/searchResultPostion&gt; &lt;maxResults&gt;&lt;!--opt,sx:integer--&gt;&lt;/maxResults&gt; &lt;/CMSearchDescription&gt;</pre>		
<b>CMSearchResultXML Block</b>		

```

<CMSearchResult version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<numOfMatches><!--req:inter --></numOfMatches>
<matchList>
<matchElement>
  <chanNo><!--req: sx:string --></chanNo -->
<Time>2013-05-18T10:31.26</Time>
  <type><!--opt:String ALL,System,Warning,Alarm,Operation,User,Other --></ type>
<user><!--req: sx:string --></user>
  <content><!--req: sx:string --></content>
</matchElement>
</matchList>
</CMSearchResult>

```

**Test cases**

**POST/ISAPI/ContentMgmt/logSearch**

**Response XML:** <CMSearchResult>

**Request XML:** <CMSearchDescription> as below

```

<CMSearchDescription>
<searchID>1</searchID>
<languageID>1</languageID>
<channelID>0</channelID>
<LogTypeList>
<logType>ALL</logType>
</LogTypeList>
<timeSpan>
<startTime>2016-12-14T00:00:00Z</startTime>
<endTime>2016-12-14T23:59:59Z</endTime>
</timeSpan>
<searchResultPostion>1</searchResultPostion>
<maxResults>18</maxResults>
</CMSearchDescription>

```

**1.3.6/ISAPI/ContentMgmt/record/tracks/<ID>/type/<ID>/dailyDistribution**

**/ISAPI/ContentMgmt/record/tracks/<ID>/type/<ID>/dailyDistributionGeneral Resource v2.0**

**POST**

<b>Description</b>	Obtain video recording file date information
<b>Query</b>	None
<b>Inbound Data</b>	<trackDailyParam>
<b>Success Return</b>	<trackDailyDistribution>

**Explanations on protocol:**

This protocol is to realize the query function of the playback interface date information.

Explanations of parameters:

tracks/<ID>: represents channel No., start from 1

type/<ID>: code stream type, 1: main code stream, 2: sub code stream

**trackDailyParamXML Block**

```

<?xml version="1.0" encoding="utf-8"?>
<trackDailyParam>
<year><!-- req, xs:intger --></year>//year
<monthOfYear><!-- req, xs:intger --></monthOfYear>//month
</trackDailyParam>

```



### trackDailyDistributionXML Block

```
<trackDailyDistribution version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<dayList>
<day>
<id><!-- req, xs:intger --></id>//serial number
<dayOfMonth><!-- req, xs:intger --></dayOfMonth>//day of month
<record><!--req,xs:boolean></record>//whether has video recording
</day>
<dayList>
</trackDailyDistribution>
```

#### Test cases

#### POST /ISAPI/ContentMgmt/record/tracks/1/dailyDistribution

**Request XML:** <trackDailyParam> as below

```
<?xml version="1.0" encoding="utf-8"?>
<trackDailyParam>
<year>2017</year>//year
<monthOfYear>7</monthOfYear>//month
</trackDailyParam>
```

**Response XML:** <trackDailyDistribution>

**Response XML:** <trackDailyDistribution> as below

```
<?xml version="1.0" encoding="UTF-8"?>
<trackDailyDistribution>
<dayList>
<day>
<id>1</id>
<dayOfMonth>1</dayOfMonth>
<record>false</record>
</day>
<day>
<id>2</id>
<dayOfMonth>2</dayOfMonth>
<record>>true</record>
</day>
.....
<day>
<id>31</id>
<dayOfMonth>31</dayOfMonth>
<record>false</record>
</day>
</dayList>
</trackDailyDistribution>
```

### 1.3.7/ISAPI/ContentMgmt/InputProxy/search

/ISAPI/ContentMgmt/InputProxy/search		General Resource v2.0
<b>POST</b>		
<b>Description</b>	Search of front-end equipments through NVR	
<b>Query</b>	None	
<b>Inbound Data</b>	<SearchParam>	
<b>Success Return</b>	<VideoSourceList>	
<b>GET</b>		
<b>Description</b>	Obtain results for search of front-end equipments through NVR	
<b>Query</b>	None	
<b>Inbound Data</b>	<SearchParam>	

<b>Success Return</b>	<VideoSourceList>
<p><b>Explanations on protocol:</b>  This protocol is to realize the functions of search of front-end equipments through NVR.  PUT time represents request  GET time represents obtaining result  Explanations of parameters:  Send:  SearchType(0: stop search, 1: search IPC, 2: search decoder)  SearchMode(0: IP, 1: domain name, 2: active mode)  Reply:  proxyProtocol(private (private), onvif)  addressingFormatType(ipaddress: IP, hostname: domain name, active: active mode)</p>	

**SearchParam XML Block**

```
<?xml version="1.0" encoding="UTF-8" ?>
<SearchParam>
<SearchType><!-- req, xs:integer '0: stop search, 1: search IPC, 2: search decoder' --></SearchType>
<SearchMode><!-- req, xs:integer 'ipaddress: IP, hostname: domain name, active: active mode' --></SearchMode>
</SearchParam>
```

**VideoSourceList XML Block**

```
<VideoSourceList>
<ending><!--req,xs:boolean--></ending>//search end status, true indicates that search is ended, false indicates that search is not ended.
<VideoSourceDescriptor>
<id><!-- req, xs:string --></id>//serial number
<proxyProtocol><!-- req, xs:string --></proxyProtocol> //protocol type, private (private), onvif
<addressingFormatType><!-- req, xs:string, "ipaddress,hostname,active"-->
</addressingFormatType>//address mode: IP, domain name, active mode
<ipAddress><!-- req, xs:string --></ipAddress>//ip address
<serialNumber><!-- req, xs:string --></serialNumber>//serial number
<macAddress><!-- req, xs:string --></macAddress>//physical address
<firmwareVersion><!-- req, xs:string --></firmwareVersion>//firmware core version
<managePortNo><!--req,xs:integer></managePortNo>//management port
<userName><!-- req, xs:string --></userName>//user name
<password><!-- req, xs:string --></password>//password
<srcInputPortNums><!--req,xs:integer></srcInputPortNums>//channel number
<deviceID><!-- req, xs:string --></deviceID>//ex-factory No.
<activated><!--req, xs: string, "active,inactive,unknown"--></activated>//activation status
<Mask><!--req, xs:string --></Mask>
<Gateway><!--req, xs:string --></Gateway>
<DNS><!--req, xs:string --></DNS>
<IPv6Address><!-- req, xs:string --></IPv6Address>//IPv6 address
<IPv6MaskLen><!--req,xs:integer></IPv6MaskLen> //IPv6 subnet mask prefix length
<IPv6Gateway><!--req, xs:string --></IPv6Gateway> //IPv6 gateway
<IPv6DNS><!--req, xs:string --></IPv6DNS> // IPv6 domain name parsing
<IPv6Support><!-- req, xs:boolean --></IPv6Support> //equipment supporting IPv6
</VideoSourceDescriptor>
</VideoSourceList>
```

**Test cases**

**POST /ISAPI/ContentMgmt/InputProxy/search**

**Request XML: <SearchParam> as below**

```
<?xml version="1.0" encoding="UTF-8" ?>
<SearchParam>
<SearchType>1</SearchType>
<SearchMode>0</SearchMode>
</SearchParam>
```

**Response XML: <VideoSourceList>**

```
<?xml version="1.0" encoding="UTF-8" ?>
<VideoSourceList>
<VideoSourceDescriptor>
<id>0</id>//serial number
<proxyProtocol>private</proxyProtocol> //protocol type, privat(private)s、onvif
<addressingFormatType>ipaddress</addressingFormatType>
<ipAddress>10.30.30.81</ipAddress>//ip address
<serialNumber></serialNumber>//serial number
<macAddress>0F: 0F: 0F: 0F: 0F: 0F</macAddress>//physical address
<firmwareVersion></firmwareVersion>//firmware core version
<managePortNo>3000</managePortNo>//management port
<userName></userName>//user name
<password></password>//password
<srcInputPortNums>16</srcInputPortNums>//channel number
<deviceID>ID12345678910</deviceID>//ex-factory No.
<activated>active</activated>//activation status
<Mask>255.255.255.0</Mask>
<Gateway>10.30.30.1</Gateway>
<DNS>192.168.1.3</DNS>
<IPv6Address>2001::202:116:160:42</IPv6Address>//IPv6 address
<IPv6MaskLen>64</IPv6MaskLen> //IPv6 subnet mask prefix length
<IPv6Gateway>2001::1</IPv6Gateway> //IPv6 gateway
<IPv6DNS>2001::202:116:160:42</IPv6DNS> // IPv6 domain name parsing
<IPv6Support>true</IPv6Support>
</VideoSourceDescriptor>
</VideoSourceList>
```

**1.3.8/ISAPI/ContentMgmt/InputProxy/channels/<ID>**

/ISAPI/ContentMgmt/InputProxy/channels/<ID> General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Obtain digital channel information
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<InputProxyChannel>
<b>PUT</b>	
<b>Description</b>	Set digital channel information
<b>Query</b>	None
<b>Inbound Data</b>	<InputProxyChannel>
<b>Success Return</b>	<ResponseStatus>
<b>DELETE</b>	
<b>Description</b>	Delete digital channel
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol is to realize the obtaining/adding/modification/deletion of front-end of digital channels.	

**InputProxyChannel XML Block**

```

<?xml version="1.0" encoding="UTF-8" ?>
<InputProxyChannel>
<id><!-- req, xs:string --></id>
<quickAdd><!--req, xs:boolean--></quickAdd> //whether to add quickly
<sourceInputPortDescriptor/><!--opt-->
</InputProxyChannel>

<sourceInputPortDescriptor>
<access><!--req, xs:string --></access>// for encryption check
<enable><!--req,xs:boolean--></enable>//enabling
<channel><!--req,xs:boolean--></channel>//channel No.
<channelName><!-- req, xs:string ></channelName>
<adminProtocol><!--req, xs:string " Private , ONVIF, RTSP, RTMP...">
</adminProtocol>
<addressingFormatType>
<!-- req, xs:string, "ipaddress,hostname,active, ipV6address,easyDDNS "-->
</addressingFormatType>//address mode : IP, domain name, active mode [A1] IPV6 ,
easyDDNS
<hostName><!-- dep, xs:string --></hostName>//domain name
<ipAddress><!-- dep, xs:string --></ipAddress>//IPV4 address
<ipV6Address><!-- dep, xs:string --></ipV6Address>//IPV6 address
<ipProxy><!-- dep: addressingFormatType, xs:string --></ ipProxy >//proxy ip address
<serialnumber><!-- dep, xs:string --></serialnumber>//serial number
<deviceID><!-- dep, xs:string --></deviceID>//ex-factory No., used in active mode
<adminPortNo><!-- req, xs:integer --></adminPortNo>//management port No.
<srcInputPort><!-- req, xs:string; id --></srcInputPort>//front-end channel No.
<userName><!-- req, xs:string --></userName>//user name, needing encryption
<password><!--_req, xs:string --></password>//password, needing encryption
<synchroToIpc><!-- req, xs:string --></synchroToIpc>//synchronization to front-end
<activated><!--req,xs:string,"active,inactive,unknown"--></activated>//equipment activation
status
<connMode><!-- opt, xs:string "plugplay, manual" --></connMode>//connection mode, not
used temporarily
<streamType><!-- opt, xs:string; "auto, tcp, udp"--></streamType>//transmission protocol
<deciphering><!-- req, xs:string --></deciphering>//deciphering password
<mainstreamRtspURL><!--dep:streamtype, xs:string --></ mainstreamRtspURL >//main code
stream URL
<substreamRtspURL><!--dep:streamtype, xs:string --></ substreamRtspURL >//sub code
stream URL
<<MUCURL>><!--dep:streamtype, xs:string --></ <MUCURL>>//multicast address
<MUCport><!--dep:streamtype, xs:string --></MUCport>//multicast port No.
<Mac><!--dep, xs:string --></Mac>//equipment Mac address
<chnType><!-- req, xs: integer --></chnType> //channel type 0=digital channel, 1=analogue
channel
<rtmpURL><!--dep, xs:string --></rtmpURL>//rtmp url
</sourceInputPortDescriptor>

```

#### Test cases

**GET/ISAPI/ContentMgmt/InputProxy/channels/0**

**Request XML:** NONE

**Response XML:** <InputProxyChannel>

**PUT /ISAPI/ContentMgmt/InputProxy/channels/0**

**Response XML:** NONE

**Request XML:** as below

```

<InputProxyChannel>
<id/>
<quickAdd>>false</quickAdd>
<sourceInputPortDescriptor>
<access>C533F72B20396DB9B08D106C538BB379</access>
<enable>>true</enable>
<channel>1</channel>
<channelName>[1] Channel 1</channelName>
<adminProtocol>Private</adminProtocol>
<addressingFormatType>ipaddress</addressingFormatType>
<hostName/>
<ipAddress>192.168.16.164</ipAddress>
<ipv6Address/>
<ipProxy/>
<serialnumber/>
<deviceID/>
<adminPortNo>3000</adminPortNo>
<srcInputPort>1</srcInputPort>
<userName>+xtLQ1yiS+w=</userName>
<password>2btNROVoH2Q=</password>
<activated/>
<synchroToIpc>>true</synchroToIpc>
<connMode/>
<streamType>tcp</streamType>
<deciphering/>
<mainstreamRtspURL/>
<substreamRtspURL/>
<MUCURL/>
<MUCport/>
<Mac/>
</sourceInputPortDescriptor>
</InputProxyChannel>

```

### 1.3.9/ISAPI/ContentMgmt/InputProxy/channels

/ISAPI/ContentMgmt/InputProxy/channels/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Batch obtain digital channel information	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<InputProxyChannelList>	
<b>PUT</b>		
<b>Description</b>	Batch set digital channel information	
<b>Query</b>	None	
<b>Inbound Data</b>	<InputProxyChannelList>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is to realize the batch obtaining/adding/modification of front-end of digital channels.		

#### InputProxyChannelList XML Block

```

<InputProxyChannelList version="1.0" encoding="UTF-8">
<InputProxyChannel/><!-- opt -->
</InputProxyChannelList>

<?xml version="1.0" encoding="UTF-8" ?>

```

```

<InputProxyChannel>
<id><!-- req, xs:string --></id>
<quickAdd><!--req, xs:boolean--></quickAdd> //whether to add quickly
<sourceInputPortDescriptor/><!--opt-->
</InputProxyChannel>
<sourceInputPortDescriptor>
<access><!--req, xs:string --></access>// for encryption check
<enable><!--req,xs:boolean--></enable>//enabling
<channel><!--req,xs:boolean--></channel>//channel No.
<channelName><!-- req, xs:string ></channelName>
<adminProtocol><!--req, xs:string "Private , ONVIF, RTSP, RTMP...">
</adminProtocol>
<addressingFormatType>
<!-- req, xs:string, "ipaddress,hostname,active, ipV6address,easyDDNS "-->
</addressingFormatType>//address mode: IP, domain name, active mode, IPv6, easyDDNS
<hostName><!-- dep, xs:string --></hostName>//domain name
<ipAddress><!-- dep, xs:string --></ipAddress>//IPV4 address
<ipv6Address><!-- dep, xs:string --></ipv6Address>//IPV6 address
<ipProxy><!-- dep: addressingFormatType, xs:string --></ ipProxy >//proxy ip address
<serialnumber><!-- dep, xs:string --></serialnumber>//serial number
<deviceID><!-- dep, xs:string --></deviceID>//ex-factory No., used in active mode
<adminPortNo><!-- req, xs:integer --></adminPortNo>//management port No.
<srcInputPort><!-- req, xs:string; id --></srcInputPort>//front-end channel No.
<userName><!-- req, xs:string --></userName>//user name, needing encryption
<password><!--_req,wo, xs:string --></password>//password, needing encryption
<activated><!--req,xs:string,"active,inactive,unknown"--></activated>//equipment activation
status
<connMode><!-- opt, xs:string "plugplay, manual" --></connMode>//connection mode, not
used temporarily
<streamType><!-- opt, xs:string; "auto, tcp, udp"--></streamType>//transmission protocol
<deciphering><!-- req, xs:string --></deciphering>//deciphering password
<mainstreamRtspURL><!--dep:streamtype, xs:string --></ mainstreamRtspURL >//main code
stream URL
<substreamRtspURL><!--dep:streamtype, xs:string --></ substreamRtspURL >//sub code
stream URL
<MUCURL><!--dep:streamtype, xs:string --></MUCURL>//multicast address
<MUCport><!--dep:streamtype, xs:string --></MUCport>//multicast port No.
<Mac><!--dep, xs:string --><Mac>//equipment Mac address
<chnType><!-- req, xs: integer --></chnType> //channel type: 0=digital channel, 1=analogue
channel
<rtmpURL><!--dep, xs:string --></rtmpURL>//rtmp url
</sourceInputPortDescriptor>

```

#### Test cases

**GET /ISAPI/ContentMgmt/InputProxy/channels**

**Request XML:** NONE

**Response XML:** <InputProxyChannelList>

**PUT /ISAPI/ContentMgmt/InputProxy/channels**

**Request XML:** <InputProxyChannelList>

**Response XML:** <ResponseStatus>

**<InputProxyChannelList> as below:**

```

<?xml version="1.0" encoding="UTF-8" ?>
<InputProxyChannelList>
<InputProxyChannel>
<id>0</id>
<quickAdd>>false</quickAdd> //whether to add quickly
<sourceInputPortDescriptor>
<access>94AAABB419A9820DC171B43240CEEF41</access>

```

```

<enable>true</enable>//enabling
<channel>0</channel>//channel No.
<channelName>channel 1</channelName>
<adminProtocol>Private</adminProtocol>
<addressingFormatType>ipaddress</addressingFormatType>//address mode: IP, domain name,
active mode, easyDDNS
<hostName></hostName>//domain name
<ipAddress>10.30.30.80</ipAddress>//IPV4 address
<ipv6Address></ipv6Address>//IPV6 address
<serialNumber></serialNumber>//serial number
<deviceID></deviceID>//ex-factory No., used in active mode
<adminPortNo>3000</adminPortNo>//management port No.
<srcInputPort>0</srcInputPort>//front-end channel No.
<userName></userName>//user name, needing encryption
<password></password>//password, needing encryption
<activated>active</activated>
<connMode>manual</connMode>//connection mode, not used temporarily
<streamType>tcp</streamType>//transmission protocol
<deciphering></deciphering>//deciphering password
<mainstreamRtspURL></mainstreamRtspURL >//main code stream URL
<substreamRtspURL></substreamRtspURL >//sub code stream URL
<MUCURL></MUCURL>//multicast address
<MUCport></MUCport>//multicast port No.
<Mac>00:50:c2:28:1f:bf<Mac>//equipment Mac address
</sourceInputPortDescriptor>
</InputProxyChannel>
//...obtain above fields
</InputProxyChannelList>

```

### 1.3.10/ISAPI/ContentMgmt/InputProxy/channels/<ID>/status

/ISAPI/ContentMgmt/InputProxy/channels/<ID>/status General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Obtain digital channel status
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<InputProxyChannelStatus>
<b>Explanations on protocol:</b>	
This protocol is to realize the obtaining of the digital channel status information, such as online, going offline and reason for going offline, etc.	

#### InputProxyChannelStatus XML Block

```

<InputProxyChannelStatus version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<id><!-- req, xs:string; id --></id>
<sourceInputPortDescriptor/><!--opt-->
<online><!-- req, xs:boolean --></online>//online status
<supportCreateStream/><!-- opt, xs:boolean -->
<streamingProxyChannelIdList><!-- req -->
<streamingProxyChannelId><!-- req, xs:string; id --></streamingProxyChannelId>
</streamingProxyChannelIdList>
<relatedIOProxy><!-- opt -->
<inputProxyPortIdList><!--opt-->
<inputProxyPortId><!-- opt -->
</inputProxyPortIdList>
<outputProxyPortIdList><!-- opt-->
<outputProxyPortId><!-- opt -->

```

```

</outputProxyPortIdList>
</relatedIOProxy>
<chanDetectResult><!-- opt, xs:string, "connect, overSysBandwidth, domainError,
ipcStreamFail, connecting, chanNoError, ipAddrConflictWithDev, ipAddrConflicWithIpc,
errorUserNameOrPasswd, netUnreachable, unknownError,  notExist,
ipcStreamTypeNotSupport, ipcResolutionNotSupport" -->
</chanDetectResult>//reply to reason of not being online ,  connect ( connected ) ,
overSysBandwidth ( access bandwidth reaches the upper limit ) , domainError ( domain name
error ) ,ipcStreamFail ( IPC code stream connection fails ) , connecting ( being connected ) ,
chanNoError ( channel No. error ) , ipAddrConflictWithDev ( IP conflicts with NVR ) ,
ipAddrConflicWithIpc ( IP conflicts with IPC ) ,errorUserNameOrPasswd ( user or password
error ) , netUnreachable ( net unreachable ) , unknownError ( unknown error ) ,  notExist ( front-end
not exist ) , ipcStreamTypeNotSupport ( IPC not support this code stream type ) ,
ipcResolutionNotSupport ( not support IPC resolution ) , ipMask ( IP is shielded ) , accountBlocked
( account is blocked ) ,  maxConnection ( reach the maximum connection number ) ,
coderNotSupport ( not supported encoding mode ) , videoEncrypt ( video encrypted ) ,
NVRPropertyReachUpperLimit ( NVR property reaches upper limit ) , analogSigExp
( Analog signal exception ) , analogChnNolink ( Analog channel is not connected )
</InputProxyChannelStatus>

<sourceInputPortDescriptor>
<access><!--req,xs:string></access>
<enable><!--req,xs:boolean--></enable>//enabling
<channel><!--req,xs:boolean--></channel>//channel No.
<channelName><!-- req, xs:string ></channelName>
<adminProtocol><!--req, xs:string "Private , ONVIF, RTSP...">
</adminProtocol>
<addressingFormatType>
<!-- req, xs:string, "ipaddress,hostname,active, ipV6address,  easyDDNS "-->
</addressingFormatType>//address mode: IP, domain name, active mode, IPv6, easyDDNS
<hostName><!-- dep, xs:string --></hostName>//domain name
<ipAddress><!-- dep, xs:string --></ipAddress>//IPV4 address
<ipv6Address><!-- dep, xs:string --></ipv6Address>//IPV6 address
<serialnumber><!-- dep, xs:string --></serialnumber>//serial number
<deviceID><!-- dep, xs:string --></deviceID>//ex-factory No.,  used in active mode
<adminPortNo><!-- req, xs:integer --></adminPortNo>//management port No.
<srcInputPort><!-- req, xs:string; id --></srcInputPort>//front-end channel No.
<userName><!-- req, xs:string --></userName>//user name, needing encryption
<password><!--_req,wo, xs:string --></password>//password,  needing encryption
<activated><!--req,xs:string,"active,inactive,unknown"--></activated>//equipment  activation
status
<connMode><!-- opt, xs:string "plugplay, manual" --></connMode>//connection mode, not
used temporarily
<streamType><!-- opt, xs:string; "auto, tcp, udp"--></streamType>//transmission protocol
<deciphering><!-- req, xs:string --></deciphering>//deciphering password
<mainstreamRtspURL><!--dep:streamtype, xs:string --></ mainstreamRtspURL >//main code
stream URL
<substreamRtspURL><!--dep:streamtype, xs:string --></ substreamRtspURL >//sub code
stream URL
<<MUCURL>><!--dep:streamtype, xs:string --></ <MUCURL>>//multicast address
<MUCport><!--dep:streamtype, xs:string --></MUCport>//multicast port No.
<Mac><!--dep, xs:string --></Mac>//equipment Mac address
</sourceInputPortDescriptor>

```

#### Test cases

**GET /ISAPI/ContentMgmt/InputProxy/channels/0/status**

**Request XML: none**

**Response XML: <InputProxyChannelStatus>**



```

<InputProxyChannelStatus version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<id>0</id>
<sourceInputPortDescriptor>
<access>94AAABB419A9820DC171B43240CEEF41</access>
<enable>>true</enable>//enabling
<channel>0</channel>//channel No.
<channelName>channel 1</channelName>
<adminProtocol>Private</adminProtocol>
<addressingFormatType>ipaddress</addressingFormatType>//address mode: IP, domain name,
active mode, easyDDNS
<hostName></hostName>//domain name
<ipAddress>10.30.30.80</ipAddress>//IPV4 address
<ipv6Address></ipv6Address>//IPV6 address
<serialNumber></serialNumber>//serial number
<deviceID></deviceID>//ex-factory No., used in active mode
<adminPortNo>3000</adminPortNo>//management port No.
<srcInputPort>0</srcInputPort>//front-end channel No.
<userName></userName>//user name, needing encryption
<password></password>//password, needing encryption
<connMode>manual</connMode>//connection mode, not used temporarily
<streamType>tcp</streamType>//transmission protocol
<deciphering></deciphering>//deciphering password
<mainstreamRtspURL></mainstreamRtspURL >//main code stream URL
<substreamRtspURL></substreamRtspURL >//sub code stream URL
<<MUCURL>></ <MUCURL>>//multicast address
<MUCport></MUCport>//multicast port No.
<Mac>00:50:c2:28:1f:bf<Mac>//equipment Mac address
</sourceInputPortDescriptor>
<online>>true</online>//online status
<chanDetectResult>connect</chanDetectResult>//reply to reason of not being online
</InputProxyChannelStatus>

```

### 1.3.11/ISAPI/ContentMgmt/InputProxy/channels/status

<b>/ISAPI/ContentMgmt/InputProxy/channels/&lt;ID&gt;/status</b> <b>General Resource</b> <b>v2.0</b>	
<b>GET</b>	
<b>Description</b>	Obtain all digital channel status
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<InputProxyChannelStatusList>
<b>Explanations on protocol:</b> This protocol is to realize the obtaining of the digital channel status information, such as online, going offline and reason for going offline, etc.	

### InputProxyChannelStatusList XML Block

```

<InputProxyChannelStatusList>
<InputProxyChannelStatus/><!-- opt -->
</InputProxyChannelStatusList>

<InputProxyChannelStatus version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<id><!-- req, xs:string; id --></id>
<sourceInputPortDescriptor/><!--opt-->
<online><!-- req, xs:boolean --></online>//online status
<supportCreateStream/><!-- opt, xs:boolean -->
<streamingProxyChannelIdList><!-- req -->
<streamingProxyChannelId><!-- req, xs:string; id --></streamingProxyChannelId>

```

```

</streamingProxyChannelIdList>
<relatedIOProxy><!-- opt -->
<inputProxyPortIdList><!--opt-->
<inputProxyPortId/><!-- opt -->
</inputProxyPortIdList>
<outputProxyPortIdList><!-- opt-->
<outputProxyPortId/><!-- opt -->
</outputProxyPortIdList>
</relatedIOProxy>
<chanDetectResult><!-- opt, xs:string, "connect, overSysBandwidth, domainError,
ipcStreamFail, connecting, chanNoError, ipAddrConflictWithDev, ipAddrConflicWithIpc,
errorUserNameOrPasswd, netUnreachable, unknownError,  notExist,
ipcStreamTypeNotSupport, ipcResolutionNotSupport" -->
</chanDetectResult>//reply to reason of not being online , connect ( connected ) ,
overSysBandwidth ( access bandwidth reaches the upper limit ) , domainError ( domain name
error ) ,ipcStreamFail ( IPC code stream connection fails ) , connecting ( being connected ) ,
chanNoError ( channel No. error ) , ipAddrConflictWithDev ( IP conflicts with NVR ) ,
ipAddrConflicWithIpc ( IP conflicts with IPC ) , errorUserNameOrPasswd ( user or password
error ) , netUnreachable ( net unreachable ) , unknownError ( unknown error ) , notExist ( front-end
not exis ) , ipcStreamTypeNotSupport ( IPC not support this code stream type ) ,
ipcResolutionNotSupport ( not support IPC resolution ) , ipMask ( IP is shielded ) , accountBlocked
( account is blocked ) , maxConnection ( reach the maximum connection number ) ,
coderNotSupport ( not supported encoding mode ) , videoEncrypt ( video encrypted ) ,
NVRPropertyReachUpperLimit ( NVR property reaches upper limit ) , analogSigExp ( Abnormal
analog signal ) , analogChnNolink ( Analog channel is not connected )
</InputProxyChannelStatus>

<sourceInputPortDescriptor>
<access><!--req,xs:string --></access>
<enable><!--req,xs:boolean--></enable>//enabling
<channel><!--req,xs:boolean--></channel>//channel No.
<channelName><!-- req, xs:string ></channelName>
<adminProtocol><!--req, xs:string "Private , ONVIF, RTSP...">
</adminProtocol>
<addressingFormatType>
<!-- req, xs:string, "ipaddress,hostname,active, ipV6address,easyDDNS "-->
</addressingFormatType>//address mode: IP, domain name, active mode, IPv6, easyDDNS
<hostName><!-- dep, xs:string --></hostName>//domain name
<ipAddress><!-- dep, xs:string --></ipAddress>//IPV4 address
<ipV6Address><!-- dep, xs:string --></ipV6Address>//IPV6 address
<serialnumber><!-- dep, xs:string --></serialnumber>//serial number
<deviceID><!-- dep, xs:string --></deviceID>//ex-factory No., used in active mode
<adminPortNo><!-- req, xs:integer --></adminPortNo>//management port No.
<srcInputPort><!-- req, xs:string; id --></srcInputPort>//front-end channel No.
<userName><!-- req, xs:string --></userName>//user name, needing encryption
<password><!--_req,wo, xs:string --></password>//password, needing encryption
<activated><!--req,xs:string,"active,inactive,unknown"--></activated>//equipment activation
status
<connMode><!-- opt, xs:string "plugplay, manual" --></connMode>//connection mode, not
used temporarily
<streamType><!-- opt, xs:string; "auto, tcp, udp"--></streamType>//transmission protocol
<deciphering><!-- req, xs:string --></deciphering>//deciphering password
<ipcCloudUpGradeEnable><!--req,xs:boolean--></ipcCloudUpGradeEnable>//ipc cloud
upgrading enabling, true: support, false: not support
<mainstreamRtspURL><!--dep:streamtype, xs:string --></ mainstreamRtspURL >//main code
stream URL
<substreamRtspURL><!--dep:streamtype, xs:string --></ substreamRtspURL >//sub code
stream URL

```

```

<<MUCURL>><!--dep:streamtype, xs:string --></ <MUCURL>>//multicast address
<MUCport><!--dep:streamtype, xs:string --></MUCport>//multicast port No.
<Mac><!--dep, xs:string --><Mac>//equipment Mac address
</sourceInputPortDescriptor>

```

**Test cases**

**GET /ISAPI/ContentMgmt/InputProxy/channels/status**

**Request XML: none**

**Response XML: <InputProxyChannelStatusList>**

```

<InputProxyChannelStatusList>
<InputProxyChannelStatus>
<id>0</id>
<sourceInputPortDescriptor>
<access>94AAABB419A9820DC171B43240CEEF41</access>
<enable>ture</enable>//enabling
<channel>0</channel>//channel No.
<channelName>channel 1</channelName>
<adminProtocol>Private</adminProtocol>
<addressingFormatType>ipaddress</addressingFormatType>//address mode: IP, domain name,
active mode
<hostName></hostName>//domain name
<ipAddress>10.30.30.80</ipAddress>//IPV4 address
<ipv6Address></ipv6Address>//IPV6 address
<serialNumber></serialNumber>//serial number
<deviceID></deviceID>//ex-factory No., used in active mode
<adminPortNo>3000</adminPortNo>//management port No.
<srcInputPort>0</srcInputPort>//front-end channel No.
<userName></userName>//user name, needing encryption
<password></password>//password, needing encryption
<activated>active</activated>
<connMode>manual</connMode>//connection mode, not used temporarily
<streamType>tcp</streamType>//transmission protocol
<deciphering></deciphering>//deciphering password
<ipcCloudUpGradeEnable>>true</ipcCloudUpGradeEnable>//ipc cloud upgrading enabling,
true: support, false: not support
<mainstreamRtspURL></mainstreamRtspURL >//main code stream URL
<substreamRtspURL></substreamRtspURL >//sub code stream URL
<<MUCURL>></ <MUCURL>>//multicast address
<MUCport></MUCport>//multicast port No.
<Mac>00:50:c2:28:1f:bf<Mac>//equipment Mac address
</sourceInputPortDescriptor>
<online>>true</online>//online status
<chanDetectResult>connect</chanDetectResult>//reply to reason of not being online
</InputProxyChannelStatus>
//...obtain above fields
</InputProxyChannelStatusList>

```

**1.3.12/ISAPI/ContentMgmt/InputProxy/channels/basic/status**

<b>/ISAPI/ContentMgmt/InputProxy/channels/basic/status General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Obtain all digital channel status (lightweight information)
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<InputProxyChnBasicStatusList>

**Explanations on protocol:**

This protocol is to realize the obtaining of the digital channel status information, only including the channel No., channel alias, channel enabling, link status, Channel type, etc. information.

**InputProxyChnBasicStatusList XML Block**

```
<InputProxyChannelStatusList>
<InputProxyChnBasicStatus>
<id><!-- req, xs:string; id --></id>
<sourceInputBasicDescriptor>
<enable><!--req,xs:boolean--></enable>//enabling
<channel><!--req,xs:boolean--></channel>//channel No.
<channelName><!-- req, xs:string --></channelName>
<adminProtocol><!--req, xs:string "Private , ONVIF, RTSP..."></adminProtocol>
</sourceInputBasicDescriptor>
<online><!-- req, xs:boolean --></online>//online status
<chnType><!-- req, xs: integer --></chnType> //Channel type 0 = Digital channel, 1 = Analog
channel
</ InputProxyChnBasicStatus>
</InputProxyChannelStatusList>
```

**Test cases**

**GET /ISAPI/ContentMgmt/InputProxy/channels/basic/status**

**Request XML: none**

**Response XML: <InputProxyChnBasicStatusList>**

```
<InputProxyChnBasicStatusList>
<InputProxyChnBasicStatus>
<id>1</id>
<sourceInputBasicDescriptor>
<enable>true</enable>
<channel>1</channel>
<channelName>channel 1</channelName>
<adminProtocol>Private</adminProtocol>
</sourceInputBasicDescriptor>
<online>true</online>
<chnType>0</chnType>
</InputProxyChnBasicStatus>
```

**1.3.13/ISAPI/ContentMgmt/InputProxy/ipcConfig**

<b>/ISAPI/ContentMgmt/InputProxy/ipcConfig General Resource v2.0</b>	
<b>PUT</b>	
<b>Description</b>	Modify IP of front-end through NVR
<b>Query</b>	None
<b>Inbound Data</b>	<ipcInfo>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol is to realize the function of modify IP of front-end through NVR.	

**ipcInfoXML Block**

```
<ipcInfo>
<access><!--req, xs:string --></access>// for encryption check
<MAC><!--req, xs:string --><!--req,xs:integer></MAC>// MAC address
<userName><!--req, xs:string --><!--req,xs:integer></userName>//user name
<userPass><!--req, xs:string --></userPass>//password
<adminProtocol><!--req, xs:string --></adminProtocol>//connection protocol
<IP><!--req, xs:string --></IP>
```

```

<Mask><!--req, xs:string --></Mask>
<Gateway><!--req, xs:string --></Gateway>
<DNS><!--req, xs:string --></DNS>
<CheckCode><!--req, xs:string --></CheckCode>//check code, fixed to be 20160113
<ipVersion><!-- req, xs:string, "v4,v6,dual" --></ipVersion>
</ipcInfo>

```

**Test cases**

**PUT/ISAPI/ContentMgmt/InputProxy/ipcConfig**

**Request XML: <ipcInfo>**

```

<ipcInfo>
  <access>94AAABB419A9820DC171B43240CEEF41</access>
  <MAC>0F: 0F: 0F: 0F: 0F: 0F<!--req,xs:integer></MAC>// MAC address
  <userName>admin</userName>//user name
  <userPass>1111</userPass>//password
  <adminProtocol>Private</adminProtocol>//connection protocol
  <IP>10.30.30.79</IP>
  <Mask>255.255.255.0</Mask>
  <Gateway>10.30.30.1</Gateway>
  <DNS>8.8.8.8</DNS>
  <CheckCode>20160113</CheckCode>//check code, fixed to be 20160113
  <ipVersion> v4 </ipVersion>
</ipcInfo>

```

**Response XML: <ResponseStatus>**

**1.3.14/ISAPI/ContentMgmt/InputProxy/ChnEnable/channels/<ID>**

<b>/ISAPI/ContentMgmt/InputProxy/ChnEnable/channels/&lt;ID&gt;</b>		<b>General Resource</b>
<b>v2.0</b>		
<b>GET</b>		
<b>Description</b>	Obtain digital channel enabling status	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<b>&lt;InputProxyChnEnable&gt;</b>	
<b>PUT</b>		
<b>Description</b>	Set digital channel enabling status	
<b>Query</b>	None	
<b>Inbound Data</b>	<b>&lt;InputProxyChnEnable&gt;</b>	
<b>Success Return</b>	<b>&lt;ResponseStatus&gt;</b>	
<b>Explanations on protocol:</b>		
This protocol is to realize the obtaining/modification of digital channel status.		

**InputProxyChnEnable XML Block**

```

<?xml version="1.0" encoding="UTF-8" ?>
<InputProxyChnEnable>
  <id><!-- req, xs:string --></id>
  <channel><!--req,xs:boolean--></channel>//channel No.
  <enable><!--req,xs:boolean--></enable>//enabling
</InputProxyChnEnable>

```

**Test cases**

**GET /ISAPI/ContentMgmt/InputProxy/ChnEnable/channels/1**

**Request XML: NONE**

**Response XML: <InputProxyChnEnable>**

**PUT /ISAPI/ContentMgmt/InputProxy/ChnEnable/channels/1**

**Request XML: InputProxyChnEnable**

**Response XML: as below**

```

<?xml version="1.0" encoding="UTF-8" ?>
<InputProxyChnEnable>
<id>0</id>
<channel>1</channel>//channel No.
<enable>>true</enable>//enabling
</InputProxyChnEnable>

```

**1.3.15/ISAPI/ContentMgmt/InputProxy/ChnEnable/channels**

<b>/ISAPI/ContentMgmt/InputProxy/ChnEnable/channels</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Batch obtain digital channel enabling status	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<InputProxyChnEnableList>	
<b>PUT</b>		
<b>Description</b>	Batch set digital channel enabling status	
<b>Query</b>	None	
<b>Inbound Data</b>	<InputProxyChnEnableList>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is to realize the batch obtaining/modification of digital channel status.		

**InputProxyChnEnableList XML Block**

```

<InputProxyChnEnableList version="1.0" encoding="UTF-8">
<InputProxyChnEnable/><!-- opt -->
</InputProxyChnEnableList>

<?xml version="1.0" encoding="UTF-8" ?>
<InputProxyChnEnable>
<id><!-- req, xs:string --></id>
<channel><!--req,xs:boolean--></channel>//channel No.
<enable><!--req,xs:boolean--></enable>//enabling
</InputProxyChnEnable>

```

**Test cases**

**GET /ISAPI/ContentMgmt/InputProxy/ChnEnable/channels**

**Request XML: NONE**

**Response XML: <InputProxyChnEnableList>**

**PUT /ISAPI/ContentMgmt/InputProxy/ChnEnable/channels**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<InputProxyChnEnableList version="1.0" encoding="UTF-8">
<InputProxyChnEnable>
<id>0</id>
<channel>1</channel>//channel No.
<enable>>true</enable>//enabling
</InputProxyChnEnable>
//...obtain above fields
</InputProxyChnEnableList>

```

**1.3.16/ISAPI/ContentMgmt/Storage/hdd/<ID>/SMARTTest/config**

<b>/ISAPI/ContentMgmt/Storage/hdd/&lt;ID&gt;/SMARTTest/config</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Obtain Smart detection verification enabling	

<b>Query</b>	None
<b>Inbound Data</b>	<b>None</b>
<b>Success Return</b>	<SMARTTestConfig>
<b>PUT</b>	
<b>Description</b>	Set Smart detection verification enabling
<b>Query</b>	None
<b>Inbound Data</b>	<SMARTTestConfig>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is to obtain and set the Smart detection verification enabling parameters. If the setting is false, the measurement of hard disk not passing smart detection can still be used, otherwise not be used.	

#### SMARTTestConfig XML Block

```
<SMARTTestConfig version="1.0" >
  <enabled><!-- req, xs:Boolean"true,false"--></enabled>
</SMARTTestConfig>
```

#### Test cases

**GET/ISAPI/ContentMgmt/Storage/hdd/1/SMARTTest/config**

**Response XML:** <SMARTTestConfig>

**Request XML:** None

**PUT/ISAPI/ContentMgmt/Storage/hdd/1/SMARTTest/config**

**Response XML:** <ResponseStatus>

**request XML:** <SMARTTestConfig> as below

```
<SMARTTestConfig version="1.0">
  <enabled>false</enabled>
</SMARTTestConfig>
```

### 1.3.17/ISAPI/ContentMgmt/Storage/hdd/<ID>/SMARTTest/status

<b>/ISAPI/ContentMgmt/Storage/hdd/&lt;ID&gt;/SMARTTest/statusGeneralResourcev2.0</b>	
<b>GET</b>	
<b>Description</b>	Obtain Smart detection status
<b>Query</b>	None
<b>Inbound Data</b>	<b>None</b>
<b>Success Return</b>	<SmartTestStatus>
<b>Explanations on protocol:</b> This protocol is to obtain the Smart detection status.	

#### SmartTestStatus XML Block

```
<SmartTestStatus version="1.0" >
<id><!-- req, xs:integer --></id>
<temprature><!-- req, xs:integer --></temprature>
<powerOnDay><!-- req, xs:integer --></powerOnDay>
<selfEvaluaiingStatus><!-- req, xs:string "ok,fail", self-evaluation
status--></selfEvaluaiingStatus>
<allEvaluaiingStatus><!-- req, xs:string "functional,fail", overall evaluation
status--></allEvaluaiingStatus>
<devModel><!-- req, xs:string, hard disk model--></devModel>
<serialNum><!-- req, xs:string, hard disk serial number--></serialNum>
<TestResultList>
<TestResult>
<attributeID><!-- req, xs:integer --></attributeID>
<status><!-- req, xs:string "OK,FAILING_NOW,In_the_past....."--></status>
<flags><!-- req, xs:integer --></flags>
<thresholds><!-- req, xs:integer --></thresholds>
```

```

<value><!-- req, xs:integer --></value>
<worst><!-- req, xs:integer --></worst>
<rawValue><!-- req, xs:integer --></rawValue>
</TestResult>
</TestResultList>
</SmartTestStatus>

```

**Test cases**

**GET/ISAPI/ContentMgmt/Storage/hdd/0/SMARTTest/status**

**Request XML: None**

**Response XML: <SmartTestStatus>**

```

<SmartTestStatus version="1.0" >
<id>7</id>
<temprature>36</temprature>
<powerOnDay>465</powerOnDay>
<selfEvaluatingStatus>ok</selfEvaluatingStatus>
<allEvaluatingStatus>functional</allEvaluatingStatus>
<devModel>WD</devModel>
<serialNum>123456789</serialNum>
<TestResultList>
<TestResult>
<attributeID>1</attributeID>
<status>ok</status>
<flags>15</flags>
<thresholds>44</thresholds>
<value>79</value>
<worst>63</worst>
<rawValue>84702424</rawValue>
</TestResult>
<TestResult>
<attributeID>3</attributeID>
<status>ok</status>
<flags>3</flags>
<thresholds>0</thresholds>
<value>95</value>
<worst>93</worst>
<rawValue>0</rawValue>
</TestResult>
...
<attributeID>0</attributeID>
<status>ok</status>
<flags>0</flags>
<thresholds>0</thresholds>
<value>0</value>
<worst>0</worst>
<rawValue>0</rawValue>
</TestResult>
</TestResultList>
</SmartTestStatus>

```

**1.3.18/ISAPI/ContentMgmt/Storage/hdd/<ID>/SMARTTest/enable**

<b>/ISAPI/ContentMgmt/Storage/hdd/&lt;ID&gt;/SMARTTest/startGeneral Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Start smart detection order
<b>Query</b>	None
<b>Inbound Data</b>	<b>None</b>



<b>Success Return</b>	<SMARTTestEnable>
<b>PUT</b>	
<b>Description</b>	Start smart detection order
<b>Query</b>	None
<b>Inbound Data</b>	<SMARTTestEnable>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is used to start the smart detection.	

**SMARTTestEnableXML Block**

```
<SMARTTestEnable version="1.0" >
  <enabled><!-- req, xs:Boolean"true,false"--></enabled>
</SMARTTestEnable>
```

**Test cases**

**PUT /ISAPI/ContentMgmt/Storage/hdd/7/SMARTTest/enable**

**Response XML:** <SMARTTestEnable>

**Request XML:** <ResponseStatus>

```
<SMARTTestEnable version="1.0" >
  <enabled>true</enabled>
</SMARTTestEnable>
```

**GET /ISAPI/ContentMgmt/Storage/hdd/7/SMARTTest/enable**

**Request XML:** None

**Response XML:** as below

```
<SMARTTestEnable version="1.0" >
  <enabled>true</enabled>
</SMARTTestEnable>
```

**1.3.19/ISAPI/ContentMgmt/Storage/hdd/<ID>/BadSectorsTest/status**

<b>/ISAPI/ContentMgmt/Storage/hdd/&lt;ID&gt;/BadSectorsTest/status</b>	<b>General</b>
<b>Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Obtain bad track detection status
<b>Query</b>	None
<b>Inbound Data</b>	<b>None</b>
<b>Success Return</b>	<BadSectorsTestStatus>
<b>Explanations on protocol:</b> This protocol is to obtain bad track detection status. Block volume is calculated, and each block has one No..	

**BadSectorsTestStatusXML Block**

```
<BadSectorsTestStatus version="1.0">
  <diskID><!-- req, xs:integer --></diskID>
  <MaskAreaList>
  <BlockNo><!-- req, xs:integer --></BlockNo> //shielded block No. of bad block
  </MaskAreaList>
  <BlockAreaTestStatus>
  <testType><!-- req, xs:string "full: full, keyblock: key region"--></testType>
  <testStatus><!-- req, xs:string "none, pause, abort, running, finish"--></testStatus>
  <firstBlock><!-- req, xs:integer --></firstBlock> //first block No.
  <lastBlock><!-- req, xs:integer --></lastBlock> //last block No., maximum 64*64
  <currentBlock><!-- req, xs:integer --></currentBlock> //currently detected block No.
  <BadSectorsList>
  <BadSectors>
  <BlockNo><!-- req, xs:integer --></BlockNo> //bad block No.
  </BadSectors>
  </BadSectorsList>
```

```
</BlockAreaTestStatus>
</BadSectorsTestStatus>
```

**Test cases**

**GET/ISAPI/ContentMgmt/Storage/hdd/0/SMARTTest/status**

**Response XML:** <BadSectorsTestStatus>

**Request XML:** None

```
<BadSectorsTestStatus version="1.0">
<diskID>7</diskID>
<MaskAreaList>
</MaskAreaList>
<BlockAreaTestStatus>
<testType>full</testType>
<testStatus>none</testStatus>
<firstBlock>0</firstBlock>
<lastBlock>0</lastBlock>
<currentBlock>0</currentBlock>
<BadSectorsList>
<BadSectors>
<num>10</num>//the 10th block is a bad block.
</BadSectors>
</BadSectorsList>
</BlockAreaTestStatus>
</BadSectorsTestStatus>
```

**1.3.20/ISAPI/ContentMgmt/Storage/hdd/<ID>/BadSectorsTest/start**

<b>/ISAPI/ContentMgmt/Storage/hdd/&lt;ID&gt;/BadSectorsTest/start</b>		<b>General</b>
<b>Resource v2.0</b>		
<b>POST</b>		
<b>Description</b>	Start bad track detection command	
<b>Query</b>	None	
<b>Inbound Data</b>	<BadSectorsTest>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is to start the bad track detection process, the follow-up process needs to call /ISAPI/ContentMgmt/Storage/hdd/<ID>/BadSectorsTest/status for obtaining detection progress.		

**BadSectorsTest XML Block**

```
<BadSectorsTest version="1.0">
<testType><!-- req, xs:string "full: full, keyblock: key region"--></testType>
</BadSectorsTest>
```

**Test cases**

**PUT/ISAPI/ContentMgmt/Storage/hdd/7/BadSectorsTest/start**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<BadSectorsTest version="1.0">
<testType>full</testType>
</BadSectorsTest>
```

**1.3.21/ISAPI/ContentMgmt/Storage/hdd/<ID>/BadSectorsTest/pause**

<b>/ISAPI/ContentMgmt/Storage/hdd/&lt;ID&gt;/BadSectorsTest/pause</b>		<b>General</b>
<b>Resource v2.0</b>		
<b>PUT</b>		

<b>Description</b>	Pause bad track detection command
<b>Query</b>	None
<b>Inbound Data</b>	<b>None</b>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is to pause the bad track detection process. ID range: 1-8	

**Test cases**

**PUT/ISAPI/ContentMgmt/Storage/hdd/7/BadSectorsTest/pause**

**Response XML:** <ResponseStatus>

**Request XML:** None

**1.3.22/ISAPI/ContentMgmt/Storage/hdd/<ID>/BadSectorsTest/stop**

<b>/ISAPI/ContentMgmt/Storage/hdd/&lt;ID&gt;/BadSectorsTest/stop</b>		<b>General</b>
<b>Resource v2.0</b>		
<b>PUT</b>		
<b>Description</b>	Stop bad track detection command	
<b>Query</b>	None	
<b>Inbound Data</b>	<b>None</b>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b> This protocol is to stop the bad track detection process.		

**Test cases**

**POST/ISAPI/ContentMgmt/Storage/hdd/7/BadSectorsTest/stop**

**Response XML:** <ResponseStatus>

**Request XML:** None

**1.3.23/ISAPI/ContentMgmt/Storage/hdd/<ID>/BadSectorsTest/resume**

<b>/ISAPI/ContentMgmt/Storage/hdd/&lt;ID&gt;/BadSectorsTest/resume</b>		<b>General</b>
<b>Resource v2.0</b>		
<b>PUT</b>		
<b>Description</b>	Restart bad track detection command	
<b>Query</b>	None	
<b>Inbound Data</b>	<b>None</b>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b> This protocol is to restart the bad track detection process.		

**Test cases**

**PUT /ISAPI/ContentMgmt/Storage/hdd/7/BadSectorsTest/resume**

**Response XML:** <ResponseStatus>

**Request XML:** None

**1.3.24/ISAPI/ContentMgmt/record/control/locks**

<b>/ISAPI/ContentMgmt/record/control/locks</b>		<b>General Resource v2.0</b>
<b>POST</b>		
<b>Description</b>	Obtain file blocking status	
<b>Query</b>	None	
<b>Inbound Data</b>	<RecordingFileNameList>	
<b>Success Return</b>	<RecordingLockList>	

<b>PUT</b>	
<b>Description</b>	Set file blocking and unblocking
<b>Query</b>	None
<b>Inbound Data</b>	<RecordingLockList>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This protocol is to realize the obtaining of the file blocking status and the setting of the file blocking and unblocking, and realize the use and operation of the client sides or IE for the equipment files through the CGI protocol.</p> <p><b>Explanations on key parameters:</b>  &lt;filename&gt; represents file name of the file to be obtained or to be set  &lt; status&gt; represents file blocking and unblocking status, true: blocking; false: unblocking</p>	

**RecordingFileNameListXML Block**

```
<RecordingFileNameListxmlns="http://www.isapi.org/ver20/XMLSchema">
  <RecordingFileName>
    <id><!-- opt, xs:integer--></id>
    <filename><!-- req, xs:string --></filename>
  </RecordingFileName>
</RecordingFileNameList>
```

**RecordingLockList XML Block**

```
<RecordingLockList xmlns="http://www.isapi.org/ver20/XMLSchema">
  <RecordingLock>
    <id><!-- opt, xs:integer--></id>
    <filename><!-- req, xs:string --></filename>
    <status><!-- req, xs:boolean "true, false" --></status>
  </RecordingLock>
</RecordingLockList>
```

**Test cases**

**POST /ISAPI/ContentMgmt/record/control/locks**

**Request XML:** <RecordingFileNameList>

**Response XML:** <RecordingLockList>

**<RecordingFileNameList>XML: as below**

```
<RecordingFileNameList xmlns="http://www.isapi.org/ver20/XMLSchema">
  <RecordingFileName>
    <id>1</id>
    <filename>H1000125000474490000C00.sdv</filename>
  </RecordingFileName>
</RecordingFileNameList>
```

**PUT /ISAPI/ContentMgmt/record/control/locks**

**Request XML:** <RecordingLockList>

**Response XML:** <ResponseStatus>

**<RecordingLockList>XML: as below**

```
<RecordingLockList xmlns="http://www.isapi.org/ver20/XMLSchema">
  <RecordingLock>
    <id>1</id>
    <filename>H1000125000474490000C00.sdv</filename>
    <status>false</status>
  </RecordingLock>
</RecordingLockList>
```

**1.3.25/ISAPI/ContentMgmt/dailySearch**

<b>/ISAPI/ContentMgmt/dailySearch Resource v2.0</b>	
<b>POST</b>	
<b>Description</b>	Obtain the date information

<b>Query</b>	None
<b>Inbound Data</b>	<CDailySearchDescription>
<b>Success Return</b>	<CDailySearchResult>

**Explanations on protocol:**

This protocol is to realize the date query functions of video recording or pictures. The replied fields only include the time periods of video recording files in current day, and video recording type information. Multiple files of same type in original time periods will be combined the time periods to raise the speed of querying and displaying the video recording information.

**Explanations on key parameters:**

Query xml:

< day> represents query date

<contentType> represents file type, video: video recording, picture: picture

<recType> represents video recording type, ALL: all, Manual: manual, Timer: timing, Alarm: alarm

(Note: if <contentType> is picture, this place only supports filling ALL query all types)

<streamType> code stream type, main: main code stream, sub: sub code stream

Reply xml:

<numOfMatches> represents number of matches

<chanNo> represents channel No., starting from 0

<startTime> represents start time

<endTime> represents end time

<type> represents file type, ALL: all, Manual: manual, Timer: timing, Alarm: alarm

<streamType> code stream type, main: main code stream, sub: sub code stream

<maxResults> is not used temporarily

<searchResultPostion> is not used temporarily

**CDailySearchDescriptionXML Block**

```
<?xml version="1.0" encoding="UTF-8"?>
<CDailySearchDescription version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<day>2013-06-10</day>
<contentTypeList>
<contentType><!--req:string "video,picture"--></contentType>
</contentTypeList>
<RecTypeList>
<recType><!--req:string ALL, Manual, Timer, Alarm--></recType>
</RecTypeList>
<chanNo><!--req:sx:integer-- ></chanNo>
<streamType><!--req:string ,"main,sub"--></streamType>
<maxResults><!--req:sx:integer-- ></maxResults>
<searchResultPostion><!--req:sx:integer-- ></searchResultPostion>
</CDailySearchDescription>
```

**CDailySearchResult XML Block**

```
<CDailySearchResult version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<numOfMatches><!--req:inter ></numOfMatches>
<matchList>
<matchElement>
<chanNo><!--req:inter ></chanNo >
<streamType><!--req:string ,"main,sub"--></contentType>
<timeSpan>
<startTime>2013-05-18T10:31:26Z</startTime>
<endTime>2013-05-18T10:32:54Z</endTime>
</timeSpan>
<type><!--opt:String ALL, Manual, Timer, Alarm--></type>
</matchElement>
</matchList>
</CDailySearchResult>
```

**Test cases**

## POST/ISAPI/ContentMgmt/search

**Request XML:** <CDailySearchDescription> as below

```
<CDailySearchDescription version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<day>2013-06-10</day>
<contentTypeList>
<contentType>video</contentType>
</contentTypeList>
<RecTypeList>
<recType>ALL</recType>
</RecTypeList>
<chanNo>1</chanNo>
<streamType>main</contentType>
<maxResults>300</maxResults>
<searchResultPostion>1</searchResultPostion>
</CDailySearchDescription>
```

**Response XML:** <CDailySearchResult>

```
<?xml version="1.0" encoding="UTF-8"?>
<CDailySearchResult>
<numOfMatches>2</numOfMatches>
<matchList>
<matchElement>
<chanNo>1</chanNo>
<streamType>main</contentType>
<type>Timer</type>
<timeSpan>
<startTime>2017-07-07T00:05:55Z</startTime>
<endTime>2017-07-07T01:04:47Z</endTime>
</timeSpan>
</matchElement>
<matchElement>
<chanNo>1</chanNo>
<streamType>main</contentType>
<type>Timer</type>
<timeSpan>
<startTime>2017-07-07T01:04:47Z</startTime>
<endTime>2017-07-07T02:04:48Z</endTime>
</timeSpan>
</matchElement>
</matchList>
</CDailySearchResult>
```

## 1.4/ISAPI/Record

### 1.4.1/ISAPI/Record/Ftpupload

/ISAPI/Record/Ftpupload		General Resource v2.0
<b>PUT</b>		
<b>Description</b>	Set FTP download	
<b>Query</b>	None	
<b>Inbound Data</b>	<Ftpupload>	
<b>Success Return</b>	<ResponseStatus>	

**Explanations on protocol:**

This protocol is to realize the setting of the FTP download, and realize the setting of the client sides or IE for the equipment FTP download through the CGI protocol, including the parameters such as file name, etc.

**Explanations on key parameters:**

<fileName> represents file name

**FtpuploadXML Block**

```
< Ftpupload version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <FileName ><!--req:string ></ FileName >
  < FilePath ><!--req:string ></ FilePath >
  <Port ><!--req:string ></ Port >
  <UserName ><!--req:string ></ UserName >
  <PassWord ><!--req:string ></ PassWord >
</ Ftpupload >
```

**Test cases****PUT/ISAPI/Record/Ftpupload**

**Response XML:** <ResponseStatus>

**Request XML:**

```
<Ftpupload version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <FileName></FileName>
  <FilePath></FilePath>
  <Port>21</Port>
  <UserName>admin</UserName>
  <PassWord>1111</PassWord>
</Ftpupload>
```

**1.4.2 /CGI/Customize/SmartDbdeviceParam**

/CGI/Customize/SmartDbdeviceParam		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Obtain intelligent integration data service equipment configuration parameters	
<b>Query</b>	<b>None</b>	
<b>Inbound Data</b>	<b>None</b>	
<b>Success Return</b>	<SmartDbdeviceParam>	
<b>PUT</b>		
<b>Description</b>	Set intelligent integration data service equipment configuration parameters	
<b>Query</b>	<b>None</b>	
<b>Inbound Data</b>	<SmartDbdeviceParam>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
Obtain or set intelligent integration data service equipment configuration parameters		
<b>Explanations on key parameters:</b>		
<ID> equipment ID <httpurl>HTTP_URL <httpkey>HTTP_KEY <mqttTopic> topic <mqttIp> server IP <mqttPort> port No. <mqttUser> user name <access> represents random information, for correction <mqttPassword> password		

**ComStrParam Block**

```

<SmartDbdeviceParam>
  <ID><!--req, xs:string--></ID>
  <httpurl><!--req, xs:string--></httpurl>
  <httpkey><!--req, xs:string--></httpkey>
  <mqttTopic><!--req, xs:string--></mqttTopic>
  <mqttIp><!--req, xs:string--></mqttIp>
  <mqttPort><!--req, xs:string--></mqttPort>
  <mqttUser><!--req, xs:string--></mqttUser>
  <access><!--req, xs:string--></access>
  <mqttPassword><!--req, xs:string--></mqttPassword>
</SmartDbdeviceParam>

```

**Test cases**

**GET /CGI/Customize/SmartDbdeviceParam**

**Request XML: None**

**Response XML: <SmartDbdeviceParam>**

**PUT /CGI/Customize/SmartDbdeviceParam**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<?xml version="1.0" encoding="UTF-8"?>
<Customize>
<SmartDbdeviceParam>
  <ID>AAAA123456</ID>
  <httpurl>http://192.168.1.140/agbox/device</httpurl>
  <httpkey>db504129-85e0-49ca-8626-f639b8d098</httpkey>
  <mqttTopic>person/#</mqttTopic>
  <mqttIp>192.168.1.140</mqttIp>
  <mqttPort>1883</mqttPort>
  <mqttUser>guest</mqttUser>
  <access> f639b8d098</access>
  <mqttPassword>1111</mqttPassword>
</SmartDbdeviceParam>
</Customize>

```

**1.5/ISAPI/Smart**

**1.5.1/ISAPI/Smart/SmartEnable/Channels/<ID>/Scene/<ID>**

<b>General Resource v2.0</b>	
<b>/ISAPI/Smart/SmartEnable/Channels/&lt;ID&gt;/Scene/&lt;ID&gt;</b>	
<b>GET</b>	
<b>Description</b>	Obtain intelligent analysis algorithm start parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<SmartEnable>
<b>PUT</b>	
<b>Description</b>	Set intelligent analysis algorithm start parameters
<b>Query</b>	None
<b>Inbound Data</b>	<SmartEnable>
<b>Success Return</b>	<ResponseStatus>



**Explanations on protocol:**

This protocol is to realize the query and setting of the intelligent analysis algorithm start parameters, and realize the query and setting of the client sides or IE for the equipment intelligent analysis algorithm start parameters through the CGI protocol, including the parameters such as intelligent analysis enabling/intelligent analysis type, etc.

**Explanations on key parameters:**

<enabled> represents intelligent analysis enabling,

IPC: true/disable: open, false/local: close

NVR: disable non-enabling, local intelligent analysis enabling, remoteIPC intelligent analysis enabling

<sceneActionType> represents the action type of the scene, ptzPreset fixed preset position, zoneScan zone scan

<SmartTypeEnable> represents starting algorithm (note: only one type can be started when the behavior analysis is started)

<type> represents intelligent analysis type, Behavior: behavior analysis, Face: human face identification, Audio: audio diagnosis, Video: video diagnosis, Group: group gathering, OnDuty: on-duty detection, Demographics: demographics, PlatLicense: license plate identification, ParkGuard: parking space guard, IllegalPark: illegal parking, Follow: intelligent tracking, Helmet: safety helmet, Human: human shape detection, Pept: oilfield monitoring, PeopleNumAlarm: number of people exception alarm, Prctduty: single interrogation/unattended, Sleep: sleeping post, NewFight: new fight, GetUp: personnel stand up, HeightLimit: height limit, NewDuty: new off-duty, Stranded: stranded, Alone: single stay alone, Delivergoods: deliver goods through window, FaceMosaic: human face mosaic, ColorTrack: color tracking, Loitering : loitering , AttendedBaggage : loss of attended baggage, UnattendedBaggage: unattended baggage, HeatMap: heat map, Smoke: smoking, Telephone: phone call, TempDetect temperature detection, Fireworks firework detection[A2]

<sceneName> scene name, maximum 31 characters

**SmartEnableXML Block**

```
< SmartEnable version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <enabled><!-- opt, xs:Boolean"true,false" --></enabled>
  < sceneName ><!-- req, xs:string--></sceneName>
< SmartTypeEnableList>
  <SmartTypeEnable>
    <type><!-- opt, xs: string" Behavior,Face, Audio,Video,Group,OnDuty, PlatLicense,
Demographics,ParkGuard,IllegalPark,Follow,Human,Pept,PeopleNumAlarm,Prctduty,Sleep,Ne
wFight,GetUp,HeightLimit,NewDuty,Stranded,Alone,Delivergoods,FaceMosaic,
ColorTrack,Loitering,AttendedBaggage, UnattendedBaggage, HeatMap, Smoke,
TelephoneTemDetect,Fireworks " -->
  </type>
  <enabled><!-- opt, xs:Boolean"true,false" --></enabled >
</SmartTypeEnable>
</SmartTypeEnableList>
</ SmartEnable >
```

**Test cases**

**GET /ISAPI/Smart/SmartEnable/Channels/<ID>/Scene/<ID>**

**Request XML: none**

**Response XML: <SmartEnable>**

**PUT /ISAPI/Smart/SmartEnable/Channels/<ID>/Scene/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<?xml version="1.0" encoding="UTF-8"?>
<SmartEnable>
<enabled>true</enabled>
<sceneName>scene1</sceneName>
<SmartTypeEnableList>
<SmartTypeEnable>
<type>Behavior</type>
<enabled>true</enabled>
</SmartTypeEnable>
<SmartTypeEnable>
<type>Follow</type>
<enabled>false</enabled>
</SmartTypeEnable>
<SmartTypeEnable>
<type>Face</type>
<enabled>false</enabled>
</SmartTypeEnable>
<SmartTypeEnable>
<type>Human</type>
<enabled>true</enabled>
</SmartTypeEnable>
<SmartTypeEnable>
<type>Demographics</type>
<enabled>false</enabled>
</SmartTypeEnable>
<SmartTypeEnable>
<type>Video</type>
<enabled>false</enabled>
</SmartTypeEnable>
<SmartTypeEnable>
<type>PlatLicense</type>
<enabled>false</enabled>
</SmartTypeEnable>
<SmartTypeEnable>
<type>Audio</type>
<enabled>false</enabled>
</SmartTypeEnable>
<SmartTypeEnable>
<type>OnDuty</type>
<enabled>false</enabled>
</SmartTypeEnable>
<SmartTypeEnable>
<type>Pept</type>
<enabled>true</enabled>
</SmartTypeEnable>
<SmartTypeEnable>
<type>Group</type>
<enabled>false</enabled>
</SmartTypeEnable>
<SmartTypeEnable>
<type>PeopleNumAlarm</type>
<enabled>true</enabled>
</SmartTypeEnable>
<SmartTypeEnable>
<type>Prctduty</type>
<enabled>true</enabled>
</SmartTypeEnable>
<SmartTypeEnable>
```

```
<type>Sleep</type>
<enabled>true</enabled>
</SmartTypeEnable>
<SmartTypeEnable>
<type>NewFight</type>
<enabled>true</enabled>
</SmartTypeEnable>
<SmartTypeEnable>
<type>GetUp</type>
<enabled>true</enabled>
</SmartTypeEnable>
<SmartTypeEnable>
<type>HeightLimit</type>
<enabled>true</enabled>
</SmartTypeEnable>
<SmartTypeEnable>
<type>NewDuty</type>
<enabled>true</enabled>
</SmartTypeEnable>
<SmartTypeEnable>
<type>Stranded</type>
<enabled>true</enabled>
</SmartTypeEnable>
<SmartTypeEnable>
<type>Alone</type>
<enabled>true</enabled>
</SmartTypeEnable>
<SmartTypeEnable>
<type>Delivergoods</type>
<enabled>true</enabled>
</SmartTypeEnable>
<SmartTypeEnable>
<type>FaceMosaic</type>
<enabled>true</enabled>
</SmartTypeEnable>
<SmartTypeEnable>
<type>ColorTrack</type>
<enabled>true</enabled>
</SmartTypeEnable>
<SmartTypeEnable>
<type>Loitering</type>
<enabled>true</enabled>
</SmartTypeEnable>
<SmartTypeEnable>
<type>AttendedBaggage</type>
<enabled>true</enabled>
</SmartTypeEnable>
<SmartTypeEnable>
<type>UnattendedBaggage</type>
<enabled>true</enabled>
</SmartTypeEnable>
<SmartTypeEnable>
<type>HeatMap</type>
<enabled>true</enabled>
</SmartTypeEnable>
<SmartTypeEnable>
```

```

<type> Smoke</type>
<enabled>true</enabled>
</SmartTypeEnable>
<SmartTypeEnable>
<type> Telephone </type>
<enabled>true</enabled>
</SmartTypeEnable>
<SmartTypeEnable>
<type>TempDetect</type>
<enabled>true</enabled>
</SmartTypeEnable>
<SmartTypeEnable>
<type>Fireworks</type>
<enabled>true</enabled>
</SmartTypeEnable>
</SmartTypeEnableList>
</SmartEnable>

```

### 1.5.2/ISAPI/Smart/DoubleLineDetection/<ID>/channels/<ID>/Scene/<ID>

/ISAPI/Smart/DoubleLineDetection/<ID>/channels/<ID>/Scene/<ID> <b>General Resource</b> v2.0	
<b>GET</b>	
<b>Description</b>	Obtain double trip-line parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<DoubleLineDetection>
<b>PUT</b>	
<b>Description</b>	Set double trip-line parameters
<b>Query</b>	None
<b>Inbound Data</b>	<DoubleLineDetection>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This protocol is to realize the query and setting of the double trip-line, and realize the query and setting of the client sides or IE for the double trip-line parameters through the CGI protocol, including the parameters such as rule No./rule enabling/trip-line No./rule name/proportion/arrow direction/coordinate point/statistics type/alarm counting, etc.</p> <p><b>Explanations on key parameters:</b>  &lt;DoubleLineDetection&gt;/ID: rule No., range 1-8  &lt;Channels&gt;/ID: channel No., IPC value is 1  &lt;Scene&gt;/ID: scene No., range 0-15  &lt;id&gt; represents rule No., range: 1-0038  &lt;SceneID&gt; represents scene No.  &lt;enabled&gt; represents whether it is effective, true: start, false: not start  &lt;id&gt; represents trip-line No., note: the current trip-line only supports one double trip-line, the value of which is 1.  &lt;ruleName&gt; represents rule name, maximum 16-bit characters and 5 Chinese characters  &lt;sensitivityLevel&gt; represents proportion range 0-100  &lt;directionSensitivity&gt; represents arrow direction value assignment is 0  &lt;CoordinatesList&gt; represents trip-line coordinate, per 10,000, 0-10000  &lt;alarmColor&gt; represents alarm color default is red  &lt;noAlarmColor&gt; represents no alarm color default is green</p>	

<tripwireMaxTimeInterval > represents maximum time x = 1-2000 seconds  
 <tripwireMinTimeInterval > represents minimum time 0-x seconds  
 <identifyType > represents statistics type, people, car, all, people and car  
 <displayStat > represents alarm counting, true: start, false: not start  
 <alarmRule> represents alarm rules, true: start, false: not start  
 <twoWayAlarm> represents two-way alarm, true: start, false: not start  
 <displyTarget> represents display target, true: start, false: not start  
 <minObjectSize> represents minimum object size, [0-100]  
 <maxObjectSize> represents maximum object size, [0-100]

#### DoubleLineDetectionXML Block

```

<DoubleLineDetection version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <id><!-- req, xs:string --></id>
    <SceneID><!-- opt, xs:string --><SceneID>
  <enabled><!-- req, xs:boolean --></enabled>
  <startTriggerTime><!-- req, xs:integer, milliseconds --></startTriggerTime>
  <endTriggerTime><!-- req, xs:integer, milliseconds --></endTriggerTime>
  <normalizedScreenSize>
  <normalizedScreenHeight><!-- req, xs:integer --></normalizedScreenHeight>
</normalizedScreenSize>
  <minObjectSize>
  <!-- opt, xs:integer, min number of pixels per object -->
</minObjectSize>
  <maxObjectSize>
  <!-- opt, xs:integer, max number of pixels per object -->
</maxObjectSize>
  <DoubleLineItemList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <DoubleLineItem version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <id><!-- req, xs:string --></id>
  <ruleName><!-- req, xs:string --></ruleName>
  <enabled><!-- req, xs:boolean --></enabled>
  <sensitivityLevel>
  <!--req, xs:integer-->
</sensitivityLevel>
  <directionSensitivity>
  <!-- opt,integer, 0-360 -->
</directionSensitivity>
  <CoordinatesList>
  <Coordinates><!-- req, -->
  <positionX><!-- req, xs:integer;coordinate --></positionX>
  <positionY><!-- req, xs:integer;coordinate --></positionY>
</Coordinates>
</CoordinatesList>
  <CoordinatesExList>
  <CoordinatesEx><!-- req, -->
  <positionX><!-- req, xs:integer;coordinate --></positionX>
  <positionY><!-- req, xs:integer;coordinate --></positionY>
</CoordinatesEx>
</CoordinatesExList>
  <alarmColor><!-- req, xs:string"red" --></alarmColor>
  <noAlarmColor><!-- req, xs:string "green"--></noAlarmColor>
  <tripwireMaxTimeInterval ><!-- req, xs:integer --></tripwireMaxTimeInterval>
  <tripwireMaxTimeInterval ><!-- req, xs:integer --></tripwireMaxTimeInterval >
  <identifyType ><!-- req, xs: string --></identifyType>
  <displayStat ><!-- req, xs:boolean --></displayStat>
  <alarmRule><!-- req, xs:boolean --></alarmRule>
  <twoWayAlarm><!-- req, xs:boolean --></twoWayAlarm>
  <displyTarget><!-- req, xs:boolean --></displyTarget >
  
```

```
</DoubleLineItem>
</DoubleLineItemList>
</ DoubleLineDetection >
```

#### Test cases

**GET /ISAPI/Smart/DoubleLineDetection/<ID>/channels/<ID>/Scene/<ID>**

**Request XML:** none

**Response XML:** <DoubleLineDetection>

**PUT/ISAPI/Smart/DoubleLineDetection/<ID>/channels/<ID>/Scene/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<DoubleLineDetection>
<id>1</id>
<enabled>true</enabled>
<DoubleLineItemList>
<DoubleLineItem>
<id>1</id>
<ruleName>Rule1</ruleName>
<enabled>true</enabled>
<sensitivityLevel>20</sensitivityLevel>
<directionSensitivity>0</directionSensitivity>
<alarmColor>red</alarmColor>
<noAlarmColor>green</noAlarmColor>
<tripwireMaxTimeInterval>30</tripwireMaxTimeInterval>
<tripwireMinTimeInterval>10</tripwireMinTimeInterval>
<identifyType>all</identifyType>
<displayStat>true</displayStat>
<alarmRule>true</alarmRule>
<twoWayAlarm>true</twoWayAlarm>
<displayTarget>true</displayTarget>
<CoordinatesList>
<Coordinates>
<positionX>1250</positionX>
<positionY>5243</positionY>
</Coordinates>
<Coordinates>
<positionX>7500</positionX>
<positionY>2100</positionY>
</Coordinates>
<Coordinates>
<positionX>7528</positionX>
<positionY>2013</positionY>
</Coordinates>
</CoordinatesList>
<CoordinatesExList>
<CoordinatesEx>
<positionX>2272</positionX>
<positionY>7413</positionY>
</CoordinatesEx>
<CoordinatesEx>
<positionX>8380</positionX>
<positionY>5538</positionY>
</CoordinatesEx>
</CoordinatesExList>
</DoubleLineItem>
```

</DoubleLineItemList>  
</DoubleLineDetection>

### 1.5.3/ISAPI/Smart/FieldDetection/<ID>/Channels/<ID>/Scene/<ID>

/ISAPI/Smart/FieldDetection/<ID>/Channels/<ID>/Scene/<ID>General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Obtain invasion parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<FieldDetection>
<b>PUT</b>	
<b>Description</b>	Set invasion parameters
<b>Query</b>	None
<b>Inbound Data</b>	<FieldDetection>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b> This protocol is to realize the query and setting of the invasion, and realize the query and setting of the client sides or IE for the invasion parameters through the CGI protocol, including the parameters such as rule No./rule enabling/area No./rule name/sensibility level detection region coordinate/alarm counting, etc.</p> <p><b>Explanations on key parameters:</b>            &lt; FieldDetection &gt;/ID: rule No., range 1-8            &lt;Channels&gt;/ID: channel No., IPC value is 1            &lt;Scene&gt;/ID: scene No., range 0-15            &lt;id&gt; represents rule No., range: 1-8            &lt;enabled&gt; represents whether it is effective, true: start, false: not start            &lt;FieldDetectionRegion&gt; represents invasion detection implementation region            &lt;id&gt; represents region No., note: currently the perimeter only supports one region, the value of which is 1.            &lt;ruleName&gt; represents rule name, maximum 16-bit characters and 5 Chinese characters            &lt;sensitivityLevel&gt; represents sensibility level            &lt;RegionCoordinatesList&gt; represents detection region coordinate list            &lt;RegionCoordinates&gt; represents detection region coordinate            &lt;positionX&gt; represents detection region abscissa, per 10,000, 0-10000            &lt;positionY&gt; represents detection region ordinate, per 10,000, 0-10000            &lt;alarmColor&gt; represents alarm color default is red            &lt;noAlarmColor&gt; represents no alarm color default is green            &lt;invasionTime&gt; represents invasion time 1-10 seconds            &lt;displayStat &gt; represents alarm counting, true: start, false: not start            &lt;alarmRule&gt; represents alarm rules, true: start, false: not start            &lt;displyTarget&gt; represents display target, true: start, false: not start            &lt;noAlarmMode&gt; leaveDeteArea: leave the detection area to clear the alarm, leaveVideoArea: leave the video area to clear the alarm</p>	

#### FieldDetectionXML Block

```
<FieldDetection version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<id><!-- req, xs:string --></id>
<enabled><!-- req, xs:boolean --></enabled>
<intelliBackSearch><!-- opt, xs:boolean --></intelliBackSearch>
<startTriggerTime><!-- req, xs:integer, milliseconds --></startTriggerTime>
<endTriggerTime><!-- req, xs:integer, milliseconds --></endTriggerTime>
<normalizedScreenSize>
<normalizedScreenWidth><!-- req, xs:integer --></normalizedScreenWidth>
<normalizedScreenHeight><!-- req, xs:integer --></normalizedScreenHeight>
</normalizedScreenSize>
<minObjectSize>
```

```

<!-- opt, xs:integer, min number of pixels per object -->
</minObjectSize>
<maxObjectSize>
<!-- opt, xs:integer, max number of pixels per object -->
</maxObjectSize>
<FieldDetectionRegionList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<FieldDetectionRegion version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<id><!-- req, xs:string --></id>
<ruleName><!-- req, xs:string --></ruleName>
<enabled><!-- req, xs:boolean --></enabled>
<sensitivityLevel><!--req, xs:integer--></sensitivityLevel>
<timeThreshold><!--req, xs:integer --></timeThreshold>
<objectOccupation><!--req, xs:integer--></objectOccupation>
<RegionCoordinatesList>
<RegionCoordinates><!-- req, -->
<positionX><!-- req, xs:integer;coordinate --></positionX>
<positionY><!-- req, xs:integer;coordinate --></positionY>
</RegionCoordinates>
</RegionCoordinatesList>
<alarmColor><!-- req, xs:string"red" --></alarmColor>
<noAlarmColor><!-- req, xs:string "green"--></noAlarmColor>
<identifyType><!-- req, xs:string "all"--></identifyType>
<invasionTime><!-- req, xs:integer --></invasionTime>
< displayStat ><!-- req, xs:boolean --></displayStat>
<alarmRule><!-- req, xs:boolean --></alarmRule>
<displyTarget><!-- req, xs:boolean --></displyTarget >
<noAlarmMod><!-- req, xs:string --></noAlarmMode>
</FieldDetectionRegion>
</FieldDetectionRegionList>
</FieldDetection>

```

#### Test cases

**GET /ISAPI/Smart/FieldDetection/<ID>/Channels/<ID>/Scene/<ID>**

**Request XML:** none

**Response XML:** <FieldDetection>

**PUT/ISAPI/Smart/FieldDetection/<ID>/Channels/<ID>/Scene/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```

<?xml version="1.0" encoding="UTF-8"?>
<FieldDetection>
<id>1</id>
<enabled>true</enabled>
<FieldDetectionRegionList>
<FieldDetectionRegion>
<id>1</id>
<ruleName>Rule1</ruleName>
<alarmColor>red</alarmColor>
<noAlarmColor>green</noAlarmColor>
<displayStat>true</displayStat>
<displayTarget>true</displayTarget>
<noAlarmMode>leaveDeteArea<noAlarmMode>
<identifyType>all</identifyType>
<alarmRule>true</alarmRule>
<invasionTime>3</invasionTime>
<sensitivityLevel>20</sensitivityLevel>
<RegionCoordinatesList>
<RegionCoordinates>
<positionX>2656</positionX>

```



```

<positionY>1302</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>951</positionX>
<positionY>5468</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>752</positionX>
<positionY>8906</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>3806</positionX>
<positionY>9548</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>7357</positionX>
<positionY>9548</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>9375</positionX>
<positionY>8940</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>9375</positionX>
<positionY>5381</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>8480</positionX>
<positionY>2013</positionY>
</RegionCoordinates>
</RegionCoordinatesList>
</FieldDetectionRegion>
</FieldDetectionRegionList>
</FieldDetection>

```

#### 1.5.4/ISAPI/Smart/regionEntrance/<ID>/Channels/<ID>/Scene/<ID>

/ISAPI/Smart/regionEntrance/<ID>/Channels/<ID>/Scene/<ID>	
General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Obtain entrance parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<RegionEntrance>
<b>PUT</b>	
<b>Description</b>	Set entrance parameters
<b>Query</b>	None
<b>Inbound Data</b>	<RegionEntrance>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

This protocol is to realize the query and setting of the entrance, and realize the query and setting of the client sides or IE for the entrance parameters through the CGI protocol, including the parameters such as rule No./rule enabling/region No./rule name/sensibility level detection region coordinate/alarm counting, etc.

**Explanations on key parameters:**

<id> represents rule No., range: 1-8  
 <enabled> represents whether it is effective, true: start, false: not start  
 <RegionEntranceRegion> represents entering detection implementation region  
 <id> represents region No., note: currently the perimeter only supports one region, the value of which is 1.  
 <ruleName> represents rule name, maximum 16-bit characters and 5 Chinese characters  
 <sensitivityLevel> represents sensibility level  
 <RegionCoordinatesList> represents detection region coordinate list  
 <RegionCoordinates> represents detection region coordinate  
 <positionX> represents detection region abscissa  
 <positionY> represents detection region ordinate  
 <alarmColor> represents alarm color  
 <noAlarmColor> represents no alarm color  
 <identifyType> represents alarm type  
 <displayStat > represents alarm counting, true: start, false: not start  
 <alarmRule> represents alarm rules, true: start, false: not start  
 <displyTarget> represents display target, true: start, false: not start

**RegionEntranceXML Block**

```
<RegionEntrance version="2.0" xmlns="http://www.std-cgi.org/ver20/XMLSchema">
<id><!-- req, xs:string --></id>
<enabled><!-- req, xs:boolean --></enabled>
<normalizedScreenSize>
<normalizedScreenWidth><!-- req, xs:integer --></normalizedScreenWidth>
<normalizedScreenHeight><!-- req, xs:integer --></normalizedScreenHeight>
</normalizedScreenSize>
<RegionEntranceRegionList                                version="2.0"
xmlns="http://www.std-cgi.org/ver20/XMLSchema">
<RegionEntranceRegion version="2.0" xmlns="http://www.std-cgi.org/ver20/XMLSchema">
<id><!-- req, xs:string --></id>
<ruleName><!-- req, xs:string --></ruleName>
<sensitivityLevel><!-- req, xs:integer, 1..100, 0 is the least sensitive --></sensitivityLevel>
<RegionCoordinatesList><!-- opt -->
<RegionCoordinates><!-- opt, -->
<positionX><!-- req, xs:integer;coordinate --></positionX>
<positionY><!-- req, xs:integer;coordinate --></positionY>
</RegionCoordinates>
</RegionCoordinatesList>
<alarmColor><!-- req, xs:string"red" --></alarmColor>
<noAlarmColor><!-- req, xs:string "green"--></noAlarmColor>
<identifyType><!-- req, xs:string "all"--></identifyType>
<displayStat ><!-- req, xs:boolean --></displayStat>
<alarmRule><!-- req, xs:boolean --></alarmRule>
<displyTarget><!-- req, xs:boolean --> /displyTarget>
</RegionEntranceRegion>
</RegionEntranceRegionList>
<mutexAbility opt="PDC"/><!--opt,ro, xs:string, "PDC" -->
<isSupportMultiScene><!-- opt, xs:boolen --></isSupportMultiScene>
</RegionEntrance>
```

**Test cases**

**GET /ISAPI/Smart/regionEntrance/<ID>/Channels/<ID>/Scene/<ID>**

**Request XML: none**

**Response XML: <RegionEntrance>**  
**PUT/ISAPI/Smart/regionEntrance/<ID>/Channels/<ID>/Scene/<ID>**  
**Response XML: <ResponseStatus>**  
**Request XML: as below**

```
<?xml version="1.0" encoding="UTF-8"?>
<RegionEntrance>
<id>1</id>
<enabled>true</enabled>
<RegionEntranceRegionList>
<RegionEntranceRegion>
<id>1</id>
<ruleName>Rule1</ruleName>
<alarmColor>red</alarmColor>
<noAlarmColor>green</noAlarmColor>
<displayStat>true</displayStat>
<displayTarget>true</displayTarget>
<identifyType>all</identifyType>
<alarmRule>true</alarmRule>
<sensitivityLevel>20</sensitivityLevel>
<RegionCoordinatesList>
<RegionCoordinates>
<positionX>2627</positionX>
<positionY>1267</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>923</positionX>
<positionY>5434</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>724</positionX>
<positionY>8871</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>3778</positionX>
<positionY>9513</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>7329</positionX>
<positionY>9513</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>9375</positionX>
<positionY>8906</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>9375</positionX>
<positionY>5347</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>8451</positionX>
<positionY>1979</positionY>
</RegionCoordinates>
</RegionCoordinatesList>
</RegionEntranceRegion>
</RegionEntranceRegionList>
</RegionEntrance>
```

### 1.5.5/ISAPI/Smart/regionExiting/<ID>/Channels/<ID>/Scene/<ID>

General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Obtain exiting parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<RegionExiting>
<b>PUT</b>	
<b>Description</b>	Set exiting parameters
<b>Query</b>	None
<b>Inbound Data</b>	<RegionExiting>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>            This protocol is to realize the query and setting of the exiting, and realize the query and setting of the client sides or IE for the exiting parameters through the CGI protocol, including the parameters such as rule No./rule enabling/region No./rule name/sensibility level detection area coordinate/alarm counting, etc.</p> <p><b>Explanations on key parameters:</b>            &lt;id&gt; represents rule No., range: 1-8            &lt;enabled&gt; represents rule enabling, true: start, false: not start            &lt;RegionExitingRegion&gt; represents exiting detection implementation region            &lt;id&gt; represents region No., note: currently the perimeter only supports one region, the value of which is 1.            &lt;ruleName&gt; represents rule name, maximum 16-bit characters and 5 Chinese characters            &lt;sensitivityLevel&gt; represents sensibility level            &lt;RegionCoordinatesList&gt; represents detection region coordinate list            &lt;RegionCoordinates&gt; represents detection region coordinate            &lt;positionX&gt; represents detection region abscissa            &lt;positionY&gt; represents detection region ordinate            &lt;alarmColor&gt; represents alarm color, 0: default, 1: red. 2: green. 3: yellow. 4: blue. 5: purple. 6: cyan. 7: black. 8: white            &lt;noAlarmColor&gt; represents no alarm color, 0: default, 1: red, 2: green, 3: yellow, 4: blue, 5: purple, 6: cyan, 7: black, 8: white            &lt;identifyType&gt; represents alarm type            &lt;displayStat &gt; represents alarm counting, true: start, false: not start            &lt;alarmRule&gt; represents alarm rules, true: start, false: not start            &lt;displyTarget&gt; represents display target, true: start, false: not start</p>	
<b>RegionExitingXML Block</b>	
<pre> &lt;RegionExiting version="2.0" xmlns="http://www.std-cgi.org/ver20/XMLSchema"&gt; &lt;id&gt;&lt;!-- req, xs:string --&gt;&lt;/id&gt; &lt;enabled&gt;&lt;!-- req, xs:boolean --&gt;&lt;/enabled&gt; &lt;normalizedScreenSize&gt; &lt;normalizedScreenWidth&gt;&lt;!-- req, xs:integer --&gt;&lt;/normalizedScreenWidth&gt; &lt;normalizedScreenHeight&gt;&lt;!-- req, xs:integer --&gt;&lt;/normalizedScreenHeight&gt; &lt;/normalizedScreenSize&gt; &lt;RegionExitingRegionList version="2.0" xmlns="http://www.std-cgi.org/ver20/XMLSchema"&gt; &lt;RegionExitingRegion version="2.0" xmlns="http://www.std-cgi.org/ver20/XMLSchema"&gt; &lt;id&gt;&lt;!-- req, xs:string --&gt;&lt;/id&gt; &lt;ruleName&gt;&lt;!-- req, xs:string --&gt;&lt;/ruleName&gt; &lt;sensitivityLevel&gt;&lt;!--req, xs:integer, 0..100, 0 is the least sensitive --&gt;&lt;/sensitivityLevel&gt; &lt;RegionCoordinatesList&gt;&lt;!-- opt --&gt; &lt;RegionCoordinates&gt;&lt;!-- opt, --&gt; &lt;positionX&gt;&lt;!-- req, xs:integer;coordinate --&gt;&lt;/positionX&gt; &lt;positionY&gt;&lt;!-- req, xs:integer;coordinate --&gt;&lt;/positionY&gt;           </pre>	

```

</RegionCoordinates>
</RegionCoordinatesList>
<alarmColor><!-- req, xs:string "red" --></alarmColor>
<noAlarmColor><!-- req, xs:string "green"--></noAlarmColor>
<identifyType><!-- req, xs:string "all"--></identifyType>
<displayStat ><!-- req, xs:boolean --></displayStat>
<alarmRule><!-- req, xs:boolean --></alarmRule>
<displyTarget><!-- req, xs:boolean --></displyTarget>
< /RegionExitingRegion >
</RegionExitingRegionList>
<mutexAbility opt="PDC"/><!--opt,ro, xs:string, "PDC" -->
<isSupportMultiScene><!-- opt, xs:boolen --></isSupportMultiScene>
</RegionExiting>

```

**Test cases**

**GET /ISAPI/Smart/regionExiting/<ID>/Channels/<ID>/Scene/<ID>**

**Request XML: none**

**Response XML: <RegionExiting>**

**PUT/ISAPI/Smart/regionExiting/<ID>/Channels/<ID>/Scene/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<?xml version="1.0" encoding="UTF-8"?>
<RegionExiting>
<id>1</id>
<enabled>true</enabled>
<RegionExitingRegionList>
<RegionExitingRegion>
<id>1</id>
<ruleName>Rule1</ruleName>
<alarmColor>red</alarmColor>
<noAlarmColor>green</noAlarmColor>
<displayStat>true</displayStat>
<displayTarget>true</displayTarget>
<identifyType>all</identifyType>
<alarmRule>true</alarmRule>
<sensitivityLevel>20</sensitivityLevel>
<RegionCoordinatesList>
<RegionCoordinates>
<positionX>2599</positionX>
<positionY>1250</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>880</positionX>
<positionY>5399</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>681</positionX>
<positionY>8836</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>3750</positionX>
<positionY>9479</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>7301</positionX>
<positionY>9479</positionY>
</RegionCoordinates>
<RegionCoordinates>

```

```

<positionX>9375</positionX>
<positionY>8871</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>9375</positionX>
<positionY>5312</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>8423</positionX>
<positionY>1944</positionY>
</RegionCoordinates>
</RegionCoordinatesList>
</RegionExitingRegion>
</RegionExitingRegionList>
</RegionExiting>

```

**1.5.6/ISAPI/Smart/unattendedBaggage/<ID>/Channels/<ID>/Scene/<ID>**

<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Obtain unattended baggage parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<UnattendedBaggage>
<b>PUT</b>	
<b>Description</b>	Set unattended baggage parameters
<b>Query</b>	None
<b>Inbound Data</b>	<UnattendedBaggage>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This protocol is to realize the query and setting of the unattended baggage, and realize the query and setting of the client sides or IE for the unattended baggage parameters through the CGI protocol, including the parameters such as rule No./rule name/alarm counting/alarm rules/display target/proportion, etc.</p> <p><b>Explanations on key parameters:</b>  &lt;id&gt; represents rule No., range: 1-8  &lt;enabled&gt; represents rule enabling, true: start, false: not start  &lt;ruleName&gt; represents rule name, maximum 16-bit characters and 5 Chinese characters  &lt;alarmColor&gt; represents alarm color, 1: red, 2: green, 3: yellow, 4: blue, 5: purple, 6: cyan, 7: black, 8: white  &lt;noAlarmColor&gt; represents no alarm color, 1: red, 2: green, 3: yellow, 4: blue, 5: purple, 6: cyan, 7: black, 8: white  &lt; alarmTime &gt; represents alarm time  &lt;displayStat &gt; represents alarm counting, true: start, false: not start  &lt;alarmRule&gt; represents alarm rules, true: start, false: not start  &lt;displyTarget&gt; represents display target, true: start, false: not start  &lt;id&gt; represents region No., note: currently it only supports one region, the value of which is 1.  &lt;sensitivityLevel&gt; represents proportion 0-100 (sensibility level)  &lt;IgnoreRegionList&gt; corresponding ignored regions (maximum three)</p>	

**UnattendedBaggageXML Block**

```

<UnattendedBaggage version="2.0" xmlns="http://www.std-cgi.org/ver20/XMLSchema">
<id><!-- req, xs:string --></id>
<enabled><!-- req, xs:boolean --></enabled>
<ruleName><!-- req, xs:string --></ruleName>
<alarmColor><!-- req, xs:string "red" --></alarmColor>
<noAlarmColor><!-- req, xs:string "green"--></noAlarmColor>
< alarmTime ><!-- req, xs:integer --></alarmTime >
<displayStat ><!-- req, xs:boolean --></displayStat >
<alarmRule><!-- req, xs:boolean --></alarmRule>
<displyTarget><!-- req, xs:boolean --> /displyTarget >
<normalizedScreenSize>
<normalizedScreenWidth><!-- req, xs:integer --></normalizedScreenWidth>
<normalizedScreenHeight><!-- req, xs:integer --></normalizedScreenHeight>
</normalizedScreenSize>
<UnattendedBaggageRegionList version="2.0"
xmlns="http://www.std-cgi.org/ver20/XMLSchema">
<UnattendedBaggageRegion version="2.0"
xmlns="http://www.std-cgi.org/ver20/XMLSchema">
<id><!-- req, xs:string --></id>
<sensitivityLevel><!--req, xs:integer, 0..100, 0 is the least sensitive --></sensitivityLevel>
<timeThreshold><!--opt, xs:integer--></timeThreshold>
<RegionCoordinatesList><!-- opt -->
<RegionCoordinates><!-- opt -->
<positionX><!-- req, xs:integer;coordinate --></positionX>
<positionY><!-- req, xs:integer;coordinate --></positionY>
</RegionCoordinates>
</RegionCoordinatesList>
<IgnoreRegionList version="2.0"
xmlns="http://www.std-cgi.org/ver20/XMLSchema">
<IgnoreRegion>
<RegionCoordinatesList><!-- opt -->
<RegionCoordinates><!-- opt -->
<positionX><!-- req, xs:integer;coordinate --></positionX>
<positionY><!-- req, xs:integer;coordinate --></positionY>
</RegionCoordinates>
</RegionCoordinatesList>
</IgnoreRegion>
</IgnoreRegionList>
</UnattendedBaggageRegion>
</UnattendedBaggageRegionList>
<mutexAbility opt="PDC"/><!--opt,ro, xs:string, "PDC" -->
<isSupportMultiScene><!-- opt, xs:boolen --></isSupportMultiScene>
</UnattendedBaggage>

```

**Test cases**

**GET /ISAPI/Smart/unattendedBaggage/<ID>/Channels/<ID>/Scene/<ID>**

**Request XML: none**

**Response XML: <UnattendedBaggage>**

**PUT/ISAPI/Smart/unattendedBaggage/<ID>/Channels/<ID>/Scene/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<?xml version="1.0" encoding="UTF-8"?>
<UnattendedBaggage>
<id>2</id>
<enabled>true</enabled>
<ruleName>Rule2</ruleName>
<alarmColor>red</alarmColor>
<noAlarmColor>green</noAlarmColor>

```

```
<alarmTime>5</alarmTime>
<displayStat>true</displayStat>
<alarmRule>true</alarmRule>
<displayTarget>true</displayTarget>
<UnattendedBaggageRegionList>
<UnattendedBaggageRegion>
<id>1</id>
<sensitivityLevel>15</sensitivityLevel>
<RegionCoordinatesList>
<RegionCoordinates>
<positionX>1377</positionX>
<positionY>677</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>752</positionX>
<positionY>5208</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>823</positionX>
<positionY>9236</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>4701</positionX>
<positionY>9201</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>9048</positionX>
<positionY>9045</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>9801</positionX>
<positionY>3576</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>8423</positionX>
<positionY>625</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>5326</positionX>
<positionY>468</positionY>
</RegionCoordinates>
</RegionCoordinatesList>
<IgnoreRegionList>
<IgnoreRegion>
<RegionCoordinatesList>
<RegionCoordinates>
<positionX>2357</positionX>
<positionY>1666</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>2073</positionX>
<positionY>2812</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>2755</positionX>
<positionY>4270</positionY>
</RegionCoordinates>
<RegionCoordinates>
```



<positionX>**4957**</positionX>  
<positionY>**4305**</positionY>  
</RegionCoordinates>  
<RegionCoordinates>  
<positionX>**4659**</positionX>  
<positionY>**2534**</positionY>  
</RegionCoordinates>  
<RegionCoordinates>  
<positionX>**4403**</positionX>  
<positionY>**1475**</positionY>  
</RegionCoordinates>  
<RegionCoordinates>  
<positionX>**3210**</positionX>  
<positionY>**1267**</positionY>  
</RegionCoordinates>  
<RegionCoordinates>  
<positionX>**2698**</positionX>  
<positionY>**1614**</positionY>  
</RegionCoordinates>  
</RegionCoordinatesList>  
</IgnoreRegion>  
<IgnoreRegion>  
<RegionCoordinatesList>  
<RegionCoordinates>  
<positionX>**6633**</positionX>  
<positionY>**1267**</positionY>  
</RegionCoordinates>  
<RegionCoordinates>  
<positionX>**5710**</positionX>  
<positionY>**2170**</positionY>  
</RegionCoordinates>  
<RegionCoordinates>  
<positionX>**6122**</positionX>  
<positionY>**3940**</positionY>  
</RegionCoordinates>  
<RegionCoordinates>  
<positionX>**7826**</positionX>  
<positionY>**4079**</positionY>  
</RegionCoordinates>  
<RegionCoordinates>  
<positionX>**8551**</positionX>  
<positionY>**2604**</positionY>  
</RegionCoordinates>  
<RegionCoordinates>  
<positionX>**8210**</positionX>  
<positionY>**1336**</positionY>  
</RegionCoordinates>  
<RegionCoordinates>  
<positionX>**7684**</positionX>  
<positionY>**972**</positionY>  
</RegionCoordinates>  
<RegionCoordinates>  
<positionX>**7230**</positionX>  
<positionY>**1145**</positionY>  
</RegionCoordinates>  
</RegionCoordinatesList>  
</IgnoreRegion>  
<IgnoreRegion>

```

<RegionCoordinatesList>
<RegionCoordinates>
<positionX>5227</positionX>
<positionY>5312</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>3948</positionX>
<positionY>6631</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>4375</positionX>
<positionY>8281</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>6548</positionX>
<positionY>8541</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>8025</positionX>
<positionY>7638</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>7500</positionX>
<positionY>5173</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>6079</positionX>
<positionY>5000</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>5198</positionX>
<positionY>5000</positionY>
</RegionCoordinates>
</RegionCoordinatesList>
</IgnoreRegion>
</IgnoreRegionList>
</UnattendedBaggageRegion>
</UnattendedBaggageRegionList>
</UnattendedBaggage>

```

### 1.5.7/ISAPI/Smart/rapidMove/<ID>/Channels/<ID>/Scene/<ID>

/ISAPI/Smart/rapidMove/<ID>/Channels/<ID>/Scene/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Obtain rapid move parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<RapidMove>	
<b>PUT</b>		
<b>Description</b>	Set rapid move parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<RapidMove>	
<b>Success Return</b>	<ResponseStatus>	

**Explanations on protocol:**

This protocol is to realize the query and setting of the rapid move, and realize the query and setting of the client sides or IE for the rapid move parameters through the CGI protocol, including the parameters such as rule No./region No./alarm counting/alarm rule/display target, etc.

**Explanations on key parameters:**

<id> represents rule No., range: 1-8  
 <enabled> represents rule enabling, true: start, false: not start  
 <id> represents region No., note: currently it only supports one region, the value of which is 1.  
 <ruleName> represents rule name, maximum 16-bit characters and 5 Chinese characters  
 <sensitivityLevel> represents sensibility level 0-100  
 <alarmColor> represents alarm color, 1: red, 2: green, 3: yellow, 4: blue, 5: purple, 6: cyan, 7: black, 8: white  
 <noAlarmColor> represents no alarm color, 1: red, 2: green, 3: yellow, 4: blue, 5: purple, 6: cyan, 7: black, 8: white  
 <minimumArea> represents minimum movement area per second  
 <displayStat > represents alarm counting, true: start, false: not start  
 <alarmRule> represents alarm rules, true: start, false: not start  
 <displyTarget> represents display target, true: start, false: not start  
 <identifyType> represents statistics type, all, people, car, people and car

**RapidMoveXML Block**

```
<RapidMove version="2.0" xmlns="http://www.std-cgi.org/ver20/XMLSchema">
  <id><!-- req, xs:string --></id>
  <enabled><!-- req, xs:boolean --></enabled>
  <normalizedScreenSize>
  <normalizedScreenWidth><!-- req, xs:integer --></normalizedScreenWidth>
  <normalizedScreenHeight><!-- req, xs:integer --></normalizedScreenHeight>
</normalizedScreenSize>
  <RapidMoveRegionList version="2.0" xmlns="http://www.std-cgi.org/ver20/XMLSchema">
  <RapidMoveRegion version="2.0" xmlns="http://www.std-cgi.org/ver20/XMLSchema">
  <id><!-- req, xs:string --></id>
  <ruleName><!-- req, xs:string --></ruleName>
  <sensitivityLevel><!-- req, xs:integer, 1..100, 0 is the least sensitive --></sensitivityLevel>
  <identifyType><!-- req, xs:string --></identifyType>
  <RegionCoordinatesList><!-- opt -->
  <RegionCoordinates><!-- opt -->
  <positionX><!-- req, xs:integer;coordinate --></positionX>
  <positionY><!-- req, xs:integer;coordinate --></positionY>
  </RegionCoordinates>
  </RegionCoordinatesList><!-- opt -->
  <alarmColor><!-- req, xs:string "red" --></alarmColor>
  <noAlarmColor><!-- req, xs:string "green" --></noAlarmColor>
  <minimumArea><!-- req, xs:integer --></minimumArea >
  <displayStat ><!-- req, xs:boolean --></displayStat >
  <alarmRule><!-- req, xs:boolean --></alarmRule>
  <displyTarget><!-- req, xs:boolean --></displyTarget >
  </RapidMoveRegion>
  </RapidMoveRegionList>
  <mutexAbility opt="PDC"/><!--opt,ro, xs:string, "PDC" -->
  <isSupportMultiScene><!-- opt, xs:boolen --></isSupportMultiScene>
</RapidMove>
```

**Test cases**

**GET /ISAPI/Smart/rapidMove/<ID>/Channels/<ID>/Scene/<ID>**

**Request XML: none**

**Response XML: <RapidMove>**

**PUT/ISAPI/Smart/rapidMove/<ID>/Channels/<ID>/Scene/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<?xml version="1.0" encoding="UTF-8"?>
<RapidMove>
  <id>1</id>
  <enabled>true</enabled>
  <RapidMoveRegionList>
    <RapidMoveRegion>
      <id>1</id>
      <ruleName>Rule1</ruleName>
      <sensitivityLevel>10</sensitivityLevel>
      <RegionCoordinatesList>
        <RegionCoordinates>
          <positionX>3025</positionX>
          <positionY>1111</positionY>
        </RegionCoordinates>
        <RegionCoordinates>
          <positionX>1122</positionX>
          <positionY>3767</positionY>
        </RegionCoordinates>
        <RegionCoordinates>
          <positionX>781</positionX>
          <positionY>8437</positionY>
        </RegionCoordinates>
        <RegionCoordinates>
          <positionX>3607</positionX>
          <positionY>8871</positionY>
        </RegionCoordinates>
        <RegionCoordinates>
          <positionX>7073</positionX>
          <positionY>9079</positionY>
        </RegionCoordinates>
        <RegionCoordinates>
          <positionX>8750</positionX>
          <positionY>8871</positionY>
        </RegionCoordinates>
        <RegionCoordinates>
          <positionX>9005</positionX>
          <positionY>3472</positionY>
        </RegionCoordinates>
        <RegionCoordinates>
          <positionX>8252</positionX>
          <positionY>972</positionY>
        </RegionCoordinates>
      </RegionCoordinatesList>
      <alarmColor>red</alarmColor>
      <noAlarmColor>green</noAlarmColor>
      <minimumArea>5</minimumArea>
      <displayStat>true</displayStat>
      <alarmRule>true</alarmRule>
      <displayTarget>true</displayTarget>
      <identifyType>people</identifyType>
    </RapidMoveRegion>
  </RapidMoveRegionList>
</RapidMove>
```

### 1.5.8/ISAPI/Smart/parking/<ID>/Channels/<ID>/Scene/<ID>

/ISAPI/Smart/parking/<ID>/Channels/<ID>/Scene/<ID>General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Obtain parking parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<Parking>
<b>PUT</b>	
<b>Description</b>	Set parking parameters
<b>Query</b>	None
<b>Inbound Data</b>	<Parking>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>            This protocol is to realize the query and setting of the parking, and realize the query and setting of the client sides or IE for the parking parameters through the CGI protocol, including the parameters such as rule No./region No./alarm counting/alarm rule/display target, etc.</p> <p><b>Explanations on key parameters:</b>            &lt;id&gt; represents rule No., range: 1-8            &lt;enabled&gt; represents whether it is effective, true: start, false: not start            &lt;id&gt; represents region No., note: currently it only supports one region, the value of which is 1.            &lt;ruleName&gt; represents rule name, maximum 16-bit characters and 5 Chinese characters            &lt;sensitivityLevel&gt; represents sensibility level 0-100            &lt;alarmColor&gt; represents alarm color, 1: red, 2: green, 3: yellow, 4: blue, 5: purple, 6: cyan, 7: black, 8: white            &lt;noAlarmColor&gt; represents no alarm color, 1: red, 2: green, 3: yellow, 4: blue, 5: purple, 6: cyan, 7: black, 8: white            &lt; alarmTime &gt; represents alarm time            &lt; speedThreshold&gt; represents speed threshold            &lt;displayStat &gt; represents alarm counting, true: start, false: not start            &lt;alarmRule&gt; represents alarm rules, true: start, false: not start            &lt;displyTarget&gt; represents display target, true: start, false: not start</p>	
<b>ParkingXML Block</b>	
<pre> &lt;Parking version="2.0" xmlns="http://www.std-cgi.org/ver20/XMLSchema"&gt; &lt;id&gt;&lt;!-- req, xs:string --&gt;&lt;/id&gt; &lt;enabled&gt;&lt;!-- req, xs:boolean --&gt;&lt;/enabled&gt; &lt;normalizedScreenSize&gt; &lt;normalizedScreenWidth&gt;&lt;!-- req, xs:integer --&gt;&lt;/normalizedScreenWidth&gt; &lt;normalizedScreenHeight&gt;&lt;!-- req, xs:integer --&gt;&lt;/normalizedScreenHeight&gt; &lt;/normalizedScreenSize&gt; &lt;ParkingRegionList version="2.0" xmlns="http://www.std-cgi.org/ver20/XMLSchema"&gt; &lt;ParkingRegion version="2.0" xmlns="http://www.std-cgi.org/ver20/XMLSchema"&gt; &lt;id&gt;&lt;!-- req, xs:string --&gt;&lt;/id&gt; &lt;ruleName&gt;&lt;!-- req, xs:string --&gt;&lt;/ruleName&gt; &lt;sensitivityLevel&gt;&lt;!--req, xs:integer, 1..100, 0 is the least sensitive --&gt;&lt;/sensitivityLevel&gt; &lt;timeThreshold&gt;&lt;!--opt, xs:integer--&gt;&lt;/timeThreshold&gt; &lt;RegionCoordinatesList&gt;&lt;!-- opt --&gt; &lt;RegionCoordinates&gt;&lt;!-- opt --&gt; &lt;positionX&gt;&lt;!-- req, xs:integer;coordinate --&gt;&lt;/positionX&gt; &lt;positionY&gt;&lt;!-- req, xs:integer;coordinate --&gt;&lt;/positionY&gt; &lt;/RegionCoordinates&gt; &lt;/RegionCoordinatesList&gt; &lt;alarmColor&gt;&lt;!-- req, xs:string"red" --&gt;&lt;/alarmColor&gt; &lt;noAlarmColor&gt;&lt;!-- req, xs:string "green"--&gt;&lt;/noAlarmColor&gt; &lt; alarmTime &gt;&lt;!-- req, xs:integer --&gt;&lt;/ alarmTime &gt;           </pre>	

```

< speedThreshold><!-- req, xs:integer --></ speedThreshold >
<displayStat ><!-- req, xs:boolean --></displayStat >
<alarmRule><!-- req, xs:boolean --></alarmRule>
<displayTarget><!-- req, xs:boolean --></ displayTarget >
</ParkingRegion>
</ParkingRegionList>
<mutexAbility opt="PDC"/><!--opt,ro, xs:string, "PDC" -->
<isSupportMultiScene><!-- opt, xs:boolean --></isSupportMultiScene>
</Parking>

```

**Test cases**

**GET /ISAPI/Smart/parking/<ID>/Channels/<ID>/Scene/<ID>**

**Request XML: none**

**Response XML: <Parking>**

**PUT/ISAPI/Smart/parking/<ID>/Channels/<ID>/Scene/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<Parking>
<id>1</id>
<enabled>true</enabled>
<ParkingRegionList>
<ParkingRegion>
<id>1</id>
<ruleName>Rule1</ruleName>
<speedThreshold>2</speedThreshold>
<sensitivityLevel>10</sensitivityLevel>
<alarmColor>red</alarmColor>
<noAlarmColor>green</noAlarmColor>
<alarmTime>5</alarmTime>
<displayStat>true</displayStat>
<displayTarget>true</displayTarget>
<alarmRule>true</alarmRule>
<dispalyTarget>true</dispalyTarget>
<RegionCoordinatesList>
<RegionCoordinates>
<positionX>1700</positionX>
<positionY>1300</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>800</positionX>
<positionY>4733</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>775</positionX>
<positionY>8233</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>2775</positionX>
<positionY>9100</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>7325</positionX>
<positionY>9000</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>9275</positionX>
<positionY>6266</positionY>
</RegionCoordinates>

```

```

<RegionCoordinates>
<positionX>9200</positionX>
<positionY>2600</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>7175</positionX>
<positionY>700</positionY>
</RegionCoordinates>
</RegionCoordinatesList>
</ParkingRegion>
</ParkingRegionList>
</Parking>

```

### 1.5.9/ISAPI/Smart/AudioDetection/channels/<ID>/status

/ISAPI/Smart/AudioDetection/channels/<ID>/status		General Resource	v2.0
<b>GET</b>			
<b>Description</b>	Obtain audio exception detection real-time volume parameters		
<b>Query</b>	None		
<b>Inbound Data</b>	None		
<b>Success Return</b>	<AudioStrengthStatus>		
<b>PUT</b>			
<b>Description</b>	Set audio exception detection real-time volume parameters		
<b>Query</b>	None		
<b>Inbound Data</b>	<AudioStrengthStatus>		
<b>Success Return</b>	<ResponseStatus>		
<b>Explanations on protocol:</b> This protocol is to realize the query and setting of the audio exception detection real-time volume, and realize the query and setting of the client sides or IE for the audio exception detection real-time volume parameters through the CGI protocol. At present, the equipments temporarily do not support, and the protocol is kept for the follow-up extension.			
<b>Explanations on key parameters:</b> <audioStrength> represents audio exception detection real-time volume			

#### AudioStrengthStatusXML Block

```

<AudioStrengthStatus version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<id><!-- req, xs:string --></id>
<audioStrength><!--ro, req, xs:integer--></audioStrength>
</AudioStrengthStatus>

```

#### Test cases

**GET /ISAPI/Smart/AudioDetection/channels/<ID>/status**

**Request XML:** none

**Response XML:** <AudioStrengthStatus>

**Response XML:** as below

```

<?xml version="1.0" encoding="UTF-8"?>
<AudioStrengthStatus>
<id>1</id>
<audioStrength>-1</audioStrength>
</AudioStrengthStatus>

```

### 1.5.10/ISAPI/Smart/AudioDetection/<ID>/channels/<ID>/Scene/<ID>

```

/ISAPI/Smart/AudioDetection/<ID>/channels/<ID>/Scene/<ID>

```

General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Obtain audio exception detection parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<AudioDetectionList>
<b>PUT</b>	
<b>Description</b>	Set audio exception detection parameters
<b>Query</b>	None
<b>Inbound Data</b>	<AudioDetectionList>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This protocol is to realize the query and setting of the audio exception detection, and realize the query and setting of the client sides or IE for the audio exception detection parameters through the CGI protocol, including the parameters such as audio exception detection id/signal loss detection/sensibility level/real-time volume threshold, etc.</p> <p><b>Explanations on key parameters:</b>  &lt;id&gt; represents audio exception detection id, the value of which is 1.  &lt;SignalLossDetection&gt; represents signal loss detection  &lt;enabled&gt; represents whether to start, true: start, false: not start  &lt;sensitivityLevel&gt; represents sensibility level, range: 0-5  &lt;mutationThreshold&gt; represents real-time volume threshold  &lt;signalAbnormalDetection&gt; represents signal exception detection  &lt;audioInputException &gt; audio input exception enabling</p>	
<p><b>AudioDetectionListXML Block</b></p> <pre>&lt;AudioDetectionList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema"&gt; &lt;AudioDetection version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema"&gt; &lt;id&gt;&lt;!-- req, xs:string;id --&gt;&lt;/id&gt; &lt;audioInputException&gt; &lt;enabled&gt;&lt;!-- req, xs:boolean --&gt;&lt;/enabled&gt; &lt;/audioInputException&gt; &lt;soundIntensityMutation&gt;&lt;!-- opt --&gt; &lt;enabled&gt;&lt;!-- req, xs:boolean --&gt;&lt;/enabled&gt; &lt;sensitivityLevel&gt; &lt;!--req, xs:integer--&gt; &lt;/sensitivityLevel&gt; &lt;mutationThreshold&gt; &lt;!--req, xs:integer --&gt; &lt;/mutationThreshold&gt; &lt;/soundIntensityMutation&gt; &lt;SteepFall&gt;&lt;!-- opt --&gt; &lt;enabled&gt;&lt;!-- req, xs:boolean --&gt;&lt;/enabled&gt; &lt;sensitivityLevel&gt; &lt;!--req, xs:integer--&gt; &lt;/sensitivityLevel&gt; &lt;/SteepFall&gt; &lt;SignalLossDetection&gt;&lt;!-- req --&gt; &lt;enabled&gt;&lt;!-- req, xs:boolean --&gt;&lt;/enabled&gt; &lt;sensitivityLevel&gt; &lt;!--req, xs:integer--&gt; &lt;/sensitivityLevel&gt; &lt;/SignalLossDetection&gt; &lt;SignalAbnormalDetection&gt;&lt;!-- req --&gt; &lt;enabled&gt;&lt;!-- req, xs:boolean --&gt;&lt;/enabled&gt; &lt;sensitivityLevel&gt; &lt;!--req, xs:integer--&gt; &lt;/sensitivityLevel&gt; &lt;/SignalAbnormalDetection&gt;</pre>	



```

</sensitivityLevel>
</SignalAbnormalDetection>
</AudioDetection>
</AudioDetectionList>

```

**Test cases**

**GET /ISAPI/Smart/AudioDetection/<ID>/channels/<ID>/Scene/<ID>**

**Request XML: none**

**Response XML: <AudioDetectionList>**

**PUT/ISAPI/Smart/AudioDetection/<ID>/channels/<ID>/Scene/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<?xml version="1.0" encoding="UTF-8"?>
<AudioDetection>
<SignalLossDetection>
<enabled>true</enabled>
<sensitivityLevel>3</sensitivityLevel>
</SignalLossDetection>
<SignalAbnormalDetection>
<enabled>true</enabled>
<sensitivityLevel>4</sensitivityLevel>
</SignalAbnormalDetection>
</AudioDetection>

```

**1.5.11/ISAPI/Smart/VideoDetection/<ID>/channels/<ID>/Scene/<ID>**

**/ISAPI/Smart/VideoDetection/<ID>/channels/<ID>/Scene/<ID>** **General Resource v2.0**

<b>GET</b>	
<b>Description</b>	Obtain video exception detection parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<VedioDetection>
<b>PUT</b>	
<b>Description</b>	Set video exception detection parameters
<b>Query</b>	None
<b>Inbound Data</b>	<VedioDetection>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**  
This protocol is to realize the query and setting of the video exception detection, and realize the query and setting of the client sides or IE for the video exception detection parameters through the CGI protocol, including the parameters such as video exception detection id/lens diagnosis/sensibility level/scene switch diagnosis, etc.

**Explanations on key parameters:**  
<id> represents video exception detection id, the value of which is 1.  
<LensDignose> represents lens diagnosis.  
<enabled> represents whether to start, true: start, false: not start  
<sensitivityLevel> represents sensibility level, range: 0-5  
< SceneSwitchDignose> represents scene switch diagnosis

**VedioDetectionListXML Block**

```

<VideoDetection version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<id><!-- req, xs:string;id --></id>
<LensDignose><!-- req -->
<enabled><!-- req, xs:boolean --></enabled>
<sensitivityLevel>
<!--req, xs:integer-->
</sensitivityLevel>

```

```

</ LensDignose >
< SceenSwitchDignose><!-- req -->
<enabled><!-- req, xs:boolean --></enabled>
<sensitivityLevel>
<!--req, xs:integer-->
</sensitivityLevel>
</ SceenSwitchDignose >
</VideoDetection>

```

**Test cases**

**GET /ISAPI/Smart/VideoDetection/<ID>/channels/<ID>/Scene/<ID>**

**Request XML: none**

**Response XML: <VedioDetection>**

**PUT/ISAPI/Smart/VideoDetection/<ID>/channels/<ID>/Scene/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<?xml version="1.0" encoding="UTF-8"?>
<VideoDetection>
<id>1</id>
<VedioInputException />
<LensDignose>
<enabled>true</enabled>
<sensitivityLevel>3</sensitivityLevel>
</LensDignose>
<SceenSwitchDignose>
<enabled>true</enabled>
<sensitivityLevel>4</sensitivityLevel>
</SceenSwitchDignose>
</VideoDetection>

```

**1.5.12/ISAPI/Smart/channels/<ID>/capabilities**

/ISAPI/Smart/channels/<ID>/ capabilities General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Obtain intelligent analysis algorithm capability set
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<SmartCapList>
<p><b>Explanations on protocol:</b>  This protocol is to query the intelligent analysis support algorithm capability set.</p> <p><b>Explanations on key parameters:</b>  &lt;Type&gt; represents intelligent analysis type, Behavior: behavior analysis, Face: human face identification, Human: human shape detection, Pept: oilfield monitoring, PeopleNumAlarm: number of people abnormal alarm, Audio: audio diagnosis, Video: video diagnosis, Group: group gathering, OnDuty: on-duty detection, Demographics: demographics, PlatLicense: license plate identification, ParkGuard: parking space guard, IllegalPark: illegal parking, IntelliTrace: intelligent tracking, structurization: structurization, Helmet: safety helmet, Prctduty: single interrogation/unattended, Sleep: sleeping post, NewFight: new fight, GetUp: personnel stand up, HeightLimit: height limit, NewDuty: new off-duty, Stranded: stranded, Alone: single stay alone, Delivergoods: deliver goods through window, FaceMosaic: human face mosaic, ColorTrack: color tracking, Loitering: loitering, AttendedBaggage: loss of attended baggage, UnattendedBaggage: unattended baggage[A3]</p> <p>Behavior analysis type:  LineDetection: trip-line, DoubleLineDetection: double trip-line, FieldDetection: perimeter detection, Loitering: loitering, Parking: parking, RapidMove: rapid move,  AttendedBaggage: loss of attended baggage, UnattendedBaggage: unattended baggage,</p>	

Alert: alert, HeatMap: heat map  
 Note: Loitering: loitering, AttendedBaggage: loss of attended baggage, UnattendedBaggage: unattended baggage, HeatMap:heat map, such four algorithms can not only serve as the algorithm large type, but only serve as behavior analysis sub-type.

Demographics:  
 Vertical: vertical, Horizontal: horizontal

Video diagnosis type:  
 Noise: noise diagnosis, Clarity: clarity diagnosis, Brightness: brightness diagnosis, ColourCast: colorcast diagnosis, Frezze: screen freezing diagnosis, VideoLost: video lost diagnosis, SceneChange: scene change detection, Jamming: jamming diagnosis  
 PTZ runaway diagnosis: PTZRunAway

Video diagnosis type:  
 AudioLost: audio lost, Abnormal: audio abnormal, NoiseSupr: noise suppression, EchoSupr: echo suppression, FeedbackSupr: audio signal feedback abnormal

Human face detection type:  
 Tiandy: Tiandy algorithm, ST: ST algorithm, FacePlusPlus: FACE++ algorithm, NewTiandy: new Tiandy human face algorithm  
 Behavior analysis supports obtaining rule quantity  
 periAlert: perimeter alert tripAlert: trip-line alert

Structured algorithm type:  
 faceDetect: human face detection mode; pedestrianDetect: pedestrian detection mode, licensePlate: license plate detection mode, VehicleDetect: motor vehicle detection mode; Non-Motor: non-motor vehicle, plateShade: plate shade

### SmartCap XML Block

```
<SmartCapList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  < SmartTypeCap>
    <MainType>
      <Type>
        <!--req,xs:string"Behavior,Face,Human,Pept,
        Prctduty,Sleep,NewFight,GetUp,HeightLimit,NewDuty,Stranded,Alone,Delivergoods,
        FaceMosaic,ColorTrack,Loitering,AttendedBaggage,UnattendedBaggage, HeatMap
        PeopleNumAlarm,Audio,Video,Group,OnDuty,PlatLicense,
        Demographics,ParkGuard, IllegalPark, IntelliTrace" -->
        </Type>//when the type is behavior analysis, the rule quantity shall be added.
      <IsSupport><!-- req, xs: boolean --></IsSupport >
    </MainType>
    < SubTypeList>
      <subtype>
        < Type><!--req,xs:string></ Type>
        < IsSupport ><!-- req, xs: boolean -->< IsSupport >
      </subtype>
    </SubTypeList>
  </ SmartTypeCap >
</SmartTypeCapList>
```

### Test cases

**GET /ISAPI/Smart/channels/<ID>/ capabilities**

**Request XML: none**

**Response XML: <SmartCap >**

```
<SmartTypeCapList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  < SmartTypeCap>
    <MainType>
      <Type>Behavior</Type>
      <IsSupport>True</IsSupport >
      <IsSupportRuleNum >8</IsSupportRuleNum>
    </MainType>
    < SubTypeList>
```

```

<subtype>
  < Type>LineDetection</ Type>
  < IsSupport > True< IsSupport >
</subtype>
<subtype>
  < Type>DoubleLineDetection</ Type>
  < IsSupport > True< IsSupport >
</subtype>
<subtype>
  < Type>Alert</ Type>
  < IsSupport >False< IsSupport >
</subtype>
<subtype>
  < Type>Loitering</ Type>
  < IsSupport > True< IsSupport >
</subtype>
<subtype>
  < Type>HeatMap</ Type>
  < IsSupport >False< IsSupport >
</subtype>
</SubTypeList>
< / SmartTypeCap >
< SmartTypeCap>
  <MainType>
    <Type>Face</Type>
    <IsSupport>True< /IsSupport >
  </MainType>
  < SubTypeList>
    <subtype>
      < Type>Tiandy</ Type>
      < IsSupport >False< IsSupport >
    </subtype>
    <subtype>
      < Type>ST</ Type>
      < IsSupport >False< IsSupport >
    </subtype>
    <subtype>
      < Type>FacePlusPlus</ Type>
      < IsSupport > True< IsSupport >
    </subtype>
    <subtype>
      < Type>NewTiandy</ Type>
      < IsSupport > True< IsSupport >
    </subtype>
  </SubTypeList>
< / SmartTypeCap >
<SmartTypeCap>
  <MainType>
    <Type>Human</Type>
    <IsSupport>true</IsSupport>
  </MainType>
</SmartTypeCap>
<SmartTypeCap>
  <MainType>
    <Type>Pept</Type>
    <IsSupport>true</IsSupport>
  </MainType>
</SmartTypeCap>

```

```
<SmartTypeCap>
  <MainType>
    <Type>PeopleNumAlarm</Type>
    <IsSupport>true</IsSupport>
  </MainType>
</SmartTypeCap>
<SmartTypeCap>
  <MainType>
    <Type>Prctduty</Type>
    <IsSupport>true</IsSupport>
  </MainType>
</SmartTypeCap>
<SmartTypeCap>
  <MainType>
    <Type>Sleep</Type>
    <IsSupport>true</IsSupport>
  </MainType>
</SmartTypeCap>
<SmartTypeCap>
  <MainType>
    <Type>NewFight</Type>
    <IsSupport>true</IsSupport>
  </MainType>
</SmartTypeCap>
<SmartTypeCap>
  <MainType>
    <Type>GetUp</Type>
    <IsSupport>true</IsSupport>
  </MainType>
</SmartTypeCap>
<SmartTypeCap>
  <MainType>
    <Type>HeightLimit</Type>
    <IsSupport>true</IsSupport>
  </MainType>
</SmartTypeCap>
<SmartTypeCap>
  <MainType>
    <Type>NewDuty</Type>
    <IsSupport>true</IsSupport>
  </MainType>
</SmartTypeCap>
<SmartTypeCap>
  <MainType>
    <Type>Stranded</Type>
    <IsSupport>true</IsSupport>
  </MainType>
</SmartTypeCap>
<SmartTypeCap>
  <MainType>
    <Type>Alone</Type>
    <IsSupport>true</IsSupport>
  </MainType>
</SmartTypeCap>
<SmartTypeCap>
  <MainType>
    <Type>Delivergoods</Type>
    <IsSupport>true</IsSupport>
  </MainType>
</SmartTypeCap>
```

```

</MainType>
</SmartTypeCap>
<SmartTypeCap>
<MainType>
<Type>FaceMosaic</Type>
<IsSupport>true</IsSupport>
</MainType>
</SmartTypeCap>
<SmartTypeCap>
<MainType>
<Type>ColorTrack</Type>
<IsSupport>true</IsSupport>
</MainType>
</SmartTypeCap>
<smartTypeCap>
</smartTypeCap>
<SmartTypeCap>
<MainType>
<Type>HeatMap</Type>
<IsSupport>true</IsSupport>
</MainType>
</SmartTypeCap>
</SmartTypeCapList>

```

### 1.5.13/ISAPI/Smart/IntelliTrace/<ID>/channels//<ID>/Scene/<ID>

<b>/ISAPI/Smart/IntelliTrace /&lt;ID&gt;/channels/&lt;ID&gt;/Scene/&lt;ID&gt;</b>	
<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Obtain intelligent tracking parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<IntelliTrace>
<b>PUT</b>	
<b>Description</b>	Set intelligent tracking parameters
<b>Query</b>	None
<b>Inbound Data</b>	<IntelliTrace>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This protocol is to realize the setting and obtaining of the intelligent tracking senior parameters.  Both the full scene tracking and interaction tracking use this protocol.</p> <p><b>Explanations on key parameters:</b>  &lt;tracktime&gt; //tracking time 0-300 unit second  &lt;identifyType &gt; represents statistics type, people, car, all, people_car</p>	
<b>IntelliTrace XML Block</b>	
<pre> &lt;IntelliTrace version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema"&gt;   &lt;id&gt;&lt;!-- req, xs:string --&gt;&lt;id&gt;//support 1   &lt;enabled&gt;&lt;!-- req, xs:boolean "true,false"--&gt;&lt;/enabled&gt;   &lt;tracktime&gt;&lt;!-- req, xs:integer, "0—300"--&gt;&lt;/tracktime&gt;//tracking time unit second   &lt;zoomRate&gt;&lt;!-- opt, xs:integer, "10—360"--&gt;&lt;/ zoomRate&gt;//tracking zoom rate ( 1~36 times, precise to 0.1 )   &lt;height&gt;&lt;!-- opt, xs:integer, "1-30"--&gt;&lt;/ height&gt;//dome camera height unit m   &lt;desStopTime&gt;&lt;!-- opt, xs:integer, "2-600"--&gt;&lt;/desStopTime&gt;//target stop tracking time unit second   &lt;minSize&gt;&lt;!-- opt, xs:integer,"0-100"--&gt; </pre>	

```

</minSize >//minimum size default 20 (the interface display is the sensibility level, and the
full scene tracking has this parameter)
<maxSize><!-- opt, xs:integer, "0-100"--></maxSize >//maximum size
<detectFaceRet><!-- opt, xs:string"true,false"--></detectFaceRet> //detect whether the human
face is returned
<antiOcclusions><!-- opt, xs:string"true,false"--></antiOcclusions>//whether to start the
anti-occlusion function
< displyTarget><!-- opt, xs:string"true,false"--></displyTarget> //whether to display tracking
frame
<limit><!-- opt, xs:string"true,false"--></limit> //whether to start position limit
<limitType opt = "upLimit, downLimit, liftLimit,rightLimit">
<!-- opt, xs: string, " upLimit, downLimit, liftLimit,rightLimit"-->
</limitType>//the position limit type can only be selected one
<identifyType ><!-- req, xs: string --></identifyType>
</IntelliTrace>

```

#### Test cases

**GET /ISAPI/Smart/IntelliTrace/1/channels/1/Scene/1**

**Request XML: none**

**Response XML: <IntelliTrace >**

**PUT/ISAPI/Smart/IntelliTrace/1/channels/1/Scene/1**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<IntelliTrace version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<id>1</id>
<enabled>true</enabled>
<tracktime>120</tracktime>
<zoomRate>30</zoomRate>
<height>2</height>
<desStopTime>110</desStopTime>
<minSize>20</minSize>
<maxSize>0</maxSize>
<detectFaceRet>false</detectFaceRet>
<antiOcclusions>true</antiOcclusions>
<displyTarget>true</displyTarget>
<limit>true</limit>
<limitType>upLimit</limitType>
<identifyType>people and car</identifyType>
</IntelliTrace>

```

## 1.6/ISAPI/Event

### 1.6.1/ISAPI/Event/triggers/<ID>/channels/<ID>/scenes /<ID> (extend protocol)

Port input-port 1: /ISAPI/Event/triggers/IO-1

Mobile alarm: /ISAPI/Event/triggers/VMD/channels/<ID>

Shade alarm: /ISAPI/Event/triggers/tamperdetection/channels/<ID> /tamperdetection

Loss alarm: /ISAPI/Event/triggers/videoLoss/channels/<ID>

Trip-line: /ISAPI/Event/triggers/linedetection-1/channels/[1-]/scenes/[0-]

Double trip-line: /ISAPI/Event/triggers/doubleLineDetection-1/channels/[1-]/scenes/[0-]

Perimeter invasion: /ISAPI/Event/triggers/fieldDetection-1/channels/[1-]/scenes/[0-]

Perimeter entrance: /ISAPI/Event/triggers/regionEntrance-1/channels/[1-]/scenes/[0-]

Perimeter exiting: /ISAPI/Event/triggers/regionExiting-1/channels/[1-]/scenes/[0-]

Unattended baggage: /ISAPI/Event/triggers/unattendedBaggage-1/channels/[1-]/scenes/[0-]

Loss of attended baggage: /ISAPI/Event/triggers/attendedBaggage-1/channels/[1-]/scenes/[0-]

Loitering: /ISAPI/Event/triggers/loitering-1/channels/[1-]/scenes/[0-]

Rapid move: /ISAPI/Event/triggers/rapidMove-1/channels/[1-]/scenes/[0-]

Parking: /ISAPI/Event/triggers/parking-1/channels/[1-]/scenes/[0-]

Alert: /ISAPI/Event/triggers/alert -1/channels/[1-]/scenes/[0-]  
Note: XM20180037-the items behind the alter gun do not use this protocol.  
Heat map: /ISAPI/Event/triggers/heatMap-1/channels/[1-]/scenes/[0-]  
Human face detection: /ISAPI/Event/triggers/faceDetect/channels/[1-]/scenes/[0-]/Model/[ID]  
Human face identification:  
/ISAPI/Event/triggers/FaceDiscern/channels/[1-]/scenes/[0-]/Model/[ID]/Type/[ID]/Key/[ID]  
Model: 0 nvr 1 ipc  
Type: alarm type, 1: human face detection, 2: comparison alarm, 3: stranger alarm, 4: frequency alarm, 5: stranded alarm  
Key: human face base key value, comparison alarm key value, other key value is 0  
Oilfield monitoring: /ISAPI/Event/triggers/Pept/channels/[1-]/scenes/[0-]  
License plate identification: /ISAPI/Event/triggers/platLicenseRecog/channels/[1-]/scenes/[0-]  
License plate identification-white list :  
/ISAPI/Event/triggers/whitePlatLicenseRecog/channels/[1-]/scenes/[0-]  
License plate identification-black list :  
/ISAPI/Event/triggers/blackPlatLicenseRecog/channels/[1-]/scenes/[0-]  
Audio detection: /ISAPI/Event/triggers/audioDetection/channels/[1-]/scenes/[0-]  
Video diagnosis: /ISAPI/Event/triggers/videoDetection/channels/[1-]/scenes/[0-]  
Group gathering: /ISAPI/Event/triggers/group/channels/[1-]/scenes/[0-]  
On-duty detection: /ISAPI/Event/triggers/onDutyDetection/channels/[1-]/scenes/[0-]  
Demographics: /ISAPI/Event/triggers/demographics/channels/[1-]/scenes/[0-]  
Alert contingency plan: /ISAPI/Event/triggers/alertTemplate-10/channels/<ID>/scenes /31  
Parking space guard: /ISAPI/Event/triggers/guardPark/channels/[1-]/scenes/[0-]  
Illegal parking: /ISAPI/Event/triggers/illegalPark/channels/[1-]/scenes/[0-]  
Intelligent tracking: /ISAPI/Event/triggers/intelliTrace/channels/[1-]/scenes/[0-]  
Safety helmet: /ISAPI/Event/triggers/helmet/channels/[1-]/scenes/[0-]  
Local port alarm (decoder use): /ISAPI/Event/triggers/localPortWarning/channels/[1-]/scenes/[0-]  
Featured alert: /ISAPI/Event/triggers/ItemAlert/channels/<ID>/scenes/<ID>/type/<ID> Note: type is perimeter type or trip-line type.  
Vehicle detection: /ISAPI/Event/triggers/vehicledetection/channels/[1-]/scenes/[0-]  
Mixed target detection: /ISAPI/Event/triggers/mixedTargetDetect/channels/[1-]/scenes/[0-]  
License plate shade: /CGI/Event/triggers/plateShade/channels/[1-]/scenes/[0-]  
Exception alarm:  
Disk full: /ISAPI/Event/triggers/diskfull  
Disk error: /ISAPI/Event/triggers/diskerror  
No disk: /ISAPI/Event/triggers/noDisk  
No redundant disk: /ISAPI/Event/triggers/noMirrorHDD  
Array exception: /ISAPI/Event/triggers/arrayError  
Hot standby exception: /ISAPI/Event/triggers/spareexpctetion  
Network cable broken: /ISAPI/Event/triggers/nicbroken  
IP conflict: /ISAPI/Event/triggers/ipconflict  
Illegal visit: /ISAPI/Event/triggers/illaccess  
Video recording failure: /ISAPI/Event/triggers/recordingfailure  
Smart detection exception: /ISAPI/Event/triggers/smartdetection  
Disk overflow: /ISAPI/Event/triggers/diskoverflow  
MAC address conflict: /ISAPI/Event/triggers/macconflict  
PSE power overload: /ISAPI/Event/triggers/psepoweroverload tamperdetection  
Disk temperature error: /ISAPI/Event/triggers/disktemperatureerror  
FTP server error: /ISAPI/Event/triggers/ftpException  
SHM disk health status error: /ISAPI/Event/triggers/shmException  
Voltage alarm: / ISAPI / Event / triggers / voltage  
Temperature & humidity alarm: /ISAPI/Event/triggers/temhum/channels/<ID>  
People number alarm: /ISAPI/Event/triggers/peopleNumAlarm/channels/[1-]/scenes/[0-]  
Single interrogation/unattended: /ISAPI/Event/triggers/Prctduty/channels/[1-]/scenes/[0-]  
Sleep: /ISAPI/Event/triggers/Sleep/channels/[1-]/scenes/[0-]  
New fight: /ISAPI/Event/triggers/NewFight/channels/[1-]/scenes/[0-]  
Getup: /ISAPI/Event/triggers/GetUp/channels/[1-]/scenes/[0-]



Height limit: /ISAPI/Event/triggers/HeightLimit/channels/[1-]/scenes/[0-]  
 New duty: /ISAPI/Event/triggers/NewDuty/channels/[1-]/scenes/[0-]  
 Stranded: /ISAPI/Event/triggers/Stranded/channels/[1-]/scenes/[0-]  
 Alone: /ISAPI/Event/triggers/Alone/channels/[1-]/scenes/[0-]  
 Deliver goods: /ISAPI/Event/triggers/Delivergoods/channels/[1-]/scenes/[0-]  
 Face detection: / ISAPI / Event / triggers / faceDetect / channels / [1-] / scenes / [0-] / Model / [ID]  
 Mask wearing detection: / ISAPI / Event / triggers / faceMask / channels / [1-] / scenes / [0-] / Model / [ID]  
 No mask detection: / ISAPI / Event / triggers / faceNoMask / channels / [1-] / scenes / [0-] / Model / [ID]  
 Smoking: / ISAPI / Event / triggers / Smoke / channels / [1-] / scenes / [0-]  
 Phone call: / ISAPI / Event / triggers / Telephone / channels / [1-] / scenes / [0-]  
 Human high temperature alarm detection: / ISAPI / Event / triggers / BodyHighTemp / channels / [1-] /  
 Scenes / [0-] / Model / [ID]  
 (Model: 0-nvr,1-ipc)  
 Fireworks detection: / ISAPI / Event / triggers / Fireworks / channels / [1-] / scenes / [0-]  
 Temperature detection: / ISAPI / Event / triggers / TemDetect / channels / [1-] / scenes / [0-]

/ISAPI/Event/triggers/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire alarm linkage parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<EventTrigger>	
<b>PUT</b>		
<b>Description</b>	Set alarm linkage parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<EventTrigger>	
<b>Success Return</b>	<ResponseStatus>	
<p><b>Explanations on protocol:</b>            This protocol is prepared for query and setting of alarm linkage parameters, helping client or IE query and set device alarm linkage parameters via CGI protocol, including input port/linkage type/linkage output port No./PTZ linkage channel/linkage PTZ type/number/linkage dual light.</p> <p><b>Explanations on key parameters:</b>  <b>Port alarm has no channel No., screen No.; motion and shielding alarm has no screen No.; other alarms are provided with channel No. and screen No.</b>            &lt;id&gt; means input port: IO-1            &lt;notificationMethod&gt; means linkae type, IO: Linkage output, record: Linkage recording, snapshot: Linkage snapshot, ptz: Linkage ptz, activateDualLight: Linkage dual light, ftp: Linkage FTP, whitelight: White light, guardsound: Alarm sound, laser: Laser, talk: Talk, upload: Upload center ROI: ROI, exposure: exposureBright, voiceMsg: Voice broadcast " ipcIO: Linkage frontend alarm output, guardLight: Linkage alarm light, trafficTouch: Linkage traffic trigger, closeupsnapshot:Linkage close-up snapshot            &lt;outputIOPortID&gt; means linkage output port No.            &lt;videoInputID&gt; means channel No. (ipc is 1)            &lt;ptzChannelID&gt; means PTZ linkage channel            &lt;actionName&gt; means linkage PTZ type, preset: Preset position, pattern: Mode path, patrol: Patrol path, scenes:Intelligent analysis scenarios            &lt;actionNum&gt; means corresponding numbers            &lt;activateDualLight&gt; means linkage dual light, day: Color mode, night: Black and white mode            &lt;trafficWarnType&gt; means traffic violation type Bayonet: Bayonet, retrograde: Retrogradation, redlightrunning: Red light running, telephone: Making and receiving calls, notdirected: Undirected driving, vehicle: Vehicle occupies bicycle lane, turnaround:</p>		

Illegal turnaround, lanechange: Illegal lane change, safetybelt: Fail to belt up, forbiddenmarking: Violation of marking line, reversing: Reversing, overspeed: Overspeed, speciallane: Enter special lane, Illegalparking: Illegal parking, prohibitionsign: Violation of prohibition signs  
 <zoomMode> stands for close-up snapshot magnification mode, constant: fixed magnification, auto: adaptive magnification  
 <voiceMsg> Voice broadcast

### EventTriggerXML Block

```
<EventTrigger opt="audioshow, screenshow, snapshot, record, IO, ptz, singlepicture,
email,plan, guardsound, laser, whitelight, activateDualLight, talk,
upload,ftp,ROI,exposureBright">tamperdetection
<id><!-- req, xs:string;id --></id>
<enabled><!--req,xs:Boolean--></enabled>
<eventType>
<!-- req, xs:string,
"IO,VMD,videoloss,raidfailure,recordingfailure, localport,port,
badvideo,POS,analytics,fanfailure,overheat, tamperdetection, diskfull, diskerror,
nicbroken, ipconflict, illaccess, videomismatch, resolutionmismatch,
radifailure,PIR, WLSensor, spareException, poePowerException,heatmap,
counting,linedetection,fielddetection,regionEntrance,regionExiting,loitering,group
,rapidMove,parking,unattendedBaggage,attendedBaggage,nodisk,noredundancydisk,macconfl
ict,diskoverflow,SmartDetection,spareexception,
arrayError,alertTemplate,localportwarning,bayonet" -->
</eventType>
<localPortWarningInfoList><!-- opt -->
<localPortWarningData>
<trafficWarnType>
<!-- req, xs:string,
"bayonet,retrograde,redlightrunning,telephone,notdirected,vehicle,turnaround,lanechange,safe
tybelt,forbiddenmarking,reversing,overspeed,speciallane,Illegalparking,prohibitionsign" -->
</trafficWarnType>
<warnEnable><!-- req, xs:boolean --></warnEnable>
</localPortWarningData>
</localPortWarningInfoList>
<eventDescription><!-- opt, xs:string --></eventDescription>
<inputIOPortID><!-- dep, xs:string; id --> /inputIOPortID>
<dynInputIOPortID><!-- dep, xs:string; id --></dynInputPortID>
<videoInputChannelID>
<!-- dep, xs:string; id, if <eventType> is "VMD,videoloss,
tamperdetection,regionEntrance,regionExiting,loitering,group,rapidMove,parking,unattend
edBaggage,attendedBaggage" -->
</videoInputChannelID>
<dynVideoInputChannelID><!-- dep, xs:string; id --></dynVideoInputChannelID>
<intervalBetweenEvents><!-- opt, xs:integer, seconds --></intervalBetweenEvents>
<WLSensorID><!-- dep, xs:string; id --></WLSensorID>
<EventTriggerNotificationList version="2.0"
  xmlns="http://www.isapi.org/ver20/XMLSchema">
  <EventTriggerNotification><!-- opt -->
  <id><!-- req, xs:string;id --></id>
  <notificationMethod>
  <!-- req, xs:string,"email,IO,ptz,record,snapshot,activateDualLight,ftp,screenshow,audioshow,
singlepicture,plan,guardsound, laser, whitelight, talk,
upload,ROI,exposureBright ,level ,ipcIO, guardLight,trafficTouch, closeupsnapshot "-->
  </notificationMethod>
  <notificationRecurrence>
  <!-- opt, xs:string, "beginning,beginningandend,recurring" -->
  </notificationRecurrence>
```

```

<notificationInterval><!-- dep, xs:integer, milliseconds --></notificationInterval>
<outputIOPortID><!-- dep, xs:string;id --></outputIOPortID>
<dynOutputIOPortID><!-- dep, xs:string;id --></dynOutputIOPortID>
<videoInputID><!-- dep, xs:string;id --></videoInputID>
<dynVideoInputID><!-- dep, xs:string;id --></dynVideoInputID>
<ptzAction><!-- dep -->
<ptzChannelID><!-- req, xs:string; id --></ptzChannelID>
<actionName><!-- req, xs:string, "preset, pattern, patrol, scenes " --></actionName>
<actionNum><!-- dep, xs:integer></actionNum>
</ptzAction>
<activateDualLight><!-- dep, xs:string;"day,night," --></ activateDualLight >
<planID><!-- dep, xs:string --></ planID> // Linkage plan No.
<emailsendpic><!-- dep, xs:boolean --></emailsendpic>// Whether linkage E-mail has
attachment
<SoundID><!-- req, xs:integer;--></SoundID>// Alarm sound No.
<ROIlevel><!-- dep, xs: integer;--></ ROIlevel> // Level
<exposureBrightTime><!-- dep, xs: integer;--></exposureBrightLevel > Exposure time
0-3600
<alarmLevel><!-- dep, xs:integer;id --></alarmLevel>// Alarm level of special warning
linkage
<levelTime><!-- dep, xs:integer;id --></levelTime>// Detention time under special warning
<nextLevelEnable><!-- dep,xs:boolean;id --></nextLevelEnable>// Whether enable the next
level under special warning
<zoomMode><!-- req, xs:string;" constant,auto" --></zoomMode>
<voiceMsgList>
<voiceMsg>
<type><!-- req, xs: integer --></type> //0 frontend, 1NVR
<enable><!-- dep, xs: boolean --></enable>
<id><!-- req, xs: integer --></id> // Voice broadcast No., starts from 0, nvr has one default 0
only
<msg><!-- req, xs: string--></msg> // Voice contents
<voiceMsg>
</voiceMsgList>
<ipcAlarmOutPortID><!-- dep, xs:string; id --></ipcAlarmOutPortID>
// Linkage frontend port alarm output – NVR control frontend port alarm (introduction of bit:
bit0 means frontend port 1, bit1 means frontend port 2...)
</EventTriggerNotification>
</EventTriggerNotificationList>
</EventTrigger>

```

#### Test cases

**GET /ISAPI/Event/triggers/<ID>**

**Request XML: none**

**Response XML: <EventTrigger>**

**PUT/ISAPI/Event/triggers/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<?xml version="1.0" encoding="UTF-8"?>
<EventTrigger>
<guardSoundCap>
<isSupprotGuardSound>true</isSupprotGuardSound>
<supportSoundTotalNum>5</ supportSoundTotalNum>
<supportSoundSampleNum>3</ supportSoundSampleNum>
<supportSoundCustomNum>2</supportSoundCustomNum>
</guardSoundCap >
<id>tamperdetection</id>
<enabled>true</enabled>
<eventType>tamperdetection</eventType>

```

```

<EventTriggerNotificationList>
  // Linkage sound
  <EventTriggerNotification>
    <id>audioshow</id>
    <notificationMethod>audioshow</notificationMethod>
  </EventTriggerNotification>
  // Linkage screen display
  <EventTriggerNotification>
    <id>screenshow</id>
    <notificationMethod>screenshow</notificationMethod>
  </EventTriggerNotification>
  // Linkage recording channel 1
  <EventTriggerNotification>
    <id>record-1</id>
    <notificationMethod>record</notificationMethod>
    <videoInputID>1</videoInputID>
  </EventTriggerNotification>
  // Linkage recording channel 2
  <EventTriggerNotification>
    <id>record-2</id>
    <notificationMethod>record</notificationMethod>
    <videoInputID>2</videoInputID>
  </EventTriggerNotification>
  // Linkage snapshot channel 1
  <EventTriggerNotification>
    <id>snapshot-1</id>
    <notificationMethod>snapshot</notificationMethod>
    <videoInputID>1</videoInputID>
  </EventTriggerNotification>
  // Linkage snapshot channel 2
  <EventTriggerNotification>
    <id>snapshot-2</id>
    <notificationMethod>snapshot</notificationMethod>
    <videoInputID>2</videoInputID>
  </EventTriggerNotification>
  // Linkage output port 1
  <EventTriggerNotification>
    <id>IO-1</id>
    <notificationMethod>IO</notificationMethod>
    <outputIOPortID>1</outputIOPortID>
  </EventTriggerNotification>
  // Linkage output port 2
  <EventTriggerNotification>
    <id>IO-2</id>
    <notificationMethod>IO</notificationMethod>
    <outputIOPortID>2</outputIOPortID>
  </EventTriggerNotification>
  // Linkage single picture
  <EventTriggerNotification>
    <id>singlepicture</id>
    <notificationMethod>singlepicture</notificationMethod>
    <videoInputID>1</videoInputID>
  </EventTriggerNotification>
  // Linkage E-mail
  <EventTriggerNotification>
    <id>email</id>
    <notificationMethod>email</notificationMethod>
    <emailsendpic>true</emailsendpic>

```

```

</EventTriggerNotification>
// Linkage PTZ linkage 4-channel preset position 8
<EventTriggerNotification>
  <id>ptz4-preset8</id>
  <notificationMethod>ptz</notificationMethod>
  <ptzAction>
    <ptzChannelID>4</ptzChannelID>
    <actionName>preset</actionName>
    <actionNum>8</actionNum>
  </ptzAction>
</EventTriggerNotification>
// Linkage PTZ linkage 6-channel mode path 5
<EventTriggerNotification>
  <id>ptz6-pattern5</id>
  <notificationMethod>ptz</notificationMethod>
  <ptzAction>
    <ptzChannelID>6</ptzChannelID>
    <actionName>pattern</actionName>
    <actionNum>5</actionNum>
  </ptzAction>
</EventTriggerNotification>
// Link PTZ, link 1 channel scene 6
<EventTriggerNotification>
  <id>ptz1-scenes6</id>
  <notificationMethod>ptz</notificationMethod>
  <ptzAction>
    <ptzChannelID>1</ptzChannelID>
    <actionName>scenes</actionName>
    <actionNum>6</actionNum>
  </ptzAction>
</EventTriggerNotification>
// Linkage laser
<EventTriggerNotification>
  <id>laser</id>
  <notificationMethod>laser</notificationMethod>
</EventTriggerNotification>
// Linkage white light
<EventTriggerNotification>
  <id>whitelight</id>
  <notificationMethod>whitelight</notificationMethod>
  <whiteLightNum>666</whiteLightNum>// This field exists only if white light
linkage is enabled under special alarm; 0-10 means flash times; 666 means normally on; 667
means strobing

  </EventTriggerNotification>
// Linkage traction
<EventTriggerNotification>
  <id>linkFollow</id>
  <notificationMethod>linkFollow</notificationMethod>
</EventTriggerNotification>

// Linkage call
<EventTriggerNotification>
  <id>talk</id>
  <notificationMethod>talk</notificationMethod>

```

```

</EventTriggerNotification>
// Linkage upload center
<EventTriggerNotification>
  <id>upload</id>
  <notificationMethod>upload</notificationMethod>
</EventTriggerNotification>
// Linkage dual light
<EventTriggerNotification>
  <id>activateDualLight</id>
  <notificationMethod>activateDualLight</notificationMethod>
  <activateDualLight>day</ activateDualLight >
</EventTriggerNotification>
// Linkage alarm sound
<EventTriggerNotification>
  <id>guardsound-3</id>
  <notificationMethod>guardsound</notificationMethod>
  <SoundID>3</ SoundID>
</EventTriggerNotification>
// Linkage level
<EventTriggerNotification>
  <id>level</id>
  <notificationMethod>level</notificationMethod>
  <alarmLevel>2</alarmLevel>
  <levelTime>60</levelTime>
  <nextLevelEnable>true</nextLevelEnable>
</EventTriggerNotification>

// Linkage plan
<EventTriggerNotification>
<id>plan-3</id>
<notificationMethod>plan</notificationMethod>
<planID>3</ planID>
// Linkage ROI
</EventTriggerNotification>
<EventTriggerNotification>
<id>ROI</id>
<notificationMethod>ROI</notificationMethod>
<ROILevel>1</ ROILevel > // Level
// Linkage exposure
</EventTriggerNotification>
<EventTriggerNotification>
<id>exposureBright</id>
<notificationMethod> exposureBright</notificationMethod>
<exposureBrightTime>1000</exposureBrightTime>
<voiceMsgList>
<voiceMsg>
<type>0</type>
<enable>true</enable>
<id>0</id>
<msg> Hello, Zhang San</msg>
</voiceMsg>
<voiceMsg>
<type>0</type>
<enable>true</enable>
<id>1</id>
<msg> Hello, Li Si</msg>
</voiceMsg>
<voiceMsg>

```

```
<type>1</type>
<enable>>true</enable>
<id>0</id>
<msg> Hello </msg>
</voiceMsg>
</voiceMsgList>
</EventTriggerNotification>
// Linkage frontend alarm output port 1
<EventTriggerNotification>
  <id>ipcIO-1</id>
  <notificationMethod>ipcIO</notificationMethod>
  <ipcAlarmOutPortID >1</ipcAlarmOutPortID>
</EventTriggerNotification>
// Linkage frontend alarm output port 2
<EventTriggerNotification>
  <id> ipcIO-2</id>
  <notificationMethod> ipcIO</notificationMethod>
  <ipcAlarmOutPortID>2</ipcAlarmOutPortID>
</EventTriggerNotification>
// Linkage frontend alarm output port 3
<EventTriggerNotification>
  <id>ipcIO-3</id>
  <notificationMethod>ipcIO</notificationMethod>
  <ipcAlarmOutPortID >3</ipcAlarmOutPortID >
</EventTriggerNotification>
// Linkage frontend alarm output port 4
<EventTriggerNotification>
  <id> ipcIO-4</id>
  <notificationMethod> ipcIO</notificationMethod>
  <ipcAlarmOutPortID>4</ipcAlarmOutPortID>
</EventTriggerNotification>
// Linkage frontend alarm output port 5
<EventTriggerNotification>
  <id>ipcIO-5</id>
  <notificationMethod>ipcIO</notificationMethod>
  <ipcAlarmOutPortID>5</ipcAlarmOutPortID>
</EventTriggerNotification>
// Linkage frontend alarm output port 6
<EventTriggerNotification>
  <id> ipcIO-6</id>
  <notificationMethod> ipcIO</notificationMethod>
  <ipcAlarmOutPortID>6</ipcAlarmOutPortID>
</EventTriggerNotification>
// Linkage frontend alarm output port 7
<EventTriggerNotification>
  <id>ipcIO-7</id>
  <notificationMethod>ipcIO</notificationMethod>
  <ipcAlarmOutPortID>7</ipcAlarmOutPortID>
</EventTriggerNotification>
// Linkage frontend alarm output port 8
<EventTriggerNotification>
  <id> ipcIO-8</id>
  <notificationMethod> ipcIO</notificationMethod>
  <ipcAlarmOutPortID>8</ipcAlarmOutPortID>
</EventTriggerNotification>
// Linkage frontend alarm output port 9
<EventTriggerNotification>
  <id>ipcIO-9</id>
```

```
<notificationMethod>ipcIO</notificationMethod>
<ipcAlarmOutPortID>9</ipcAlarmOutPortID>
</EventTriggerNotification>
// Linkage frontend alarm output port 10
<EventTriggerNotification>
  <id> ipcIO-10</id>
  <notificationMethod> ipcIO</notificationMethod>
  <ipcAlarmOutPortID>10</ipcAlarmOutPortID>
</EventTriggerNotification>
// Linkage frontend alarm output port 11
<EventTriggerNotification>
  <id>ipcIO-11</id>
  <notificationMethod>ipcIO</notificationMethod>
  <ipcAlarmOutPortID>11</ipcAlarmOutPortID>
</EventTriggerNotification>
// Linkage frontend alarm output port 12
<EventTriggerNotification>
  <id> ipcIO-12</id>
  <notificationMethod> ipcIO</notificationMethod>
  <ipcAlarmOutPortID>12</ipcAlarmOutPortID>
</EventTriggerNotification>
// Linkage frontend alarm output port 13
<EventTriggerNotification>
  <id>ipcIO-13</id>
  <notificationMethod>ipcIO</notificationMethod>
  <ipcAlarmOutPortID>13</ipcAlarmOutPortID>
</EventTriggerNotification>
// Linkage frontend alarm output port 14
<EventTriggerNotification>
  <id> ipcIO-14</id>
  <notificationMethod> ipcIO</notificationMethod>
  <ipcAlarmOutPortID>14</ipcAlarmOutPortID>
</EventTriggerNotification>
// Linkage frontend alarm output port 15
<EventTriggerNotification>
  <id>ipcIO-15</id>
  <notificationMethod>ipcIO</notificationMethod>
  <ipcAlarmOutPortID>15</ipcAlarmOutPortID>
</EventTriggerNotification>
// Linkage frontend alarm output port 16
<EventTriggerNotification>
  <id> ipcIO-16</id>
  <notificationMethod> ipcIO</notificationMethod>
  <ipcAlarmOutPortID>16</ipcAlarmOutPortID>
</EventTriggerNotification>
// Linkage alarm light
<EventTriggerNotification>
<id>guardLight</id>
<notificationMethod>guardLight</notificationMethod>
</EventTriggerNotification>
// Linkage traffic trigger
<EventTriggerNotification>
<id>trafficTouch</id>
<notificationMethod>trafficTouch</notificationMethod>
</EventTriggerNotification>
//Linkage close-up snapshot
<EventTriggerNotification>
```



```

<id>closeupsnapshot</id>
<notificationMethod>closeupsnapshot</notificationMethod>
<zoomMode>constant</zoomMode>
</EventTriggerNotification>
</EventTriggerNotificationList>
</EventTrigger>

```

## 1.6.2/ISAPI/Event/schedules/<type>/<ID>/channels/<ID>/Scene/<ID>

Input port: /ISAPI/Event/schedules/inputs/channels/<ID>  
 Alarm output: /ISAPI/Event/schedules/outputs/<ID>  
 Motion alarm: /ISAPI/Event/schedules/motionDetections/channels/<ID>  
 Shielding alarm: /ISAPI/Event/schedules/tamperDetections/channels/<ID>  
 Loss alarm: /ISAPI/Event/schedules/videoLoss/channels/<ID>  
 Voltage alarm: / ISAPI / Event / schedules / voltage / channels / <ID>  
 Line: /ISAPI/Event/schedules/lineDetections/<ID>/channels/<ID>/Scene/<ID>  
 Double line: /ISAPI/Event/schedules/doubleLineDetections/<ID>/channels/<ID>/Scene/<ID>  
 Intrusion: /ISAPI/Event/schedules/fieldDetections/<ID>/channels/<ID>/Scene/<ID>  
 Entrances: /ISAPI/Event/schedules/regionEntrances/<ID>/channels/<ID>/Scene/<ID>  
 Exiting: /ISAPI/Event/schedules/regionExitings/<ID>/channels/<ID>/Scene/<ID>  
 Unattended baggage: /ISAPI/Event/schedules/unattendedBaggages/<ID>/channels/<ID>/Scene/<ID>  
 Lost items: /ISAPI/Event/schedules/attendedBaggages/<ID>/channels/<ID>/Scene/<ID>  
 Loiterings: /ISAPI/Event/schedules/loiterings/<ID>/channels/<ID>/Scene/<ID>  
 Running: /ISAPI/Event/schedules/rapidMoves/<ID>/channels/<ID>/Scene/<ID>  
 Parking: /ISAPI/Event/schedules/parkings/<ID>/channels/<ID>/Scene/<ID>  
 Alert: /ISAPI/Event/schedules/alerts/<ID>/channels/<ID>/Scene/<ID>  
 Heat map: /ISAPI/Event/schedules/heatMaps/<ID>/channels/<ID>/Scene/<ID>  
 Face detection: /ISAPI/Event/schedules/faceDetects/<ID>/channels/<ID>/Scene/<ID>/Model/[ID]  
 Human face identification:  
 /ISAPI/Event/schedules/FaceDiscern/<ID>/channels/<ID>/Scene/<ID>/Model/[ID]/Type/[ID]/Key/[ID]  
 Model: 0 nvr 1 ipc  
 Type: Alarm type; 1. Face detection (disabled); 2. Contrast alarm; 3. Stranger alarm; 4. Frequency alarm; 5. Retention alarm  
 Key: Face database key value, contrast key value, no key value for stranger, frequency and retention is 0  
 Oil field monitoring: /CGI/Event/schedules/Pept/<ID>/channels/<ID>/Scene/<ID>  
 License plate recognition: /ISAPI/Event/schedules/platLicenseRecogs/<ID>/channels/<ID>/Scene/<ID>  
 License plate recognition – whitelist:  
 /ISAPI/Event/schedules/whitePlatLicenseRecogs/<ID>/channels/<ID>/Scene/<ID>  
 License plate recognition – blacklist:  
 /ISAPI/Event/schedules/blackPlatLicenseRecogs/<ID>/channels/<ID>/Scene/<ID>  
 Audio error detection: /ISAPI/Event/schedules/audioDetections/<ID>/channels/<ID>/Scene/<ID>  
 Video error detection: /ISAPI/Event/schedules/videoDetections/<ID>/channels/<ID>/Scene/<ID>  
 Group: /ISAPI/Event/schedules/groups/<ID>/channels/<ID>/Scene/<ID>  
 On-duty detection: /ISAPI/Event/schedules/onDutyDetections/<ID>/channels/<ID>/Scene/<ID>  
 People counting: /ISAPI/Event/schedules/demographics/<ID>/channels/<ID>/Scene/<ID>  
 Alert template: /ISAPI/Event/schedules/alertTemplates/10/channels/<ID>/Scene/31  
 Illegal parking: /ISAPI/Event/schedules/illegalParks/<ID>/channels/<ID>/Scene/<ID>  
 Park guard: /ISAPI/Event/schedules/guardParks/<ID>/channels/<ID>/Scene/<ID>  
 Special alert: /ISAPI/Event/schedules/itemAlert/<ID>/channels/<ID>/Scene/<ID>/type/<ID>  
 Vehicle detection: /ISAPI/Event/schedules/vehicledetects/<ID>/channels/<ID>/Scene/<ID>  
 Mixed target detection: /ISAPI/Event/schedules/mixedTargetDetection/<ID>/channels/<ID>/Scene/<ID>  
 Plate shading: /CGI/Event/schedules/plateShade/<ID>/channels/<ID>/Scene/<ID>  
 Helmet: /CGI/Event/schedules/helmet/<ID>/channels/<ID>/Scene/<ID>  
 Temperature & humidity alarm: /CGI/Event/schedules/temhum/channels/<ID>  
 People number alarm monitoring:  
 /CGI/Event/schedules/peopleNumAlarm/<ID>/channels/<ID>/Scene/<ID>

Single interrogation/unattended: /CGI/Event/schedules/Prctduty/<ID>/channels/<ID>/Scene/<ID>  
 Sleep: /CGI/Event/schedules/Sleep/<ID>/channels/<ID>/Scene/<ID>  
 New fight: /CGI/Event/schedules/NewFight/<ID>/channels/<ID>/Scene/<ID>  
 Get up: /CGI/Event/schedules/GetUp/<ID>/channels/<ID>/Scene/<ID>  
 Height limit: /CGI/Event/schedules/HeightLimit/<ID>/channels/<ID>/Scene/<ID>  
 New duty: /CGI/Event/schedules/NewDuty/<ID>/channels/<ID>/Scene/<ID>  
 Stranded: /CGI/Event/schedules/Stranded/<ID>/channels/<ID>/Scene/<ID>  
 Alone: /CGI/Event/schedules/Alone/<ID>/channels/<ID>/Scene/<ID>  
 Deliver goods: /CGI/Event/schedules/Delivergoods/<ID>/channels/<ID>/Scene/<ID>  
 Color traction: /CGI/Event/schedules/ColorTrack/<ID>/channels/<ID>/Scene/<ID>  
 Smoking: /CGI/Event/schedules/Smoke/<ID>/channels/<ID>/Scene/<ID>  
 Call: /CGI/Event/schedules/Telephone/<ID>/channels/<ID>/Scene/<ID>  
 Human high temperature alarm detection: /CGI/Event/schedules/BodyHighTemp/<ID>/channels/<ID>/Scene/<ID>  
 Fireworks detection: /CGI/Event/schedules/Fireworks/<ID>/channels/<ID>/Scene/<ID>  
 Temperature detection: /CGI/Event/schedules/TemDetect/<ID>/channels/<ID>/Scene/<ID>

/ISAPI/Event/schedules/inputs/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire parameters of deployment time	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<Schedule>	
<b>PUT</b>		
<b>Description</b>	Set parameters of deployment time	
<b>Query</b>	None	
<b>Inbound Data</b>	<Schedule>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is prepared for query and setting of deployment time parameters, helping client or IE query and set deployment time parameters via CGI protocol, including input port/week/time.		
<b>Explanations on key parameters:</b>		
<b>Port alarm has no channel No., screen No.; motion and shielding alarm, temperature &amp; humidity alarm has no screen No.; other alarms are provided with channel No. and screen No.</b>		
<id> means input port <dayOfWeek> means week <TimeRange> means time frame; format: 19:35:00 (hour; minute; second, second assignment 00)		

**ScheduleXML Block**

<pre> &lt;Schedule version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema"&gt; &lt;id&gt;&lt;!-- req, xs:string; id --&gt;&lt;/id&gt; &lt;eventType&gt;&lt;!-- opt, xs:string --&gt;&lt;/eventType&gt; &lt;inputIOPortID&gt;&lt;!-- ro, dep, xs:string; id --&gt;&lt;/inputIOPortID&gt; &lt;outputIOPortID&gt;&lt;!-- ro, dep, xs:string; id --&gt;&lt;/outputIOPortID&gt; &lt;videoInputChannelID&gt;&lt;!-- ro, dep, xs:string; id --&gt;&lt;/videoInputChannelID&gt; &lt;TimeBlockList&gt; &lt;TimeBlock&gt; &lt;dayOfWeek&gt;&lt;!-- rsp, xs:integer; --&gt;&lt;/dayOfWeek&gt; &lt;ItemEnable&gt;&lt;!-- rsp, xs:boolean; --&gt;&lt;/ItemEnable&gt; &lt;/TimeBlock&gt; &lt;/TimeBlockList&gt; &lt;TimeBlockList&gt;&lt;!-- req --&gt; &lt;TimeBlock&gt; </pre>
---

```

<dayOfWeek>
<!-- opt, xs:integer, ISO8601 weekday number, 1=Monday, ... -->
</dayOfWeek>
<TimeRange><!-- req -->
<beginTime><!-- req, xs:time, ISO8601 time --></beginTime>
<endTime><!-- req, xs:time, ISO8601 time --></endTime>
</TimeRange>
</TimeBlock>
</TimeBlockList>
<HolidayBlockList><!-- opt -->
<TimeBlock>
<TimeRange><!-- req -->
<beginTime><!-- req, xs:time, ISO8601 time --></beginTime>
<endTime><!-- req, xs:time, ISO8601 time --></endTime>
</TimeRange>
</TimeBlock>
</HolidayBlockList>
</Schedule>

```

**Test cases**

**GET /ISAPI/Event/schedules/inputs/1**

**Request XML:** none

**Response XML:** <Schedule>

**PUT/ISAPI/Event/schedules/inputs/1**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```

<?xml version="1.0" encoding="UTF-8"?>
<Schedule>
<id>1</id>
<TimeBlockList>
<TimeBlock>
<dayOfWeek>1</dayOfWeek>
<TimeRange>
<enabledTimeRange >true</enabledTimeRange >
<beginTime>00:00:00</beginTime>
<endTime>07:59:00</endTime>
</TimeRange>
</TimeBlock>
</TimeBlockList>
</Schedule>

```

**1.6.3 /CGI/SmartSetting/channels/<ID>**

/CGI/SmartSetting/channels/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire intelligent code, intelligent image and intelligent scene status	
<b>Query</b>	<b>None</b>	
<b>Inbound Data</b>	<b>None</b>	
<b>Success Return</b>	<SmartEnable>	
<b>PUT</b>		
<b>Description</b>	Set intelligent code, intelligent image and intelligent scene status	
<b>Query</b>	<b>None</b>	
<b>Inbound Data</b>	<SmartEnable>	
<b>Success Return</b>	<ResponseStatus>	

**Explanations on protocol:**

Acquire or set intelligent code and intelligent image status of channel

**Explanations on key parameters:**

<smartCode> Intelligent code status  
 <smartImage> Intelligent image status  
 <smartScene> Smart scene status

**SmartEnable Block**

```
<SmartEnable>
  <smartCode><!--req, xs:boolean--></smartCode>
  <smartImage><!--req, xs:boolean--></smartImage>
  <smartScene><!--req, xs:boolean--></smartScene>
</SmartEnable>
```

**Test cases**

**GET /CGI/SmartSetting/channels/1**

**Request XML: None**

**Response XML: <SmartEnable>**

**PUT /CGI/SmartSetting/channels/1**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<?xml version="1.0" encoding="UTF-8"?>
<SmartEnable>
  <smartCode>true</smartCode>
  <smartImage>true</smartImage>
  <smartScene>true</smartScene>
</SmartEnable>
```

**1.7/ISAPI/Image****1.7.1/ISAPI/Image/channels/<ID>/ircutFilter (not developed)**

/ISAPI/Image/channels/<ID>/ircutFilter		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire parameters of day and night mode	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<IrcutFilter>	
<b>PUT</b>		
<b>Description</b>	Set parameters of day and night mode	
<b>Query</b>	None	
<b>Inbound Data</b>	<IrcutFilter>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is prepared for query and setting of day and night mode parameters, helping client or IE query and set day and night mode parameters via CGI protocol.		

**IrcutFilterXML Block**

```
<IrcutFilter version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <IrcutFilterType>
    <!-- opt, xs:string, " auto, day, night,schedule,eventTrigger"-->
  </IrcutFilterType>
  <dayToNightFilterLevel>
    <!--opt, xs:string, "low, normal, high" -->
  </dayToNightFilterLevel>
  <dayToNightFilterTime><!--opt xs:integer --></dayToNightFilterTime>
  <nightToDayFilterLevel>
```

```

<!--opt,xs:string, "low, normal, high" -->
</nightToDayFilterLevel>
<nightToDayFilterTime><!--opt xs:integer --></nightToDayFilterTime>
<Schedule><!--dep-->
<scheduleType><!--req,xs:string,"day,night"></scheduleType>
<TimeRange><!-- req -->
<beginTime><!-- req, xs:time, ISO8601 time --></beginTime>
<endTime><!-- req, xs:time, ISO8601 time --></endTime>
</TimeRange>
</Schedule>
<EventTrigger><!--dep-->
<eventType><!--req,xs:string,"IO,VMD"></eventType>
<IrcutFilterAction><!--req,xs:string,"day,night"></ IrcutFilterAction >
</EventTrigger>
</IrcutFilter>

```

### 1.7.2/CGI/Image/channels/<ID>/irLight

/CGI/Image/channels/<ID>/irLight		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire color-to-black parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<IrLight>	
<b>PUT</b>		
<b>Description</b>	Set color-to-black parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<IrLight>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is prepared for query and setting of color-to-black parameters, helping client or IE query and set color-to-black parameters via CGI protocol.		
<b>Explanations on key parameters:</b>		
<mode> means color-to-black type, inside: Internal synchronization, outside: External synchronization, gray: Black and white, color: Color, schedule: Timing, self-adaptive: Self-adaptive, fillLight: Fill light mode <brightnessLevel> means daytime brightness, range: 0-100 <nightBrightnessLevel> means nighttime brightness, range: 0-100 (Daytime brightness should be higher than nighttime brightness) <grayToColorDelay> means black-to-color delay, range: 0-100 <colorToGrayDelay> means color-to-black delay, range: 0-100 <infraredLampMode> Infrared lamp mode: 1-Manual, 2-Auto, 3- Near-infrared, 4-This value should be sent under auto near-infrared mode, it is invalid value, 5- manual mid-infrared, 6-manual laser, the laser brightness and laser angle are displayed at the same time when the laser is reported <infraredLampPower> means infrared lamp brightness, range: 0-100 <sunRiseTime> means sunrise time: format: 10:31:00 (hour; minute; second, second assignment 00) <sunSetTime> means sunset time; format: 10:31:00 (hour; minute; second, second assignment 00) <sensitivityLevel> means sensibility: 1: Low; 2: Intermediate; 3: High <FarinfraredLampPower > means far infrared lamp brightness, range: 0-100 <midInfraRedLampPower> Mid-infrared lamp brightness 0-100 // Only effective when infraredLampMode reports type 5		

<laserBrightness> Laser brightness 0-100 // Only effective when infraredLampMode reports type 6

<laserAngle> Laser angle 0-100 // Only effective when infraredLampMode reports type 6

### IrLightXML Block

```
<IrLight version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<mode opt=" auto,manual,inside,outside,gray,color,timer,schedule,self-adaptive,day,night,fillLight">
<!--req, xs:string, "auto,manual,inside,outside,gray,color,timer,schedule,self-adaptive,day,night,fillLight" -->
</mode>
<brightnessLevel><!--dep, xs:integer--></brightnessLevel>
<nightBrightnessLevel><!--dep, xs:integer--></nightBrightnessLevel>
<grayToColorDelay><!--dep, xs:integer--></grayToColorDelay>
<colorToGrayDelay><!--dep, xs:integer--></colorToGrayDelay>
<infraredLampMode "opt = 1,2 ,3,4,5,6"><!--opt, xs:integer--></infraredLampMode>
<infraredLampPower><!--dep, xs:integer--></infraredLampPower>
<sunRiseTime><!--dep, xs:string--><!--dep, xs:string --></sunRiseTime>
<sunSetTime><!--dep, xs:string --></sunSetTime>
<sensitivityLevel><!--dep, xs:integer--></sensitivityLevel>
<brightnessLimit><!--dep,opt, xs:integer,--></brightnessLimit>
<triggerMode><!--dep,opt, xs:string, "camera,photosensitive" --></triggerMode>
<FarinfraredLampPower><!--dep, xs:integer--></FarinfraredLampPower>
<midInfraRedLampPower><!--dep, xs:integer--></ midInfraRedLampPower >
<laserBrightness><!--dep, xs:integer--></ laserBrightness >
<laserAngle><!--dep, xs:integer--></ laserAngle >
</IrLight>
```

### Test cases

**GET /CGI/Image/channels/1/irLight**

**Request XML:** none

**Response XML:** <IrcutFilter>

**PUT /CGI/Image/channels/1/irLight**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<IrLight>
<brightnessLevel>38</brightnessLevel>
<nightBrightnessLevel>5</nightBrightnessLevel>
<grayToColorDelay>10</grayToColorDelay>
<colorToGrayDelay>10</colorToGrayDelay>
<mode>self-adaptive</mode>
<sunRiseTime>06:00:00</sunRiseTime>
<sunSetTime>18:00:00</sunSetTime>
<infraredLampMode>1</infraredLampMode>
<infraredLampPower>100</infraredLampPower>
<sensitivityLevel>1</sensitivityLevel>
<FarinfraredLampPower>80</FarinfraredLampPower>
<midInfraRedLampPower>30</ midInfraRedLampPower >
<laserBrightness>30</ laserBrightness >
<laserAngle>30</ laserAngle >
</IrLight>
```

### 1.7.3/ISAPI/Image/channels/<ID>/WhiteLight

<b>GET</b>	
<b>Description</b>	Acquire white light control parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	< WhiteLight >
<b>PUT</b>	
<b>Description</b>	Set white light control parameters
<b>Query</b>	None
<b>Inbound Data</b>	< WhiteLight >
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This protocol is prepared for query and setting of white light control parameters in color-to-black parameter page, helping client or IE query and set white light control parameters via CGI protocol.</p> <p><b>Explanations on key parameters:</b>  &lt;contrltype&gt; means white light control type: 0-Auto; 1-Manual opening; 2-Manual closing; 3-Timing  &lt;sunRiseTime&gt; means sunrise time, i.e. white light turning off time; format: 10:31:00 (hour; minute; second, second assignment 00) Control type: Valid under timing mode  &lt;sunSetTime&gt; means sunset time, i.e. white light turning on time; format: 10:31:00 (hour; minute; second, second assignment 00) Control type: Valid under timing mode  &lt;infraredLampPower&gt; means white light brightness, range: 0-100. Control type: Valid under manual control.</p>	

**WhiteLight XML Block**

```
<WhiteLight version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
< contrltype ><!--req, xs:integer--></ contrltype >
<sunRiseTime><!--req, xs:string--><sunRiseTime>
<sunSetTime><!--req, xs:string --><sunSetTime>
<infraredLampPower><!--req, xs:integer--></infraredLampPower>
</WhiteLight>
```

**Test cases**

**GET /ISAPI/Image/channels/1/ WhiteLight**

**Request XML: none**

**Response XML: < WightLight >**

**PUT/ISAPI/Image/channels/1/ WhiteLight**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<?xml version="1.0" encoding="UTF-8"?>
<WhiteLight>
<contrltype>0</contrltype>
<sunRiseTime>07:00:00</sunRiseTime>
<sunSetTime>17:00:00</sunSetTime>
<infraredLampPower>100</infraredLampPower>
</ WhiteLight >
```

**1.8/ISAPI/PTZCtrl**

**1.8.1/ISAPI/PTZCtrl/channels/<ID>**

<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire set parameters of PTZ protocol
<b>Query</b>	None
<b>Inbound Data</b>	None

<b>Success Return</b>	<PTZChannel>
<b>PUT</b>	
<b>Description</b>	Set parameters of PTZ protocol
<b>Query</b>	None
<b>Inbound Data</b>	<PTZChannel>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This protocol is prepared for query and setting of PTZ protocol; acquisition by channel is supported.  Note: The field of PTZR485Para and WorkMode is abandoned and known as opt item; it can be sent by client or not if it is realized in the old device. 1.8.2 protocol is enabled for setting of serial port parameters.</p>	

**PTZChannel XML Block**

```
<PTZChannel version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<portID><!-- req, xs:integer --></portID> // Serial port 1: Com1 2: Com2
<id><!-- req, xs:integer --></id>
<WorkMode><!-- opt, xs:integer --></WorkMode> // Working mode 1: Protocol mode 2:
Transparent channel
<enabled><!--ro,req, xs:boolean --></enabled>
<videoInputID><!-- req, xs:integer --></videoInputID>
<panMaxSpeed><!--ro,opt, xs:integer, degrees/sec --></panMaxSpeed>
<tiltMaxSpeed><!--ro,opt, xs:integer, degrees/sec --></tiltMaxSpeed>
<presetSpeed><!--opt, xs:integer 1..8 --></presetSpeed>
<autoPatrolSpeed><!-- opt, xs:integer, 0..100 --></autoPatrolSpeed>
<keyBoardControlSpeed><!-- opt, xs:integer, 0..100 --></keyBoardControlSpeed>
<controlProtocol><!-- opt, xs:string, "DOME_PELCO_P, DOME_PELCO_,
DOME_PLUS"--></controlProtocol>// ptz protocol value is consistent with IE interface
<controlAddress>
<enabled><!-- req, xs:boolean --></enabled>
<Address><!--opt, xs:string 1-255 --></Address> // Address value is consistent with IE
interface
</controlAddress>
<defaultPresetID><!-- opt, xs:string;id --></defaultPresetID>
<PTZR485Para>
<baudRate><!--opt, xs:integer--></baudRate> // Baud rate value is consistent with IE interface,
range: 1200-115200
<dataBits><!--opt, xs:integer --></dataBits> // Data bit value is consistent with IE interface;
range: 7-8
<parityType><!--opt, xs:string, "none,even,odd" --></parityType> //Check bit none: No check
even: Even parity check odd: Odd parity check
<stopBits><!--opt, xs:string, --></stopBits> // Stop bit is consistent with IE interface, range 1-2
<flowCtrl><!--opt, xs:string, "none, software, hardware" --></flowCtrl>
</PTZR485Para>
</PTZChannel>
```

**Test cases**

**GET /ISAPI/PTZCtrl/channels/1**

**Request XML: none**

**Response XML: <PTZChannel>**

**PUT /ISAPI/PTZCtrl/channels/1**

**Request XML: <PTZChannel>**

**Response XML: <ResponseStatus>**

```
<PTZChannel version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<portID>1</portID> // Serial port No.: 1: Com1 2: Com2
<id>1</id>
<WorkMode>1</WorkMode> //Working mode 1: Protocol mode 2: Transparent channel
<enabled>ture</enabled>
<videoInputID>0</videoInputID>
```



```

<panMaxSpeed>0</panMaxSpeed>
<tiltMaxSpeed>0</tiltMaxSpeed>
<presetSpeed>0</presetSpeed>
<autoPatrolSpeed>0</autoPatrolSpeed>
<keyBoardControlSpeed>0</keyBoardControlSpeed>
<controlProtocol>DOME_PLUS</controlProtocol> // ptz protocol value is consistent with IE
interface
<controlAddress>
<enabled>ture</enabled>
<Address>256</Address> // Address value is consistent with IE interface
</controlAddress>
<defaultPresetID>0</defaultPresetID>
<PTZRs485Para>
<baudRate>115200</baudRate> // Baud rate value is consistent with IE interface, range:
1200-115200
<dataBits>8</dataBits> // Data bit value is consistent with IE interface; range: 7-8
<parityType>even</parityType> // Check digit none: No check even: Even parity check odd:
Odd parity check
<stopBits>1</stopBits> // Stop bit is consistent with IE interface, range 1-2
<flowCtrl>none</flowCtrl>
</PTZRs485Para>
</PTZChannel>

```

### 1.8.2/ISAPI/PTZCtrl/ComPara/ComID/<ID>

/ISAPI/PTZCtrl/ComPara/ComID/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire set parameters of PTZ protocol	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<ComPara>	
<b>PUT</b>		
<b>Description</b>	Set parameters of PTZ protocol	
<b>Query</b>	None	
<b>Inbound Data</b>	<ComPara>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is prepared for query and setting of PTZ protocol; acquisition by channel is supported.		
Note: The field of PTZRs485Para and WorkMode is abandoned and known as opt item; it can be sent by client or not if it is realized in the old device. It is enabled		
Explanations on key parameters:		
<WorkMode> Working mode 1: Protocol mode 2: Transparent channel 3: Peripheral mode		
<baudRate> Baud rate value is consistent with IE interface, range: 1200-115200		
<dataBits> Data bit value is consistent with IE interface; range: 7-8		
<parityType> Check digit none: No check even: Even parity check odd: Odd parity check		
<stopBits> Stop bit is consistent with IE interface, range 1-2		

### PTZChannel XML Block

```

<ComPara version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<id><!-- req, xs:integer --></id>
<portID><!-- req, xs:integer --></portID> //Serial port No. 1: Com1 2: Com2, the rest can
be analogized in the same way
<PTZRs485Para>
<WorkMode><!-- req, xs:integer --></ WorkMode> // Working mode 1: Protocol mode 2:
Transparent channel 3: Peripheral mode
<baudRate><!-- req, xs:integer --></baudRate> // Baud rate value is consistent with IE

```

```

interface, range: 1200-115200
<dataBits><!-- req, xs:integer --></dataBits> // Data bit value is consistent with IE interface;
range: 7-8
<parityType><!-- req, xs:string, "none,even,odd" --></parityType> // Check digit none: No
check even: Even parity check odd: Odd parity check
<stopBits><!-- req, xs:string, --></stopBits> // Stop bit is consistent with IE interface, range 1-2
<flowCtrl><!-- req, xs:string, "none, software, hardware" --></flowCtrl>
</PTZRs485Para>
</ComPara>

```

**Test cases**

**GET /ISAPI/PTZCtrl/ComPara/ComID/1**

**Request XML:** none

**Response XML:** <ComPara>

**PUT /ISAPI/PTZCtrl/ComPara/ComID/1**

**Request XML:** <ComPara>

**Response XML:** <ResponseStatus>

```

<ComPara version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<PTZRs485Para>
<WorkMode>1</WorkMode>
<baudRate>115200</baudRate>
<dataBits>8</dataBits>
<parityType>even</parityType>
<stopBits>1</stopBits>
<flowCtrl>none</flowCtrl>
</PTZRs485Para>
</ComPara>

```

**1.8.3/ISAPI/PTZCtrl/channels/<ID>/patrols**

<b>/ISAPI/PTZCtrl/channels/&lt;ID&gt;/patrols</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Acquire PTZ patrol path configuration	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<PTZPatrolList>	
<b>Explanations on protocol:</b> This protocol is prepared for acquiring PTZ patrol path configuration; acquisition by channel is supported.		
<b>Explanations on key parameters:</b> None		

**PTZPatrolList XML Block**

```

< PTZPatrolList version="2.0" >
<PTZPatrol version="2.0">
  <id>!-- req, xs:string;id --></id>
  <patrolName>!-- req, xs:string --></patrolName>
  <PatrolSequenceList></PatrolSequenceList>
</PTZPatrol>
</PTZPatrolList>

```

**Test cases**

**GET /ISAPI/PTZCtrl/channels/1/patrols**

**Request XML:** none

**Response XML:** <PTZPatrolList >

```

<PTZPatrolList version="2.0" >
<PTZPatrol version="2.0" >
  <id>1</id>
  <patrolName>Patrol401</patrolName>
  <PatrolSequenceList></PatrolSequenceList>
</PTZPatrol>
<PTZPatrol version="2.0">
  <id>2</id>
  <patrolName>Patrol402</patrolName>
  <PatrolSequenceList></PatrolSequenceList>
</PTZPatrol>
</PTZPatrolList>

```

#### 1.8.4/ISAPI/PTZCtrl/channels/<ID>/patrols/<ID>/start

/ISAPI/PTZCtrl/channels/<ID>/patrols/< ID>/start		General Resource v2.0
<b>PUT</b>		
<b>Description</b>	Enable PTZ patrol path	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b> This protocol is prepared for enabling the designated PTZ patrol path configuration; acquisition by channel is supported. <b>Explanations on key parameters:</b> None		

#### Test cases

**PUT /ISAPI/PTZCtrl/channels/1/patrols/1/start**

**Request XML:** none

**Response XML:** <ResponseStatus>

#### 1.8.5/ISAPI/PTZCtrl/channels/<ID>/patrols/<ID>/stop

/ISAPI/PTZCtrl/channels/<ID>/patrols/< ID>/stop		General Resource v2.0
<b>PUT</b>		
<b>Description</b>	Disable PTZ patrol path	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b> This protocol is prepared for disabling the designated PTZ patrol path configuration; acquisition by channel is supported. <b>Explanations on key parameters:</b> None		

#### Test cases

**PUT /ISAPI/PTZCtrl/channels/1/patrols/1/stop**

**Request XML:** none

**Response XML:** <ResponseStatus>

#### 1.8.6/ISAPI/PTZCtrl/channels/<ID>/patterns/<ID>/start

/ISAPI/PTZCtrl/channels/<ID>/patterns/<ID>/start	General Resource v2.0
--	-----------------------

<b>PUT</b>	
Description	Start PTZ path
Query	None
InboundData	None
SuccessReturn	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for starting the designated PTZ patrol path configuration; acquisition by channel is supported.	

**Test cases**

**PUT /ISAPI/PTZCtrl/channels/1/patterns/1/start**

**Request XML:** none

**Response XML:** <ResponseStatus>

**1.8.7/ISAPI/PTZCtrl/channels/<ID>/patterns/<ID>/stop**

<b>/ISAPI/PTZCtrl/channels/&lt;ID&gt;/patterns/&lt;ID&gt;/stop</b>		<b>General Resource v2.0</b>
<b>PUT</b>		
Description	Stop PTZ path	
Query	None	
None	None	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b> This protocol is prepared for stopping the designated PTZ patrol path configuration; acquisition by channel is supported.		

**Test cases**

**PUT /ISAPI/PTZCtrl/channels/1/patterns/1/stop**

**Request XML:** none

**Response XML:** <ResponseStatus>

**1.8.8/ISAPI/PTZCtrl/channels/<ID>/patterns/<ID>**

<b>/ISAPI/PTZCtrl/channels/&lt;ID&gt;/patterns/&lt;ID&gt;</b>	<b>General Resource v2.0</b>
<b>DELETE</b>	
Description	Delete mode path
Query	None
Inbound Data	None
Success Return	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for deleting the mode path through CGI and shared memory protocol.	
<b>Explanations on key parameters:</b> None	

**patrols XML Block**

None

**Test cases**

**DELETE /ISAPI/PTZCtrl/channels/<ID>/patterns/<ID>**

**Request XML:** none

**Response XML:** <ResponseStatus>

**1.8.9/ISAPI/PTZCtrl/channels/<ID>/auxcontrols/<ID>**

<b>/ISAPI/PTZCtrl/channels/&lt;ID&gt;/auxcontrols/&lt;ID&gt;</b>	<b>General Resource v2.0</b>
<b>PUT</b>	

<b>Description</b>	Control over windshield wiper
<b>Query</b>	None
<b>Inbound Data</b>	< PTZAux >
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for controlling windshield wiper. <b>Explanations on key parameters:</b> POWER: Power supply, WIPER: Windshield wiper	

#### PTZAux XML Block

```
<PTZAux version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<id><!-- req, xs:string; id --></id>
<type><!--req, ro, xs:string, "LIGHT, WIPER,POWER, DEFOG,
LIGHTSUPPRESSION,WIDEDYNAMIC" --></type>// LIGHT: Light POWER: Power supply,
WIPER: Windshield wiper
(Not support DEFOG: Defog, LIGHTSUPPRESSION: Light suppression, WIDEDYNAMIC:
```

Test cases

PUT /ISAPI/PTZCtrl/channels/<ID>/auxcontrols/<ID>

Response XML: <ResponseStatus>

Request XML: as below

```
<PTZAux version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<id>1</id>
<type>WIPER</type>
<status>on</status>
</PTZAux>
```

#### 1.8.10/ISAPI/ITS/ComPara/Coms/channels/<ID>

<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire parameters of peripheral serial port parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ComParaList>
<b>PUT</b>	
<b>Description</b>	Set parameters of peripheral serial port parameters
<b>Query</b>	None
<b>Inbound Data</b>	<ComParaList>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for setting and acquiring all serial port protocols. <b>explanations on important parameters:</b> <ComPara> <portID> Serial port No. <deviceNo> Peripheral agreement name 0, None 1, T704/T708 2,T324/328V20/324ES 3,CSR_IK16 4,CSR68ND 5,T550L/T550G 6, CSR_AD 7,LED-EB01 8, SMARTCOM 10, LVD_600X 13, LED-GK-JCY01 14, LED-GK-ZX01 15 LED-GK-EB01 16, STJ1 17, weighing instrument SH 18, LED-ZX-B1045-Z-KT <comType> // Serial port type 0, 485; 1, 232; 2, 422 </ComPara>	

ComIDs XML Block

```

<ComParaList version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<ComPara>
<portID><!-- req, xs:integer --></portID>
<deviceNo><!-- opt, xs:integer --></deviceNo>
<comType><!-- opt, xs:integer --></comType>
</ComPara>
</ComParaList>

```

Test cases  
GET /ISAPI/ITS/ComPara/Coms/channels/1  
Request XML: none  
Response XML: <ComParaList>  
PUT /ISAPI/ITS/ComPara/Coms/channels/1  
Response XML: <ResponseStatus>  
Request XML: as below

```

<ComParaList version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<ComPara>
<portID>1</portID>
<deviceNo>16</deviceNo>
<comType>0</comType>
</ComPara>
</ComParaList>

```

### 1.8.11 /ISAPI/PTZCtrl/channels/<ID>/clearcfg

/ISAPI/PTZCtrl/channels/<ID>/clearcfg		General Resource	v2.0
<b>PUT</b>			
<b>Description</b>	Clear setting		
<b>Query</b>	None		
<b>Inbound Data</b>	<ClearCfgList>		
<b>Success Return</b>	<ResponseStatus>		
<b>Explanations on protocol:</b>			
This protocol is prepared for clearing setting. param "No., No., No...." No.: 0-Preset bit, 1-Patrol path, 2-Pattern scanning, 3-Limit setting, 4-Guard, 5-Mode path, 6-Regional indication			

#### ClearCfgList XML Block

```

<ClearCfgListversion="2.0">
  <param><!-- req, xs:string --></param>
</ClearCfgList>

```

Test cases  
PUT /ISAPI/PTZCtrl/channels/1/cancelcfg  
Request XML: <ClearCfgList>  
Response XML: <ResponseStatus>

```

<ClearCfgList version="2.0">
  <param>2</param>
</ClearCfgList>

```

### 1.8.12 /ISAPI/PTZCtrl/channels/<ID>/clearcfg/capabilities

/ISAPI/PTZCtrl/channels/<ID>/clearcfg/capabilities		General Resource	v2.0
<b>GET</b>			
<b>Description</b>	Acquire configuration items supporting clearing		
<b>Query</b>	None		
<b>Inbound Data</b>	None		
<b>Success Return</b>	<ClearCfgList>		

**Explanations on protocol:**

This protocol is prepared for clearing reporting of ability level.

param "No., No., No...."

No.: 0-Preset bit, 1-Patrol path, 2-Pattern scanning, 3-Limit setting, 4-Guard, 5-Mode path, 6-Regional indication

**ClearCfgList XML Block**

```
<ClearCfgListversion="2.0">
  <param><!-- req, xs:string --></param>
</ClearCfgList>
```

**Test cases**

**GET /ISAPI/PTZCtrl/channels/1/clearcfg/capabilities**

**Request XML: None**

**Response XML: <ClearCfgList>**

```
<ClearCfgListversion="2.0">
  <param>2</param>
</ClearCfgList>
```

**1.8.13 /ISAPI/PTZCtrl/channels/<ID>/asensorcorrect**

<b>/ISAPI/PTZCtrl/channels/&lt;ID&gt;/asensorcorrect</b>		<b>General Resource v2.0</b>
<b>PUT</b>		
<b>Description</b>	Set calibration of acceleration sensor	
<b>Query</b>	None	
<b>Inbound Data</b>	<AsensorCorrect>	
<b>Success Return</b>	<ResponseStatus>	

**Explanations on protocol:**

This protocol is prepared for realizing calibration of acceleration sensor.

**Explanations on key parameters:**

<sceneId> Screen No. 0-31

<rulesNo> Rule No. 0-15

**AsensorCorrect XML Block**

```
< AsensorCorrectversion="2.0">
  <sceneId><!-- req, xs:integer --></sceneId>
  <rulesNo><!-- req, xs:integer --></rulesNo>
</AsensorCorrect>
```

**Test cases**

**PUT /ISAPI/PTZCtrl/channels/1/asensorcorrect**

**Request XML: <AsensorCorrect>**

**Response XML: <ResponseStatus>**

```
<AsensorCorrectversion="2.0">
  <sceneId>1</sceneId>
  <rulesNo>1</rulesNo>
</AsensorCorrect>
```

**1.8.14 /ISAPI/PTZCtrl/channels/<ID>/peripherallist**

<b>/ISAPI/PTZCtrl/channels/&lt;ID&gt;/peripherallist</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Acquire list of peripheral type	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	< PeripheralList>	

**Explanations on protocol:**

This protocol is prepared for acquiring list of peripheral types.

**Explanations on key parameters:**

Type "No., No., No...."

No.: 1: Temperature & humidity 2: Differential pressure 3: Laser rain gauge 4: Radar level gauge 5: Battery sensor

6: Current meter 7: LED 8: Beidou module 9: GPS 10: 485 fill light

**AsensorCorrect XML Block**

```
<PeripheralListversion="2.0">
  <type><!-- req, xs:string --></type>
</PeripheralList>
```

**Test cases**

**GET** /ISAPI/PTZCtrl/channels/1/peripheralList

**Request XML:** none

**Response XML:** <PeripheralList>

```
< PeripheralListversion="2.0">
  <type>1,3,5,7</type>
</PeripheralList>
```

**1.8.15 /ISAPI/PTZCtrl/peripheral/channels/<ID>/com/<ID>/type/<ID>**

<b>/ISAPI/PTZCtrl/peripheral/channels/&lt;ID&gt;/com/&lt;ID&gt;/type/&lt;ID&gt; General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire parameters of peripheral types
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<Peripheral>
<b>PUT</b>	
<b>Description</b>	Set parameters of peripheral types
<b>Query</b>	None
<b>Inbound Data</b>	<Peripheral>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol is prepared for realizing parameters of peripheral types.	
type 0-Reserved, 1- Temperature & humidity instrument 2: Differential pressure gauge 3: Laser rain gauge 4: Radar level gauge 5: Battery sensor	
6: Current meter 7: LED 8: Beidou module 9: GPS 10: 485 fill light	
enable: Enable	
Address (0~255)	

**Peripheral XML Block**

```
< Peripheralversion="2.0">
  <enable><!-- req, xs:string--></enable>
  < addressList>
    <address><!-- req, xs:integer--></address>
  </addressList>
</Peripheral>
```

**Test cases**

**GET** /ISAPI/PTZCtrl/peripheral/channels/1/com/1/type/1

**Request XML:** none

**Response XML:** <Peripheral>

**PUT** /ISAPI/PTZCtrl/peripheral/channels/1/com/1/type/1

**Request XML:** <Peripheral>

**Response XML:** <ResponseStatus>



```

<Peripheralversion="2.0">
  <enable>1</enable>
  <addressList>
    <address>1</address>
  </addressList>
</Peripheral>

```

### 1.8.16 /ISAPI/PTZCtrl/DomeTitle/channels/<ID>/type/<ID>/number/<id>

/ISAPI/PTZCtrl/DomeTitle/channels/<ID>/type/<ID>/number/<id> Resource v2.0		General
<b>GET</b>		
<b>Description</b>	Acquire title name of dome camera	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<DomeTitle>	
<b>PUT</b>		
<b>Description</b>	Set title name of dome camera	
<b>Query</b>	None	
<b>Inbound Data</b>	< DomeTitle >	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is prepared for realizing acquisition of title name of ballhead camera type 0-Reserved 1-Preset bit 2-Scanning 3-Patrol 4-Mode path 5-Regional indication number : Type number name: 32 bits at most		

#### DomeTitle XML Block

```

<DomeTitle version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <type><!-- req, xs:integer --></ type >
  <number size="maxnum"><!-- opt, xs:integer --></number>
  <name><!-- req, xs:string --></name>
</DomeTitle>

```

#### Test cases

**GET /ISAPI/PTZCtrl/DomeTitle/channels/1/type/1/number/1**

**Request XML: none**

**Response XML: <DomeTitle>**

**PUT /ISAPI/PTZCtrl/DomeTitle/channels/1/type/1/number/1**

**Request XML: <DomeTitle>**

**Response XML: <ResponseStatus>**

```

<DomeTitle version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <type>1</type>
  <number opt="32">1</number>
  <name>hello1</name>
</DomeTitle>

```

### 1.8.17 /ISAPI/PTZCtrl/DomePara/channels/<ID>

/ISAPI/PTZCtrl/DomePara/channels/<ID>		General Resource v2.0
<b>POST</b>		
<b>Description</b>	Acquire menu parameters of dome camera	
<b>Query</b>	<DomeParaTypeList>	

<b>Inbound Data</b>	None
<b>Success Return</b>	<DomeParaList>
<b>PUT</b>	
<b>Description</b>	Set menu parameters of dome camera
<b>Query</b>	None
<b>Inbound Data</b>	<DomeParaList>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This protocol is prepared for setting menu parameters of dome camera.  The detailed parameters are shown in table below  domeParaQuery param: type is 20--Preset bit param: Preset bit No.  type is 21--Scanning/22--Mode path/23-- Current status of mode path/24-- param means preset bit No. in regional indication</p>	

type	param1	Param2	Param3	Param4
1-- Display time of preset bit title	0-Disabled 0x7FFFFFFF-Continuous The rest is second; unit: second			
2-- Display time of auto function title	0-Disabled 0x7FFFFFFF-Continuous The rest is second; unit: second			
3-- Display time of regional title	0-Disabled 0x7FFFFFFF-Continuous The rest is second; unit: second			
4-- Display time of coordinate direction	0-Disabled 0x7FFFFFFF-Continuous The rest is second; unit: second			
5-- Display time of traction point title	0-Disabled 0x7FFFFFFF-Continuous The rest is second; unit: second			
6-- Title background	0-Disabled 1-Enabled			
7-- Auto stop time	Unit: Second			
8-- Menu closing time	Unit: Minute			
9-- Vertical angle adjustment	Software value is reduced by 1000-11 ° (-11 + 1000 = 989), network sends 989	Max. vertical angle (Max): Software value is reduced by 1000-11 ° (-11 + 1000 = 989), network sends 989		
10-- Control speed level	0-Low speed 1-Intermediate speed 2-High speed			
11-- Preset bit speed level	0-Low speed 1-Intermediate speed 2-High speed			
12-- Temperature	0-Disabled 1-Air cooling			

control mode	2-Auto 3-Defog 4-Heating			
13--485 Address setting	0~255			
14-- Zero point setting	0-Setting			
15-- North arrow setting	0-Set 1-Delete	0-Manual 1-Auto	0-Reserved 1-Pointed to north	
16-- Infrared control mode	0-Auto 1-Camera following 2-Timing enabling 3-Manual enabling 4-Manual disabling	When iPara1 is timing enabling: Start time is HH:MM	When iPara1 is timing enabling: End time is HH:MM	
17-- Sensitization threshold	0-Ultralow 1-Low 2-Standard 3-Intermediate 4-High			
18-- Delay time	0-Low 1-Intermediate 2-High			
19-- Zoom matching	0-Disabled 1-Enabled	When iPara1 is disabled: "Brightness of high beam group 1; brightness of high beam group 2 (0~10)"	When iPara1 is disabled: "Brightness of low beam group 1; brightness of low beam group 2 (0~10)"	
20-- Preset bit	Focus mode (0-Auto, 1-Fixed)	Preset bit No. (0~499)	Operation: 0-Setting, 1-Delete, 2-Call	
21--Scanning	Group No. (0~7)	Mode: 0-Left/right scanning, 1-Auto scan, 2-Frame scan, 3-Random scan, 4-Vertical scan, 5-Panoramic scan, 6-Set helical scan speed, 7-Set helical scan step	Speed (1~30) When mode is 6 (set helical scanning speed), it means speed; when mode is 7 (set vertical step of helical scanning), it means disposal step (1~15)	Operation: 0-Left boundary, 1-Right boundary, 2-Call
22--Mode path	Group No. (0~7)	Operation: 0-Start, 1-End, 2-Delete, 3-Call		
23-- Current status of mode path	Group No. (0~7)	Memory use (percentage): 0~100	Remaining time (countdown): 0~180 (unit: Second)	

24--Regional indication	Group No. (0~7)	Operation: 0-Left boundary, 1-Right boundary, 2-Delete		
25-- Zoom speed	0-Low 1-Intermediate 2-High (Hikvision and control speed are configured simultaneously)			
26-- Digital zoom	0-Disabled 1-Enabled			
27-- Preset bit freezing	0-Disabled 1-Enabled			
28-- Laser brightness threshold	0-Min. value 1- Max. value			
29-- Laser coaxial setting	Speed (0~10)	Direction: 0-Stop, 1-Left, 2-Upper left, 3-Top, 4-Upper right, 5-Right, 5-Lower right, 7-Low, 8-Lower left		
30-- Set enabling time of visible light	0-Manual enabling 1-Manual disabling 2-Time frame 3-Timing	When iPARA1=2: Start time HH:MM When iPARA1=3, it means enabling time	When iPARA1=2: End time HH:MM	
31-- Set key limit	0-Set limit 1 - Clear limit		0- Unlimited 1- Limited	
32-- Power-off memory mode	0-Disabled, 30, 60, 300, 600 The rest is detailed value: (unit: second)			
33-- PTZ first	0-Network 1-RS485 2-Close 485	Delay: 0--200 second	Delay: 0--200 second	
34-- Enable key limit	0 -Disabled 1- Enable limit			
35- Light control mode	0-Infrared, 1-Full spectrum, 2-White light, 3-Laser			
36 White light control mode	0-Auto 1-Manual enabling 2-Manual disabling 3-Timing enabling	If iPara1 is timing enabling: Start time HH:MM	If iPara1 is timing enabling: End time HH:MM	
37- Laser control mode	0-Auto 1-Camera following 2-Timing enabling 3-Manual enabling 4-Manual disabling	If iPara1 is timing enabling: Start time HH:MM	If iPara1 is timing enabling: End time HH:MM	

38- Timing enabling/disabling of infrared light	0-Disabled 1-Enabled	Infrared light enabling time; unit: Second (30min as default) Range: 60s-24h	Infrared light disabling time; unit: Second (30min as default) Range: 60s-24h	
41-Automatic wiper setting	0-reserved, 1-open, 2-closed			
42-similar perspective	0-reserve, 1-set, 2-call			

**DomeParaQueryList XML Block**

```
<DomeParaQueryList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<domeParaQuery>
<type><!-- req, xs: integer --></type>
<param><!-- dep, xs: integer --></param>
</domeParaQuery>
</DomeParaQueryList>
```

**DomeParaList XML Block**

```
<DomeParaList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<DomePara>
<type><!-- req, xs:integer --></type >
<param1><!-- req, xs:integer --></param1>
<param2><!-- req, xs: integer --></param2>
<param3><!-- req, xs: integer --></param3>
<param4><!-- req, xs: integer --></param4>
</DomePara>
</DomeParaList>
```

**Test cases**

**POST** /ISAPI/PTZCtrl/DomePara/channels/1

**Request XML:** <DomeParaTypeList>

**Response XML:** < DomeParaList>

**PUT** /ISAPI/PTZCtrl/DomePara/channels/1

**Request XML:** <DomeParaList>

**Response XML:** <ResponseStatus>

```
<DomeParaQueryList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<domeParaQuery>
<type>1</type>
<param>1</param>
</domeParaQuery>
</DomeParaQueryList>

<DomeParaList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<DomePara>
<type>1</type>
<param1>1</param1>
<param2>0</param2>
<param3>0</param3>
<param4>0</param4>
</DomePara>
</DomeParaList>
```

### 1.8.18 /ISAPI/PTZCtrl/DomePTZ/channels/<ID>

/ISAPI/PTZCtrl/DomePTZ/channels/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire PTZ parameters of dome camera	
<b>Query</b>	<DomePTZTypeList>	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<DomePTZList>	
<b>PUT</b>		
<b>Description</b>	Set PTZ parameters of dome camera	
<b>Query</b>	None	
<b>Inbound Data</b>	<DomePTZList>	
<b>Success Return</b>	<ResponseStatus>	
<p><b>Explanations on protocol:</b>            This protocol is prepared for setting PTZ parameters of dome camera.            The detailed parameters are shown in table below            Param reserved</p>		

domeParaType	param1	param2
1-- Enable freezing of preset bit	Disabled	Disabled
2-- Enable auto rotation	Disabled	Disabled
3-- Preset bit speed level	0--Low, 1--Intermediate, 2--High	Disabled
4-- Manual control speed level	0--Low, 1--Intermediate, 2--High	Disabled
5-- Enable standby action	Detailed values: 30, 60, 300, 600, 1800 (unit: Second)	0--Preset bit, 1--Scanning, 2--Patrol, 3--Mode path
6-- Infrared light mode	0--Manual, 1--Auto	0--When manual mode is enabled, it means infrared light brightness, detailed value is: [0,10]; 1--When auto mode is enabled, it means infrared sensitivity, detailed value is: 0-Minimum,1-Low, 2-Standard, 3-High, 4-Maximum
7--Proportion zoom	Disabled	Disabled
8--Function enabling/disabling	“Preset bit snapshot: Scan recording: Mode path recording” 0: No operation 1: Operation	Disabled
9-- PTZ anti-shaking	0-Reserved 1-Disabled 2-Enabled	Disabled

#### DomePTZTypeList XML Block

```
<DomePTZQueryList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<domePTZQuery>
  <type><!-- req, xs: integer --></type>
<param><!-- dep, xs: integer --></param>
</domePTZQuery>
</DomePTZQueryList>
```

#### DomeParaList XML Block

```

<DomePTZList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<DomePTZ>
  <domePTZType ><!-- req, xs:integer --></domePTZType>
  <autoEnable><!-- req, xs:integer --></autoEnable>
  <param1><!-- dep, xs: integer --></param1>
  <param2><!-- dep, xs: integer --></param2>
</DomePTZ>
</DomePTZList>

```

**Test cases**

**GET** /ISAPI/PTZCtrl/DomePTZ/channels/1

**Request XML:** <DomePTZQueryList>

**Response XML:** <DomePTZList >

**PUT** /ISAPI/PTZCtrl/DomePTZ/channels/1

**Request XML:** <DomePTZList>

**Response XML:** <ResponseStatus>

```

<DomePTZQueryList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<domePTZQuery>
  <type>1</type>
<param>1</param>
</domePTZQuery>
</DomePTZQueryList>
<DomePTZList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<DomePTZ>
  <type>1</type>
  <autoEnable>1</autoEnable>
  <param1>1</param1>
  <param2>1</param2>
</DomePTZ>
</DomePTZList>

```

**1.8.19/CGI/Image/channels/<ID>/FocusMode/template/<ID>/type/<ID>**

/CGI/Image/channels/<ID>/ FocusMode /template/<ID> General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire focus mode parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	< FocusMode >
<b>PUT</b>	
<b>Description</b>	Set focus mode parameters
<b>Query</b>	None
<b>Inbound Data</b>	< FocusMode >
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol is prepared for query and setting of focus mode parameters, helping client or IE query and set focus mode parameters of device via CGI protocol.	
<b>Explanations on key parameters:</b>	
<Template> Template No.: 0~7	
<type> means types of different image parameters 0 - Monitoring image; 1- Snapshot image; 2 - Analysis image	
<mode> means focus mode, auto: Automatic manual: Manual onepush: Semi-auto trigger: Zoom trigger	

**FocusModeXML Block**

```
< FocusMode version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<currentTemplate><!-- req,xs:string, --><currentTemplate>
<mode><!--req, xs:string,"manual,auto,onepush,trigger"--></mode>
</ FocusMode>
```

**Test cases**

**GET /CGI/Image/channels/1/ FocusMode /template/1/type/1**

**Request XML:** none

**Response XML:** < FocusMode >

**PUT/CGI/Image/channels/1/ FocusMode /template/1/type/1**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<FocusMode>
<mode>auto</mode>
</FocusMode>
```

**1.8.20/CGI/Image/channels/<ID>/MinFocusDistance/template/<ID>/type/<ID>**

<b>/CGI/Image/channels/&lt;ID&gt;/MinFocusDistance/template/&lt;ID&gt; General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire the parameters of the minimum focus distance
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<MinFocusDistance>
<b>PUT</b>	
<b>Description</b>	Set the parameters of the minimum focus distance
<b>Query</b>	None
<b>Inbound Data</b>	<MinFocusDistance>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for query and setting of focus distance parameters, helping client or IE query and set focus distance parameters of device via CGI protocol.	
<b>Explanations on key parameters:</b> <Template> Template No.: 0~7 <type> means types of different image parameters 0 - Monitoring image; 1- Snapshot image; 2 - Analysis image <FocusVal> means distance, 1, 10, 30, 100, 150, 300, 600, 1000, 10000; unit: cm; among which, 10000 means infinity	

**MinFocusDistanceXML Block**

```
<MinFocusDistance version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<currentTemplate><!-- req,xs:string, --><currentTemplate>
<FocusVal opt="1,10"><!--req, xs:integer--></FocusVal>
</MinFocusDistance>
```

**Test cases**

**GET /CGI/Image/channels/1/MinFocusDistance/template/1/type/1**

**Request XML:** none

**Response XML:** <MinFocusDistance>

**PUT/CGI/Image/channels/1/MinFocusDistance/template/1/type/1**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<MinFocusDistance>
<FocusVal>600</FocusVal>
</MinFocusDistance>
```



### 1.8.21/CGI/Image/channels/<ID>/ZoneAf/template/<ID>/type/<ID>

/CGI/Image/channels/<ID>/ZoneAf/template/<ID>/type/<ID> Resource v2.0		General
<b>GET</b>		
<b>Description</b>	Acquire regional focus parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<ZoneAf>	
<b>PUT</b>		
<b>Description</b>	Set regional focus parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<ZoneAf>	
<b>Success Return</b>	<ResponseStatus>	
<p><b>Explanations on protocol:</b> This protocol is prepared for setting of regional focus parameters, helping client or IE set regional focus parameters of device via CGI protocol.</p> <p><b>Explanations on key parameters:</b> &lt;Template&gt; Template No.: 0~7 &lt;type&gt; means types of different image parameters 0 - Monitoring image; 1- Snapshot image; 2 - Analysis image &lt;enabled&gt; means enabled; true: Enabled, false: Disabled &lt;ZoneAfRegionList&gt; means regional focus area &lt;leftpositionX&gt; means X-coordinate of upper left corner &lt;leftpositionY&gt; means Y-coordinate of upper left corner &lt;rightpositionX&gt; means X-coordinate of lower right corner &lt;rightpositionY&gt; means Y-coordinate of lower right corner</p>		

#### ZoneAfXML Block

```
<ZoneAf version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<enabled/><!-- req, xs:boolean -->
<currentTemplate><!-- req,xs:string, --><currentTemplate>
<ZoneAfRegionList><!--req-->
<ZoneAfRegion>
<id><!--req,integer--></id>// Only 1 region is supported temporarily, this field is disabled temporarily
<RegionCoordinatesList>//detection region coordinate list
<RegionCoordinates><!-- req, -->//detection region coordinates
<leftpositionX><!-- req, xs:integer;coordinate --></leftpositionX>// X coordinate of upper left corner
<leftpositionY><!-- req, xs:integer;coordinate --></leftpositionY>//upper left corner y-point coordinate
<rightpositionX><!-- req, xs:integer;coordinate --></rightpositionX>// X coordinates of lower right corner
<rightpositionY><!-- req, xs:integer;coordinate --></rightpositionY>// Y coordinates of lower right corner
</RegionCoordinates>
</RegionCoordinatesList>
</ZoneAfRegion>
</ZoneAfRegionList>
</ZoneAf>
```

#### Test cases

**GET /CGI/Image/channels/1/ZoneAf/template/1/type/1**

**Request XML:** none

**Response XML:** <ZoneAf>

**PUT/CGI/Image/channels/1/ZoneAf/template/1/type/1**

**Response XML:** <ResponseStatus>

**Request XML: as below**

```
<?xml version="1.0" encoding="UTF-8"?>
<ZoneAf>
<enabled>true</enabled>
<ZoneAfRegionList>
<ZoneAfRegion>
<id>1</id>
<RegionCoordinatesList>
<RegionCoordinates>
<leftpositionX>3636</leftpositionX>
<leftpositionY>2187</leftpositionY>
<rightpositionX>8940</rightpositionX>
<rightpositionY>7951</rightpositionY>
</RegionCoordinates>
</RegionCoordinatesList>
</ZoneAfRegion>
</ZoneAfRegionList>
</ZoneAf>
```

1.9/ISAPI/ITC

**1.9.1/ISAPI/ITC/illegalDictionary**

<b>/ISAPI/ITC/illegalDictionaryGeneral Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire illegal dictionary parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<IllegalDictionary>
<b>PUT</b>	
<b>Description</b>	Set illegal dictionary parameters
<b>Query</b>	None
<b>Inbound Data</b>	<IllegalDictionary>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol is prepared for query of illegal dictionary.	
<id> --Means illegal type number, range 0-100; ID means the illegal action number from 0 to the end and its order is fixed, -1Means add	
<illegalCode>-- Means user input of type code	
<illegalName>-- Means illegal type name, with character string not exceeding 4*64 bits	
<illegalPRI> -- Means illegal priority range: 0-100	
<illegalDescription> --Represents the description of illegal behavior	

**IllegalDictionary XML Block**

```
<?xml version="2.0" encoding="UTF-8"?>
<IllegalDictionary version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<illegalCodeList>
<illegalCodeItem>
<!-- Illegal type No.-->
<id><!-- req, xs:integer --></id>
<!-- Type code-->
<illegalCode><!-- req, xs:string--></illegalCode>
<!-- Illegal type name-->
<illegalName><!-- req, xs:string --></illegalName>
<!-- Illegal priority-->
<illegalPRI><!-- req, xs:integer --></illegalPRI>
<!--Description of illegal behavior-->
<illegalDescription><!-- req, xs:string --></illegalDescription>
```

```

</illegalCodeItem>
</illegalCodeList>
</IllegalDictionary>

```

**Test cases**

**GET /ISAPI/ITC/illegalDictionary**

**Request XML: none**

**Response XML: <illegalDictionary>**

**PUT /ISAPI/ITC/illegalDictionary**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<?xml version="1.0" encoding="UTF-8"?>
<IllegalDictionary version="2.0"xmlns="http://www.isapi.org/ver20/XMLSchema">
<illegalCodeList>
<illegalCodeItem>
<id>1</id>
<illegalCode>0</illegalCode>
<illegalName> Bayonet </illegalName>
<illegalPRI>0</illegalPRI>
</illegalCodeItem>
<illegalCodeItem>
<id>2</id>
<illegalCode>1301</illegalCode>
<illegalName> Motor vehicle driving in reverse </ illegalName>
<illegalPRI>4</illegalPRI>
<illegalDescription> Motor vehicle driving in reverse </ illegalDescription>
</illegalCodeItem>
</illegalCodeList>
</IllegalDictionary>

```

**1.9.2/ISAPI/ITC/TrafficParam/channels/<ID>/lanes/<ID>**

<b>/ISAPI/ITC/trafficParam/channels/&lt;ID&gt;/lanes/&lt;ID&gt; General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire flow statistics parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<TrafficParamList>
<b>PUT</b>	
<b>Description</b>	Set flow statistics parameters
<b>Query</b>	None
<b>Inbound Data</b>	<TrafficParamList>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for query and setting of flow statistics parameters of single lane.	
<b>Explanations on key parameters:</b>	
<type> means statistics types; 0: Reserved; 1: Flow statistics (only statistics by flow is supported presently)	
<enable> Whether enabled; false - Disabled; true - Enabled	
<statisticsMinute> Interval of statistics by minute; range: 1~1440; unit: min; if statistics time interval is second, this field is 0	
<statisticsSecond> Statistics time interval; range: 30~3600; unit: Second	

**TrafficParamList XML Block**

```

<TrafficParamList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<trafficParam>
<type><!-- req, xs: integer --></type>
<enable><!-- dep, xs:Boolean --></enable>
<statisticsMinute><!-- dep, xs: integer,seconds --></statisticsMinute>
<statisticsSecond><!-- dep, xs: integer --></statisticsSecond>
</trafficParam>
</TrafficParamList>

```

**Test cases**

**GET /ISAPI/ITC/TrafficParam/channels/1/lanes/1**

**Request XML: none**

**Response XML: <TrafficParamList>**

**PUT /ISAPI/ITC/TrafficParam/channels/1/lanes/1**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<?xml version="1.0" encoding="UTF-8"?>
<TrafficParamList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<trafficParam>
<type>1</type>
<enable>true</enable>
<statisticsMinute>0</statisticsMinute>
<statisticsSecond>42</statisticsSecond>
</trafficParam>
</TrafficParamList></trafficParam>

```

**1.9.3/ISAPI/ITC/TrafficParam/channels/<ID>/lanes**

<b>/ISAPI/ITC/trafficParam/channels/&lt;ID&gt;/lanes General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire flow statistics parameters in batch
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<TrafficParamList>
<b>PUT</b>	
<b>Description</b>	Set flow statistics parameters in batch
<b>Query</b>	None
<b>Inbound Data</b>	<TrafficParamList>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for query and setting of flow statistics parameters of multiple lanes.	
<b>Explanations on key parameters:</b>	
<laneID> means lane No. (1~5)	
<type> means statistics type; 0: Reserved; 1: Flow statistics	
<enable> Whether enabled; false - Disabled; true - Enabled	
<statisticsMinute> Interval of statistics by minute; range: 1~1440; unit: min; if statistics time interval is second, this field is 0	
<statisticsSecond> Interval of statistics by second; range: 30~3600; unit: Second	

**TrafficParamList XML Block**

```

<TrafficParamList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<laneParamItem>
<laneID></laneID>
<laneParamList>
<trafficParam>
<type><!-- req, xs: integer --></type>
<enable><!-- dep, xs:Boolean --></enable>
<statisticsMinute><!-- dep, xs: integer,seconds --></statisticsMinute>
<statisticsSecond><!-- dep, xs: integer --></statisticsSecond>

```

```

</trafficParam>
</laneParamList>
</laneParamItem>
</TrafficParamList>

```

**Test cases**

**GET /ISAPI/ITC/TrafficParam/channels/1/lanes**

**Request XML:** none

**Response XML:** <TrafficParamList>

**PUT /ISAPI/ITC/TrafficParam/channels/1/lanes**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```

<?xml version="1.0" encoding="UTF-8"?>
<TrafficParamList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<laneParamItem>
<laneID></laneID>
<laneParamList>
<trafficParam>
<type>1</type>
<enable>true</enable>
<statisticsMinute>42</statisticsMinute>
<statisticsSecond>50</statisticsSecond>
</trafficParam>
</laneParamList>
</laneParamItem>
</TrafficParamList>

```

**1.9.4/ISAPI/ITC/syncSignalOutput/channels/<ID>/ports/<ID>**

<b>/ISAPI/ITC/syncSignalOutput/channels/&lt;ID&gt;/ports/&lt;ID&gt; General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire parameters of fill light
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<SyncSignalOutput>
<b>PUT</b>	
<b>Description</b>	Set parameters of fill light
<b>Query</b>	None
<b>Inbound Data</b>	<SyncSignalOutput>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol is prepared for query and setting of fill light configuration, helping client or IE query and set fill light parameters of device via CGI protocol, including IO No., device type, default status and working state.	
<b>Explanations on key parameters:</b>	
<id> means IO port No.; range: 1~10	
<IOWorkMode> means device linkage type; 0-Flashlight; 1-Strobe light; 2-Polarizer; 3-Continuous light; 4- Strobe flash; 64-Alarm output modify	
<defaultStatus> means default status; 0: Pulse width; 1: Electrical level (0 as default)	
<outputStatus> means working state; 0: Low level; 1: High level (0 as default)	
<dutyRate> means duty ratio; range: (0,40)	
<timeDelay> means duration; unit: μs; range: 0~10000	
<aheadTime> means ahead time; unit: μs; range: 0-4000	
<freqMultiply> means frequency multiplication; range (1,15)	
<autoControlType> means auto control type; 0-Nighttime enable (default); 1 - Daytime enable	

**SyncSignalOutputXML Block**

```

<SyncSignalOutput t version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<id><!-- req, xs:integer --></id>
<IOWorkMode><!-- dep, xs:integer --></IOWorkMode>
<defaultStatus><!-- dep, xs:integer --></defaultStatus>
<outputStatus><!-- dep, xs:integer --></outputStatus>
<aheadTime><!-- dep, xs:integer, milliseconds --></aheadTime>
<timeDelay><!-- dep, xs:integer, milliseconds --></timeDelay>
<freqMultiply><!-- dep, xs:integer --></freqMultiply>
<dutyRate><!-- dep, xs:integer --></dutyRate>
<autoControlType><!-- dep, xs:integer --></autoControlType>
</SyncSignalOutput>

```

**Test cases**

**GET /ISAPI/ITC/syncSignalOutput/channels/1/ports/1**

**Request XML:** none

**Response XML:** <SyncSignalOutput>

**PUT /ISAPI/ITC/syncSignalOutput/channels/1/ports/1**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```

<?xml version="1.0" encoding="UTF-8"?>
<SyncSignalOutput>
<id>1</id>
<IOWorkMode>0</IOWorkMode>
<defaultStatus>1</defaultStatus>
<outputStatus>0</outputStatus>
<aheadTime>10</aheadTime>
<timeDelay>1600</timeDelay>
<freqMultiply>3</freqMultiply>
<dutyRate>15</dutyRate>
<autoControlType>0</autoControlType>
</SyncSignalOutput>

```

**1.9.5/ISAPI/ITC/syncSignalOutput/channels/<ID>/ports**

/ISAPI/ITC/syncSignalOutput/channels/<ID>/ports General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire fill light parameters in batch
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<SyncSignalOutputList>
<b>PUT</b>	
<b>Description</b>	Set fill light parameters in batch
<b>Query</b>	None
<b>Inbound Data</b>	<SyncSignalOutputList>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol is prepared for query and setting of fill light configuration, helping client or IE query and set fill light parameters of device via CGI protocol, including IO No., device type, default status and working state.	
<b>Explanations on key parameters:</b>	
<id> means IO port No.; range: 1~10	
<IOWorkMode> means device linkage type; 0-Flashlight; 1-Strobe light; 2-Polarizer; 3-Continuous light; 4- Strobe flash; 64-Alarm output modify	
<defaultStatus> means default status; 0: Pulse width; 1: Electrical level (0 as default)	
<outputStatus> means working state; 0: Low level; 1: High level (0 as default)	
<dutyRate> means duty ratio; range: (0,40)	
<timeDelay> means duration; unit: μs; range: 0~10000	
<aheadTime> means ahead time; unit: μs; range: 0-4000	

<freqMultiply> means frequency multiplication; range (1,15)  
 <autoControlType> means auto control type; 0-Nighttime enable (default); 1 - Daytime enable

**SyncSignalOutputListXML Block**

```
<SyncSignalOutputList t version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
  <syncSignalOutput>
    <id><!-- req, xs:integer --></id>
    <IOWorkMode><!-- dep, xs:integer --></IOWorkMode>
    <defaultStatus><!-- dep, xs:integer --></defaultStatus>
    <outputStatus><!-- dep, xs:integer --></outputStatus>
    <aheadTime><!-- dep, xs:integer, milliseconds --></aheadTime>
    <timeDelay><!-- dep, xs:integer, milliseconds --></timeDelay>
    <freqMultiply><!-- dep, xs:integer --></freqMultiply>
    <dutyRate><!-- dep, xs:integer --></dutyRate>
    <autoControlType><!-- dep, xs:integer --></autoControlType>
  </syncSignalOutput>
</SyncSignalOutputList>
```

**Test cases**

**GET /ISAPI/ITC/syncSignalOutput/channels/1/ports**

**Request XML:** none

**Response XML:** <SyncSignalOutputList>

**PUT /ISAPI/ITC/syncSignalOutput/channels/1/ports**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<SyncSignalOutputList>
  <syncSignalOutput>
    <id>1</id>
    <IOWorkMode>0</IOWorkMode>
    <defaultStatus>1</defaultStatus>
    <outputStatus>0</outputStatus>
    <aheadTime>10</aheadTime>
    <timeDelay>1600</timeDelay>
    <freqMultiply>3</freqMultiply>
    <dutyRate>15</dutyRate>
    <autoControlType>0</autoControlType>
  </syncSignalOutput>
</SyncSignalOutputList>
```

**2/CGI**

**2.1/CGI/Streaming**

**2.1.1/CGI/Streaming/channels/<ID>/type/<ID>**

/CGI/Streaming/channels/<ID>/type/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire video parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<StreamingChannel>	
<b>PUT</b>		
<b>Description</b>	Set video parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<StreamingChannel>	

Success Return	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This protocol is prepared for query and setting of video parameters, helping client or IE query and set device audio/video parameters of device via CGI protocol, including stream type, resolution, video code type, code rate, system, compression mode, video quality, corridor pattern, channel type and encryption type.</p> <p><b>Explanations on key parameters:</b>  type &lt;id&gt; means code stream types, including: 1: Main code stream; 2: Auxiliary code stream; 3: Third code streams; 4: Ordinary main code stream; 5: Main code stream alarm; 6: Customization 1; 7: Customization 2  channels&lt;id&gt; means channel No.  &lt;eventTemplateEnable&gt;: Enable event template parameters. True: Enable; false: Disable  &lt;channelName&gt; means code stream name: MainStream, SubStream, ThirdStream, MainStream(Normal), MainStream(Alarm), SelfDef1 and SelfDef2  &lt;videoCodecType&gt; means video code type, including: H.264B, H.264M, H.264H, H.265 and MotionJPEG  &lt;videoResolutionWidth&gt; represents video resolution width  &lt;videoResolutionHeight&gt; represents video resolution height  &lt;videoQualityControlType&gt; means compression mode, CBR: Constant bit rate, VBR: Variable bit rate  &lt;constantBitRate max=""&gt; means constant bit rate, bit rate range: 32-16384; max. property bit rate range: 32- max  &lt;fixedQuality&gt; means video quality, including: Best, better, good, normal and poor  &lt;vbrUpperCap max=""&gt; means variable bit rate: Upper limit of bit rate; max. property bit rate range: 32- max  &lt;vbrLowerCap&gt; means variable bit rate: Lower limit of bit rate: 128 fields; invalid temporarily  &lt;maxFrameRate&gt; means frame rate  &lt;H264Profile&gt; Baseline,Main,High Means extending code, including: Baseline, Main, High  &lt;GovLength&gt; means I frame rate; range: 10-100  &lt;SVC&gt; means SVC; true: Enabled; false: Disabled; auto: Automatic  &lt;smoothing&gt; means bit stream smoothing; range: 0-100  &lt;np-Mode&gt; means system, including NTSC and PAL  &lt;priorityMode&gt; means priority mode, including: FramRate: Frame rate priority; Quality: Quality priority  &lt;corridorMode&gt; means corridor mode, ON: Enabled; OFF: Disabled  &lt;channelType&gt; means channel type, LocalChannel: Local channel  &lt;enctypeType&gt; means encryption type, including: AES:AES, NoEnctype: No encryption  &lt;password&gt; means encryption password, not above 16 characters  &lt;electronicImageStab&gt; means electronic anti-shaking; ON: Enabled; OFF: Disabled  &lt;electronicImageLevel&gt; means electronic anti-shaking level; range: 1-100  &lt;Splus265&gt; means S+265 enabling/disabling</p>	

**StreamingChannelXML Block**

<pre> &lt;StreamingChannel version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema"&gt; &lt;id&gt;&lt;!-- req, xs:integer;id --&gt;&lt;/id&gt; &lt;eventTemplateEnable&gt;&lt;!-- req, xs:boolean --&gt;&lt;/eventTemplateEnable&gt; &lt;channelName&gt;&lt;!-- req, xs:string --&gt;&lt;/channelName&gt; &lt;enabled&gt;&lt;!-- req, xs:boolean --&gt;&lt;/enabled&gt; &lt;Transport&gt;&lt;!-- req --&gt; &lt;maxPacketSize&gt;&lt;!-- opt, xs:integer --&gt;&lt;/maxPacketSize&gt; &lt;audioPacketLength&gt;&lt;!-- opt, xs:integer --&gt;&lt;/audioPacketLength&gt; &lt;audioInboundPacketLength&gt;&lt;!-- opt, xs:integer --&gt;&lt;/audioInboundPacketLength&gt; &lt;audioInboundPortNo&gt;&lt;!-- opt, xs:integer --&gt;&lt;/audioInboundPortNo&gt; &lt;videoSourcePortNo&gt;&lt;!-- opt, xs:integer --&gt;&lt;/videoSourcePortNo&gt; &lt;audioSourcePortNo&gt;&lt;!-- opt, xs:integer --&gt;&lt;/audioSourcePortNo&gt; &lt;ControlProtocolList&gt;&lt;!-- req --&gt; &lt;ControlProtocol&gt;&lt;!-- req --&gt; &lt;streamingTransport&gt;&lt;!--req,xs:string, "HTTP,RTSP,SHTTP" --&gt;&lt;/streamingTransport&gt; </pre>
--



```

</ControlProtocol>
</ControlProtocolList>
<Unicast><!-- opt -->
<enabled><!-- req, xs:boolean --></enabled>
<interfaceID><!-- opt, xs:string --></interfaceID>
<rtpTransportType><!-- opt, xs:string, "RTP/UDP,RTP/TCP" --></rtpTransportType>
</Unicast>
<Multicast><!-- opt -->
<enabled><!-- req, xs:boolean --></enabled>
<userTriggerThreshold><!-- opt, xs:integer --></userTriggerThreshold>
<destIPAddress><!-- dep, xs:string --></destIPAddress>
<videoDestPortNo><!-- opt, xs:integer --></videoDestPortNo>
<audioDestPortNo><!-- opt, xs:integer --></audioDestPortNo>
<destIPv6Address><!-- dep, xs:string --></destIPv6Address>
<ttl><!-- opt, xs:integer --></ttl>
</Multicast>
<Security><!-- opt -->
<enabled><!-- req, xs:boolean --></enabled>
</Security>
</Transport>
<Video><!-- opt -->
<enabled><!-- req, xs:boolean --></enabled>
<videoInputChannelID><!-- req, xs:string;id --></videoInputChannelID>
  <videoCodecTypeopt="">
<!-- req, xs:string, "MPEG4, MotionJPEG,3GP,H.264,MPNG, H.265、 H.264(baseline、 main
profile、 high profile)、 MotionJPEG" -->
  </videoCodecType>
  <videoScanType><!-- opt, xs:string, "progressive, interlaced" -->
  </videoScanType>
<videoResolutionWidthopt=""><!-- req, xs:integer --></videoResolutionWidth>
<videoResolutionHeightopt=""><!-- req, xs:integer --></videoResolutionHeight>
<videoPositionX><!-- opt, xs:integer --></videoPositionX>
<videoPositionY><!-- opt, xs:integer --></videoPositionY>
  <videoQualityControlType><!-- opt, xs:string, "CBR,VBR"
--></videoQualityControlType>
<constantBitRate><!-- dep, xs:integer, in kbps --></constantBitRate>
  <fixedQuality><!-- opt, xs:integer, percentage, "best,better,good,normal,poor" -->
  </fixedQuality>
<vbrUpperCap><!-- max, xs:integer --><!-- dep, xs:integer, in kbps --></vbrUpperCap>
<vbrLowerCap><!-- dep, xs:integer, in kbps --></vbrLowerCap>
<constantBitRate><!-- max, xs:integer --><!-- dep, xs:integer, in kbps --></ constantBitRate >
  <maxFrameRate opt=""><!--req, xs:integer, "1-25" --></maxFrameRate>
<keyFrameInterval><!-- opt, xs:integer, milliseconds --></keyFrameInterval>
<rotationDegree><!-- opt, xs:integer, degrees, 0..360 --></rotationDegree>
<mirrorEnabled><!-- opt, xs:boolean --></mirrorEnabled>
  <snapshotImageType><!-- opt, xs:string, "JPEG,GIF,PNG" --></snapshotImageType>
<Mpeg4Profile><!--dep, xs:string, "SP,ASP"--></Mpeg4Profile>
  <H264Profile> <!-- dep, xs:string, "Baseline,Main,High, Extended"
--></H264Profile>
  <GovLength><!--opt, xs:integer --></GovLength>
  <SVC><!-- req, xs:boolean --> </SVC>
  <smoothing><!-- opt, xs:integer--></smoothing>
  <np-Mode ><!-- opt, ro, xs:string, "NTSC, PAL" --></ np-Mode >
  <priorityMode><!-- opt, ro, xs:string, "FramRate, Quality" --></priorityMode>
  <corridorMode><!-- opt, ro, xs:string, "ON, OFF" --></corridorMode>
  <channelType><!-- opt, ro, xs:string, "LocalChannel" --></channelType >
  <enctypeType><!-- opt, ro, xs:string, "AES, NoEnctype" --></enctypeType>
  <password ><!-- opt, ro, xs:string, --></password>

```

```

    <electronicImageStab><!-- opt, ro, xs:string, "ON, OFF" --></electronicImageStab>
    < electronicImageLevel ><!-- opt, xs:integer--></ electronicImageLevel >
    <SPlus265><!--dep(videoCodecType), xs:boolean --></SPlus265>
</Video>
<Audio>
    <!-- opt -->
    <enabled><!-- req, xs:boolean --></enabled>
</Audio>
    <enableCABAC><!-- opt, xs: boolean --><enableCABAC>
    <subStreamRecStatus><!-- opt, xs: boolean --></subStreamRecStatus>
</StreamingChannel>

```

**Test cases**

**GET/CGI/Streaming/channels/<ID>/type/<ID>**

**Request XML: none**

**Response XML: <StreamingChannel>**

**PUT/CGI/Streaming/channels/<ID>/type/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<?xml version="1.0" encoding="UTF-8"?>
<StreamingChannel>
<id>1</id>
<channelName>MainStream</channelName>
<Video>
<eventTemplateEnable>true</eventTemplateEnable>
<videoCodecType>H.264M</videoCodecType>
<videoResolutionWidth>960</videoResolutionWidth>
<videoResolutionHeight>1280</videoResolutionHeight>
<videoQualityControlType>VBR</videoQualityControlType>
<vbrUpperCap max="6144">4096</vbrUpperCap>
<vbrLowerCap>128</vbrLowerCap>
<constantBitRate max="6144">4096</ constantBitRate >
<fixedQuality>good</fixedQuality>
<maxFrameRate>10</maxFrameRate>
<H264Profile>Main</H264Profile>
<GovLength>30</GovLength>
<SVC>true</SVC>
<np-Mode>NTSC</np-Mode>
<priorityMode>Quality</priorityMode>
<corridorMode>ON</corridorMode>
<channelType>LocalChannel</channelType>
<enctypeType>AES</enctypeType>
<password>123</password>
<electronicImageStab>ON</electronicImageStab>
< electronicImageLevel >50</ electronicImageLevel >
<smoothing>29</smoothing>
<SPlus265>true</SPlus265>
</Video>
<Audio>
    <enabled>true</enabled>
</Audio>
</StreamingChannel>

```

**2.1.2/CGI/Streaming/KeyRegion/channels/<ID>/type/<ID>**

/CGI/Streaming/KeyRegion/channels/<ID>/type/<ID>	General Resource v2.0
GET	

<b>Description</b>	Acquire key regional parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<KeyRegion>
<b>PUT</b>	
<b>Description</b>	Set key regions
<b>Query</b>	None
<b>Inbound Data</b>	<KeyRegion>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

This protocol is prepared for query and setting of key regions, helping client or IE query and set key regions of device via CGI protocol, including parameters such as stream type/promotion level.

**Explanations on key parameters:**

<id> means code stream types, including: Main code stream, auxiliary code stream and third code streams;  
 <upgradeLevel> means promotion level, including: Best, better, good, fair and poor  
 <dynamicEnable> means whether enabling dynamic traction: true: Enable; false: Disable  
 <regionCoordinatesList> means regional coordinates: 4 coordinates at least; listed clockwise from the upper left corner

**KeyRegionXML Block**

```
<KeyRegion version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<id><!--req:integer --></id>
<upgradeLevel>
<!--req, ro, xs:string, best,beter,good,fair,poor-->
</upgradeLevel>
< dynamicEnable >
<!--req, ro, xs:string, true,flase-->
</ dynamicEnable >
< regionList size="7">
<region>
<id><!--req:integer --></id>
<regionCoordinatesList>
  <regionCoordinates>
    <positionX><!--req:integer --></positionX>
    <positionY><!--req:integer --></positionY>
  </regionCoordinates>
</regionCoordinatesList>
</region>
</regionList >
</KeyRegion>
```

**Test cases**

**GET /CGI/Streaming/KeyRegion/channels/<ID>/type/<ID>**

**Request XML: none**

**Response XML: <KeyRegion>**

**PUT/CGI/Streaming/KeyRegion/channels/<ID>/type/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<KeyRegion>
<id>1</id>
<upgradeLevel>better</upgradeLevel>
<dynamicEnable>true</dynamicEnable>
<regionList size="7">
<region>
<id>1</id>
<regionCoordinatesList>
<regionCoordinates>
```

```

<positionX>1950</positionX>
<positionY>2866</positionY>
</regionCoordinates>
<regionCoordinates>
<positionX>4975</positionX>
<positionY>2866</positionY>
</regionCoordinates>
<regionCoordinates>
<positionX>4975</positionX>
<positionY>7033</positionY>
</regionCoordinates>
<regionCoordinates>
<positionX>1950</positionX>
<positionY>7033</positionY>
</regionCoordinates>
</regionCoordinatesList>
</region>
</regionList>
</KeyRegion>

```

**2.1.3/CGI/Streaming/VencSlice/channels/<ID>**

/CGI/Streaming/VencSlice/channels/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire multi-slice setting	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<vencSlice>	
<b>PUT</b>		
<b>Description</b>	Set multi-slice	
<b>Query</b>	None	
<b>Inbound Data</b>	<vencSlice>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is prepared for multi-slice setting, helping client or IE set multi-slice of device via CGI protocol, including parameters such as type/size.		
<b>Explanations on key parameters:</b>		
<type> means type, 0: Disabled; 1: By bit; 2: By macro block number <size> means size by bit; min. value: 128; max. value: 0xFFFF or (WxHx3/2)/2 By macro block; min. value: 1; max. value (image height+15)/16		

**vencSliceXML Block**

```

<vencSlice version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <type><!--req, xs:integer--></type>
  <size><!--req, xs:integer--></size>
</vencSlice>

```

**Test cases**

**GET /CGI/Streaming/VencSlice/channels/<ID>**

**Request XML:** none

**Response: XML:** <KeyRegion>

**PUT/CGI/Streaming/VencSlice/channels/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<vencSlice>
<type>0</type>
<size>0</size>
</vencSlice>
```

#### 2.1.4/CGI/Streaming/channel/<ID>/Splus

/CGI/Streaming/channel/<ID>/Splus		General Resource v2.0
<b>PUT</b>		
<b>Description</b>	Set S+265 enabling/disabling	
<b>Query</b>	None	
<b>Inbound Data</b>	<SplusParameter>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b> This protocol is prepared for helping IE enable/disable S+265 function of certain channel via CGI protocol.		
<b>Explanations on key parameters:</b> <enable> S+265 enabling/disabling; true: Enable; false: Disabled		

#### SplusParameter Block

```
<SplusParameter>
  <enable><!--req, xs:boolean--></enable>
</SplusParameter>
```

#### Test cases

**PUT /CGI/Streaming/channel/<ID>/Splus**

**Response XML:** <ResponseStatus>

**Request: XML:** <SplusParameter> as follows

```
<SplusParameter>
  <enable>true</enable>
</SplusParameter>
```

#### 2.1.5 /CGI/Streaming/SplusTemplate/channels/<ID>

/CGI/Streaming/SplusPara/channels/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Bit rate parameter table corresponding to batch S + enabling/disabling	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<SplusParameterList>	
<b>Explanations on protocol:</b> This protocol is prepared for acquiring bit rate template and setting bit rate based on the present code mode, resolution and whether S+ is enabled.		
<b>Explanations on key parameters:</b> <SplusParameter > S+265 enabling/disabling; true: Enable; false: Disabled <videoType> means video code type, including: H.264 and H.265 <videoResolutionWidth> represents video resolution width <videoResolutionHeight> represents video resolution height <vbrBitRate> means variable bit rate: Bit rate		

#### SplusParameterList XML Block

```

<SplusParameterList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<SplusParameter>
<enable><!--req, xs:boolean--></enable>
<videoType ><!-- req, xs:integer--></videoType >
<videoResolutionWidth><!-- req, xs:integer --></videoResolutionWidth>
<videoResolutionHeight><!-- req, xs:integer --></videoResolutionHeight>
<vbrBitRat ><!-- req, xs:integer, in kbps --></vbrBitRate>
</SplusParameter>
</SplusParameterList>

```

**Test cases**

**GET /CGI/Streaming/SplusTemplate/channels/<ID>**

**Request XML: none**

**Response XML: <RadarParameterList>**

**Response XML: as below**

```

<SplusParameterList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<SplusParameter>
<enable>0</enable>
<videoType >H.264</videoType>
<videoResolutionWidth>960</videoResolutionWidth>
<videoResolutionHeight>1280</videoResolutionHeight>
<vbrBitRate>4096</vbrBitRate>
</SplusParameter>
</SplusParameterList>

```

**2.1.6/CGI/Streaming/OneKeyToSplus**

/CGI/Streaming/OneKeyToSplus		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire one-key S+265 enabling/disabling	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<OneKeyToSplus>	
<b>PUT</b>		
<b>Description</b>	Set one-key S+265 enabling/disabling	
<b>Query</b>	None	
<b>Inbound Data</b>	<OneKeyToSplus>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b> This protocol is prepared for helping IE acquire or set the one-key enabling/disabling S+265 status via CGI protocol.		
<b>Explanations on key parameters:</b> <enable> true: Enabled false: Disabled		

**OneKeyToSplus Block**

```

<OneKeyToSplus>
  <enable><!--req, xs:boolean--></enable>
</OneKeyToSplus>

```

**Test cases**

**GET /CGI/Streaming/OneKeyToSplus**

**Request XML: none**

**Response XML: <OneKeyToSplus>**

**PUT /CGI/Streaming/OneKeyToSplus**

**Response XML: <ResponseStatus>**

**Request XML: <OneKeyToSplus> as follows**

```
<OneKeyToSplus>
  <enable>true</enable>
</OneKeyToSplus>
```

### 2.1.7/CGI/Streaming/Refresh/channels/<ID>

<b>/CGI/Streaming/Refresh/channels/&lt;ID&gt;</b> <b>General Resource v2.0</b>	
<b>PUT</b>	
<b>Description</b>	Refresh the resolution and bit rate of current channel
<b>Query</b>	<b>None</b>
<b>Inbound Data</b>	<b>None</b>
<b>Success Return</b>	<b>&lt;ResponseStatus&gt;</b>
<b>Explanations on protocol:</b> This protocol is prepared for helping IE refresh the resolution and bit rate of current channel via CGI protocol.	

**Test cases**

**PUT /CGI/Streaming/Refresh/channels/<ID>**

**Request XML:** none

**Response XML:** <ResponseStatus>

### 2.1.8/CGI/Streaming/GetVideoParaResult/channels/<ID>

<b>/CGI/Streaming/GetVideoParaResult/channels/&lt;ID&gt;</b> <b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire the refreshing result of resolution and bit rate of current channel
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<b>&lt;GetResultInfo&gt;</b>
<b>Explanations on protocol:</b> This protocol is prepared for helping client acquire the refreshing result of resolution and bit rate of current channel via CGI protocol.	
<b>Explanations on key parameters:</b> <updateFlag> Result 0: No update 1: Update completed	

**GetResultInfo XML Block**

```
<GetResultInfo version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<updateFlag><!-- req, xs:integer--></updateFlag>
</GetResultInfo>
```

**Test cases**

**GET /CGI/Streaming/GetVideoParaResult/channels/<ID>**

**Request XML:** none

**Response XML:** <GetResultInfo> As follows

```
<GetResultInfo version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<updateFlag>1</updateFlag>
</GetResultInfo>
```

### 2.1.9/CGI/Streaming/AudioPonticello/Channels/<ID>/Model/<ID>

<b>/CGI/Streaming/AudioPonticello/Channels/&lt;ID&gt;/Model/&lt;ID&gt;</b> <b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire the audio change parameters

<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<AudioPonicello>
<b>PUT</b>	
<b>Description</b>	Set the audio change parameters
<b>Query</b>	None
<b>Inbound Data</b>	<AudioPonicello>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This protocol is prepared for realizing intelligent analysis and query of audio change parameters. Model mode is 0 nvr 1 ipc.</p> <p><b>Explanations on key parameters:</b>  &lt;enabled&gt; represents whether it is effective, true: start, false: not start  &lt;touchType&gt; means audio change type; 0-No audio change; 1-Continuous audio change; 2-Motivating audio change  &lt;touchParam&gt; means audio change condition and parameters, depending on the parameter iTouchType.  &lt;pitchLevel&gt; means variable amplitude parameters, 6 levels in total: 0~5; among which, Level 0~2 belongs to female voice level, while Level 3~5 belongs to male voice level</p>	

**AudioPonicello XML Block**

```
<AudioPonicello version="2.0" >
  <enabled><!-- req, xs:boolean --></enabled>
  <touchType><!-- req, xs: integer --></touchType>
  <touchParam><!-- req, xs: integer --></touchParam>
  <pitchLevel><!-- req, xs: integer --></pitchLevel>
</AudioPonicello>
```

**Test cases**

**GET /CGI/Streaming/AudioPonicello/channels/<ID>/Model/<ID>**

**Request XML: none**

**Response XML: <AudioPonicello >**

**PUT /CGI/Streaming/AudioPonicello/channels/<ID>/Model/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<AudioPonicello version="2.0">
  <enabled>true</enabled>
  <touchType>1</touchType>
  <touchParam>1</touchParam>
  <pitchLevel>3</pitchLevel>
</AudioPonicello>
```

**2.1.10/CGI/Streaming/CropCoding/channels/<ID>/type/<ID>**

<b>/CGI/Streaming/CropCoding/channels/&lt;ID&gt;/type/&lt;ID&gt;General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Obtain the parameters of the code stream trimming area
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<CropCoding>
<b>PUT</b>	
<b>Description</b>	Set the code stream trimming area
<b>Query</b>	None



<b>Inbound Data</b>	<b>&lt;CropCoding&gt;</b>
<b>Success Return</b>	<b>&lt;ResponseStatus&gt;</b>
<p><b>Protocol description:</b>  This protocol is to realize the query and setting of the code stream trimming area, and to realize the query and setting of the device code stream trimming area by the client or IE through the CGI protocol, including the code stream type / rectangular area parameters.</p> <p><b>Key parameter description:</b>  / type / &lt;ID&gt;: code stream number 1 main code stream, 2 auxiliary code streams, 3 three code streams  &lt;enable&gt; whether to enable code stream trimming  &lt;regionCoordinatesList&gt; The rectangular region position list, including the coordinates of the upper left corner and the lower right corner, are all in 10000 coordinates. The actual resolution of the rectangular frame is at least 352 * 288</p>	

### CropCodingXML Block

```

<CropCoding version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<enable><!--req, ro, xs:string, true,false--></enable>
<region>
<regionCoordinatesList>
  <regionCoordinates>
    <positionX><!--req:integer --></positionX>
    <positionY><!--req:integer --></positionY>
  </regionCoordinates>
</regionCoordinatesList>
</region>
</CropCoding>

```

#### Test case

**GET /CGI/Streaming/CropCoding/channels/<ID>/type/<ID>**

**Request XML: None**

**Response XML: <CropCoding>**

**PUT/CGI/Streaming/CropCoding/channels/<ID>/type/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as follows**

```

< CropCoding>
<enable>true</enable>
<region>
<regionCoordinatesList>
<regionCoordinates>
<positionX>1950</positionX>
<positionY>2866</positionY>
</regionCoordinates>
<regionCoordinates>
<positionX>4975</positionX>
<positionY>7033</positionY>
</regionCoordinates>

```

```

</regionCoordinatesList>
</region>
</CropCoding[A4]>

```

## 2.2/CGI/Image

### 2.2.1/CGI/Image/Channels/<ID>/VideoTurn/<ID>

/CGI/Image/Channels/<ID>/VideoTurn/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Obtain video flip	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<VideoTurn>	
<b>PUT</b>		
<b>Description</b>	Set video turning	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<ResponseStatus>	
<p><b>Explanations on protocol:</b>            This protocol is prepared for setting video turning of device, helping client or IE set video turning of device via CGI protocol.</p> <p><b>Explanations on key parameters:</b>            &lt; VideoTurn &gt; means turning mode; 1-Horizontal turn; 2-Vertical turn; 3-Inverted turn</p> <p><b>Protocol description:</b>            This protocol is to realize the device video flip setting and status acquisition, and realize the client or IE to flip the device video through the CGI protocol.</p> <p><b>Key parameter description:</b>            &lt;VideoTurn&gt; represents the flip mode 0- Get status and support type (used during GET) 1- Horizontal flip 2- Vertical flip 3- Invert flip (based on the last video status flip) 4- Normal (Restore default) 5- Invert flip Flip based on the original state of the video)            &lt;Type&gt; represents the flip mode 1-horizontal flip 2-vertical flip 3-invert flip (based on the last video state flip) 4-normal (restore the default) 5-invert flip (based on the original video state flip)</p>		

#### VideoTurn XML Block

```

<VideoTurn version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<Type opt="1,2,4,5"><!--opt,xs:integer --></Type>
</VideoTurn>

```

#### Test cases

**GET /CGI/Image/channels/<ID>/VideoTurn/0**

**Request XML: None**

**Response XML: <VideoTurn>**

```

<?xml version="1.0" encoding="UTF-8"?>
<VideoTurn>
<Type opt="1,2,4,5">4</Type>
</VideoTurn>

```

**PUT/CGI/Image/Channels/<ID>/VideoTurn/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** None

### 2.2.2/CGI/Image/Channels/<ID>/OnePushFocus

<b>/CGI/Image/Channels/&lt;ID&gt;/OnePushFocus</b>		<b>General Resource v2.0</b>
<b>PUT</b>		
<b>Description</b>	Set one-key focus	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b> This protocol is prepared for setting one-key focus of device, helping client or IE set one-key focus of device via CGI protocol.		

**Test cases**

**PUT/CGI/Image/Channels/<ID>/OnePushFocus**

**Response XML:** <ResponseStatus>

**Request XML:** None

### 2.2.3/CGI/Image/Channels/<ID>/SnapShot

<b>/CGI/Image/Channels/&lt;ID&gt;/SnapShot</b>		<b>General Resource v2.0</b>
<b>PUT</b>		
<b>Description</b>	Set frontend snapshot	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b> This protocol is prepared for setting frontend snapshot of device, helping client or IE set frontend snapshot of device via CGI protocol.		

**Test cases**

**PUT/CGI/Image/Channels/<ID>/SnapShot**

**Response XML:** <ResponseStatus>

**Request XML:** None

### 2.2.4/CGI/Image/channels/<ID>/SnapShotResolution

<b>/CGI/Image/channels/&lt;ID&gt;/SnapShotResolution</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Acquire snapshot resolution	
<b>Query</b>	None	
<b>Inbound Data</b>	None	

<b>Success Return</b>	<SnapShotResolution>
<b>PUT</b>	
<b>Description</b>	Set snapshot resolution
<b>Query</b>	None
<b>Inbound Data</b>	<SnapShotResolution>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for query and setting of snapshot resolution, helping client or IE query and set snapshot resolution of device via CGI protocol.	

#### SnapShotResolutionXML Block

```
<SnapShotResolution version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <ResolutionWide><!-- opt, xs:integer --><!--req, xs:integer--></ResolutionWide>// Note:
opt="" if otp content is null, snapshot resolution setting is not supported
  <ResolutionHigh><!-- opt, xs:integer --><!--req, xs:integer--></ResolutionHigh>// Note:
opt="" if otp content is null, snapshot resolution setting is not supported
</SnapShotResolution>
```

#### Test cases

**GET /CGI/Image/channels/<ID>/SnapShotResolution**

**Request XML: none**

**Response XML: <SnapShotResolution>**

**PUT /CGI/Image/channels/<ID>/SnapShotResolution**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<?xml version="1.0" encoding="UTF-8"?>
<SnapShotResolution>
<ResolutionWide opt=""1280,1280,1920">1280</ResolutionWide>
<ResolutionHigh opt=""720,960,1080">720</ResolutionHigh>
</SnapShotResolution>
```

### 2.2.5/CGI/Image/channels/<ID>/ImageSchedule

/CGI/Image/channels/<ID>/ImageSchedule		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire HD template parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<ImageSchedule>	
<b>PUT</b>		
<b>Description</b>	Set HD template parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<ImageSchedule>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b> This protocol is prepared for query and setting of HD template parameters, helping client or IE query and set HD template parameters via CGI protocol, including template switching mode/Schedule quantity/enable/start time/end time/template ID/status type.		
<b>Explanations on key parameters:</b>		
<mode> means template switching mode, including: Auto (day/night status), manual (time frame)		
<scheduleNumber> means Schedule quantity		
<id> means corresponding serial number of Schedule		
<enable> means enabling enabling/disabling, true: Enable, false: Disable		
<startTime> means start time; format: 10:31 (hour: minute)		
<endTime> means end time; format: 10:32 (hour: minute)		
<scheduleID> means template ID		

<mode> means day/night status type  
<scheduleID> means template ID

### ImageScheduleXML Block

```
< ImageSchedule version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema" >
<mode><!--req, xs:string,"auto,manual" --></mode>
<ImageSchedulelist>
  <scheduleNumber><!--req,xs:integer,min:0,max:8--></scheduleNumber>
  <ImageSettingSchedule>
    <id><!--req,xs:integer--></id >
    <enable><!-- req, xs:boolean --></enable>
    <startTime><!--req, xs:string, --></startTime>
    <endTime><!--req, xs:string, --></endTime>
    <scheduleID><!--req,xs:integer--><scheduleID>
  </ImageSettingSchedule>
</ImageSchedulelist>
<AutoScheduleList>
<AutoSchedule>
<mode><!--req, xs:string,"day, night" --></mode>
<scheduleID><!--req,xs:integer--><scheduleID>
</AutoSchedule>
</AutoScheduleList>
< /ImageSchedule>
```

#### Test cases

**GET /CGI/Image/channels/<ID>/ImageSchedule**

**Request XML:** none

**Response XML:** <ImageSchedule>

**PUT/CGI/Image/channels/<ID>/ImageSchedule**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<ImageSchedule>
<mode>manual</mode>
<ImageSchedulelist>
<scheduleNumber>4</scheduleNumber>
<ImageSettingSchedule>
<id>0</id>
<enable>true</enable>
<startTime>00:00</startTime>
<endTime>01:35</endTime>
<scheduleID>0</scheduleID>
</ImageSettingSchedule>
<ImageSettingSchedule>
<id>1</id>
<enable>true</enable>
<startTime>01:35</startTime>
<endTime>05:00</endTime>
<scheduleID>1</scheduleID>
</ImageSettingSchedule>
<ImageSettingSchedule>
<id>2</id>
<enable>true</enable>
<startTime>05:00</startTime>
<endTime>06:20</endTime>
<scheduleID>2</scheduleID>
</ImageSettingSchedule>
```

```

<ImageSettingSchedule>
<id>3</id>
<enable>true</enable>
<startTime>06:20</startTime>
<endTime>08:15</endTime>
<scheduleID>3</scheduleID>
</ImageSettingSchedule>
</ImageScheduleList>
<AutoScheduleList>
<AutoSchedule>
<mode>day</mode>
<scheduleID>0</scheduleID>
</AutoSchedule>
<AutoSchedule>
<mode>night</mode>
<scheduleID>0</scheduleID>
</AutoSchedule>
</AutoScheduleList>
</ImageSchedule>

```

**2.2.6/CGI/Image/channels/<ID>/currentTemplate**

<b>/CGI/Image/channels/&lt;ID&gt;/currentTemplate</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Acquire information of current template	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<CurrentTemplate>	
<p><b>Explanations on protocol:</b>  This protocol is prepared for query and setting of information of current template, helping client or IE query and set the current template information of device via CGI protocol.</p> <p><b>Explanations on key parameters:</b>  &lt;scheduleType&gt; means template ID</p>		

**CurrentTemplateXML Block**

```

<CurrentTemplate version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<scheduleType><!--req,xs:integer--><scheduleType>
</CurrentTemplate>

```

**Test cases**

**GET /CGI/Image/channels/<ID>/currentTemplate**

**Request XML:** none

**Response XML:** <CurrentTemplate>

```

<?xml version="1.0" encoding="UTF-8"?>
<CurrentTemplate>
<scheduleType>255</scheduleType>
</CurrentTemplate>

```

**2.2.7/CGI/Image/channels/<ID>/default**

<b>/CGI/Image/channels/&lt;ID&gt;/default</b>		<b>General Resource v2.0</b>
<b>PUT</b>		
<b>Description</b>	Set recovery default	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<ResponseStatus>	

**Explanations on protocol:**

This protocol is prepared for recovering the default setting of device HD parameters, helping client or IE recover the default setting of device via CGI protocol.

**Test cases**

**PUT/CGI/Image/channels/<ID>/default**

**Response XML:** <ResponseStatus>

**Request XML:** None

**2.2.8/CGI/Image/channels/<ID>/templateName/template/<ID>**

/CGI/Image/channels/<ID>/templateName/template/<ID> General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire template name
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<TemplateName>
<b>PUT</b>	
<b>Description</b>	Set template name
<b>Query</b>	None
<b>Inbound Data</b>	<TemplateName>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol is prepared for query and setting of template name, helping client or IE query and set the template name of device via CGI protocol.	
<b>Explanations on key parameters:</b>	
<name> means template name, with 31 characters at most	
<template> Value range: 0-7; if other values are adopted, the device will return to the user-defined template	

**TemplateNameXML Block**

```
<TemplateName version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<name><!--req,xs:string--></name>
</TemplateName >
```

**Test cases**

**GET /CGI/Image/channels/<ID>/templateName/template/<ID>**

**Request XML:** none

**Response XML:** <TemplateName>

**PUT/CGI/Image/channels/<ID>/templateName/template/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<templateName>
<name>outdoor</name>
</templateName>
```

**2.2.9/CGI/Image/channels/<ID>/color/template/<ID>**

/CGI/Image/channels/<ID>/color/template/<ID> General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire image adjustment parameters

<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<Color>
<b>PUT</b>	
<b>Description</b>	Set image adjustment parameters
<b>Query</b>	None
<b>Inbound Data</b>	<Color>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This protocol is prepared for query and setting of image adjustment parameters, helping client or IE query and set image adjustment parameters of device via CGI protocol, including brightness/contrast/saturation/chromaticity.</p> <p><b>Explanations on key parameters:</b>  &lt;brightnessLevel&gt; means brightness, range: 0-100  &lt;contrastLevel&gt; means contrast, range: 0-100  &lt;saturationLevel&gt; means saturation, range: 0-100  &lt;hueLevel&gt; means chromaticity, range: 0-100</p>	

**ColorXML Block**

```
<Color version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<brightnessLevel><!--opt, xs:integer --></brightnessLevel>
<contrastLevel><!--opt, xs:integer --></contrastLevel>
<saturationLevel><!--opt, xs:integer --></saturationLevel>
<hueLevel><!--opt, xs:integer --></hueLevel >
<grayScale>
<grayScaleMode><!--opt,xs:string,"indoor,outdoor"--><grayScaleMode>
<grayScale>
</Color>
```

**Test cases**

**GET /CGI/Image/channels/<ID>/color/template/<ID>**

**Request XML:** none

**Response XML:** <Color>

**PUT/CGI/Image/channels/<ID>/color/template/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<Color>
<brightnessLevel>41</brightnessLevel>
<contrastLevel>60</contrastLevel>
<saturationLevel>33</saturationLevel>
<hueLevel>63</hueLevel>
</Color>
```

**2.2.10/CGI/Image/channels/<ID>/sharpness/template/<ID>**

<b>/CGI/Image/channels/&lt;ID&gt;/sharpness/template/&lt;ID&gt; General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire sharpness level adjustment parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<Sharpness>
<b>PUT</b>	
<b>Description</b>	Set sharpness level adjustment parameters
<b>Query</b>	None
<b>Inbound Data</b>	<Sharpness>
<b>Success Return</b>	<ResponseStatus>



**Explanations on protocol:**

This protocol is prepared for query and setting of sharpness level adjustment parameters, helping client or IE query and set sharpness level adjustment parameters of device via CGI protocol.

**Explanations on key parameters:**

<sharpnessLevel> means sharpness level, range: 0-100

**SharpnessXML Block**

```
<Sharpness version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<sharpnessLevel><!--req, xs:integer--></sharpnessLevel>
</Sharpness>
```

**Test cases**

**GET /CGI/Image/channels/<ID>/sharpness/template/<ID>**

**Request XML:** none

**Response XML:** <Sharpness>

**PUT/CGI/Image/channels/<ID>/sharpness/template/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<Sharpness>
<sharpnessLevel>34</sharpnessLevel>
</Sharpness>
```

**2.2.11/CGI/Image/channels/<ID>/shutter/template/<ID>**

/CGI/Image/channels/<ID>/shutter/template/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire exposure parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<Shutter>	
<b>PUT</b>		
<b>Description</b>	Set exposure parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<Shutter>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is prepared for query and setting of exposure parameters, helping client or IE query and set device exposure parameters of device via CGI protocol, including shutter speed.		
<b>Explanations on key parameters:</b>		
<ShutterLevel> means shutter speed		

**ShutterXML Block**

```
<Shutter version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<ShutterLevel><!--dep,dependson <ExposureType>,xs:string, "
1,1/2,1/3,1/4,1/5,1/6,1/8,1/10,1/12,1/15,1/25,1/30,1/50,1/60,1/80,1/100,1/120,1/125,1/150,1/180
,1/200,1/250,1/500,1/1k,1/2k,1/4k,1/10k,1/100k"--><ShutterLevel>
</Shutter>
```

**Test cases**

**GET /CGI/Image/channels/<ID>/shutter/template/<ID>**

**Request XML:** none

**Response XML:** <Shutter>

**PUT/CGI/Image/channels/<ID>/shutter/template/<ID>**

**Response XML:** <ResponseStatus>

**Request XML: as below**

```
<?xml version="1.0" encoding="UTF-8"?>
<Shutter>
<ShutterLevel>1/25</ShutterLevel>
</Shutter>
```

**2.2.12/CGI/Image/channels/<ID>/gain/template/<ID>**

/CGI/Image/channels/<ID>/gain/template/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire auto gain parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<Gain>	
<b>PUT</b>		
<b>Description</b>	Set auto gain parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<Gain>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b> This protocol is prepared for query and setting of auto gain parameters, helping client or IE query and set auto gain parameters of device via CGI protocol.		
<b>Explanations on key parameters:</b> <GainLevel> means auto gain, range: 0-100		

**GainXML Block**

```
<Gain version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<GainLevel/><!-- dep,depends on <ExposureType>, xs:integer---->
</Gain>
```

**Test cases****GET /CGI/Image/channels/<ID>/gain/template/<ID>****Request XML: none****Response XML: <Gain>****PUT/CGI/Image/channels/<ID>/gain/template/<ID>****Response XML: <ResponseStatus>****Request XML: as below**

```
<?xml version="1.0" encoding="UTF-8"?>
<Gain>
<GainLevel>100</GainLevel>
</Gain>
```

**2.2.13/CGI/Image/channels/<ID>/brightness/template/<ID>**

/CGI/Image/channels/<ID>/brightness/template/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire brightness adjustment parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<Brightness>	
<b>PUT</b>		
<b>Description</b>	Set brightness adjustment parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<Brightness>	
<b>Success Return</b>	<ResponseStatus>	

**Explanations on protocol:**

This protocol is prepared for query and setting of brightness adjustment parameters, helping client or IE query and set brightness adjustment parameters of device via CGI protocol.

**Explanations on key parameters:**

<brightLevel> means brightness adjustment, range: 0-100

**BrightnessXML Block**

```
<Brightness version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <brightLevel><!--req, xs:integer --></brightLevel>
</Brightness>
```

**Test cases**

**GET /CGI/Image/channels/<ID>/brightness/template/<ID>**

**Request XML:** none

**Response XML:** <Brightness>

**PUT/CGI/Image/channels/<ID>/brightness/template/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<Brightness>
<brightLevel>41</brightLevel>
</Brightness>
```

**2.2.14/CGI/Image/channels/<ID>/AEspeed/template/<ID>**

/CGI/Image/channels/<ID>/AEspeed/template/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire AE adjustment parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<AEspeed>	
<b>PUT</b>		
<b>Description</b>	Set AE adjustment parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<AEspeed>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is prepared for query and setting of AE adjustment parameters, helping client or IE query and set AE adjustment parameters of device via CGI protocol.		
<b>Explanations on key parameters:</b>		
<aespeedLevel> means AE adjustment, range: 0-100		

**AEspeedXML Block**

```
<AEspeed version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <aespeedLevel><!--req, xs:integer --></aespeedLevel>
</AEspeed>
```

**Test cases**

**GET /CGI/Image/channels/<ID>/AEspeed/template/<ID>**

**Request XML:** none

**Response XML:** <AEspeed>

**PUT/CGI/Image/channels/<ID>/AEspeed/template/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<AEspeed>
<aespeedLevel>25</aespeedLevel>
</AEspeed>
```

### 2.2.15/CGI/Image/channels/<ID>/Iris/template/<ID>/type/<ID>

/CGI/Image/channels/<ID>/Iris/template/<ID>/type/<ID>      **General Resource v2.0**

#### GET

<b>Description</b>	Acquire aperture parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<Irisversion>

#### PUT

<b>Description</b>	Set aperture parameters
<b>Query</b>	None
<b>Inbound Data</b>	<Irisversion>
<b>Success Return</b>	<ResponseStatus>

#### Explanations on protocol:

This protocol is prepared for query and setting of aperture parameters, helping client or IE query and set aperture parameters of device via CGI protocol.

#### Explanations on key parameters:

<type> means types of different image parameters 0 - Monitoring image; 1- Snapshot image; 2 - Analysis image

<enabled> means auto aperture enabling/disabling; true: Enable, false: Disable

<maxIrisLevelLimit> means the max. aperture; aperture size is as follows:

<minIrisLevelLimit> means the min. aperture; aperture size is as follows:

Under manual mode: 0-Disabled, 1-F1.6, 2-F2.0, 3-F3.4, 4-F4.4, 5-F6.0, 6-F8.0, 7-F11;8-F2.2, 9-F2.3, 10-F2.4, 11-F2.8, 12-F3.2, 13-F4.0, 14-F4.5, 15-F4.8, 16-F5.6, 17-F6.4, 18-F6.8, 19-F9.0, 20-F9.1, 21-F9.6, 22-F12.8, 23-F14.0, 24-F18.1, 25-F25.6, 26-F36.2

LNM3020: 0-255 Continuous

#### IrisversionXML Block

```
<Irisversion="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<currentTemplate><!-- req,xs:string, --><currentTemplate>
<enabled><!-- opt, xs:boolean --></enabled>
<mode><!-- opt, xs:string,"DC,P-iris" --><mode>// Aperture mode, DC, P-iris (this field is
unused temporarily)
<IrisLevel/><!--opt, xs:integer -->
<irisSpeed><!--opt, xs:integer --></irisSpeed>
<maxIrisLevelLimit><!--opt, xs:integer --></maxIrisLevelLimit>
<minIrisLevelLimit><!--opt, xs:integer --></minIrisLevelLimit>
</Iris>
```

#### Test cases

**GET /CGI/Image/channels/<ID>/Iris/template/<ID>/type/<ID>**

**Request XML: none**

**Response XML: <Irisversion>**

**PUT/CGI/Image/channels/<ID>/Iris/template/<ID>/type/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<?xml version="1.0" encoding="UTF-8"?>
<Iris>
<enabled>true</enabled>
<maxIrisLevelLimit>10</maxIrisLevelLimit>
<minIrisLevelLimit>0</minIrisLevelLimit>
</Iris>
```

### 2.2.16/CGI/Image/channels/<ID>/smartIR/template/<ID>/type/<ID>

/CGI/Image/channels/<ID>/smartIR/template/<ID>/type/<ID> v2.0		<b>General Resource</b>
<b>GET</b>		
<b>Description</b>	Acquire smart IR parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<SmartIR>	
<b>PUT</b>		
<b>Description</b>	Set smart IR parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<SmartIR>	
<b>Success Return</b>	<ResponseStatus>	
<p><b>Explanations on protocol:</b> This protocol is prepared for query and setting of smart IR parameters, helping client or IE query and set smart IR parameters of device via CGI protocol.</p> <p><b>Explanations on key parameters:</b> &lt;type&gt; means types of different image parameters 0 - Monitoring image; 1- Snapshot image; 2 - Analysis image</p> <p>&lt;enabled&gt; means smart IR enabling/disabling, true: Enabled, false: Disabled</p>		

#### SmartIRXML Block

<pre>&lt;SmartIR version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema"&gt; &lt;enabled&gt;&lt;!--req, xs:boolean --&gt;&lt;enabled&gt; &lt;/SmartIR&gt;</pre>
--

#### Test cases

**GET /CGI/Image/channels/<ID>/smartIR/template/<ID>/type/<ID>**

**Request XML:** none

**Response XML:** <SmartIR>

**PUT/CGI/Image/channels/<ID>/smartIR/template/<ID>/type/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** as below

<pre>&lt;?xml version="1.0" encoding="UTF-8"?&gt; &lt;SmartIR&gt; &lt;enabled&gt;true&lt;/enabled&gt; &lt;/SmartIR&gt;</pre>
--

### 2.2.17/CGI/Image/channels/<ID>/BLC/template/<ID>/type/<ID>

/CGI/Image/channels/<ID>/BLC/template/<ID>/type/<ID> v2.0		<b>General Resource</b>
<b>GET</b>		
<b>Description</b>	Acquire BLC parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<BLC>	
<b>PUT</b>		
<b>Description</b>	Set BLC parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<BLC>	
<b>Success Return</b>	<ResponseStatus>	

**Explanations on protocol:**

This protocol is prepared for query and setting of BLC parameters, helping client or IE query and set BLC parameters of device via CGI protocol, including backlight compensation region/coordinates.

**Explanations on key parameters:**

type means different image parameter types; 0-Monitoring image; 1-Snapshot image; 2-Analysis image

<enabled> means enabled; true: Enabled, false: Disabled

<BLCRegionList> means backlight compensation region

<positionX> means X coordinates, ten-thousandth, value range 0-10000

<positionY> means Y coordinates, ten-thousandth, value range 0-10000

**BLCXML Block**

```
<BLC version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<enabled/><!-- req, xs:boolean -->
<BLCMode/><!--opt, xs:string, "UP, DOWN, LEFT, RIGHT, CENTER ,
MULTI-AREA,Region" -->
<BLCLevel><!-- opt,xs:integer--></BLCLevel>
<BLCRegionList><!--dep-->
<BLCRegion>
<id><!--req,integer--></id>// Only 1 region is supported temporarily, this field is disabled
temporarily
<RegionCoordinatesList>
  <RegionCoordinates><!--opt-->
    <positionX><!--req,xs:integer;coordinate--></positionX>
    <positionY><!--req,xs:integer;coordinate--></positionY>
  </RegionCoordinates>
</RegionCoordinatesList>
</BLCRegion>
</BLCRegionList>
</BLC>
```

**Test cases**

**GET /CGI/Image/channels/<ID>/BLC/template/<ID>/type/<ID>**

**Request XML: none**

**Response XML: <BLC>**

**PUT/CGI/Image/channels/<ID>/BLC/template/<ID>/type/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<?xml version="1.0" encoding="UTF-8"?>
<BLC>
<enabled>true</enabled>
<BLCRegionList>
<BLCRegion>
<id>1</id>
<RegionCoordinatesList>
<RegionCoordinates>
<positionX>3636</positionX>
<positionY>2187</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>8940</positionX>
<positionY>7951</positionY>
</RegionCoordinates>
</RegionCoordinatesList>
</BLCRegion>
</BLCRegionList>
</BLC>
```

### 2.2.18/CGI/Image/channels/<ID>/lightSuppression/template/<ID>

/CGI/Image/channels/<ID>/lightSuppression/template/<ID> General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire strong light suppression parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<LightSuppression>
<b>PUT</b>	
<b>Description</b>	Set strong light suppression parameters
<b>Query</b>	None
<b>Inbound Data</b>	<LightSuppression>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>            This protocol is prepared for query and setting of strong light suppression parameters, helping client or IE query and set strong light suppression parameters of device via CGI protocol.</p> <p><b>Explanations on key parameters:</b>            &lt;enabled&gt; means strong light suppression enabling/disabling; true: Enabled; false: Disabled            &lt;lightSuppressionStrength&gt; means strong light suppression strength; range: 1-100</p>	

#### LightSuppressionXML Block

```
< LightSuppression>
<enabled><!-- req, xs:boolean --></enabled>
<lightSuppressionStrength><!-- opt,xs:integer--></lightSuppressionStrength>
</LightSuppression>
```

#### Test cases

**GET /CGI/Image/channels/<ID>/lightSuppression/template/<ID>**

**Request XML:** none

**Response XML:** <LightSuppression>

**PUT/CGI/Image/channels/<ID>/lightSuppression/template/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<LightSuppression>
<enabled>true</enabled>
<lightSuppressionStrength>50</lightSuppressionStrength>
</LightSuppression>
```

### 2.2.19/CGI/Image/channels/<ID>/WDR/template/<ID>

/CGI/Image/channels/<ID>/WDR/template/<ID> General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire ultra-wide dynamic parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<WDR>
<b>PUT</b>	
<b>Description</b>	Set ultra-wide dynamic parameters
<b>Query</b>	None
<b>Inbound Data</b>	<WDR>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

This protocol is prepared for query and setting of ultra-wide dynamic parameters, helping client or IE query and set ultra-wide dynamic parameters of device via CGI protocol.

**Explanations on key parameters:**

<mode> means ultra-wide dynamic strategy, increase backlight compensation item; open: Manual control of ultra-wide dynamics, close: Disable; auto: Auto control of ultra-wide dynamics; blc: Backlight compensation  
 <WDRLevel> means ultra-wide dynamic level; range: 1-100

**WDRXML Block**

```
<WDR version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<mode><!--req, xs:string, "open,close,auto,blc"--></mode>
<WDRLevel><!--opt,xs:integer--></WDRLevel>
<WDRContrastLevel><!--opt, xs:integer --></WDRContrastLevel>
<WDRLevel1><!--opt,xs:integer--></WDRLevel1>
</WDR >
```

**Test cases**

**GET /CGI/Image/channels/<ID>/WDR/template/<ID>**

**Request XML:** none

**Response XML:** <WDR>

**PUT/CGI/Image/channels/<ID>/WDR/template/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<WDR>
<mode>blc</mode>
<WDRLevel>50</WDRLevel>
</WDR>
```

**2.2.20/CGI/Image/channels/<ID>/whiteBalance/template/<ID>**

/CGI/Image/channels/<ID>/whiteBalance/template/<ID> General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire white balance adjustment parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<WhiteBalance>
<b>PUT</b>	
<b>Description</b>	Set white balance adjustment parameters
<b>Query</b>	None
<b>Inbound Data</b>	<WhiteBalance>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol is prepared for query and setting of white balance adjustment parameters, helping client or IE query and set white balance adjustment parameters of device via CGI protocol, including type/scope.	
<b>Explanations on key parameters:</b>	
<WhiteBalanceStyle/> means white balance adjustment, auto: Auto; manual-auto: Semi-auto; sunny: Sunny; fluorescent_lamp: Fluorescent light; warm_light: Warm light; filament_lamp: Incandescent filament lamp; natural_light: Natural light; lock_wb: Lock white balance; manual: Manual	
<WhiteBalanceRed/> means R, range: 0-100	
<WhiteBalanceBlue/> means B, range: 0-100	

**WhiteBalanceXML Block**



```

<WhiteBalance version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<WhiteBalanceStyle/><!--req,xs:string"auto,manual_auto,sunny,fluorescent_lamp,warm_light,f
ilament_lamp,natural_light,lock_wb"-->
<WhiteBalanceRed/><!--dep, depends on <WhiteBalanceStyle>manual_auto , manual,
xs:integer, -->
<WhiteBalanceBlue/><!--dep, depends on <WhiteBalanceStyle> manual_auto ,
manual,xs:integer -->
</WhiteBalance>

```

**Test cases**

**GET /CGI/Image/channels/<ID>/whiteBalance/template/<ID>**

**Request XML: none**

**Response XML: <WhiteBalance>**

**PUT/CGI/Image/channels/<ID>/whiteBalance/template/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<?xml version="1.0" encoding="UTF-8"?>
<WhiteBalance>
<WhiteBalanceStyle>sunny</WhiteBalanceStyle>
<WhiteBalanceRed>50</WhiteBalanceRed>
<WhiteBalanceBlue>50</WhiteBalanceBlue>
</WhiteBalance>

```

**2.2.21/CGI/Image/channels/<ID>/noiseReduce/template/<ID>**

/CGI/Image/channels/<ID>/noiseReduce/template/<ID> General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire digital noise reduction parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<NoiseReduce>
<b>PUT</b>	
<b>Description</b>	Set digital noise reduction parameters
<b>Query</b>	None
<b>Inbound Data</b>	<NoiseReduce>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol is prepared for query and setting of digital noise reduction parameters, helping client or IE query and set digital noise reduction parameters of device via CGI protocol, including noise reduction level/spatial domain noise reduction/time domain noise reduction.	
<b>Explanations on key parameters:</b>	
<mode> means digital noise reduction, close: Disable; general: General mode, advanced: Expert mode	
<generalLevel> means noise reduction level; range: 1-100	
<FrameNoiseReduceLevel> means spatial domain noise reduction; range: 1-100	
<InterFrameNoiseReduceLevel> means time domain noise reduction; range: 1-100	

**NoiseReduceXML Block**

```

<NoiseReduce version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<mode><!--req,xs:string,"close, general, advanced"--></mode>
<GeneralMode><!--dep,depends on <mode> -->
<generalLevel><!--req,depends on <mode> general,xs:integer--></generalLevel>
</GeneralMode>
<AdvancedMode><!--dep -->
<FrameNoiseReduceLevel>
<!--req,depends on <mode> advanced,xs:integer--></FrameNoiseReduceLevel>
<InterFrameNoiseReduceLevel>
<!--req,depends on <mode> advanced,xs:integer--></InterFrameNoiseReduceLevel>

```

```
</AdvancedMode>
</NoiseReduce>
```

**Test cases**

**GET /CGI/Image/channels/<ID>/noiseReduce/template/<ID>**

**Request XML:** none

**Response XML:** <NoiseReduce>

**PUT/CGI/Image/channels/<ID>/noiseReduce/template/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<NoiseReduce>
<mode>general</mode>
<GeneralMode>
<generalLevel>25</generalLevel>
</GeneralMode>
<AdvancedMode>
<FrameNoiseReduceLevel>25</FrameNoiseReduceLevel>
<InterFrameNoiseReduceLevel>0</InterFrameNoiseReduceLevel>
</AdvancedMode>
</NoiseReduce>
```

**2.2.22/CGI/Image/channels/<ID>/ImageStyle/template/<ID>**

/CGI/Image/channels/<ID>/ImageStyle/template/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire image style parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<ImageStyle>	
<b>PUT</b>		
<b>Description</b>	Set image style parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<ImageStyle>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is prepared for query and setting of image style parameters, helping client or IE query and set image style parameters of device via CGI protocol.		
<b>Explanations on key parameters:</b>		
<style> means image style; Self-adaption: Self-adaption; Natural: Natural; Bright: Bright; Gentle: Gentle; Bright-coloured: Bright		

**ImageStyleXML Block**

```
<ImageStyle version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<style><!--req,xs:string,"Self-adaption,Natural,Bright,Gentle,Bright-coloured"--></style>
</ImageStyle>
```

**Test cases**

**GET /CGI/Image/channels/<ID>/ImageStyle/template/<ID>**

**Request XML:** none

**Response XML:** <ImageStyle>

**PUT/CGI/Image/channels/<ID>/ImageStyle/template/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<ImageStyle>
<style>Self-adaption</style>
</ImageStyle>
```

### 2.2.23/CGI/Image/channels/<ID>/SceneMode/template/<ID>

/CGI/Image/channels/<ID>/SceneMode/template/<ID>      General Resource    v2.0	
<b>GET</b>	
<b>Description</b>	Acquire indoor/outdoor mode
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<DoorMode>
<b>PUT</b>	
<b>Description</b>	Set indoor/outdoor mode
<b>Query</b>	None
<b>Inbound Data</b>	<DoorMode>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for query and setting of indoor/outdoor mode, helping client or IE query and set indoor/outdoor mode of device via CGI protocol.	
<b>Explanations on key parameters:</b> <mode> means indoor/outdoor mode, indoor: Indoor; outdoor: Outdoor	

#### DoorModeXML Block

```
<DoorMode version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <mode><!-req,xs:string,"indoor,outdoor"--></mode>
</DoorMode >
```

#### Test cases

**GET /CGI/Image/channels/<ID>/SceneMode/template/<ID>**

**Request XML:** none

**Response XML:** <DoorMode>

**PUT/CGI/Image/channels/<ID>/SceneMode/template/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<DoorMode>
<mode>outdoor</mode>
</DoorMode>
```

### 2.2.24/CGI/Image/channels/<ID>/Defog/template/<ID>

/CGI/Image/channels/<ID>/Defog/template/<ID>      General Resource    v2.0	
<b>GET</b>	
<b>Description</b>	Acquire defog mode parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<Defog>
<b>PUT</b>	
<b>Description</b>	Set defog mode parameters
<b>Query</b>	None
<b>Inbound Data</b>	<Defog>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

This protocol is prepared for query and setting of defog mode, helping client or IE query and set defog mode of device via CGI protocol.

**Explanations on key parameters:**

<enbaled> means defog; true: Enable; false: Disable  
 <defogStrength> means defog strength; range: 1-100

**DefogXML Block**

```
<Defog version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema" >
  <enbaled><!-- req, xs:boolean --><enabled>
  <defogStrength><!--dep,xs:integer--></defogStrength>
</Defog>
```

**Test cases**

**GET /CGI/Image/channels/<ID>/Defog/template/<ID>**

**Request XML:** none

**Response XML:** <Defog>

**PUT/CGI/Image/channels/<ID>/Defog/template/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<Defog>
<enbaled>true</enbaled>
<defogStrength>50</defogStrength>
</Defog>
```

**2.2.25/CGI/Image/channels/<ID>/recover/template/<ID>**

<b>/CGI/Image/channels/&lt;ID&gt;/recover/template/&lt;ID&gt;</b>		<b>General Resource v2.0</b>
<b>PUT</b>		
<b>Description</b>	Set recovery of original template	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is prepared for recovering original template of device, helping client or IE query and set original template of device via CGI protocol.		

**Test cases**

**PUT/CGI/Image/channels/<ID>/recover/template/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** None

**2.2.26/CGI/Image/channels/<ID>/default/type/<ID>**

<b>/CGI/Image/channels/&lt;ID&gt;/default/type/&lt;ID&gt;</b>		<b>General Resource v2.0</b>
<b>PUT</b>		
<b>Description</b>	Set recovery default	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<ResponseStatus>	

**Explanations on protocol:**

This protocol is prepared for recovering default setting of device, helping client or IE recover the default setting of device via CGI protocol.

<type> means types of different image parameters 0 - Monitoring image; 1- Snapshot image; 2 - Analysis image

**Test cases**

**PUT/CGI/Image/channels/<ID>/default/type/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** None

**2.2.27/CGI/Image/channels/<ID>/brightness/template/<ID>/type/<ID>**

<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire brightness adjustment parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<Brightness>
<b>PUT</b>	
<b>Description</b>	Set brightness adjustment parameters
<b>Query</b>	None
<b>Inbound Data</b>	<Brightness>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol is prepared for query and setting of brightness adjustment parameters, helping client or IE query and set brightness adjustment parameters of device via CGI protocol.	
<b>Explanations on key parameters:</b>	
<type> means types of different image parameters 0 - Monitoring image; 1- Snapshot image; 2 - Analysis image	
<brightLevel> means brightness adjustment, range: 0-100	

**BrightnessXML Block**

```
<Brightness version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <brightLevel><!--req, xs:integer --></brightLevel>
</Brightness>
```

**Test cases**

**GET /CGI/Image/channels/<ID>/brightness/template/<ID>/type/<ID>**

**Request XML:** none

**Response XML:** <Brightness>

**PUT/CGI/Image/channels/<ID>/brightness/template/<ID>/type/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<Brightness>
<brightLevel>41</brightLevel>
</Brightness>
```

**2.2.28/CGI/Image/channels/<ID>/ExposalMode/template/<ID>/type/<ID>**

<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire exposure mode
<b>Query</b>	None

<b>Inbound Data</b>	None
<b>Success Return</b>	<ExposalMode>
<b>PUT</b>	
<b>Description</b>	Set exposure mode
<b>Query</b>	None
<b>Inbound Data</b>	<ExposalMode>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b> This protocol is prepared for query and setting of exposure mode, helping client or IE query and set exposure mode of device via CGI protocol.</p> <p><b>Explanations on key parameters:</b> &lt;type&gt; means types of different image parameters 0 - Monitoring image; 1- Snapshot image; 2 - Analysis image &lt;exposalType&gt; means exposure mode type; 0-Auto; 1-Manual; 3-Shutter priority; 3-Aperture priority</p>	

#### WhiteBalanceXML Block

```
<ExposalMode version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<exposalType opt=""><!--opt, xs:integer="0,1,2..."></exposalType>
</ExposalMode>
```

#### Test cases

**GET /CGI/Image/channels/<ID>/ExposalMode/template/<ID>/type/<ID>**

**Request XML:** none

**Response XML:** <ExposalMode>

**PUT/CGI/Image/channels/<ID>/ExposalMode/template/<ID>/type/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<ExposalMode>
<exposalType opt="0,1,2,3">0</exposalType>
</ExposalMode>
```

#### 2.2.29/CGI/Image/channels/<ID>/shutter/template/<ID>/type/<ID>

<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire exposure parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<Shutter>
<b>PUT</b>	
<b>Description</b>	Set exposure parameters
<b>Query</b>	None
<b>Inbound Data</b>	<Shutter>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b> This protocol is prepared for query and setting of exposure parameters, helping client or IE query and set device exposure parameters of device via CGI protocol, including shutter speed.</p> <p><b>Explanations on key parameters:</b> &lt;type&gt; means types of different image parameters 0 - Monitoring image; 1- Snapshot image; 2 - Analysis image &lt;ShutterLevel&gt; means shutter speed</p>	

#### ShutterXML Block

```
<Shutter version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<ShutterLevel><!--dep,dependson          <ExposureType>,xs:string,          "
1,1/2,1/3,1/4,1/5,1/6,1/8,1/10,1/12,1/15,1/25,1/30,1/50,1/60,1/80,1/100,1/120,1/125,1/150,1/180
,1/200,1/250,1/500,1/1k,1/2k,1/4k,1/10k,1/100k"--><ShutterLevel>
</Shutter>
```

**Test cases**

**GET /CGI/Image/channels/<ID>/shutter/template/<ID>/type/<ID>**

**Request XML:** none

**Response XML:** <Shutter>

**PUT/CGI/Image/channels/<ID>/shutter/template/<ID>/type/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<Shutter>
<ShutterLevel>1/25</ShutterLevel>
</Shutter>
```

**2.2.30/CGI/Image/channels/<ID>/AEspeed/template/<ID>/type/<ID>**

<b>/CGI/Image/channels/&lt;ID&gt;/AEspeed/template/&lt;ID&gt;/type/&lt;ID&gt;</b>	
<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire AE adjustment parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<AEspeed>
<b>PUT</b>	
<b>Description</b>	Set AE adjustment parameters
<b>Query</b>	None
<b>Inbound Data</b>	<AEspeed>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol is prepared for query and setting of AE adjustment parameters, helping client or IE query and set AE adjustment parameters of device via CGI protocol.	
<b>Explanations on key parameters:</b>	
<type> means types of different image parameters 0 - Monitoring image; 1- Snapshot image; 2 - Analysis image	
<aespeedLevel> means AE adjustment, range: 0-100	

**AEspeedXML Block**

```
<AEspeed version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <aespeedLevel><!--req, xs:integer --></aespeedLevel>
</AEspeed>
```

**Test cases**

**GET /CGI/Image/channels/<ID>/AEspeed/template/<ID>/type/<ID>**

**Request XML:** none

**Response XML:** <AEspeed>

**PUT/CGI/Image/channels/<ID>/AEspeed/template/<ID>/type/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<AEspeed>
<aespeedLevel>25</aespeedLevel>
</AEspeed>
```

2.2.31/CGI/Image/channels/<ID>/color/template/<ID>/type/<ID>

/CGI/Image/channels/<ID>/color/template/<ID>/type/<ID>	
General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire image adjustment parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<Color>
<b>PUT</b>	
<b>Description</b>	Set image adjustment parameters
<b>Query</b>	None
<b>Inbound Data</b>	<Color>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>                      This protocol is prepared for query and setting of image adjustment parameters, helping client or IE query and set image adjustment parameters of device via CGI protocol, including brightness/contrast/saturation/chromaticity.</p> <p><b>Explanations on key parameters:</b>                      &lt;type&gt; means types of different image parameters 0 - Monitoring image; 1- Snapshot image; 2 - Analysis image                      &lt;brightnessLevel&gt; means brightness, range: 0-100                      &lt;contrastLevel&gt; means contrast, range: 0-100                      &lt;saturationLevel&gt; means saturation, range: 0-100                      &lt;hueLevel&gt; means chromaticity, range: 0-100</p>	

**ColorXML Block**

```
<Color version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<brightnessLevel><!--opt, xs:integer --></brightnessLevel>
<contrastLevel><!--opt, xs:integer --></contrastLevel>
<saturationLevel><!--opt, xs:integer --></saturationLevel>
<hueLevel><!--opt, xs:integer --></hueLevel >
<grayScale>
<grayScaleMode><!--opt,xs:string,"indoor,outdoor"--><grayScaleMode>
<grayScale>
</Color>
```

**Test cases**

**GET /CGI/Image/channels/<ID>/color/template/<ID>/type/<ID>**

**Request XML: none**

**Response XML: <Color>**

**PUT/CGI/Image/channels/<ID>/color/template/<ID>/type/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<?xml version="1.0" encoding="UTF-8"?>
<Color>
<brightnessLevel>41</brightnessLevel>
<contrastLevel>60</contrastLevel>
<saturationLevel>33</saturationLevel>
<hueLevel>63</hueLevel>
</Color>
```

2.2.32/CGI/Image/channels/<ID>/ImageStyle/template/<ID>/type/<ID>

/CGI/Image/channels/<ID>/ImageStyle/template/<ID>/type/<ID>	
GeneralResource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire image style parameters



<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ImageStyle>
<b>PUT</b>	
<b>Description</b>	Set image style parameters
<b>Query</b>	None
<b>Inbound Data</b>	<ImageStyle>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b> This protocol is prepared for query and setting of image style parameters, helping client or IE query and set image style parameters of device via CGI protocol.</p> <p><b>Explanations on key parameters:</b> &lt;type&gt; means types of different image parameters 0 - Monitoring image; 1- Snapshot image; 2 - Analysis image &lt;style&gt; means image style; Self-adaption: Self-adaption; Natural: Natural; Bright: Bright; Gentle: Gentle; Bright-coloured: Bright</p>	

#### ImageStyleXML Block

```
<ImageStyle version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<style><!--req,xs:string,"Self-adaption,Natural,Bright,Gentle,Bright-coloured"--></style>
</ImageStyle>
```

#### Test cases

**GET /CGI/Image/channels/<ID>/ImageStyle/template/<ID>/type/<ID>**

**Request XML: none**

**Response XML: <ImageStyle>**

**PUT/CGI/Image/channels/<ID>/ImageStyle/template/<ID>/type/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<?xml version="1.0" encoding="UTF-8"?>
<ImageStyle>
<style>Self-adaption</style>
</ImageStyle>
```

#### 2.2.33/CGI/Image/channels/<ID>/Defog/template/<ID>/type/<ID>

<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire defog mode parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<Defog>
<b>PUT</b>	
<b>Description</b>	Set defog mode parameters
<b>Query</b>	None
<b>Inbound Data</b>	<Defog>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

This protocol is prepared for query and setting of defog mode, helping client or IE query and set defog mode of device via CGI protocol.

**Explanations on key parameters:**

<type> means types of different image parameters 0 - Monitoring image; 1- Snapshot image; 2 - Analysis image

<enbaled> means defog; true: Enable; false: Disable

<defogStrength> means defog strength; range: 1-100

**DefogXML Block**

```
<Defog version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema" >
  <enbaled><!-- req, xs:boolean --><enabled>
  <defogStrength><!--dep,xs:integer--></defogStrength>
</Defog>
```

**Test cases**

**GET /CGI/Image/channels/1/Defog/template/1/type/1**

**Request XML:** none

**Response XML:** <Defog>

**PUT/CGI/Image/channels/1/Defog/template/1/type/1**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<Defog>
<enbaled>true</enbaled>
<defogStrength>50</defogStrength>
</Defog>
```

**2.2.34/CGI/Image/channels/<ID>/noiseReduce/template/<ID>/type/<ID>**

<b>General Resource v2.0</b>	
<b>/CGI/Image/channels/&lt;ID&gt;/noiseReduce/template/&lt;ID&gt;/type/&lt;ID&gt;</b>	
<b>GET</b>	
<b>Description</b>	Acquire digital noise reduction parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<NoiseReduce>
<b>PUT</b>	
<b>Description</b>	Set digital noise reduction parameters
<b>Query</b>	None
<b>Inbound Data</b>	<NoiseReduce>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol is prepared for query and setting of digital noise reduction parameters, helping client or IE query and set digital noise reduction parameters of device via CGI protocol, including noise reduction level/spatial domain noise reduction/time domain noise reduction.	
<b>Explanations on key parameters:</b>	
<type> means types of different image parameters 0 - Monitoring image; 1- Snapshot image; 2 - Analysis image	
<mode> means digital noise reduction, close: Disable; general: General mode, advanced: Expert mode	
<generalLevel> means noise reduction level; range: 1-100	
<FrameNoiseReduceLevel> means spatial domain noise reduction; range: 1-100	
<InterFrameNoiseReduceLevel> means time domain noise reduction; range: 1-100	

**NoiseReduceXML Block**

```

<NoiseReduce version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<mode><!--req,xs:string,"close, general, advanced"--></mode>
<GeneralMode><!--dep,depends on <mode> -->
<generalLevel><!--req,depends on <mode> general,xs:integer--></generalLevel>
</GeneralMode>
<AdvancedMode><!--dep -->
<FrameNoiseReduceLevel>
<!--req,depends on <mode> advanced,xs:integer--></FrameNoiseReduceLevel>
<InterFrameNoiseReduceLevel>
<!--req,depends on <mode> advanced,xs:integer--></InterFrameNoiseReduceLevel>
</AdvancedMode>
</NoiseReduce>

```

**Test cases**

**GET /CGI/Image/channels/<ID>/noiseReduce/template/<ID>/type/<ID>**

**Request XML: none**

**Response XML: <NoiseReduce>**

**PUT /CGI/Image/channels/<ID>/noiseReduce/template/<ID>/type/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<?xml version="1.0" encoding="UTF-8"?>
<NoiseReduce>
<mode>general</mode>
<GeneralMode>
<generalLevel>25</generalLevel>
</GeneralMode>
<AdvancedMode>
<FrameNoiseReduceLevel>25</FrameNoiseReduceLevel>
<InterFrameNoiseReduceLevel>0</InterFrameNoiseReduceLevel>
</AdvancedMode>
</NoiseReduce>

```

**2.2.35/CGI/Image/channels/<ID>/SceneMode/template/<ID>/type/<ID>**

<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire indoor/outdoor mode
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<DoorMode>
<b>PUT</b>	
<b>Description</b>	Set indoor/outdoor mode
<b>Query</b>	None
<b>Inbound Data</b>	<DoorMode>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for query and setting of indoor/outdoor mode, helping client or IE query and set indoor/outdoor mode of device via CGI protocol.	
<b>Explanations on key parameters:</b> <type> means types of different image parameters 0 - Monitoring image; 1- Snapshot image; 2 - Analysis image <mode> means indoor/outdoor mode, indoor: Indoor; outdoor: Outdoor	

**DoorModeXML Block**

```

<DoorMode version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<mode><!--req,xs:string,"indoor,outdoor"--></mode>
<DoorMode >

```

**Test cases**

**GET /CGI/Image/channels/<ID>/SceneMode/template/<ID>/type/<ID>**

**Request XML:** none

**Response XML:** <DoorMode>

**PUT/CGI/Image/channels/<ID>/SceneMode/template/<ID>/type/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<DoorMode>
<mode>outdoor</mode>
</DoorMode>
```

**2.2.36/CGI/Image/channels/<ID>/sharpness/template/<ID>/type/<ID>**

<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire sharpness level adjustment parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<Sharpness>
<b>PUT</b>	
<b>Description</b>	Set sharpness level adjustment parameters
<b>Query</b>	None
<b>Inbound Data</b>	<Sharpness>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for query and setting of sharpness level adjustment parameters, helping client or IE query and set sharpness level adjustment parameters of device via CGI protocol, including brightness/contrast/saturation/chromaticity.	
<b>Explanations on key parameters:</b> <type> means types of different image parameters 0 - Monitoring image; 1- Snapshot image; 2 - Analysis image <sharpnessLevel> means sharpness level, range: 0-100	

**SharpnessXML Block**

```
<Sharpness version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<sharpnessMode><!--opt, xs:string,"manual,auto"--></ sharpnessMode>
<sharpnessLevel><!--req, xs:integer--></sharpnessLevel/>
</Sharpness>
```

**Test cases**

**GET /CGI/Image/channels/<ID>/sharpness/template/<ID>/type/<ID>**

**Request XML:** none

**Response XML:** <Sharpness>

**PUT/CGI/Image/channels/<ID>/sharpness/template/<ID>/type/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<Sharpness>
<sharpnessLevel>34</sharpnessLevel>
</Sharpness>
```

**2.2.37/CGI/Image/channels/<ID>/lightSuppression/template/<ID>/type/<ID>**

```
/CGI/Image/channels/<ID>/lightSuppression/template/<ID>/type/<ID>
```

<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire strong light suppression parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<LightSuppression>
<b>PUT</b>	
<b>Description</b>	Set strong light suppression parameters
<b>Query</b>	None
<b>Inbound Data</b>	<LightSuppression>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b> This protocol is prepared for query and setting of strong light suppression parameters, helping client or IE query and set strong light suppression parameters of device via CGI protocol.</p> <p><b>Explanations on key parameters:</b> &lt;type&gt; means types of different image parameters 0 - Monitoring image; 1- Snapshot image; 2 - Analysis image &lt;enabled&gt; means strong light suppression enabling/disabling; true: Enabled; false: Disabled &lt;lightSuppressionStrength&gt; means strong light suppression strength; range: 1-100</p>	

**LightSuppressionXML Block**

```
< LightSuppression>
<enabled><!-- req, xs:boolean --></enabled>
<lightSuppressionStrength><!-- opt,xs:integer--></lightSuppressionStrength>
</LightSuppression>
```

**Test cases**

**GET /CGI/Image/channels/<ID>/lightSuppression/template/<ID>/type/<ID>**

**Request XML: none**

**Response XML: <LightSuppression>**

**PUT/CGI/Image/channels/<ID>/lightSuppression/template/<ID>/type/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<?xml version="1.0" encoding="UTF-8"?>
<LightSuppression>
<enabled>true</enabled>
<lightSuppressionStrength>50</lightSuppressionStrength>
</LightSuppression>
```

**2.2.38/CGI/Image/channels/<ID>/templateName/template/<ID>/type/<ID>**

<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire template name
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<TemplateName>
<b>PUT</b>	
<b>Description</b>	Set template name
<b>Query</b>	None
<b>Inbound Data</b>	<TemplateName>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

This protocol is prepared for query and setting of template name, helping client or IE query and set the template name of device via CGI protocol.

**Explanations on key parameters:**

<type> means types of different image parameters 0 - Monitoring image; 1- Snapshot image; 2 - Analysis image

<name> means template name, with 31 characters at most

**TemplateNameXML Block**

```
<TemplateName version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<name><!--req,xs:string--></name>
</TemplateName >
```

**Test cases**

**GET /CGI/Image/channels/<ID>/templateName/template/<ID>/type/<ID>**

**Request XML:** none

**Response XML:** <TemplateName>

**PUT/CGI/Image/channels/<ID>/templateName/template/<ID>/type/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<templateName>
<name>outdoor</name>
</templateName>
```

**2.2.39/CGI/Image/channels/<ID>/whiteBalance/template/<ID>/type/<ID>**

/CGI/Image/channels/<ID>/whiteBalance/template/<ID>/type/<ID> General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire white balance adjustment parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<WhiteBalance>
<b>PUT</b>	
<b>Description</b>	Set white balance adjustment parameters
<b>Query</b>	None
<b>Inbound Data</b>	<WhiteBalance>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol is prepared for query and setting of white balance adjustment parameters, helping client or IE query and set white balance adjustment parameters of device via CGI protocol, including type/scope.	
<b>Explanations on key parameters:</b>	
<type> means types of different image parameters 0 - Monitoring image; 1- Snapshot image; 2 - Analysis image	
<WhiteBalanceStyle/> means white balance adjustment, auto: Auto; manual-auto: Semi-auto; sunny: Sunny; fluorescent_lamp: Fluorescent light; warm_light: Warm light; filament_lamp: Incandescent filament lamp; natural_light: Natural light; lock_wb: Lock white balance; manual: Manual	
<WhiteBalanceRed/> means R, range: 0-100	
<WhiteBalanceBlue/> means B, range: 0-100	

**WhiteBalanceXML Block**

```

<WhiteBalance version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<currentTemplate><!-- req,xs:string, --><currentTemplate>
<WhiteBalanceStyle/><!--req,xs:string"auto,manual_auto,sunny,fluorescent_lamp,warm_light,f
ilament_lamp,natural_light,lock_wb"-->
<WhiteBalanceRed/><!--dep, depends on <WhiteBalanceStyle>manual_auto , manual,
xs:integer, -->
<WhiteBalanceBlue/><!--dep, depends on <WhiteBalanceStyle> manual_auto ,
manual,xs:integer -->
</WhiteBalance>

```

**Test cases**

**GET /CGI/Image/channels/1/whiteBalance/template/1/type/1**

**Request XML: none**

**Response XML: <WhiteBalance>**

**PUT/CGI/Image/channels/1/whiteBalance/template/1/type/1**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<?xml version="1.0" encoding="UTF-8"?>
<WhiteBalance>
<WhiteBalanceStyle>sunny</WhiteBalanceStyle>
<WhiteBalanceRed>50</WhiteBalanceRed>
<WhiteBalanceBlue>50</WhiteBalanceBlue>
</WhiteBalance>

```

**2.2.40/CGI/Image/channels/<ID>/WDR/template/<ID>/type/<ID>**

<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire ultra-wide dynamic parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<WDR>
<b>PUT</b>	
<b>Description</b>	Set ultra-wide dynamic parameters
<b>Query</b>	None
<b>Inbound Data</b>	<WDR>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol is prepared for query and setting of ultra-wide dynamic parameters, helping client or IE query and set ultra-wide dynamic parameters of device via CGI protocol.	
<b>Explanations on key parameters:</b>	
<type> means types of different image parameters 0 - Monitoring image; 1- Snapshot image; 2 - Analysis image	
<mode> means ultra-wide dynamic strategy, increase backlight compensation item; open: Manual control of ultra-wide dynamics, close: Disable; auto: Auto control of ultra-wide dynamics; blc: Backlight compensation	
<WDRLevel> means ultra-wide dynamic level; range: 1-100	

**WDRXML Block**

```

<WDR version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<mode><!--req, xs:string, "open,close,auto,blc"--></mode>
<WDRLevel><!--opt,xs:integer--></WDRLevel>
</WDR >

```

**Test cases**

**GET /CGI/Image/channels/<ID>/WDR/template/<ID>/type/<ID>**

**Request XML: none**

**Response XML: <WDR>**

**PUT/CGI/Image/channels/<ID>/WDR/template/<ID>/type/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<?xml version="1.0" encoding="UTF-8"?>
<WDR>
<mode>blc</mode>
<WDRLevel>50</WDRLevel>
</WDR>
```

**2.2.41/CGI/Image/channels/<ID>/template/<ID>/type/<ID>**

<b>/CGI/Image/channels/&lt;ID&gt;/template/&lt;ID&gt;/type/&lt;ID&gt; General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire all image parameters supported by device
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<Color>
<b>PUT</b>	
<b>Description</b>	Set all image parameters supported by device
<b>Query</b>	None
<b>Inbound Data</b>	<Color>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol, as the summary of Protocol 2.2.7~2.2.25, is prepared for improving the efficiency of acquiring and setting image parameters. The detailed parameters are consistent with the meaning of relevant protocols.	
This protocol should be used in cooperation with capability set protocol of image parameters. The main procedures of device may send one or more parameters of ImageParam based on the judgment of capability set; client may display or hide interfaces based on capability set	
<b>Explanations on key parameters:</b>	
type <id> represents the code stream type, including: 1: main code stream 2: auxiliary code stream 3: three code stream 4: main code stream regular 5: main code stream alarm 6: custom 1 7: custom 2	
channels <id> represents the channel number	
template <id> template number	
<PseudoColor> Pseudo color, incandescence: whitehot	
Black hot: blackhot	
Blue red yellow: blueredyellow	
Purple red yellow: purpleredyellow	
Blue green red: bluegreenred	
Rainbow 1: rainbow1	
Rainbow 2: rainbow2	
Black-red: blackred	
Dark green-red: darkgreenred	
Blue green red-pink: bluegreenredpink	
Mixed color: mix	
Warning red: alarmred	
Blue green orange: bluecyanorange	



Blue purple red: bluepurplered  
Red and yellow: redyellow  
Blue red: bluered  
Blue green gray: bluecyangray  
Orange red yellow: angeredyellow  
Warning green: alarmgreen  
Warning blue: alarmblue

<Gainmode> Gain mode, manual: manual, bright: bright, vivid: colorful

<brightnessLevel> Brightness, 0-100

<contrastLevel> Contrast, 0-100

<Sharpness> Sharpness, 0-100

<FlatField> flat field correction, off: off, timing: timer, temperature difference: tempdiff

<TimeInterval> Time interval (minutes)

<TempInterval> Temperature interval (degrees Celsius)

<DNR> Digital noise reduction, on: on, off: off

### ImageParam XML Block

```
<ImageParam version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<!--opt-->
<Color>
<brightnessLevel><!--opt, xs:integer --></brightnessLevel>
<contrastLevel><!--opt, xs:integer --></contrastLevel>
<saturationLevel><!--opt, xs:integer --></saturationLevel>
<hueLevel><!--opt, xs:integer --></hueLevel >
<grayScale>
<grayScaleMode><!--opt,xs:string,"indoor,outdoor"--></grayScaleMode>
<grayScale>
</Color>
<!--opt-->
<Sharpness>
<sharpnessMode><!--opt, xs:string,"manual,auto"--></sharpnessMode>
<sharpnessLevel><!--req, xs:integer--></sharpnessLevel/>
</Sharpness>
<Shutter>
<ShutterLevel><!--dep,dependson <ExposureType>,xs:string,
"1,1/2,1/3,1/4,1/5,1/6,1/8,1/10,1/12,1/15,1/25,1/30,1/50,1/60,1/80,1/100,1/120,1/125,1/150,1/18
0,1/200,1/250,1/500,1/1k,1/2k,1/4k,1/10k,1/100k"--><ShutterLevel>
</Shutter>
<!--opt-->
<Gain>
<GainLevel/><!-- dep,depends on <ExposureType>, xs:integer---->
<GainWindow><!--opt -->
<RegionCoordinatesList><!--opt -->
<RegionCoordinates><!--opt -->
<positionX><!--req, xs:integer;coordinate --></positionX>
<positionY><!--req, xs:integer;coordinate --></positionY>
</RegionCoordinates>
</RegionCoordinatesList>
</GainWindow>
</Gain>
<!--opt-->
<Brightness>
<brightLevel><!--req, xs:integer --></brightLevel>
```

```

</Brightness>
<!--opt-->
<AESpeed>
<aespeedLevel><!--req, xs:integer --></aespeedLevel>
</AESpeed>
<!--opt-->
<Iris>
<enabled><!-- opt, xs:boolean --></enabled>
<mode><!-- opt, xs:string,"DC,P-iris" --><mode>// Aperture mode, DC, P-iris (this field is
unused temporarily)
<IrisLevel><!--opt, xs:integer -->
<irisSpeed><!--opt, xs:integer --></irisSpeed>
</Iris>
<!--opt-->
<SmartIR>
<enabled><!--req, xs:boolean --><enabled>
<SmartIR>
<!--opt-->
<BLC>
<enabled/><!-- req, xs:boolean -->
<BLCMode/><!--opt, xs:string, "UP, DOWN, LEFT, RIGHT, CENTER ,
MULTI-AREA,Region" -->
<BLCLevel><!-- opt,xs:integer--></BLCLevel>
<BLCRegionList><!--dep-->
<BLCRegion>
<id><!--req,integer--></id>// Only 1 region is supported temporarily, this field is disabled
temporarily
<RegionCoordinatesList>
<RegionCoordinates><!--opt-->
<positionX><!--req,xs:integer;coordinate--></positionX>
<positionY><!--req,xs:integer;coordinate--></positionY>
</RegionCoordinates>
</RegionCoordinatesList>
</BLCRegion>
</BLCRegionList>
</BLC>
<!--opt-->
<LightSuppression>
<enabled><!-- req, xs:boolean --></enabled>
<lightSuppressionStrength><!-- opt,xs:integer--></lightSuppressionStrength>
</LightSuppression>
<!--opt-->
<WDR>
<mode><!--req, xs:string,"open,close,auto,blc"--></mode>
<WDRLevel><!--opt,xs:integer--></WDRLevel>
<WDRContrastLevel><!--opt, xs:integer --></WDRContrastLevel>
<WDRLevel1><!--opt,xs:integer--></WDRLevel1>
</WDR>
<!--opt-->
<WhiteBalance>
<WhiteBalanceStyle/><!--req,xs:string"auto,manual_auto,sunny,fluorescent_lamp,warm_light,f
ilament_lamp,natural_light,lock_wb"-->
<WhiteBalanceRed/><!--dep, depends on <WhiteBalanceStyle>manual_auto 、 manual,
xs:integer, -->
<WhiteBalanceBlue/><!--dep, depends on <WhiteBalanceStyle> manual_auto 、
manual,xs:integer -->
</WhiteBalance>
<!--opt-->

```

```

<NoiseReduce>
<mode><!--req,xs:string,"close, general, advanced"--></mode>
<GeneralMode><!--dep,depends on <mode> -->
<generalLevel><!--req,depends on <mode> general,xs:integer--></generalLevel>
</GeneralMode>
<AdvancedMode><!--dep -->
<FrameNoiseReduceLevel>
<!--req,depends on <mode> advanced,xs:integer--></FrameNoiseReduceLevel>
<InterFrameNoiseReduceLevel>
<!--req,depends on <mode> advanced,xs:integer--></InterFrameNoiseReduceLevel>
</AdvancedMode>
</NoiseReduce>
<!--opt-->
<ImageStyle>
<style><!--req,xs:string,"Self-adaption,Natural,Bright,Gentle,Bright-coloured"--></style>
</ImageStyle>
<!--opt-->
<DoorMode>
<mode><!--req,xs:string,"indoor,outdoor"--></mode>
<DoorMode>
<!--opt-->
<Defog>
<enbaled><!-- req, xs:boolean --><enabled>
<defogStrength><!--dep,xs:integer--></defogStrength>
</Defog>
</ImageParam>

```

#### Test cases

**GET /CGI/Image/channels/1/template/1**

**Request XML:** none

**Response XML:** <Color>

**PUT/CGI/Image/channels/1/template/1**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```

<ImageParam version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<!--opt-->
<PseudoColor>
  <PseudoColorMode>rainbow1</PseudoColorMode>
</PseudoColor>
<Gainmode>
  <Gainmodetype>manual</Gainmodetype>
</Gainmode>
<FlatField>
  <FlatFieldMode>timer</FlatFieldMode>
</FlatField>
<TimeInterval>
  <TimeIntervalvalue>20</TimeIntervalvalue>
</TimeInterval>
<TempInterval>
  <TempIntervalvalue>5</TempIntervalvalue>
</TempInterval>
<Color>
<brightnessLevel>41</brightnessLevel>
<contrastLevel>60</contrastLevel>

```

```
<saturationLevel>33</saturationLevel>
<hueLevel>63</hueLevel>
</Color>
<!--opt-->
<Sharpness>
<sharpnessLevel>34</sharpnessLevel>
</Sharpness>
<!--opt-->
<Shutter>
<ShutterLevel>1/25</ShutterLevel>
</Shutter>
<!--opt-->
<Gain>
<GainLevel>100</GainLevel>
</Gain>
<!--opt-->
<Brightness>
<brightLevel>50</brightLevel>
</Brightness>
<!--opt-->
<AEspeed>
<aespeedLevel>25</aespeedLevel>
</AEspeed>
<!--opt-->
<Iris>
<enabled>true</enabled>
</Iris>
<!--opt-->
<SmartIR>
<enabled>true</enabled>
<SmartIR>
<!--opt-->
<BLC>
<enabled>true</enabled>
<BLCRegionList>
<BLCRegion>
<id>1</id>
<RegionCoordinatesList>
<RegionCoordinates>
<positionX>3636</positionX>
<positionY>2187</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>8940</positionX>
<positionY>7951</positionY>
</RegionCoordinates>
</RegionCoordinatesList>
</BLCRegion>
</BLCRegionList>
</BLC>
<!--opt-->
<LightSuppression>
<enabled>true</enabled>
<lightSuppressionStrength>50</lightSuppressionStrength>
</LightSuppression>
<!--opt-->
<WDR>
<mode>blc</mode>
```

```

<WDRLevel>50</WDRLevel>
</WDR>
<!--opt-->
<WhiteBalance>
<WhiteBalanceStyle>sunny</WhiteBalanceStyle>
<WhiteBalanceRed>50</WhiteBalanceRed>
<WhiteBalanceBlue>50</WhiteBalanceBlue>
</WhiteBalance>
<!--opt-->
<NoiseReduce>
<mode>general</mode>
<GeneralMode>
<generalLevel>25</generalLevel>
</GeneralMode>
<AdvancedMode>
<FrameNoiseReduceLevel>25</FrameNoiseReduceLevel>
<InterFrameNoiseReduceLevel>0</InterFrameNoiseReduceLevel>
</AdvancedMode>
</NoiseReduce>
<!--opt-->
<ImageStyle>
<style>Self-adaption</style>
</ImageStyle>
<!--opt-->
<DoorMode>
<mode>outdoor</mode>
<DoorMode>
<!--opt-->
<Defog>
<enbaled>>true</enbaled>
<defogStrength>50</defogStrength>
</Defog>
</ImageParam>

```

#### 2.2.42/CGI/Image/channels/<ID>/MinExposal /template/<ID>/type/<ID>

/CGI/Image/channels/<ID>/ MinExposal/template/<ID>/type/<ID>	
General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire the min. exposure parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	< MinExposal>
<b>PUT</b>	
<b>Description</b>	Set the min. exposure parameters
<b>Query</b>	None
<b>Inbound Data</b>	< MinExposal>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol is prepared for query and setting of the min. exposure parameters, helping client or IE query and set the min. exposure parameters of device via CGI protocol.	
<b>Explanations on key parameters:</b>	
< MinExposalLevel> means the min. exposure speed	

#### ExposalMin XML Block

```

< ExposalMin version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
< ExposalMin>
<MinExposalLevel
opt="1/2,1/3,1/4,1/5,1/6,1/8,1/10,1/12,1/15,1/25,1/30,1/50,1/60,1/80,1/100,1/120,1/125,1/150,1/
180,1/200,1/250,1/500,1/1k,1/2k,1/4k,1/10k,1/100k" ><!--req,xs:string,-->
< MinExposalLevel >
</ExposalMin>

```

**Test cases**

**GET /CGI/Image/channels/<ID>/ ExposalMin /template/<ID>/type/<ID>**

**Request XML: none**

**Response XML: <Shutter>**

**PUT/CGI/Image/channels/<ID>/ ExposalMin /template/<ID>/type/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<?xml version="1.0" encoding="UTF-8"?>
< ExposalMin>
< MinExposalLevel >1/25</ MinExposalLevel >
</ ExposalMin>

```

**2.2.43/CGI/Streaming/videomode/channels /<ID>**

/CGI/Streaming/videomode/channels/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire NP system parameters of device	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<videomode>	
<b>PUT</b>		
<b>Description</b>	Set NP system parameters of device	
<b>Query</b>	None	
<b>Inbound Data</b>	<videomode>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is prepared for query and setting of device NP system, helping client or IE query and set the NP system parameters of device via CGI protocol.		
<b>Explanations on key parameters:</b>		
<np-Mode> represents standard		

**videomodeXML Block**

```

<videomode version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<np-Mode ><!-- req, ro, xs:string, "NTSC,PAL"></np-Mode>
</videomode>

```

**Test cases**

**GET/CGI/Streaming/videomode/channels/1**

**Request XML: none**

**Response XML: < videomode>**

**PUT/CGI/Streaming/videomode/channels/1**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<?xml version="1.0" encoding="UTF-8"?>
<videomode >
<np-Mode>NTSC</np-Mode>
</videomode>

```

### 2.2.44/CGI/Image/channels/<ID>/imageSchedule/default

<b>/CGI/Image/channels/&lt;ID&gt;/imageSchedule/default</b>	
<b>General Resource v2.0</b>	
<b>PUT</b>	
<b>Description</b>	Set recovery default of HD template
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> Set recovery default of HD template	

**Test cases**

**PUT/CGI/Image/channels/<ID>/imageSchedule/default**

**Request XML:** none

**Response XML:** <ResponseStatus>

### 2.2.45/CGI/Image/channels/<ID>/ImageAdjust/mode/<ID>

<b>/CGI/Image/channels/&lt;ID&gt;/ImageAdjust/mode/&lt;ID&gt;</b>	
<b>GeneralResource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire image adjustment parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ImageAdjust>
<b>PUT</b>	
<b>Description</b>	Set image adjustment parameters
<b>Query</b>	None
<b>Inbound Data</b>	<ImageAdjust>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for query and setting of image adjustment parameters, helping client or IE query and set image adjustment parameters of device via CGI protocol.	
<b>Explanations on key parameters:</b> <mode> means the different image adjustment template No. started from 0. <horizontal> means horizontal view parameter value, 0~100 <vertical> means vertical view parameter value, 0~100 <ldc> means distortion correction strength value, 0~100 <enlarge> means remote enlarge value, 0~100	
<b>ImageAdjust XML Block</b>	

```
<ImageAdjustversion="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<horizontal><!-- req, xs:integer --></horizontal>
<vertical><!-- req, xs:integer --></vertical>
<ldc><!-- req, xs:integer --></ldc>
<enlarge><!-- req, xs:integer --></enlarge>
</ImageAdjust>
```

**Test cases**

**GET /CGI/Image/channels/<ID>/ImageAdjust/mode/<ID>**

**Request XML:** none

**Response XML:** <ImageAdjust>

**PUT /CGI/Image/channels/<ID>/ImageAdjust/mode/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```

<?xml version="1.0" encoding="UTF-8"?>
<ImageAdjust>
<horizontal>50</horizontal>
<vertical>50</vertical>
<ldc>50</ldc>
<enlarge>50</enlarge>
</ImageAdjust>

```

#### 2.2.46/CGI/Image/channels/<ID>/ImageAdjustTemplate

<b>/CGI/Image/channels/&lt;ID&gt;/ImageAdjustTemplate</b>	
<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire property of image adjustment template
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ImageAdjustTemplateList>
<p><b>Explanations on protocol:</b> This protocol is prepared for acquiring the property of image adjustment template.</p> <p><b>Explanations on key parameters:</b> &lt;i&gt;TemplateID&lt;/i&gt; means the image adjustment template No. started from 0; template 0 is disabled as default. If template is unsupported, use 0x7FFFFFFF, which means invalid parameter and it is mutually exclusive with normal S/N and they cannot be reported simultaneously. &lt;i&gt;Type&lt;/i&gt; means the template type. 1-Fixed template, divided by level; 2-User-defined template, parameters can be customized</p>	

#### ImageAdjustTemplateList XML Block

```

<ImageAdjustTemplateList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<ImageAdjustTemplate>
<i>TemplateID</i><!-- req, xs:integer--></i>TemplateID>
<i>Type</i><!-- req, xs:integer--></i>Type>
</ImageAdjustTemplate>
</ImageAdjustTemplateList >

```

#### Test cases

#### GET /CGI/Image/channels/<ID>/ImageAdjustTemplate

**Request XML:** none

**Response XML:** <ImageAdjustTemplateList>

**Response XML:** as below

```

<ImageAdjustTemplateList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<ImageAdjustTemplate>
<i>TemplateID</i><0</i>TemplateID>
<i>Type</i><1</i>Type>
</ImageAdjustTemplate>
<ImageAdjustTemplate>
<i>TemplateID</i><1</i>TemplateID>
<i>Type</i><1</i>Type>
</ImageAdjustTemplate>
<ImageAdjustTemplate>
<i>TemplateID</i><2</i>TemplateID>
<i>Type</i><1</i>Type>
</ImageAdjustTemplate>
<ImageAdjustTemplate>
<i>TemplateID</i><3</i>TemplateID>
<i>Type</i><1</i>Type>
</ImageAdjustTemplate>
<ImageAdjustTemplate>
<i>TemplateID</i><4</i>TemplateID>

```



```
<iType>2</iType>
</ImageAdjustTemplate>
</ImageAdjustTemplateList>
```

### 2.2.47/CGI/Image/channels/<ID>/ImageAdjust/CurrentTemplate

<b>/CGI/Image/channels/&lt;ID&gt;/ImageAdjust/CurrentTemplate</b>	
<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire image adjustment of present template
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<b>&lt;CurrentTemplate&gt;</b>
<b>Explanations on protocol:</b> This protocol is prepared for acquiring the image adjustment of present template. <b>Explanations on key parameters:</b> <templateID> means template ID	

#### CurrentTemplate XML Block

```
<CurrentTemplate version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<templateID><!--req,xs:integer--><templateID>
</CurrentTemplate>
```

#### Test cases

**GET /CGI/Image/channels/<ID>/ImageAdjust/CurrentTemplate**

**Request XML: none**

**Response XML: <CurrentTemplate>**

```
<?xml version="1.0" encoding="UTF-8"?>
<CurrentTemplate>
<templateID>0</templateID>
</CurrentTemplate>
```

### 2.2.48/CGI/Image/channels/<ID>/ImageAdjust/template/<ID>/type/<ID>

<b>/CGI/Image/channels/&lt;ID&gt;/ImageAdjust/template/&lt;ID&gt;/type/&lt;ID&gt;</b>	
<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire the parameters of single type image adjustment
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<b>&lt;ImageAdjustType&gt;</b>
<b>PUT</b>	
<b>Description</b>	Set the parameters of single type image adjustment
<b>Query</b>	None
<b>Inbound Data</b>	<b>&lt;ImageAdjustType&gt;</b>
<b>Success Return</b>	<b>&lt;ResponseStatus&gt;</b>
<b>Explanations on protocol:</b> This protocol is prepared for query and setting of parameters of single type image adjustment, helping client or IE query and set parameters of single type image adjustment of device via CGI protocol. <b>Explanations on key parameters:</b> <type> means type of image adjustment parameter. 1-Horizontal view; 2-Vertical view; 3-Distortion correction strength; 4-Remote enlarge value <value> means parameter value, range: 0-100	

### ImageAdjustType XML Block

```
<ImageAdjustType version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<value><!--req, xs:integer --></value>
</ImageAdjustType>
```

#### Test cases

**GET /CGI/Image/channels/<ID>/ImageAdjust/template/<ID>/type/<ID>**

**Request XML:** none

**Response XML:** <ImageAdjustType>

**PUT/CGI/Image/channels/<ID>/ImageAdjust/template/<ID>/type/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<ImageAdjustType>
<value>50</value>
</ImageAdjustType>
```

## 2.3/CGI/System

### 2.3.1/CGI/System/Video/inputs/channels/<ID>/overlays/type/<ID>

/CGI/System/Video/inputs/channels/<ID>/overlays/type/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire date and addition information	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<VideoOverlay>	
<b>PUT</b>		
<b>Description</b>	Set date and addition information	
<b>Query</b>	None	
<b>Inbound Data</b>	<VideoOverlay>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is prepared for query and setting of date and additional information in character overlay, helping client or IE query and set date and additional information of device via CGI protocol, including image size/image width/image height/channel No./additional information list/coordinates.		
<b>Explanations on key parameters:</b>		
channels/<ID>: Channel No., started from 1		
type/<ID>: Code stream No., started from 1; 1: Main code stream; 2: Auxiliary code stream; 3: Third code stream		
If protocol test fails, it is old device and remove this field before use.		
<VideoOverlay> Overlay of date and additional information		
<normalizedScreenSize> Screen size		
<normalizedScreenWidth> Screen width		
<normalizedScreenHeight> Screen height		
<channelID> Channel No.		
<TextOverlayList> means list of additional information		
<TextOverlay> means members of additional information		
<id> means number of additional information member, range: 1-5		
<enabled> means whether enabling member of current additional information; true: Enable; false: Disable		
<positionX> means X coordinates at upper left corner of additional information member		
<positionY> means Y coordinates at upper left corner of additional information member		
<displayText max=""> means text of additional information member; range: IPC 127, H6 64, max.: The max. character length allowed		
<TextFontColor> means color of additional information member, take the lower 24 bit of 32		

bits as color; rgb means digital mode bgr:

<TextFontBClarity> represents the background transparency of additional information members

<DateTimeOverlay> means information of date overlay

<enabled> means whether enabling date overlay; true: Enable; false: Disable

<positionX> means X coordinates at upper left corner

<positionY> means Y coordinates at upper left corner

<dateStyle> means date format; YYYY: Year; MM: Month; DD: Day; CHR: Month letter in English (for example: Mar 02 2016), YYYY/MM/DD on IE interface corresponds to 2016/03/02 08:08 and the rest should be analogized in the same way. Field separator should be Chinese for new date (March 23, 2018 15:51:33), Chinese for time (2018/03/23 15:52:00) and Chinese for date interval (March 23, 2018 15:52:00) (2019/05/06), (05/06/2019) AND (6/5/2019)

<dateTimeColor> means date color; take lower 24 bits of 32 bits as color rgb, means digital mode bgr:

<dateTimeBClarity> represents the transparency of the date time background

<timeStyle> means time format, 12hour: 12h system, 24hour: 24h system

<displayWeek> means whether displaying week information; true: Enabled; false: Disabled

<displaymillisecond> means whether displaying ms information; true: Enabled; false: Disabled

<channelNameOverlay> means channel overlay information; range: DVR 64, others: 32

<enabled> means whether enabling channel name overlay; true: Enabled; false: Disabled

<positionX> means X coordinates

<positionY> means Y coordinates

<channelName max=""> means channel name max: Means max. character length allowed

<channelColor> means channel overlay information and color; take lower 24 bits of 32 bits as color rgb, means digital mode bgr:

<channelBClarity> represents the channel name overlapping information background transparency

<fontSize> means font size of overlay information; 0: Self-adaption, 1:16\*16, 2:24\*24, 3: 32\*32, 4: 48\*48, 5:64\*64, 6:96\*96, 7:128\*128 and 8:72\*72

<frontColorMode> means front color mode of overlay information (disabled)

<frontColor> means front color of overlay information (disabled)

<fontType> means font size of overlay information; 1: Dot matrix; 2: Vector

### VideoOverlayXML Block

```

<VideoOverlay version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <normalizedScreenSize><!--req-->
  <normalizedScreenWidth><!--ro, req, xs:integer --></normalizedScreenWidth>
  <normalizedScreenHeight><!--ro, req, xs:integer--></normalizedScreenHeight>
</normalizedScreenSize>
  <channelID><!--req, xs:integer></channelID>
  <typeID><!--req, xs:integer></typeID>
  <attribute><!--opt-->
  <transparent><!-- req, xs:boolean --></transparent>
  <flashing><!-- req, xs:boolean--><flashing>
</attribute>
  <TextOverlayList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <TextOverlay> <!-- opt -->
    <id><!-- req, integer, --></id>
    <enabled><!-- req, string, --></enabled>
  <positionX><!-- req, integer, --></positionX>
  <positionY><!-- req, integer, --></positionY>
  <displayText max="128"><!-- req, string, --></displayText>
  <TextFontColor><!-- dep, xs: integer --></TextFontColor>
  <TextFontBClarity><!-- dep, xs: integer --></TextFontBClarity>
</TextOverlay>

```

```

<TextFontColor><!-- opt, xs: hexBinary;color --></TextFontColor>//Disabled
</TextOverlayList>
<DateTimeOverlay version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<enabled><!-- req, xs:boolean --></enabled>
<positionX><!-- req, xs:integer;coordinate --></positionX>
<positionY><!-- req, xs:integer;coordinate --></positionY>
<dateStyle><!-- opt, xs:string, "YYYY/MM/DD, MM/DD/YYYY, DD/MM/YYYY,
YYYY-MM-DD, MM-DD-YYYY, DD-MM-YYYY, YYYY.MM.DD, MM.DD.YYYY,
DD .MM.YYYY, CHR-YYYY-MM-DD, CHR-MM-DD-YYYY, CHR-DD-MM-YYYY, CHR
DD YYYY, DD CHR YYYY, YYYY Year MM Month DD Day hh:mm:ss, YYYY/MM/DD
hh Hour mm Minute ss Second, YYYY Year MM Month DD Day hh Hour mm Minute ss
Second", YYYY Year MM Month DD Day, MM Month DD Day YYYY Year, DD Day MM
Month YYYY Year-->
</dateStyle>
<dateTimeColor><!--req,integer --></dateTimeColor>
<dateTimeBClarity><!-- dep, xs: integer --></dateTimeBClarity>

<timeStyle><!--opt, xs:string, "12hour, 24hour" --></timeStyle>
    <displayWeek><!-- opt, xs:boolean --></displayWeek>
<displaymillisecond><!-- opt, xs:boolean --></displaymillisecond>
</DateTimeOverlay>
<channelNameOverlay version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<enabled><!-- req, xs:boolean --></enabled>
<positionX><!-- req, xs:integer;coordinate --></positionX>
<positionY><!-- req, xs:integer;coordinate --></positionY>
<channelName max="64"><!-- req, xs: string --></channelName>
<channelColor><!--req,xs: hexBinary;color --></channelColor>
<channelBClarity><!-- dep, xs: integer --></channelBClarity>
</channelNameOverlay>
<fontSize opt="0,1,2..."><!-- opt, xs:integer, pixels --></fontSize>
<frontColorMode><!-- opt, string, "auto,customize" --></frontColorMode>
<frontColor><!-- dep, xs: hexBinary;color --></frontColor>
<fontType><!--opt,xs:integer--></fontType>
</VideoOverlay>

```

**Test cases**

**GET /CGI/System/Video/inputs/channels/1/overlays/type/1**

**Request XML: none**

**Response XML: <VideoOverlay>**

**PUT /CGI/System/Video/inputs/channels/1/overlays/type/1**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<?xml version="1.0" encoding="UTF-8"?>
<VideoOverlay>
<normalizedScreenSize>
<normalizedScreenWidth>960</normalizedScreenWidth>
<normalizedScreenHeight>1280</normalizedScreenHeight>
</normalizedScreenSize>
<channelID>1</channelID>
<channelNameOverlay>
<enabled>true</enabled>
<positionY>1929</positionY>
<positionX>8395</positionX>
<channelName max="64">Channel 1</channelName>
<channelColor>0</channelColor>
</channelNameOverlay>
<DateTimeOverlay>
<enabled>true</enabled>

```

```
<dateStyle>YYYY-MM-DD</dateStyle>
<dateTimeColor>2123414</dateTimeColor>
<dateTimeBClarity>50</dateTimeBClarity>
<positionX>3958</positionX>
<positionY>2828</positionY>
<timeStyle>12hour</timeStyle>
<displayWeek>true</displayWeek>
<displaymillisecond>true</displaymillisecond>
</DateTimeOverlay>
<TextOverlayList>
<TextOverlay>
<ID>1</ID>
<enabled>true</enabled>
<positionX>1833</positionX>
<positionY>4000</positionY>
<displayText max="127"> Test 1</displayText>
<TextFontColor>16777215</TextFontColor>
<TextFontBClarity>20</TextFontBClarity>
</TextOverlay>
<TextOverlay>
<ID>2</ID>
<enabled>true</enabled>
<positionX>3208</positionX>
<positionY>4921</positionY>
<displayText max="127"> Test 2</displayText>
<TextFontColor>0</TextFontColor>
<TextFontBClarity>40</TextFontBClarity>
</TextOverlay>
<TextOverlay>
<ID>3</ID>
<enabled>true</enabled>
<positionX>4812</positionX>
<positionY>5218</positionY>
<displayText max="127"> Test 3</displayText>
<TextFontColor>16711680</TextFontColor>
<TextFontBClarity>60</TextFontBClarity>
</TextOverlay>
<TextOverlay>
<ID>4</ID>
<enabled>true</enabled>
<positionX>6312</positionX>
<positionY>6023</positionY>
<displayText max="127"> Test 4</displayText>
<TextFontColor>2123414</TextFontColor>
<TextFontBClarity>80</TextFontBClarity>
</TextOverlay>
<TextOverlay>
<ID>5</ID>
<enabled>true</enabled>
<positionX>7687</positionX>
<positionY>7085</positionY>
<displayText max="127"> Test 5</displayText>
<TextFontColor>1470742</TextFontColor>
<TextFontBClarity>100</TextFontBClarity>
</TextOverlay>
</TextOverlayList>
```

```
<fontType>2</fontType>
<fontSize>3</fontSize>
</VideoOverlay>
```

### 2.3.2/CGI/System/Video/inputs/channels/<ID>/Logo

/CGI/System/Video/inputs/channels/<ID>/Logo		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire LOGO enabling and position	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<TextOverlayLogo>	
<b>PUT</b>		
<b>Description</b>	Set LOGO enabling and position	
<b>Query</b>	None	
<b>Inbound Data</b>	<TextOverlayLogo>	
<b>Success Return</b>	<ResponseStatus>	
<p><b>Explanations on protocol:</b>            This protocol is prepared for query and setting of LOGO enabling and position, helping client or IE query and set LOGO enabling and position of device via CGI protocol, including Logo overlay information/channel No./coordinates.</p> <p><b>Explanations on key parameters:</b>            &lt;TextOverlayLogo&gt; means Logo overlay information            &lt;channelID&gt; Channel No.            &lt;enable&gt; means whether enabling Logo overlay            &lt;LogoPosition&gt; means Logo overlay position in image            &lt;LeftUpX&gt; means X coordinates of upper left corner            &lt;LeftUpY&gt; means Y coordinates of upper left corner</p>		

#### TextOverlayLogoXML Block

```
<TextOverlayLogo="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<channelID><!--req,sx:integer--></channelID>
<enable><!--opt,xs:boolean></enable>
<LogoPosition>
< LeftUpX><!--req,xs:integer--></LeftUpX >
< LeftUpY><!--req,xs:integer--></LeftUpY >
</ LogoPosition >
</TextOverlayLogo>
```

#### Test cases

**GET /CGI/System/Video/inputs/channels/<ID>/Logo**

**Request XML:** none

**Response XML:** <TextOverlayLogo>

**PUT/CGI/System/Video/inputs/channels/<ID>/Logo**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<TextOverlayLogo>
<channelID>1</channelID>
<enable>true</enable>
<LogoPosition>
<LeftUpX>5375</LeftUpX>
<LeftUpY>3759</LeftUpY>
</LogoPosition>
</TextOverlayLogo>
```

### 2.3.3/CGI/System/Video/inputs/channels/<ID>/PrivacyMask

/CGI/System/Video/inputs/channels/<ID>/PrivacyMask    General Resource    v2.0	
<b>GET</b>	
<b>Description</b>	Acquire video shielding parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<PrivacyMask>
<b>PUT</b>	
<b>Description</b>	Set video shielding parameters
<b>Query</b>	None
<b>Inbound Data</b>	<PrivacyMask>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>            This protocol is prepared for query and setting of video shielding parameters, helping client or IE query and set video shielding parameters of device via CGI protocol, including channel No./list of video shielding overlay information/members of video shielding overlay information/member No. of video shielding overlay information/coordinates.</p> <p><b>Explanations on key parameters:</b>            &lt;channelID&gt; Channel No.            &lt;PrivacyMaskPositionList size = "8"&gt; means list of video shielding overlay information, size represents the number of blocks that support privacy shielding.            &lt; PrivacyMaskPosition&gt; means member of video shielding overlay information, ten-thousandth, 4 points, 00: Means deleted            &lt; ID&gt; means member No. of video shielding overlay information            &lt; positionX &gt; means X coordinates of video shielding            &lt; positionY&gt; means Y coordinates of video shielding</p>	

#### PrivacyMaskXML Block

```
< PrivacyMask ="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<PrivacyMaskRegionList><!-- req -->
<PrivacyMaskRegion><!-- req -->
<id><!-- req, xs:string, id --></id>
<RegionCoordinatesList size="8"><!-- req -->
<RegionCoordinates><!-- req -->
<positionX><!-- req, xs:integer;coordinate --></positionX>
<positionY><!-- req, xs:integer;coordinate --></positionY>
</RegionCoordinates>
</RegionCoordinatesList>
</PrivacyMaskRegion>
</PrivacyMaskRegionList>
</PrivacyMask>
```

#### Test cases

**GET /CGI/System/Video/inputs/channels/1/PrivacyMask**

**Request XML:** none

**Response XML:** <PrivacyMask>

**PUT/CGI/System/Video/inputs/channels/1/PrivacyMask**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<PrivacyMask>
<enabled>true</enabled>
<PrivacyMaskRegionList>
<PrivacyMaskRegion>
<id>0</id>
<RegionCoordinatesList>
```

```

<RegionCoordinates>
<positionX>2406</positionX>
<positionY>2541</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>4874</positionX>
<positionY>4332</positionY>
</RegionCoordinates>
</RegionCoordinatesList>
</PrivacyMaskRegion>
</PrivacyMaskRegionList>
</PrivacyMask>

```

### 2.3.4/CGI/System/Network/NTP

/CGI/System/Network/NTP		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire NTP server parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<NTP>	
<b>PUT</b>		
<b>Description</b>	Set NTP server parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<NTP>	
<b>Success Return</b>	<ResponseStatus>	
<p><b>Explanations on protocol:</b>  This protocol is prepared for query and setting of NTP server parameters, helping client or IE query and set NTP server parameters of device via CGI protocol, including server address/port No./time interval.</p> <p><b>Explanations on key parameters:</b>  &lt;NTPServer&gt; means server address  &lt;PortNO&gt; 0-65535 Means port No., range: 0-65535  &lt;Inerval&gt; means time interval, range: 1-1440</p>		

#### NTPXML Block

```

< NTP xmlns="http://www.isapi.org/ver20/XMLSchema">
<id><!-- req, xs:string --></id>
<NTPServer><!--opt,xs:string --></NTPServer>
<PortNO><!--opt,xs:integer--></PortNO>
<Inerval><!--opt,xs:integer --></Interval>
</NTP>

```

#### Test cases

**GET /CGI/System/Network/NTP**

**Request XML:** none

**Response XML:** <NTP>

**PUT/CGI/System/Network/NTP**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```

<?xml version="1.0" encoding="UTF-8"?>
<NTP>
<NTPServer>10.30.41.51</NTPServer>
<PortNO>123</PortNO>
<Inerval>60</Inerval>
</NTP>

```



### 2.3.5/CGI/System/Network/registrationCenter/<ID>

/CGI/System/Network/registrationCenter/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire registration center parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<RegistrationCenter>	
<b>PUT</b>		
<b>Description</b>	Set registration center parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<RegistrationCenter>	
<b>Success Return</b>	<ResponseStatus>	
<p><b>Explanations on protocol:</b>            This protocol is prepared for query and setting of registration center parameters, helping client or IE query and set registration center parameters of device via CGI protocol, including server name/IP address/port/username/password.            Note: URL ID is reserved for expansion and ID is not processed so far.</p> <p><b>Explanations on key parameters:</b>            &lt;ServerName&gt; means server name            &lt;IP1&gt; means IP address 1            &lt;Port1&gt; means port 1; range: 81-65535            &lt;IP2&gt; means IP address 2            &lt;Port2&gt; means port 2; range: 81-65535            &lt;UserName&gt; means username            &lt;Password&gt; means password</p>		
<b>RegistrationCenterXML Block</b>		
<pre> &lt;RegistrationCenter&gt; &lt;ServerName&gt;&lt;!--req, xs:string&gt;&lt;ServerName&gt;   &lt;IP1&gt;&lt;!--req, xs:string&gt;&lt;/IP1&gt;   &lt;Port1&gt;&lt;!--req, xs:integer --&gt;&lt;Port1&gt;   &lt;IP2&gt;&lt;!--req, xs:string&gt;&lt;/IP2&gt;   &lt;Port2&gt;&lt;!--req, xs:integer --&gt;&lt;Port2&gt;   &lt;UserName&gt;&lt;!--req, xs:string&gt;&lt; UserName &gt;   &lt;Password&gt;&lt;!--req, xs:string&gt;&lt;/Password&gt; &lt;/RegistrationCenter&gt;           </pre>		
<b>Test cases</b>		
<b>GET /CGI/System/Network/registrationCenter/1</b>		
<b>Request XML: none</b>		
<b>Response XML: &lt;RegistrationCenter&gt;</b>		
<b>PUT/CGI/System/Network/registrationCenter/1</b>		
<b>Response XML: &lt;ResponseStatus&gt;</b>		
<b>Request XML: as below</b>		
<pre> &lt;?xml version="1.0" encoding="UTF-8"?&gt; &lt;RegistrationCenter&gt; &lt;ServerName&gt;server&lt;/ServerName&gt; &lt;IP1&gt;10.30.41.51&lt;/IP1&gt; &lt;Port1&gt;82&lt;/Port1&gt; &lt;IP2&gt;192.168.1.51&lt;/IP2&gt; &lt;Port2&gt;81&lt;/Port2&gt; &lt;UserName&gt;admin&lt;/UserName&gt; &lt;Password&gt;1111&lt;/Password&gt; &lt;/RegistrationCenter&gt;           </pre>		

### 2.3.6/CGI/System/Network/ConnectInfo

/CGI/System/Network/ConnectInfo		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire connection information and parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<ConnectInfolist>	
<b>PUT</b>		
<b>Description</b>	Set connection information and parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<ConnectInfolist>	
<b>Success Return</b>	<ResponseStatus>	
<p><b>Explanations on protocol:</b>            This protocol is prepared for query and setting of connection information and parameters, helping client or IE query and set connection information and parameters of device via CGI protocol, including channel type/network type/connection status/connection device IP/username.</p> <p><b>Explanations on key parameters:</b>            &lt;ChannelType&gt; means channel type; 1: Main code stream; 2: Auxiliary code stream; 3: Third code streams;            &lt;NetMode&gt; means network type; 1: TCP; 2: UDP; 3: Multicast 4: Active mode            &lt;ConnectState&gt; means connection status; 0: Connected; 1: Disconnected            &lt;ChannelNO&gt; means channel No.            &lt;UserIP&gt; means IP of connected device            &lt;UserName&gt; means username</p>		
<b>ConnectInfolistXML Block</b>		
<pre>&lt; ConnectInfolist version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema"&gt;   &lt;ConnectInfo&gt;     &lt;ChannelType&gt;&lt;!--req,xs:integer,0-cmd,1-data --&gt;&lt;/ChannelType&gt;     &lt;NetMode&gt;&lt;!--req,xs:integer,0-TCP, 1-UDP--&gt;&lt;/ NetMode&gt;     &lt;ConnectState&gt;&lt;!--req,xs:integer,0-connectd,1-disconnected--&gt;&lt;/ConnectState&gt;     &lt;ChannelNO&gt;&lt;!--req,xs:integer--&gt;&lt;/ChannelNO&gt;     &lt;UserIP&gt;&lt;!--req,xs:string&gt;&lt;/UserIP&gt;     &lt;UserName&gt;&lt;!--req,xs:string&gt;&lt;/UserName&gt;   &lt;/ConnectInfo&gt; &lt;/ ConnectInfolist &gt;</pre>		
<b>Test cases</b>		
<b>GET /CGI/System/Network/ConnectInfo</b>		
<b>Request XML: none</b>		
<b>Response XML: &lt;ConnectInfolist&gt;</b>		
<b>PUT/CGI/System/Network/ConnectInfo</b>		
<b>Response XML: &lt;ResponseStatus&gt;</b>		
<b>Request XML: as below</b>		
<pre>&lt;?xml version="1.0" encoding="UTF-8"?&gt; &lt;ConnectInfolist&gt; &lt;ConnectInfo&gt; &lt;ChannelType&gt;1&lt;/ChannelType&gt; &lt;NetMode&gt;1&lt;/NetMode&gt; &lt;ConnectState&gt;0&lt;/ConnectState&gt; &lt;ChannelNO&gt;1&lt;/ChannelNO&gt; &lt;UserIP&gt;10.30.41.51&lt;/UserIP&gt; &lt;UserName&gt;Admin&lt;/UserName&gt; &lt;/ConnectInfo&gt; &lt;/ConnectInfolist&gt;</pre>		

### 2.3.7/CGI/System/PU/<ID>

/CGI/System/PU/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire PU setting information	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<PUSet>	
<b>PUT</b>		
<b>Description</b>	Set PU setting information	
<b>Query</b>	None	
<b>Inbound Data</b>	<PUSet>	
<b>Success Return</b>	<ResponseStatus>	
<p><b>Explanations on protocol:</b>            This protocol is prepared for query and setting of device PU setting information, helping client or IE query and set PU setting information of device via CGI protocol, including registration center/port No./server/device ID/device name/access No./channel selection/channel No.</p> <p><b>Explanations on key parameters:</b>            &lt;enable&gt; means enabling, applies to decoder; true: Enabled; false: Disabled            &lt;registerServer&gt; means registration center, such as 192.168.1.1            &lt;registerPort &gt; means port No.            &lt;heartbeatServer&gt; means heartbeat server            &lt;heartbeatPort &gt; means port No.            &lt;alarmserver&gt; means alarm server            &lt;alarmPort &gt; means port No.  <del>&lt;deviceID&gt; means device ID, 32 characters or 16 Chinese characters at most</del>  <del>&lt;deviceName&gt; means device name, 31 characters or 15 Chinese characters at most</del>            &lt;deviceID&gt; means device name, 128 characters or 64 Chinese characters at most            &lt;deviceName&gt; means device name, 128 characters or 64 Chinese characters at most            &lt;VSPport&gt; means VSP port No.1            &lt;VAPport&gt; means VAP port No.            &lt;accessNumber&gt; means access No.            &lt;channelNo&gt; means channel selection, 1: Channel 1            &lt;channelID&gt; means channel No., only figures supported</p>		
<b>PUSetXML Block</b>		
<pre> &lt;?xml version="1.0" encoding="UTF-8"?&gt; &lt;PUSet&gt; &lt;enable&gt;&lt;!-- opt, xs:boolean "false,true"--&gt;&lt;/enable&gt; &lt;registerServer&gt;&lt;!-- opt, xs:string --&gt;&lt;/registerServer&gt; &lt;registerPort &gt;&lt;!-- opt, xs:integer--&gt;&lt;/registerPort &gt; &lt;heartbeatServer&gt;&lt;!-- opt, xs:string --&gt;&lt;/heartbeatServer&gt; &lt;heartbeatPort &gt;&lt;!-- opt, xs:integer--&gt;&lt;/heartbeatPort &gt; &lt;alarmserver&gt;&lt;!-- opt, xs:string --&gt;&lt;/alarmserver&gt; &lt;alarmPort &gt;&lt;!-- opt, xs:integer--&gt;&lt;/alarmPort &gt; &lt;deviceID&gt;&lt;!-- opt, xs:string --&gt;&lt;/deviceID&gt; &lt;deviceName&gt;&lt;!-- opt, xs:string --&gt;&lt;/deviceName&gt; &lt;VSPport&gt;&lt;!-- opt, xs:integer--&gt;&lt;/VSPport&gt; &lt;VAPport&gt;&lt;!-- opt, xs:integer--&gt;&lt;/VAPport&gt; &lt;accessNumber&gt;&lt;!-- opt, xs:string --&gt;&lt;/accessNumber&gt; &lt;channelNo&gt;&lt;!-- opt, xs:integer--&gt;&lt;/channelNo&gt;// Reserved field, original protocol has error and is abandoned &lt;channelID&gt;&lt;!-- opt, xs: string --&gt;&lt;/channelID&gt;// Reserved field, original protocol has error and is abandoned &lt;channelList&gt; &lt;channel&gt; &lt;channelNo&gt;&lt;!-- opt, xs:integer--&gt;&lt;/channelNo&gt; // Channel selection is consistent with ie           </pre>		

```

    <channelID><!-- opt, xs: string --></channelID> // Channel No. is consistent with ie
Only Chinese character supported
  </channel>
</channelList>
</PUSet>

```

**Test cases**

**GET /CGI/System /PU/1**

**Request XML: none**

**Response: XML: <PUSet>**

**PUT /CGI/System/PU/1**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<?xml version="1.0" encoding="UTF-8"?>
<PUSet>
<enable>false</enable>
<registerServer>192.168.1.100</registerServer>
<registerPort>10102</registerPort>
<heartbeatServer>192.168.1.100</heartbeatServer>
<heartbeatPort>10102</heartbeatPort>
<alarmserver>192.168.1.100</alarmserver>
<alarmPort>2122</alarmPort>
<deviceID>
</deviceID>
<deviceName>
</deviceName>
<VSPport>8000</VSPport>
<VAPport>9000</VAPport>
<accessNumber>
</accessNumber>
<channelNo>1</channelNo>
<channelID></channelID>
<channelList>
  <channel>
    <channelNo>1</channelNo>
    <channelID></channelID>
  </channel>
</channelList>
</PUSet>

```

**2.3.8/CGI/System/SIP/<ID>**

/CGI/System/SIP/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire SIP setting information	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<SIPServerList>	
<b>PUT</b>		
<b>Description</b>	Set SIP setting information	
<b>Query</b>	None	
<b>Inbound Data</b>	<SIPServerList>	
<b>Success Return</b>	<ResponseStatus>	

**Explanations on protocol:**

This protocol is prepared for query and setting of SIP setting information of device, helping client or IE query and set SIP setting information of device via CGI protocol, including IP address/port/server ID/account/password/valid period/channel selection/channel No./channel level.

**Explanations on key parameters:**

<userName> means username  
 <enabled> means whether requiring registration; true: Required; false: Not required  
 <registrar> means IP address  
 <registrarPort> means port, range: 0-65536  
 <serverId> means server ID  
 <authID> means account  
 <password> means password, 16 characters at most  
 <expires> means valid period of registration, range: 0-1999999999  
 <liveTime> means live time, range: 0-99999  
 <heartbeatTime> means heartbeat interval, range: 0-99999  
 <heartbeatCount> means heartbeat count, range: 0-999  
 <deviceId> means device ID  
 <channelNo> means channel selection  
 <channelID> means channel No., only Chinese characters supported  
 <channelLevel> means channel level, range: 0-999  
 <PTZTime> means PTZ time, range: 0-99999  
 <alarmInNo> means alarm input  
 <alarmID> means alarm No., only Chinese characters supported  
 <alarmLevel> Alarm level, range: 0-999  
 <encryption> Encryption mode, 0-reserved, 1-GB28181, 2-GB35114

**SIPServerListXML Block**

```
<?xml version="1.0" encoding="UTF-8"?>
<SIPServerList version="2.0">
<SIPServer version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<id><!--opt, xs:string --></id>
<localPort><!-- opt, xs:integer, "1-65535"--></localPort>
<streamID><!-- opt, xs:integer, "1(main stream),2 ( sub stream) "--></streamID>
<Standard><!-- opt -->
<registerStatus><!-- ro, req, xs:boolean, "false ( unregistered) ,true
(registered) "--></registerStatus>
<enabled><!-- req, xs:string, "true(sign in),false ( log out) "--></enabled>
<registrar><!-- req, xs:string--></registrar>
<registrarPort><!-- req, xs:integer--></registrarPort>
<proxy><!-- req, xs:string--></proxy>
<proxyPort><!-- req, xs:integer--></proxyPort>
<displayName><!-- req, xs:string--></displayName>
<userName><!-- req, xs:string--></userName>
<authID><!-- req, xs:string--></authID>
<password><!-- wo, req, xs:string--></password>
<expires><!-- req, xs:integer--></expires>
<encryption><!-- opt, xs:string--></encryption>
<GB28181><!-- opt -->
<registerStatus><!-- opt, xs:boolean --></registerStatus>
<enabled><!-- opt, xs:string, "true,false"--></enabled>
<registrar><!-- opt, xs:string--></registrar>
<registrarPort><!-- opt, xs:integer--></registrarPort>
<serverId><!-- opt, xs:string--></serverId>
<serverDomain><!-- opt, xs:integer--></serverDomain>
<userName><!-- opt, xs:string--></userName>
<authID><!-- opt, xs:string--></authID>
<password><!-- wo, opt, xs:string--></password>
```

```

<expires><!-- opt, xs:integer--></expires>
<liveTime><!-- opt, xs:integer--></liveTime>
<heartbeatTime><!-- opt, xs:integer--></heartbeatTime>
<heartbeatCount><!-- opt, xs:integer--></heartbeatCount>
<transportType><!-- opt, xs:string, "UDP, TCP, TLS"--></transportType>
<registerInterval><!-- opt, xs:integer, "60-600", second--></registerInterval>
<deviceId><!-- opt, xs: string, --></deviceId>
<channelNo><!-- opt, xs:integer--></channelNo>// Reserved field, original protocol has error
and is abandoned
<channelID><!-- opt, xs: string --></channelID>// Reserved field, original protocol has error
and is abandoned
<channelLevel><!-- opt, xs:integer--></channelLevel > // Reserved field, original protocol has
error and is abandoned
<PTZTime><!-- opt, xs:integer--></PTZTime > // Reserved field, original protocol has error
and is abandoned
<channelList>
<channel>
    <channelNo><!-- opt, xs:integer--></channelNo> // Channel selection is consistent with ie
    <channelID><!-- opt, xs: string --></channelID> // Channel No. is consistent with ie
    Only Chinese characters supported
    <channelLevel><!-- opt, xs:integer--></channelLevel > // Channel level is consistent with ie,
0-999
    <PTZTime><!-- opt, xs:integer--></PTZTime > // PTZ time is consistent with ie, 0-99999
</channel>
</channelList>
<alarmInList>
    <alarmIn>
        <alarmInNo><!-- opt, xs: integer --></alarmInNo>
        <alarmID><!-- opt, xs: string --></alarmID>
        <alarmLevel><!-- opt, xs:integer--></alarmLevel>
        <alarmIn>
    </alarmInList >
</GB28181>
</SIPServer>
</SIPServerList>

```

#### Test cases

**GET /CGI/System /SIP/<ID>**

**Request XML:** none

**Response XML:** <SIPServerList>

**PUT/CGI/System/SIP/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```

<?xml version="1.0" encoding="UTF-8"?>
<SIPServerList>
<SIPServer>
<encryption>2</encryption>
<GB28181>
<enabled>false</enabled>
<registrar></registrar>
<registrarPort>0</registrarPort>
<serverId></serverId>
<deviceId></deviceId>
<userName></userName>
<password></password>
<expires>0</expires>
<liveTime>0</liveTime>
<heartbeatTime>0</heartbeatTime>

```

```

<heartbeatCount>0</heartbeatCount>
<channelNo>1</channelNo>
<channelID></channelID>
<channelLevel>0</channelLevel>
<PTZTime>0</PTZTime>
<channelList>
<channel>
    <channelNo>1</channelNo>
    <channelID></channelID>
<channelLevel>0</channelLevel>
    <PTZTime>0</PTZTime>
</channel>
</channelList>
<alarmInList>
<alarmIn>
<alarmInNo>1</alarmInNo>
<alarmInID>98765432102111112</alarmInID>
<alarmLevel>1</alarmLevel>
</alarmIn>
<alarmIn>
<alarmInNo>2</alarmInNo>
<alarmInID>98765432102111112</alarmInID>
<alarmLevel>1</alarmLevel>
</alarmIn>
</alarmInList>
</GB28181>
</SIPServer>
</SIPServerList>

```

### 2.3.9/CGI/System/deviceInfo

/CGI/System/deviceInfo		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire device version information	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<DeviceInfo>	
<b>PUT</b>		
<b>Description</b>	Set device version information	
<b>Query</b>	None	
<b>Inbound Data</b>	<DeviceInfo>	
<b>Success Return</b>	<b>None</b>	
<p><b>Explanations on protocol:</b>  This protocol is prepared for query and setting of device version information, helping client or IE query and set device version information via CGI protocol, including S/N, kernel version/delivery No./SKD version/web version/access module/CPU.</p> <p><b>Explanations on key parameters:</b>  &lt;deviceName&gt; means device name  &lt;deviceID&gt; means device ID  &lt;deviceDescription&gt; means device description  &lt;deviceLocation&gt; means device production location  &lt;systemContact&gt; means device manufacturer  &lt;model&gt; means device model  &lt;serialNumber&gt; means device S/N  &lt;macAddress&gt; means Mac address</p>		

<firmwareVersion> means master control version  
 <firmwareReleasedDate> means date of firmware compiling  
 <bootVersion> means boot version  
 <bootReleasedDate> means date of boot compiling  
 <hardwareVersion> means hardware version  
 <encoderVersion> means encoder version  
 <encoderReleasedDate> means date of encoder compiling  
 <decoderVersion> means decoder version  
 <decoderReleasedDate> means date of decoder compiling  
 <deviceType> means device type  
 <telecontrolID> means device No.  
 <supportBeep> means whether supporting buzzer  
 <factoryNumber> means delivery No.  
 <CPU> means CPU  
 <Memory> means memory  
 <FLASH> means Flash  
 <sdkVersion> means SDK version  
 <webVersion> means web version  
 <uiVersion> means UI version  
 <accessModule> means access module  
 <trafficVersion> means traffic business version  
 <mediaVersion> means media version  
 <algVersion> means algorithm version  
 <algModelVersion> means algorithm model version  
 <aiModuleVersion> means intelligent module version  
 <trfficDbVersion> Traffic host database version

#### DeviceInfoXML Block

```

<DeviceInfo version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <deviceName><!-- req, xs:string --></deviceName>
  <deviceID><!-- ro, req, xs:string, uuid--></deviceID>
  <deviceDescription><!--opt, xs:string--></deviceDescription>
  <deviceLocation><!--opt, xs:string --></deviceLocation>
  <systemContact><!-- opt, req, xs:string --></systemContact>
  <model><!-- ro, req, xs:string --></model>
  <serialNumber><!-- ro, req, xs:string --></serialNumber>
  <macAddress><!-- ro, req, xs:string; --></macAddress>
  <firmwareVersion><!-- ro, req, xs:string --></firmwareVersion>
  <firmwareReleasedDate><!-- ro, opt, xs:string --></firmwareReleasedDate>
  <bootVersion><!-- ro, opt, xs:string --></bootVersion>
  <bootReleasedDate><!-- ro, opt, xs:string --></bootReleasedDate>
  <hardwareVersion><!-- ro, opt, xs:string --></hardwareVersion>
  <encoderVersion><!-- ro, opt, xs:string></encoderVersion>
  <encoderReleasedDate><!-- ro, opt, xs:stirng --></encoderReleasedDate>
  <decoderVersion><!-- ro, opt, xs:string></decoderVersion>
  <decoderReleasedDate><!-- ro, opt, xs:stirng --></decoderReleasedDate>
  <deviceType>
  <!--ro, req, xs:string; "IPCamera, IPDome, DVR, HybirdNVR, NVR, DVS, IPZoom"-->
  </deviceType>
  <telecontrolID><!-- opt, xs:integer; "1-255"><telecontrolID>
  <supportBeep><!--opt, xs:boolean --></supportBeep>
  <factoryNumber><!-- ro, opt, xs:string --></factoryNumber >
  <CPU><!--opt , xs:string --></CPU>
  <Memory><!-- ro, opt, xs:string, uuid--></Memory>
  <FLASH><!-- ro, opt, xs:string --></FLASH>
  <sdkVersion><!-- ro, opt, xs:string --></sdkVersion>
  <webVersion><!-- ro, opt, xs:string --><webVersion>
  <uiVersion><!-- ro, opt, xs:string --></uiVersion>
  
```



```
<accessModule><!-- ro, opt, xs:string --></accessModule>
</DeviceInfo>
```

**Test cases**

**GET /CGI/System/deviceInfo**

**Request XML: none**

**Response XML: <DeviceInfo>**

```
<?xml version="1.0" encoding="UTF-8"?>
<DeviceInfo>
<factoryNumber>ID0000801940400311610506</factoryNumber>
<serialNumber>18</serialNumber>
<firmwareVersion>NVSS_V8.1.37.20161202</firmwareVersion>
<webVersion>6.0.16.1118</webVersion>
<CPU>13</CPU>
<Memory>69</Memory>
<FLASH>85</FLASH>
<platformVersionList>
<platformInfo>
<name>onvif</name>
<version>ONVIF_V2.5.0.20161202</version>
</platformInfo>
<platformInfo>
<name>rtsp</name>
<version>RTSP_V2.5.0.20161202</version>
</platformInfo>
<platformInfo>
<name>cgi</name>
<version>CGI_V2.5.0.20161202</version>
</platformInfo>
<platformInfo>
<name>rtmp</name>
<version>RTMP_V2.5.0.20161202</version>
</platformInfo>
</platformVersionList>
</DeviceInfo>
```

**PUT /CGI/System/deviceInfo**

**Request XML: <DeviceInfo>**

**Response XML: None**

```
<?xml version="1.0" encoding="UTF-8"?>
<DeviceInfo>
<deviceName>DVRS</deviceName>// Character string supports 31 characters at most
</DeviceInfo>
```

**2.3.10/CGI/System/TelnetCtrl**

/CGI/System/TelnetCtrl		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire telnet information	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<telnetCtrl>	
<b>PUT</b>		

<b>Description</b>	Set telnet information
<b>Query</b>	None
<b>Inbound Data</b>	<telnetCtrl>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for query and setting of telnet information, helping client or IE query and set telnet information via CGI protocol. <b>Explanations on key parameters:</b> <enable> means telnet enabling/disabling; true: Enabled; false: Disabled	

#### telnetCtrlXML Block

```
<telnetCtrl>
<enable><!-- opt, xs:boolean "false,true"--></ enable >
</telnetCtrl>
```

#### Test cases

**GET /CGI/System/TelnetCtrl**

**Request XML:** none

**Response XML:** <telnetCtrl>

**PUT/CGI/System/TelnetCtrl**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<telnetCtrl>
<enable>true</enable>
</telnetCtrl>
```

### 2.3.11/CGI/System/Platform

<b>/CGI/System/Platform</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Acquire platform enabling information	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<PlatformList>	
<b>PUT</b>		
<b>Description</b>	Set platform enabling information	
<b>Query</b>	None	
<b>Inbound Data</b>	<PlatformList>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b> This protocol is prepared for query and setting of platform enabling information, helping client or IE query and set enabling information via CGI protocol, including platform enabling parameters. Explanations on key parameters: <platformName> means platform is enabled, value "onvif", "rtsp", "cgi", "rtmp", "p2p", "gb28181", "gat1400", "tencentCloud", "ytlf", "imgupload", "gb35114", "rtmpclient", "ksrx". Interface will display the <platformName> received; there's no display if no message is received. Interface will display "onvif" and "rtsp" and hide others if it receives "onvif" and "rtsp" only. <enabled> represents enabling, true: start, false: not start <supportH265> Support access of H265 video; true: Enabled; false: Disabled <supportnoreboot> set platform device not to restart, true: open, false: close		

#### PlatformListXML Block

```
<PlatformList version="2.0">
<Platform>
<platformName><!-- req, xs: string --></platformName>
<enabled><!-- req, xs:string, "true,false"--></enabled>
<supportH265><!-- req, xs:string, "true,false"--></supportH265>
</Platform>
</PlatformList>
```

**Test cases**

**GET /CGI/System/Platform**

**Request XML:** none

**Response XML:** <PlatformList>

**PUT/CGI/System/Platform**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<PlatformList>
<Platform>
<platformName>p2p</platformName>
<enabled>true</enabled>
<supportnoreboot><!-- req, xs:string, "true,false"--></supportnoreboot>
</Platform>
<Platform>
<platformName>onvif</platformName>
<enabled>true</enabled>
</Platform>
<Platform>
<platformName>rtsp</platformName>
<enabled>true</enabled>
</Platform>
<Platform>
<platformName>cgi</platformName>
<enabled>true</enabled>
</Platform>
<Platform>
<platformName>rtmp</platformName>
<enabled>true</enabled>
<supportH265>true</supportH265>
</Platform>
<Platform>
<platformName>rtmpclient</platformName>
<enabled>true</enabled>
</Platform>
<Platform>
<platformName>gb35114</platformName>
<enabled>true</enabled>
<supportH265>true</supportH265>
</Platform>
<supportnoreboot>true</supportnoreboot>
<Platform>
<platformName>ksrx</platformName>
<enabled>true</enabled>
</Platform>
</PlatformList>
```

### 2.3.12/CGI/System/IrisCorrection/channels/<ID>

/CGI/System/IrisCorrection/channels/<ID>		General Resource v2.0
<b>PUT</b>		
<b>Description</b>	Set aperture correction	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b> This protocol is prepared for setting of aperture correction, helping client or IE set aperture correction of device via CGI protocol.		

#### Test cases

PUT/CGI/System/IrisCorrection/channels/<ID>

Response XML: <ResponseStatus>

Request XML: None

### 2.3.13/CGI/System/LensReset/channels/<ID>

/CGI/System/LensReset/channels/<ID>		General Resource v2.0
<b>PUT</b>		
<b>Description</b>	Set camera reset	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b> This protocol is prepared for resetting of device camera, helping client or IE reset the device camera via CGI protocol.		

#### Test cases

PUT/CGI/System/LensReset/channels/<ID>

Response XML: <ResponseStatus>

Request XML: None

### 2.3.14/CGI/System/ExportLogData/<filename>

/CGI/System/ExportLogData/<filename>		General Resource v2.0
<b>POST</b>		
<b>Description</b>	Export log	
<b>Query</b>	None	
<b>Inbound Data</b>	<CMSearchDescription>	
<b>Success Return</b>	<CMSearchResult>	
<b>Explanations on protocol:</b> This protocol is prepared for log export, helping client or IE export the device log via CGI protocol, including language/channel No./start time/end time.		
<b>Explanations on key parameters:</b> <languageID> means language; 0: English; 1: Chinese <channelID> represents channel No., 0 is acceptable <logType> represents log type, ALL: all, System: system, Warning: warning, Alarm: alarm, Operation: operation, User: user, Other: other <startTime> represents start time <endTime> represents end time <searchResultPosition> represents search result position. This field cannot be omitted, (when searching from the 1st log, the assigned value is 1, not 0)		

<maxResults> represents query number (not exceeding 40) . This field cannot be omitted.  
 <numOfMatches> represents number of matches  
 <chanNo> represents channel No.  
 <type> represents type, log type, ALL: all, System: system, Warning: warning, Alarm: alarm, Operation: operation, User: user, Other: other  
 <user> represents user  
 <content> represents content

#### **CMSearchDescriptionXML Block**

```

<?xml version="1.0" encoding="UTF-8"?>
<CMSearchDescription version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<searchID><!--req,sx:string--></searchID>
<languageID><!--opt,sx:integer--></languageID>
<channelID><!--req,sx:integer-- ></channelID>
<LogTypeList>
<logType><!--req:String ALL,System,Warning,Alarm,Operation,User,Other --></logType>
</LogTypeList>
<timeSpanList>
<timeSpan>
<startTime>2013-05-18T10:31:26Z</startTime>
<endTime> 2013-05-18T10:31:26Z</endTime>
</timeSpan>
</timeSpanList>
<metaID><!--opt,sx:integer--></metaID>
<searchResultPostion><!--opt,sx:integer--></searchResultPostion>
<maxResults><!--opt,sx:integer--></maxResults>
</CMSearchDescription>
  
```

#### **CMSearchResultXML Block**

```

<CMSearchResult version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<numOfMatches><!--req:inter ></numOfMatches>
<matchList>
<matchElement>
  <chanNo><!--req: sx:string ></chanNo >
<Time>2013-05-18T10:31.26</Time>
  <type><!--opt:String ALL,System,Warning,Alarm,Operation,User,Other --></ type>
<user><!--req: sx:string ></user>
  <content><!--req: sx:string ></content>
</matchElement>
</matchList>
</CMSearchResult>
  
```

#### **Test cases**

**POST /CGI/System/ExportLogData/<filename>**

**Response XML:** <CMSearchResult>

**Request XML:** <CMSearchDescription> as below

```

<CMSearchDescription>
<searchID>1</searchID>
<languageID>1</languageID>
<channelID>0</channelID>
<LogTypeList>
<logType>ALL</logType>
</LogTypeList>
<timeSpan>
<startTime>2016-12-14T00:00:00Z</startTime>
<endTime>2016-12-14T23:59:59Z</endTime>
</timeSpan>
<searchResultPostion>1</searchResultPostion>
<maxResults>18</maxResults>
</CMSearchDescription>
  
```

### 2.3.15/CGI/System/ExportLocalData/<FileName>

/CGI/System/ExportLocalData/<FileName>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Local export	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	File content	
<b>Explanations on protocol:</b>		
As customized contents of website, this protocol is transferred to server as parameter. The contents are not processed by server and returned via downloading. A dialogue box of “Save as” will pop up theoretically.		

### 2.3.16/CGI/System/configData/export/<FileName>

/CGI/System/configData/export/<FileName>		<b>General Resource v2.0</b>
<b>POST</b>		
<b>Description</b>	Parameter export	
<b>Query</b>	None	
<b>Inbound Data</b>	Form	
<b>Success Return</b>	File content	
<b>Explanations on protocol:</b>		
This protocol is prepared for parameter export, helping client or IE export the device parameters via CGI protocol.		
Note: Three export settings are included; ALARM: Alarm; VCA: Intelligent analysis; SYSCNF: System setting; STORAGE: Storage; PREVIEW: Preview; ITS_CHN: ITS lane parameters, ITS_SNAP: ITS snapshot parameters; ITS_SYS: Parameters of ITS system; ITS_DOMDEV: Parameters of ITS peripherals; IMAGE: Image parameters; Mark ITS license plate whitelist; ITS_ALL: All parameters of ITS.		
Sent by means of form,		
For example, if three methods are selected: Send “ALARM=on&VCA=on&SYSCNF=on” to CGI;		
If two methods are selected: Send “ALARM=on&VCA=on”		
If one method is selected: Send “ALARM=on”.		

### 2.3.17/CGI/System/CommConfigData/channels/<ID>/type/<ID>/export/<FileName>

/CGI/System/CommConfigData/channels/<ID>/type/<ID>/export/<FileName>		<b>General Resource v2.0</b>
<b>POST</b>		
<b>Description</b>	Export common parameters	
<b>Query</b>	<b>None</b>	
<b>Inbound Data</b>	<b>None</b>	
<b>Success Return</b>	<b>File content</b>	
<b>Explanations on protocol:</b>		
This protocol is prepared for common parameter export, helping client or IE export the designated device parameters via CGI protocol.		

**Explanations on protocol:**

This protocol is prepared for common parameter export.

**Explanations on key parameters:**

channels/<ID> Channel

type/<ID> means file type: 1: Channel parameter; 2: Black and white license plate; 3: Bayonet parameters; 4: Stall whitelist

**Test cases**

**POST /CGI/System/CommConfigData/channels/0/type/1/export/<FileName>**

**POST /CGI/System/CommConfigData/channels/1/type/2/export/<FileName>**

**2.3.18/CGI/System/Network/InternetStatus**

/CGI/System/Network/InternetStatus		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire online status of public network	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<IntrenetStatus>	
<b>Explanations on protocol:</b>		
This protocol is prepared for query of online status of public network, helping client or IE acquire the public network online status of device via CGI protocol.		
<b>Explanations on key parameters:</b>		
<status> Status; true: Online; false: Offline <reason> Reason: noConnectServer: The device fails to connect server; noClientConnect: Not connected to client; noConnectNet: The device fails to connect the public network. This field is null under online status.		

**IntrenetStatus XML Block**

```
<InternetStatus xmlns="http://www.isapi.org/ver20/XMLSchema">
  <status><!-- req, xs:boolean --></status>
<reason><!-- req, xs:string --></reason>
</InternetStatus>
```

**Test cases**

**GET /CGI/System/Network/InternetStatus**

**Request XML: none**

**Response XML: <IntrenetStatus>**

**Response XML: as below**

```
<InternetStatus xmlns="http://www.isapi.org/ver20/XMLSchema">
  <status>off</status>
  <reason>noClientConnect</reason>
</InternetStatus>
```

**2.3.19/CGI/System/BackupImage/types/<ID>**

/CGI/System/BackupImage/types/<ID>		General Resource v2.0
<b>PUT</b>		
<b>Description</b>	Backup present application procedure and resource file	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<ResponseStatus>	

**Explanations on protocol:**

This protocol is prepared for backup of present application procedure and resource file, helping client or IE do backup of device via CGI protocol.

**Explanations on key parameters:**

types/<ID>: Means backup target; 0: Backup of kernel, the rest is reserved

**Test cases**

PUT/CGI/System/BackupImage/types/<ID>

Response XML: <ResponseStatus>

**2.3.20/CGI/System/Shutdown/types/<ID>**

/CGI/System/Shutdown/types/<ID>		General Resource v2.0
<b>PUT</b>		
<b>Description</b>	System shutdown	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is prepared for controlling device shutdown, helping client or IE do shut down device via CGI protocol.		
<b>Explanations on key parameters:</b>		
types/<ID>:0 means shutdown, the rest is to be expanded		

**Test cases**

PUT/CGI/System/Shutdown/types/<ID>

Response XML: <ResponseStatus>

**2.3.21/CGI/System/AutoReboot**

/CGI/System/AutoReboot		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire auto maintenance time of device	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<AutoRebootPara>	
<b>PUT</b>		
<b>Description</b>	Set auto maintenance time of device	
<b>Query</b>	None	
<b>Inbound Data</b>	<AutoRebootPara>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is prepared for query and setting of auto maintenance configuration of device, helping client or IE query and set auto maintenance of device (auto restart) via CGI protocol.		
<b>Explanations on key parameters:</b>		
<frequency> Maintenance frequency, daily/weekly/monthly/year or never		
<month> means month if it is set as year		
<day> means day if it is set as year and month; means day of week if set as week; value range has minor difference		
<hour> means hour		
<minute> means minute		

**AutoRebootParaXML Block**



```

<AutoRebootPara>
  <frequency><!-- req, xs: string,"never,yearly,monthly,weekly,daily"--></frequency>
  <month><!-- dep: frequency, xs: integer,"1-12"--></month>
  <day><!-- dep, xs: integer,"1-31"--></day>
  <hour><!-- req, xs:integer,"0-23"--></hour>
  <minute><!-- req, xs: integer,"0-59"--></minute>
</AutoRebootPara>

```

**Test cases**

**GET /CGI/System/AutoReboot**

**Request XML:** none

**Response XML:** <AutoRebootPara>

**PUT/CGI/System/ AutoReboot**

**Response XML:** <ResponseStatus>

**Request XML:** <AutoRebootPara>

<AutoRebootPara>XML as follows

```

<AutoRebootPara>
  <frequency>yearly</frequency>
  <month>7</month>
  <day>3</day>
  <hour>10</hour>
  <minute>0</minute>
</AutoRebootPara>

```

**2.3.22/CGI/System/LogLevel**

/CGI/System/LogLevel		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire device log level	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<LogLevelPara>	
<b>PUT</b>		
<b>Description</b>	Set device log level	
<b>Query</b>	None	
<b>Inbound Data</b>	<LogLevelPara>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is prepared for query and setting of device log level, helping client or IE query and set device log level via CGI protocol.		
<b>Explanations on key parameters:</b>		
<system> means whether enabling system log; enable; True; disable: False <warning> means whether enabling warning log; enable: True; disable: False <alarm> means whether enabling alarm log; enable: True; disable: False <operate> means whether enabling operation log; enable: True; disable: False <user> means whether enabling user log; enable: True; disable: False <other> means whether enabling other logs; enable: True; disable: False <logsize> means setting of log size		

**LogLevelPara XML Block**

```

<LogLevelPara>
  <system><!-- req, xs:string, "true,false"--></system>
  <warning><!-- req, xs:string, "true,false"--></warning>
  <alarm><!-- req, xs:string, "true,false"--></alarm>
  <operate><!-- req, xs:string, "true,false"--></operate>
  <user><!-- req, xs:string, "true,false"--></ user>
  <other><!-- req, xs:string, "true,false"--></other>
  <logsize><!-- req, xs:integer--></logsize>

```

</LogLevelPara>

**Test cases**

**GET /CGI/System/LogLevel**

**Request XML:** none

**Response: XML:** <LogLevelPara>

**PUT/CGI/System/LogLevel**

**Response XML:** <ResponseStatus>

**Request XML:** <LogLevelPara>

<LogLevelPara>XML as follows

<LogLevelPara>

<system>true</system>

<warning>true</warning>

<alarm>true</alarm>

<operate>true</operate>

<other>>false</other>

<logsize>10000</logsize>

</LogLevelPara>

### 2.3.23/CGI/System/Video/inputs/channels/<ID>/DynamicPrivacyMask

/CGI/System/Video/inputs/channels/<ID>/DynamicPrivacyMaskGeneral Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire shielding parameters of privacy
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<DynamicPrivacyMask>
<b>PUT</b>	
<b>Description</b>	Set shielding parameters of privacy
<b>Query</b>	None
<b>Inbound Data</b>	<DynamicPrivacyMask>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for query and setting of privacy shielding parameters, helping client or IE query and set privacy shielding parameters via CGI protocol.	
<b>Explanations on key parameters:</b> <channelID> Channel No. <shieldingfactormax> means the max. shielding factor <DynamicPrivacyMaskRegionList> means the list of privacy shielding region information <DynamicPrivacyMaskRegion> means the privacy shielding region information <regionId> means the privacy shielding region No. <color> means privacy shielding region color <shieldingfactor> means shielding factor <regionCoordinateList> Regional coordinate list, including the coordinates of fixed points; ten-thousandth, all points 00: Deleted	

#### DynamicPrivacyMaskXML Block

```
<DynamicPrivacyMask ="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<channelID><!--req,sx:integer--></channelID>
<enabled><!--req,xs:bool--></enabled>
<shieldingfactormax><!--req,xs:integer--></ shieldingfactormax >
<DynamicPrivacyMaskRegionList>
<DynamicPrivacyMaskRegion>
<id><!--req,xs:integer--><id>
<regionId><!--req,xs:integer--></regionId>
<color><!--req,xs:string, "black,red,green,yellow,blue,purple,cyan,white,mosaic"--></color>
<shieldingfactor><!--req,xs:integer--></shieldingfactor>
<regionCoordinateList>
<regionCoordinate>
```

```

<positionX><!--req,xs:integer--></positionX>
<positionY><!--req,xs:integer--></positionY>
</regionCoordinate>
</regionCoordinateList>
</ DynamicPrivacyMaskRegion>
< /DynamicPrivacyMaskRegionList>
</DynamicPrivacyMask>

```

**Test cases**

**GET /CGI/System/Video/inputs/channels/<ID>/DynamicPrivacyMask**

**Request XML:** none

**Response XML:** <DynamicPrivacyMask>

**PUT/CGI/System/Video/inputs/channels/<ID>/DynamicPrivacyMask**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```

<?xml version="1.0" encoding="UTF-8"?>
<DynamicPrivacyMask>
<enabled>true</enabled>
<shieldingfactormax>44</shieldingfactormax>
<DynamicPrivacyMaskRegionList>
<DynamicPrivacyMaskRegion>
<id>1</id>
<regionId>1</regionId>
<color>yellow</color>
<shieldingfactor>1</shieldingfactor>
<RegionCoordinatesList>
<RegionCoordinates>
<positionX>2406</positionX>
<positionY>2541</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>4874</positionX>
<positionY>4332</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>3350</positionX>
<positionY>3387</positionY>
</RegionCoordinates>
</RegionCoordinatesList>
</DynamicPrivacyMaskRegion>
</DynamicPrivacyMaskRegionList>
</DynamicPrivacyMask>

```

**2.3.24/CGI/System/HotBackup/mode**

<b>/CGI/System/HotBackup/mode</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Acquire hot standby mode (working device/hot standby device) of present device	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<HotBackupMode>	
<b>PUT</b>		
<b>Description</b>	Set hot standby mode (working device /hot standby device) of present device	
<b>Query</b>	None	
<b>Inbound Data</b>	<HotBackupMode>	

<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for setting of hot standby mode.	
<b>Explanations on key parameters:</b> <mode>workDev: Working device hotBackupDev: Hot backup device	

#### HotBackupModeXML Block

```
<HotBackupMode version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema" >
<mode><!-- req,xs:string, "workDev, hotBackupDev"></ mode>
</HotBackupMode>
```

#### Test cases

**GET /CGI/System/HotBackup/mode**

**Request XML:** none

**Response XML:** <hotBackupMode>

**PUT /CGI/System/HotBackup/mode**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<hotBackupMode version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema" >
<mode>workDev</mode>
</hotBackupMode>
```

#### 2.3.25/CGI/System/HotBackup/workDev/enable

<b>/CGI/System/HotBackup/workDev/enable</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Acquire hot standby enabling of present device	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<HotBackupEn>	
<b>PUT</b>		
<b>Description</b>	Set hot standby enabling of present device	
<b>Query</b>	None	
<b>Inbound Data</b>	<HotBackupEn>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b> This protocol is prepared for setting of hot standby enabling of device.		
<b>Explanations on key parameters:</b> <enabled> Hot standby enabling; true: Enabled; false: Disabled		

#### HotBackupEnXML Block

```
<HotBackupEn version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema" >
<enabled><!-- req, xs:boolean "false,true"--></enabled>
</HotBackupEn>
```

#### Test cases

**GET /CGI/System/HotBackup/workDev/enable**

**Request XML:** none

**Response XML:** <hotBackupEn>

**PUT /CGI/System/HotBackup/workDev/enable**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<HotBackupEn version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema" >
<enabled>true</enabled>
</HotBackupEn>
```

### 2.3.26/CGI/System/HotBackup/workDevList

/CGI/System/HotBackup/workDevList		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Client acquires the list of searched working device IP	
<b>Query</b>	None	
<b>Inbound Data</b>	<WorkDevList>	
<b>Success Return</b>	<ResponseStatus>	
<p><b>Explanations on protocol:</b>            This protocol is prepared for sending the searched working device IP to client. This protocol requires regular call of client for device information is changed constantly.</p> <p><b>Explanations on key parameters:</b>            &lt;ip&gt; Working device IP -- Support IPv6 address</p>		

#### WorkDevListXML Block

```
<WorkDevList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema" >
<dev>
<id><!-- opt, xs:integer --></id>
<ip><!-- req, xs:string --></ip>
</dev>
</WorkDevList>
```

#### Test cases

**GET /CGI/System/HotBackup/workDevList**

**Request XML:** none

**Response XML:** <WorkDevList>

```
<WorkDevList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema" >
<dev>
<id>1</id>
<ip>10.30.31.78</ip>
</dev>
<dev>
<id>2</id>
<ip>10.30.30.158</ip>
</dev>
</WorkDevList>
```

### 2.3.27/CGI/System/HotBackup/modifyDev

/CGI/System/HotBackup/modifyDev		General Resource v2.0
<b>PUT</b>		
<b>Description</b>	Set IP list of working device/hot standby device of present device	
<b>Query</b>	None	
<b>Inbound Data</b>	<HotModifyInfoList>	
<b>Success Return</b>	<ResponseStatus>	
<b>DELETE</b>		
<b>Description</b>	Delete IP list of working device/hot standby device of present device	
<b>Query</b>	None	
<b>Inbound Data</b>	<HotDeleteInfoList>	
<b>Success Return</b>	<ResponseStatus>	

**Explanations on protocol:**

This protocol is prepared for adding or deleting hot standby device IP for working device, adding or deleting working device IP of hot standby device. The details are determined by the working mode of device.

**Explanations on key parameters:**

<mode>workDev: Working device hotBackupDev: Hot backup device  
 <ip> ip address -- Support IPv6 address  
 <username> Username of working device  
 <password> Login password of working device

**HotModifyInfoList XML Block**

```
<HotModifyInfoList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema" >
<HotModifyInfo>
<mode><!-- req, xs:string, "workDev, hotBackupDev"--></mode>
<ip><!-- req,xs:string --></ip>
<username><!-- req,xs:string --></username>
<password><!-- req,xs:string --></password>
</HotModifyInfo>
</HotModifyInfoList>
```

**HotDeleteInfoList XML Block**

```
<HotDeleteInfoList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema" >
<HotDeleteInfo>
<mode><!-- req, xs:string,"workDev, hotBackupDev"--></mode>
<ip><!-- req,xs:string --></ip>
</HotDeleteInfo>
</HotDeleteInfoList>
```

**Test cases****PUT /CGI/System/HotBackup/modifyDev****Request XML:** <HotModifyInfoList>**Response XML:** <ResponseStatus>**DELETE/CGI/ System/HotBackup/modifyDev****Request XML:** <HotDeleteInfoList>**Response XML:** <ResponseStatus>**<HotModifyInfoList>XML: As follows**

```
<HotModifyInfoList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema" >
<HotModifyInfo>
<mode>workDev</mode>
<ip>10.30.31.47</ip>
<username>admin</username>
<password>admin11</password>
</HotModifyInfo>
</HotModifyInfoList >
```

**p<HotDeleteInfoList>XML: As follows**

```
<HotDeleteInfoList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema" >
<HotDeleteInfo>
<mode>hotBackupDev--></mode>
<ip>10.30.31.44</ip>
</HotDeleteInfo>
</HotDeleteInfoList>
```

**2.3.28/CGI/System/HotBackup/devStatus**

<b>/CGI/System/HotBackup/devStatus</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Client acquires the configuration information and connection status of hot standby device or working device	

<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b> This protocol is prepared for acquiring working status information of hot standby device for working device, or acquiring working status information of working device for hot standby device.</p> <p><b>Explanations on key parameters:</b>          &lt;mode&gt;workDev: Working device hotBackupDev: Hot backup device          &lt;ip&gt; ip address -- Support IPv6 address          &lt;state&gt; Working device: online: Online; offline: Offline; syncing: Synchronizing in progress          Hot standby device: Normal; hot standby; backup: Backup; syncing: Synchronizing;          offline: Offline; pswerr: Username or password error            &lt;progress&gt; Synchronization percentage, 0~100</p>	

**HotDevStatusListXML Block**

<pre>&lt;HotDevStatusList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema" &gt; &lt;mode&gt;&lt;!-- req, xs:string,"workDev, hotBackupDev"--&gt;&lt;/devType&gt; &lt;HotDevStatus&gt; &lt;id&gt;&lt;!-- opt,xs:integer --&gt;&lt;/id&gt; &lt;ip&gt;&lt;!-- reqxs:string;ip --&gt;&lt;/ip&gt; &lt;state&gt;&lt;!-- depxs:integer;devType--&gt;&lt;/state&gt; &lt;progress&gt;&lt;!-- dep: state ,xs:integer--&gt;&lt;/progress&gt; &lt;/HotDevStatus&gt; &lt;/HotDevStatusList&gt;</pre>
---

**Test cases**

**GET/CGI/System/HotBackup/devStatus**

**Request XML: None**

**Response XML: <HotDevStatusList>**

**<HotDevStatusList>XML: As follows**

<pre>&lt;HotDevStatusListversion="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema" &gt; &lt;mode&gt;workDev&lt;/mode&gt; &lt;HotDevStatus&gt; &lt;id&gt;1&lt;/id&gt; &lt;ip&gt;10.30.31.44&lt;/ip&gt; &lt;state&gt;syncing&lt;/state&gt; &lt;progress&gt;35&lt;/progress&gt; &lt;/HotDevStatus&gt; &lt;/HotModifyInfo&gt;</pre>
--

**2.3.29/CGI/System/textPlan**

<b>/CGI/System/textPlan</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Acquire plan management parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<TextPlanList>	
<b>PUT</b>		
<b>Description</b>	Set plan management parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<TextPlanList>	
<b>Success Return</b>	<ResponseStatus>	

**Explanations on protocol:**

This protocol is prepared for query and setting of plan parameters, helping client or IE query and set device plan via CGI protocol, including S/N, alias and contents.

**Explanations on key parameters:**

None

**TextPlanList XML Block**

```
< TextPlanList version="2.0" xmlns="http://urn:selfextension:ISAPItext-ver10-xsd">
<textPlan>
<id><!-- req, xs: :integer--></id>//Plan No. 1,2,....
<alias><!-- req, xs:string --></alias>// Plan alias, 63 characters at most
<text><!-- req, xs:string--></text>// Plan text, 255 characters at most
</textPlan>
</TextPlanList>
```

**Test cases**

**GET /CGI/System/textPlan**

**Request XML: none**

**Response XML: <TextPlanList>**

**PUT/CGI/System/textPlan**

**Response XML: <TextPlanList>**

**Request XML: as below**

```
<TextPlanList version="1.0" >
<textPlan>
  <id>1</id>
  <alias>yuan1</alias>
  <text>alarm</text>
</textPlan>
</TextPlanList>
```

**2.3.30/CGI/System/channels/capabilities**

/CGI/System/channels/capabilities		General Resource v2.0
<b>POST</b>		
<b>Description</b>	Equipment channel specific capability set	
<b>Query</b>	None	
<b>Inbound Data</b>	<CapDiscription>	
<b>Success Return</b>	<ChanBasicCapList>	
<b>Explanations on protocol:</b>		
This protocol is prepared for acquiring certain capability set from all channels of device.		
<b>Explanations on key parameters:</b>		
<capType> Types of capability sets acquired; value: laserlight (laser light), alert (alert), guardSound (guard sound), whitelight (white light), activateDualLight (dual light), dynprvarea (dynamic privacy shielding), color2gray (color to black), image (video parameters), vca (intelligent analysis), talk (talk), keyregion (key region), alarminput (alarm input), daynight (day/night mode), encodeSet (encode set), staticPrvarea (static privacy shielding) OSD (character overlay), MotionDetection (motion detection), tamperDetection (tampering detection), videoLoss (loss alarm), ptzSet (PTZ setting), imageSchedule (HD template), smartConfig (smart configuration), AudioPonticello: Audio mutation; accessDetection (loop detection), protocolAuthType (protocol authentication method) AutoTestCloudIPC: Whether NVR supports auto detection of IPC cloud version AutoChangeIPCTime: Whether NVR supports auto timing of IPC. NetCardGather: Whether it supports gather mode of net card <channel> Channel No.: Means NVR property if this field is "all"		

**CapDiscriptionXML Block**



```
<CapDiscription>
  <capType><!--req, xs:string,"laserlight,alert,guardSound" --></capType>
</CapDiscription>
```

#### **ChanBasicCapListXML Block**

```
<ChanBasicCapList>
  <capType><!--req, xs:string,"laserlight,alert,guardSound" --></capType>
  <ChanBasicCap>
    <channel><!-- req, xs:integer --></channel>
    <support><!-- req, xs:bool,"true,false" --></support>
    <supportSoundSampleNum >
      <!-- dep: capType=guardSound, xs: integer;-->
    </supportSoundSampleNum > // Number of linkage warning sounds supported
    <supportSoundCustomNum >
      <!-- dep: capType=guardSound, xs: integer;-->
    </supportSoundCustomNum > // Number of linkage customized warning sounds
supported
  </ChanBasicCap>
</ChanBasicCapList>
```

#### **Test cases**

##### **POST/CGI/System/channels/capabilities**

**Request XML:** <CapDiscription>

**Response XML:** <ChanBasicCapList>

**Request XML:** None

**CapDiscriptionXML as follows:**

```
<CapDiscription>
  <capType>laserlight</capType>
</CapDiscription>
```

#### **ChanBasicCapListXML as follows:**

```
<ChanBasicCapList>
  <capType>laserlight</capType>
  <ChanBasicCap>
    <channel>1</channel>
    <support>ture</support>
  </ChanBasicCap>
  <ChanBasicCap>
    <channel>2</channel>
    <support>>false</support>
  </ChanBasicCap>
</ChanBasicCapList>
Or
<ChanBasicCapList>
  <capType>NetCardGather</capType>
  <ChanBasicCap>
    <channel>all</channel>
    <support>ture</support>
  </ChanBasicCap>
</ChanBasicCapList>
```

### **2.3.31/CGI/System/channels/<ID>/capabilities[A5]**

For details, please see: CGI Ability Level Agreement.docx

<b>POST</b>	
<b>Description</b>	Capability set of device channel
<b>Query</b>	None
<b>Inbound Data</b>	<CapDiscription>
<b>Success Return</b>	<ChanBasicCapList>
<p><b>Explanations on protocol:</b> This protocol is prepared for acquiring the capability set of device channel.</p> <p><b>Explanations on key parameters:</b>  &lt;capType&gt; Types of capability set acquired: laserlight: Laser light; guardSound: Guard sound; Whitelight: White light; activateDualLight: Dual light; talk: Talk; ROI, exposureBright: Exposure; mutualExclusion: Intelligent analysis is mutually exclusive with S+; detectionMoved: Motion detection; tamperDetection: Tampering detection; videoLoss: Loss alarm; ptzSet: PTZ setting; Calibrate: Calibrate; vcaAndAlert: Intelligent analysis is mutually exclusive with alert; vcaFaceAndAudio: Face recognition is mutually exclusive with audio diagnosis under intelligent analysis; vcaFaceAndVideo: Face recognition is mutually exclusive with video diagnosis under intelligent analysis; alertSupport: Alert; alertPerimeter: Perimeter alert; alertTrip: Trip alert; alertScreenNum: screens supported; fastLight: Fast enabling of strong light; fastLaser: Fast enabling of laser; ptzPoint: Preset position; ptzCruise: PTZ cruising; playAlertSound: Play alert sound; highframerateandother: Mutually exclusively functions above 25/30 frames; color2graylight: Whether support brightness control over color-to-black far infrared light and white light; drawFace: Information of face drawn at client. spaceHeatMap: Space heat map. algoResourceProcess: Distribution of algorithm resources; algoResourceTiming: Regular distribution of resource distribution; defaultSchedule: Recover default setting of HD template.  Face recognition laser: faceDiscernLaserLight  Face recognition sound: faceDiscernGuardSound  Face recognition white light: faceDiscernWhiteLight  Face recognition guard light: faceDiscernGuardLight   Video flip: videoFlip  NP system setting: npModeSwitch  Face recognition is mutually exclusively with people counting: FaceDetectDemographics  Lines of characters added on each OSD block: osdLine OSD  Number of additional characters: osdNumber  ABF function: AutoBackFocus,  Whether OSD overlay date supports Chinese: osdSupportChineseDate; true: Supported; false: Not supported  Whether support dynamic ROI: DynamicRoi; true 1: Support dynamic ROI of ball camera  2 support dynamic ROI of bolt  Flase: Not supported  Face detection laser: faceDetectLaserLight  Face detection sound: faceDetectGuardSound  Face detection white light: faceDetectWhiteLight  Face detection guard light: faceDetectGuardLight  Face detection area: faceDetectArea; 0: Not supported; 1: Screen 0 supported; 2 Multi-screen supported  Support shielding area setting: vcaMaskArea  Smart code: smartCode  Smart image: smartImage  Smart alarm: smartAlarm  Setting of electrical anti-shaking level: eleantiShakeLevel  Working mode of serial port: comWorkMode  Temperature control mode: tempCtrlMode  Priority mode: proirityMode  Onvif supports access of H265 video: insertH265  Intelligent alarm support multi areas: smartAlmMulArea,</p>	

Switching screen snapshot: SceneSnap  
 Audio mutation: AudioPonticello  
 Image adjustment: imageAdjust  
 Guard light: guardLight  
 Auto scan mode: AutoScanMode (this mode includes < subCap ><ScanMode > //0-Left/right scan; 1-Auto scan; 2-Frame scan; 3-Random scan; 4-Vertical scan; 5-Panoramic scan; 6-Helical scan)  
 Traffic trigger: trafficTouch  
 Auto detection of cloud upgrade: autoTestCloud  
 Structured attribute: structuredAttribute  
 Support IPv6: ipv6Support

#### CapDiscription XML Block

```
<?xml version="2.0" encoding="UTF-8"?>
<CapDiscription>
  <capType><!--req,xs:string,"laserlight,guardSound,whitelight,activateDualLight,talk,exposureBright,ROI,mutualExclusion,
                                                                    SceneSnap,
AudioPonticello,Calibrate,guardLight,trafficTouch,structuredAttribute " -->
  </capType>
</CapDiscription>
```

#### ChanBasicCapList XML Block

```
<?xml version="2.0" encoding="UTF-8"?>
<ChanBasicCapList>
  <capTypeList>
    <capType><!--req,xs:string,"laserlight,guardSound,whitelight,activateDualLight,talk,exposureBright,ROI,mutualExclusion" --></capType>
    <support><!-- req, xs:bool,"true,false" --></support>
    <subCap>// This field exists if sub capability set is available and the field of sub capability set varies
      // This field does not exist if there's no capability set
      < supportSoundSampleNum >
        <!-- dep: capType=guardSound, xs: integer;-->
      </supportSoundSampleNum > // Number of linkage warning sounds supported
      <supportSoundCustomNum>
        <!-- dep: capType=guardSound, xs: integer;-->
      </supportSoundCustomNum > // Number of linkage customized warning sounds supported
      < supportSmartType>
        <!-- dep: capType= exposureBright or ROI,xs:string,"LineDetection、
DoubleLineDetection、 FieldDetection、 Loitering、 RapidMove、 AttendedBaggage、
UnattendedBaggage、 Alert、 Face、 Group、 OnDuty、 PlatLicense、 ParkGuard、 IllegalPark"
-->
      </supportSmartType>
    </subCap>
  </capTypeList>
  <capTypeList>
    <capType>highframerateandother</capType>
    <support>ture</support>
    <subCap>
      <mutexType>lcd</ mutexType >// Distortion correction
      < mutexType >vcabaisc</ mutexType >// Behavior analysis
      < mutexType >vcavfd</ mutexType >// Face detection
      < mutexType >vcacdd</ mutexType >// Gathering
      < mutexType >vcacpc</ mutexType >// People counting
      < mutexType >vcasvd</ mutexType >// On-duty detection
      < mutexType >vcavideo</ mutexType >// Video diagnosis
      < mutexType >vcaalert</ mutexType >// Alert template
      < mutexType >vcalpr</ mutexType >// License plate recognition
```

```

    < mutexType >vcaillpark</ mutexType >// Illegal parking
    < mutexType >wdr</ mutexType >// Wide dynamic
    < mutexType >videocover </ mutexType >// Video shielding
    < mutexType >corridor</ mutexType >// Corridor mode
    < mutexType >vcaspalert </ mutexType >// Special warning
    < mutexType >vcalpd</ mutexType >// Park guard:
    < mutexType >vcafollow</ mutexType >// Traction
    < mutexType >vcaallfolloew</ mutexType >// Panoramic ball algorithm
    < mutexType >vcahat</ mutexType >// Helmet algorithm
    < mutexType >antishake</ mutexType >// Electronic anti-shaking
< mutexType >digitalzoom</ mutexType >// Electronic zoom
< mutexType >allvca</ mutexType >// All intelligent algorithms
</subCap>
</capTypeList>
<capTypeList>
    <capType>color2graylight </capType>
    <support>ture</support>
    <subCap>
        < lightType >farinfraredLamp</ lightType >// Infrared light
        < lightType > whiteLamp</ lightType >// Brightness control of white lamp
    </subCap>
</capTypeList>
<capTypeList>
    <capType><!--req,xs:string,"FaceDetectDemographics " --></capType>
    <support><!-- req, xs:bool,"true,false" --></support> //true: Mutually exclusive false:
Not mutually exclusive
</capTypeList>
<capTypeList>
    <capType><!--req,xs:string,"AutoBackFocus " --></capType>
    <support><!-- req, xs:bool,"true,false" --></support> // true: Support ABF; false: Not
support ABF
</capTypeList>
<capTypeList>
    <capType> faceDetectArea </capType>
    <support>ture</support>
    <subCap>
        <supportSceneNum>1</supportSceneNum >//1 Screen 0: Support 2: Multi-screen
support
    </subCap>
</capTypeList>
<capTypeList>
    <capType><!--req,xs:string,"comWorkMode" --></capType>
    <support><!-- req, xs:bool,"true,false" --></support> // true: Support; false: Not support
    <subCap>
        <comMode><!-- req, xs:string,"1,2,3" --></comMode> //1: Protocol mode; 2:
Transparent channel; 3: Peripheral mode
    </subCap>
</capTypeList>
<capTypeList>
    <capType><!--req,xs:string,"tempCtrlMode" --></capType>
    <support><!-- req, xs:bool,"true,false" --></support> // true: Support; false: Not support
    <subCap>
        <ctrlMode><!-- req, xs: string,"1,2,3,4,5" --></ctrlMode> // 0-Disabled 1-Air cooling
2-Auto 3-Defog 4-Heating
    </subCap>
</capTypeList>
<capTypeList>
    <capType><!--req,xs:string,"proirityMode" --></capType>

```

```

<support><!-- req, xs:bool,"true,false" --></support> // true: Support; false: Not support
  <subCap>
    <proirityMode><!-- req, xs: string,"1,2" --></proirityMode> // 0-Network priority;
1-PTZ priority
  </subCap>
</capTypeList>
<capTypeList>
  <capType>insertH265</capType>
  <support>true</support>
</capTypeList>
<capTypeList>
  <capType><!--req,xs:string,"SceneSnap" --></capType>
<support><!-- req, xs:bool,"true,false" --></support> // true: Support; false: Not support
</capTypeList>
<capTypeList>
  <capType><!--req,xs:string,"AudioPonticello" --></capType>
<support><!-- req, xs:bool,"true,false" --></support> // true: Support; false: Not support
</capTypeList>
<capTypeList>
  <capType><!--req,xs:string,"Calibrate" --></capType>
<support><!-- req, xs:bool,"true,false" --></support> // true: Support; false: Not support
</capTypeList>
<capTypeList>
  <capType><!--req,xs:string,"ImageAdjust" --></capType>
<support><!-- req, xs:bool,"true,false" --></support> // true: Support; false: Not support
  <subCap>
    <supportImageNum><!--dep: xs: integer;--></supportImageNum>// Number of
templates supported
  <adjustType><!--dep,xs:string,"horizontal, vertical, ldc, enlarge" --></adjustType>
  </subCap>
</capTypeList>
<capTypeList>
  <capType><!--req,xs:string,"guardLight" --></capType>
<support><!-- req, xs:bool,"true,false" --></support> // true: Support; false: Not support
</capTypeList>
<capTypeList>
  <capType><!--req,xs:string,"faceDiscernGuardLight" --></capType>
  <support><!-- req, xs:bool,"true,false" --></support>
</capTypeList>
<capTypeList>
  <capType><!--req,xs:string,"faceDetectGuardLight" --></capType>
  <support><!-- req, xs:bool,"true,false" --></support>
</capTypeList>
<capTypeList>
  <capType><!--req,xs:string," AutoScanMode " --></capType>
<support><!-- req, xs:bool,"true,false" --></support> // true: Support; false: Not support
  <subCap>
    < ScanMode ><!--req,xs:string,"0,1,2,3,4,5,6 " --></ ScanMode > // 0-Left/right scan,
1-Auto scan, 2-Frame scan, 3-Random scan, 4-Vertical scan, 5-Panoramic scan, 6-Helical scan
  </subCap>
</capTypeList>
<capTypeList>
  <capType><!--req,xs:string,"trafficTouch" --></capType>
<support><!-- req, xs:bool,"true,false" --></support> // true: Support; false: Not support
</capTypeList>
<capTypeList>
  <capType><!--req,xs:string," structuredAttribute " --></capType>
  <support><!-- req, xs:bool,"true,false" --></support>

```

```

<subCap>
  <supportType>face</supportType>// Face attribute
  <supportType>human</supportType>// Human attribute
  <supportType>vehicle</supportType>// Vehicle attribute
  <supportType>plate</supportType>// Plate attribute
  <supportType>nonmotor</supportType>// Nonmotor attribute
</subCap>
</capTypeList>
</ChanBasicCapList>

```

**Test cases**

**POST/CGI/System/channels/1/capabilities**

**Request XML: <CapDiscription>**

**Response XML: <ChanBasicCapList>**

**CapDiscriptionXML as follows:**

```

<?xml version="2.0" encoding="UTF-8"?>
<CapDiscription>
  <capType>laserlight</capType>
  <capType>guardSound</capType>
  <capType> FaceDetectDemographics</capType>
  <capType> faceDetectArea </capType>
  <capType>comWorkMode</capType>
  <capType>tempCtrlMode</capType>
  <capType>proirityMode</capType>
  <capType>AudioPonticello</capType>
  <capType>guardLight</capType>
  <capType>AutoScanMode</capType>
  <capType> trafficTouch</capType>
  <capType>structuredAttribute</capType>
</CapDiscription>

```

**ChanBasicCapListXML as follows:**

```

<?xml version="2.0" encoding="UTF-8"?>
<ChanBasicCapList>
  <capTypeList>
    <capType>laserlight</capType>
    <support>ture</support >
  </capTypeList>
  <capTypeList>
    <capType>guardSound</capType>
    <support>true</support>
    <subCap>
      <supportSoundSampleNum >7</supportSoundSampleNum >
      <supportSoundCustomNum >2</supportSoundCustomNum >
    </subCap>
  </capTypeList>
  <capTypeList>
    <capType>osdLine</capType> // Lines of additional characters of each block
    <support>true</support>
    <subCap>
      <supportOsdLine >2</ supportOsdLine >
    </subCap>
  </capTypeList>
  <capTypeList>
    <capType>osdNumber</capType> // Number of additional characters of OSD
    <support>true</support>
    <subCap>
      <supportOseNumber >1</supportOsdNumber >
    </subCap>

```

```

</capTypeList>
<capTypeList>
  <capType>imageAdjust</capType>
  <support>true</support> //true: Supported false: Not supported
  <subCap>
    <supportImageNum>5</supportImageNum>// Number of templates supported
    <adjustType>horizontal</adjustType>
    <adjustType>vertical</adjustType>
    <adjustType>ldc</adjustType>
    <adjustType>enlarge</adjustType>
    //adjustType field name corresponds to the distortion calibrationlevel of network
    protocol. 1:horizontal
    //2:vertical
    //3:ldc
    //4:enlarge
  </subCap>
</capTypeList>
<capTypeList>
  <capType>osdSupportChineseDate</capType> // Whether OSD overlay date supports
  Chinese format
  <support>true</support>
<capTypeList>
  <capType>DynamicRoi</capType> // Whether support dynamic ROI
  <support>true</support>// When support is flase: Not supported (No subCap if it is flase)
  <subCap>
    <supportDynamicRoi>1</supportDynamicRoi>
  </subCap>
</capTypeList>
< capTypeList >
  <capType>exposureBright</capType>
  <support>true</support>
  <subCap>
    < supportSmartType>Face</supportSmartType>
    < supportSmartType>Alert</supportSmartType>
    < supportSmartType>IllegalPark</supportSmartType>
  </subCap>
</capTypeList>
<capTypeList>
  <capType>alertSupport</capType>// Alert
  <support>true</support>
</capTypeList>
<capTypeList>
  <capType>alertPerimeter</capType>
  <support>ture</support >
  <subCap>
    <supportAlertType>targetSet</supportAlertType>// Set target box
    <supportAlertType>targetDiff</supportAlertType>// Distinguish target box
    <supportAlertType>tripDisplay</supportAlertType>// Display trip
    <supportAlertType>linkFollow</supportAlertType>// Linkage traction
    <supportAlertType>linkSound</supportAlertType>// Linkage sound
    <supportAlertType>linkLaser</supportAlertType>// Linkage laser
    <supportAlertType>linkWhiteLight</supportAlertType>// Linkage white light
    <supportAlertType>targetTypeCheck</supportAlertType>// Target type check
  </subCap>
</capTypeList>
<capTypeList>
  <capType>alertTrip</capType>
  <support>ture</support>

```

```

<subCap>
  <supportAlertType>targetSet</supportAlertType>// Set target box
  <supportAlertType>targetDiff</supportAlertType>// Distinguish target box
  <supportAlertType>tripDisplay</supportAlertType>// Display trip
  <supportAlertType>linkFollow</supportAlertType>// Linkage traction
  <supportAlertType>linkSound</supportAlertType>// Linkage sound
  <supportAlertType>linkLaser</supportAlertType>// Linkage laser
  <supportAlertType>linkWhiteLight</supportAlertType>// Linkage white light
  <supportAlertType>targetTypeCheck</supportAlertType>// Target type check
  <supportAlertType>twoWayAlarm </supportAlertType>// Two-way alarm
</subCap>
</capTypeList>
<capTypeList>
  <capType>alertScreenNum</capType>// Number of screens supported
  <support>4</support>// Number, 0 or 4 supported, 2 or more may be supported latterly
</capTypeList>
<capTypeList>
  <capType>drawFace</capType>
  <support>ture</support>
</capTypeList>
<capTypeList>
  <capType> FaceDetectDemographics</capType>
  <support>ture</support>
</capTypeList>
<capTypeList>
  <capType>AutoBackFocus</capType>
  <support>ture</support>
</capTypeList>
<capTypeList>
  <capType> faceDetectArea </capType>
  <support>ture</support>
  <subCap>
    <supportSceneNum>1</supportSceneNum >//1 Screen 0: Support 2: Multi-screen
support
  </subCap>
</capTypeList>
<capTypeList>
  <capType> comWorkMode</capType>
  <support>ture</support>
  <comMode>1,2,3</comMode> //1: Protocol mode; 2: Transparent mode; 3: Peripheral
mode </capTypeList>
<capTypeList>
  <capType> tempCtrlMode</capType>
  <support>ture</support>
  <ctrlMode>1,2,3,4,5</ctrlMode> // 0-Disabled 1-Air cooling 2-Auto 3-Defog 4-Heating
</capTypeList>
<capTypeList>
  <capType> proirityMode</capType>
  <support>ture</support>
  <proirityMode>1,2</proirityMode> // 0-Network priority; 1-PTZ priority
</capTypeList>
<capTypeList>
  <capType>SceneSnap</capType>
  <support>ture</support>
</capTypeList>
<capTypeList>
  <capType> AudioPonticello</capType>
  <support>ture</support>

```



```

</capTypeList>
<capTypeList>
  <capType><!--req,xs:string,"Calibrate" --></capType>
<support><!-- req, xs:bool,"true,false" --></support> // true: Support; false: Not support
</capTypeList>
<capTypeList>
  <capType> guardLight </capType>
  <support>true</support>
</capTypeList>
<capTypeList>
  <capType>faceDiscernGuardLight</capType>
  <support>true</support>
</capTypeList>
<capTypeList>
  <capType>faceDetectGuardLight</capType>
  <support>true</support>
</capTypeList>
<capTypeList>
  <capType> AutoScanMode </capType>
  <support>ture</support>
  < ScanMode >0,1,2,3,4,5,6</ ScanMode > // 0-Left/right scan, 1-Auto scan, 2-Frame scan,
3-Random scan, 4-Vertical scan, 5-Panoramic scan, 6-Helical scan
</capTypeList>
<capTypeList>
  <capType>trafficTouch</capType>
  <support>true</support>
</capTypeList>
<capTypeList>
<capType>autoTestCloud</capType>
  <support>true</support>
  <capTypeList>
<capTypeList>
  <capType>structuredAttribute</capType>
  <support>ture</support >
  <subCap>
    <supportType>face</supportType>
    <supportType>human</supportType>
    <supportType>vehicle</supportType>
    <supportType>plate</supportType>
    <supportType>nonmotor</supportType>
  </subCap>
</capTypeList>
</capTypeList>
</ChanBasicCapList>

```

### 2.3.32/CGI/System/ActivationStatus

/CGI/System/ActivationStatus		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire device activation status	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<ActivationStatus>	

**Explanations on protocol:**

This protocol is prepared for query of device activation status, helping client or IE query the device activation status via CGI protocol.

**Explanations on key parameters:**

<activated> Status; active: Activated; inactive: Not activated; unknown: Unknown

**ActivationStatus XML Block**

```
<ActivationStatus xmlns="http://www.isapi.org/ver20/XMLSchema">
  <activated><!-- req, xs:string, "active, inactive,unknown" --></activated>
</ActivationStatus>
```

**Test cases**

**GET /CGI/System/ActivationStatus**

**Request XML:** none

**Response XML:** <ActivationStatus>

**Response XML:** as below

```
<ActivationStatusxmlns="http://www.isapi.org/ver20/XMLSchema">
  <activated>inactive</activated>
</ActivationStatus>
```

**d2.3.33/CGI/System/Video/inputs/channels/<ID>/focus**

/CGI/System/Video/inputs/channels/<ID>/focus	<b>General Resource v2.0</b>
<b>PUT</b>	
<b>Description</b>	Focus control
<b>Query</b>	None
<b>Inbound Data</b>	< FocusData >
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for focus setting.	
<b>Explanations on key parameters:</b> <focus> 100 means: Increase focus; -100 means: Decrease focus; 0 means: stop	

**FocusData XML Block**

```
<FocusData version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<focus><!-- req, xs:intger --></focus> 100: Add focus; -100: Reduce focus; 0: Stop
</FocusData>
```

**Test cases**

**PUT /CGI/System/Video/inputs/channels/<ID>/focus**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<FocusData version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<focus>100</focus>
</FocusData>
```

**2.3.34/CGI/System/Video/inputs/channels/<ID>/iris**

/CGI/System/Video/inputs/channels/<ID>/iris	<b>General Resource v2.0</b>
<b>PUT</b>	
<b>Description</b>	Aperture control
<b>Query</b>	None
<b>Inbound Data</b>	< IrisData >
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

This protocol is prepared for setting aperture control.

**Explanations on key parameters:**

<iris> 100: Aperture enabled; -100: Aperture disabled;

**IrisData XML Block**

```
<IrisData version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<iris><!-- req, xs:intger --></iris> 100: Aperture enabled; -100: Aperture disabled;
</IrisData>
```

Test cases

PUT /CGI/System/Video/inputs/channels/1/iris

Response XML: <ResponseStatus>

Request XML: as below

```
<IrisData version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<iris>100</iris>
</IrisData>
```

**2.3.35/CGI/System/IO/inputs/<ID>**

/CGI/System/IO/inputs/<ID>	General Resource v2.0
<b>GET</b>	
<b>Description</b>	Obtain alarm input parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<IOInputPort>
<b>PUT</b>	
<b>Description</b>	Set alarm input parameters
<b>Query</b>	None
<b>Inbound Data</b>	<IOInputPort>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol is prepared for acquisition and setting of alarm input	
<b>Explanations on key parameters:</b>	
<triggering> means mode setting; high: Open circuit alarm; low: Closed circuit alarm	

**IOInputPort XML Block**

```
<IOInputPort version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<id><!-- req, xs:string,id --></id> // Input port value is consistent with ie
<enabled><!--req,Boolean,"true,false"--></enabled> // Enabling; true: Enabled; false:
Disabled
<triggering><!-- req, xs:string, "high,low" --></triggering> // Mode setting; high: Open circuit
alarm; low: Closed circuit alarm
<name><!--opt,xs:string--></name>
</IOInputPort>
```

Test cases

GET /CGI/System/IO/inputs/<ID>

Request XML: none

Response XML: <IOInputPort>

PUT /CGI/System/IO/inputs/<ID>

Response XML: <ResponseStatus>

Request XML: as below

```
<?xml version="1.0" encoding="UTF-8"?>
<IOInputPort>
<id>1</id>
<enabled>>true</enabled>
<triggering>low</triggering>
</IOInputPort>
```

### 2.3.36/CGI/System/IO/outputs/<ID>

/CGI/System/IO/inputs/<ID>	General Resource v2.0
<b>GET</b>	
<b>Description</b>	Obtain alarm output parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<IOOutputPort>
<b>PUT</b>	
<b>Description</b>	Set alarm output parameters
<b>Query</b>	None
<b>Inbound Data</b>	<IOOutputPort>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for acquisition and setting of alarm output <b>Explanations on key parameters:</b> <outputState> means mode setting; high: Open circuit alarm; low: Closed circuit alarm	

#### IOOutputPort XML Block

```
<IOOutputPort version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<id><!-- req, xs:string; id --></id> // Output port: Value is consistent with ie
<PowerOnState><!-- req -->
<defaultState><!--ro, req, xs:string, "high,low" --></defaultState>
<outputState><!--ro, req, xs:string, "high,low" --></outputState> // Mode setting; high: Open
circuit alarm; low: Closed circuit alarm
<delayTime><!-- dep, xs:integer,seconds --></ delayTime > // Delay time is consistent with ie:
0, 1, 2, 5, 10 and 30
<pulseDuration><!-- dep, xs:integer, milliseconds --></pulseDuration>
</PowerOnState>
<name><!--opt, xs:string--></name>
</IOOutputPort>
```

Test cases

```
GET /CGI/System/IO/outputs/<ID>
Request XML: none
Response XML: <IOOutputPort>
PUT /CGI/System/IO/outputs/<ID>
Response XML: <ResponseStatus>
Request XML: as below
```

```
<?xml version="1.0" encoding="UTF-8"?>
<IOOutputPort>
<id>1</id>
<PowerOnState>
<outputState>low</outputState>
<delayTime>30</delayTime>
</PowerOnState>
</IOOutputPort>
```

### 2.3.37/CGI/System/Video/inputs/channels/<ID>/motionDetection

/CGI/System/Video/inputs/channels/<ID>/motionDetection		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire motion alarm parameters of video	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<MotionDetection>	
<b>PUT</b>		
<b>Description</b>	Set motion alarm parameters of video	
<b>Query</b>	None	
<b>Inbound Data</b>	<MotionDetection>	
<b>Success Return</b>	<ResponseStatus>	
<p><b>Explanations on protocol:</b>            This protocol is prepared for acquisition and setting of motion alarm parameters of video</p> <p><b>Explanations on key parameters:</b>            &lt;sensitivityLevel&gt; means sensitivity level, value is consistent with ie; range: 0-100s            &lt;gridMap&gt; means regional coordinates of image (see web6.0 interface module introduction.doc for details)</p>		

#### IOOutputPort XML Block

```

<MotionDetection version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <enabled><!--req, Boolean, "true,false"--></enabled> // Enabling; true: Enabled; false:
  Disabled
  <enableHighlight><!-- opt, xs:boolean --></enableHighlight>
  <samplingInterval><!-- opt, xs:integer, number of frames --></samplingInterval>
  <startTriggerTime><!-- opt, xs:integer, milliseconds --></startTriggerTime>
  <endTriggerTime><!-- opt, xs:integer, milliseconds --></endTriggerTime>
  <regionType><!-- ro, req, xs:string, "grid" --></regionType> // Assignment is "grid"
  <Grid><!-- dep -->
  <rowGranularity><!-- ro, req, xs:integer --></rowGranularity> // Assignment is 18
  <columnGranularity><!-- ro, req, xs:integer --></columnGranularity> // Assignment is 22
  </Grid>
  <ROI><!-- dep -->
  <normalizedScreenWidth><!--ro,req,xs:integer --></normalizedScreenWidth>
  <normalizedScreenHeight><!-- ro, req, xs:integer --></normalizedScreenHeight>
  </ROI>
  <MotionDetectionLayout/><!-- req -->
</MotionDetection>

<MotionDetectionLayout version="2.0"
  xmlns="http://www.isapi.org/ver20/XMLSchema">
  <sensitivityLevel><!-- req -->
  <!-- req, xs:integer, "0-100", 0 is least sensitive --> // Sensitivity is consistent with ie; 0-100s
  </sensitivityLevel>
  <layout>
  <gridMap><!--dep, xs:hexstring--></gridMap> // Regional coordinates of image (see web6.0
  interface module introduction.doc for details)
  <roiMap/>
  </layout>
</MotionDetectionLayout>

```

#### Test cases

GET /CGI/System/Video/inputs/channels/<ID>/motionDetection  
 Request XML: none  
 Response XML: <MotionDetection>



### VoDevInfoList XML Block

```
<VoDevInfoList version="1.0" >
<voDevNum><!-- req, xs:integer --></voDevNum>
<voDevResList>
  <voDevInfo>
    <voDevId><!-- req, xs:integer --></voDevId>
    <voDevName ><!-- req, xs:string --></voDevName>
    <voDevParam>
      <para><!-- req, xs:string --></para>
      <para><!-- req, xs:string --></para>
    </voDevParam>
  </voDevInfo>
  <voDevInfo>
    <voDevId><!-- req, xs:integer --></voDevId>
    <voDevName ><!-- req, xs:string --></voDevName>
    <voDevParam>
      <para><!-- req, xs:string --></para>
      <para><!-- req, xs:string --></para>
    </voDevParam>
  </voDevInfo>
</voDevResList>
</VoDevInfoList>
```

#### Test cases

#### GET /CGI/System/ScreenResolutionList

Response XML: <SmartTestStatus>

Request XML: None

```
<VoDevInfoList version="1.0" >
<voDevNum>2</voDevNum>
<voDevResList>
  <voDevInfo>
    <voDevId>1</voDevId>
    <voDevName>VGA123<!-- req, xs:integer --></voDevName>
    <voDevParam>
      <para>(1080P)1920*1080(30HZ)</para>
      <para>(960P)1260*960(30HZ)</para>
    </voDevParam>
  </voDevInfo>
  <voDevInfo>
    <voDevId>2</voDevId>
    <voDevName>DH456</voDevName>
    <voDevParam>
      <para>(1080P)1920*1080(30HZ)</para>
      <para>(960P)1260*960(30HZ)</para>
    </voDevParam>
  </voDevInfo>
</voDevResList>
</VoDevInfoList>
```

### 2.3.40/CGI/System/ScreenCurrentResParam/<ID>

/CGI/System/ScreenCurrentResParam/<ID>General Resource v2.0	
GET	
<b>Description</b>	Acquire present resolution parameters of screen
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ScrResParam>

<b>PUT</b>	
<b>Description</b>	Set present resolution parameters of screen
<b>Query</b>	None
<b>Inbound Data</b>	<ScrResParam>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for query and setting of present resolution parameters of screen via CGI protocol. <b>Explanations on key parameters:</b> ID: Device screen ID voDevResAuto: Self-adaption of screen resolution; true: Disabled; false: Enabled voDevResParam: Present resolution of screen	

#### ScrResParam Block

```
<ScrResParamList>
<ScrResParam>
  <voDevResAuto><!--rsp, xs:boolean--></voDevResAuto>
  <voDevResParam><!--rsp, xs:string--></voDevResParam>
</ScrResParam>
```

#### Test cases

**GET /CGI/System/ScreenCurrentResParam/<ID>**

**Request XML:** none

**Response XML:** <ScrResParam>

**PUT /CGI/System/ScreenCurrentResParam/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** <ScrResParam> As follows

```
<ScrResParam>
<voDevResAuto>true</voDevResAuto>
<voDevResParam>(1080P)1920x1080(60HZ)</voDevResParam>
</ScrResParam>
```

### 2.3.41/CGI/System/ScreenCurrentResParam

<b>/CGI/System/ScreenCurrentResParam</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Acquire the list of present resolution parameters of screen	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<ScrResParamList>	
<b>Explanations on protocol:</b> This protocol is prepared for acquisition of present resolution parameters of screen via CGI protocol. <b>Explanations on key parameters:</b> ID: Device screen ID voDevResAuto: Self-adaption of screen resolution; true: Disabled; false: Enabled voDevResParam: Present resolution of screen		

#### ScrResParamList Block

```
<ScrResParamList>
<ScrResParam>
  <voDevId><!--rsp, xs:integer--></voDevId>
  <voDevResAuto><!--rsp, xs:boolean--></voDevResAuto>
  <voDevResParam><!--rsp, xs:string--></voDevResParam>
</ScrResParam>
</ScrResParamList>
```



**Test cases****GET /CGI/System/ScreenCurrentResParam****Request XML: none****Response XML: <ScrResParamList>**

```

<ScrResParamList>
<ScrResParam>
  <voDevId>1</voDevId>
  <voDevResAuto>true</voDevResAuto>
  <voDevResParam>(960P)1260*960(30HZ)</voDevResParam>
</ScrResParam>
  <ScrResParam>
  <voDevId>2</voDevId>
  <voDevResAuto>>false</voDevResAuto>
  <voDevResParam>(960P)1260*960(30HZ)</voDevResParam>
</ScrResParam>
</ScrResParamList>

```

**2.3.42/CGI/System/ipcVersionInfo/channels/<ID>**

<b>/CGI/System/ipcVersionInfo/channels/&lt;ID&gt;</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Acquire information of IPC version	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<IPCVerInfo>	
<b>Explanations on protocol:</b> This protocol is prepared for acquisition of IPC version information of certain channel via CGI protocol.		
<b>Explanations on key parameters:</b> ipcVersionInfo: ipc version information		

**IPCVerInfo XML Block**

```

<IPCVerInfo version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<channels><!-- ro, rsp, xs:integer --></channels>
<ipcVersionInfo><!-- ro, rsp, xs:string --></ipcVersionInfo>
</IPCVerInfo>

```

**Test cases****GET /CGI/System/ipcVersionInfo/channels/<ID>****Request XML: none****Response: XML: <IPCVerInfo>**

```

<?xml version="1.0" encoding="UTF-8"?>
<IPCVerInfo>
<channels>1</channels>
  <ipcVersionInfo>NVSS_V9.10.1.20180101</ipcVersionInfo>
</IPCVerInfo>

```

**2.3.43/CGI/System/DeviceRegistrarStatus**

<b>/CGI/System/DeviceRegistrarStatus</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Acquire device registration status	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<DeviceRegistrar>	

**Explanations on protocol:**

This protocol is prepared for query and setting of device registration status, helping client or IE query device registration status via CGI protocol, including registration status of traffic algorithm and monitoring algorithm.

**Explanations on key parameters:**

<monitorRegistorState> means whether monitoring algorithm is registered. 0-Unregistered; 1-Registered

<trafficRegistorState> means whether traffic algorithm is registered. 0-Unregistered; 1-Registered

**DeviceRegistor XML Block**

```
<DeviceRegistor version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<monitorRegistorState><!-- req, xs:integer--></monitorRegistorState>
<trafficRegistorState><!-- req, xs:integer--></trafficRegistorState>
</DeviceRegistor >
```

**Test cases**

**GET /CGI/System/DeviceRegistorStatus**

**Request XML: none**

**Response XML:<DeviceRegistor>**

```
<DeviceRegistor version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<monitorRegistorState>1</monitorRegistorState>
<trafficRegistorState>1</trafficRegistorState>
</DeviceRegistor >
```

**2.3.44/CGI/System/IrisCorrection/channels/<ID>/type/<ID>**

**/CGI/System/IrisCorrection/channels/<ID>/type/<ID>**

**General Resource v2.0**

**PUT**

<b>Description</b>	Set aperture correction
<b>Query</b>	None
<b>Inbound Data</b>	<IrisCorrectionInfo>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

This protocol is prepared for setting of aperture correction, helping client or IE set aperture correction of device via CGI protocol.

<type> means types of different image parameters 0 - Monitoring image; 1- Snapshot image; 2 - Analysis image

(Snapshot image has no aperture correction)

**TemplateName XML Block**

```
<IrisCorrectionInfoversion="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
</IrisCorrectionInfo>
```

**Test cases**

**PUT/CGI/System/IrisCorrection/channels/<ID>/type/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<?xml version="1.0" encoding="UTF-8"?>
<IrisCorrectionInfo>
</IrisCorrectionInfo>
```

**2.3.45 /CGI/System/reboot/type/<ID>**

**/CGI/System/reboot/type/<ID>**

**General Resource**

<b>v2.0</b>	
<b>PUT</b>	
<b>Description</b>	Set restart
<b>Query</b>	<b>None</b>
<b>Inbound Data</b>	<b>None</b>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> Restart setting of device or designated process <b>Explanations of parameters:</b> types: 0-Device, 1-GUI 2-APP (ITS) 3-APP (all)	

**Test cases**

**PUT /CGI/System/reboot/type/<ID>**

**Request XML:** none

**Response XML:** <ResponseStatus>

**2.3.46 /CGI/System/Identify**

<b>/CGI/System/Identify</b>		<b>General Resource v2.0</b>
<b>Post</b>		
<b>Description</b>	User password identification	
<b>Query</b>	<b>None</b>	
<b>Inbound Data</b>	<identifyPara>	
<b>Success Return</b>	<identifyResult>	
<b>Explanations on protocol:</b> Whether enabling authentication <b>Explanations of parameters:</b> <userName> Username, default is admin, un-editable, 16 characters <passWord> Password, 16 characters		

**IdentifyPara XML Block**

```
<?xml version="2.0" encoding="UTF-8"?>
<identifyPara>
  <userName><!--req,xs:string,"admin" --></userName>
  <passWord><!--req,xs:string --></passWord>
</identifyPara>
```

**IdentifyResult XML Block**

```
<?xml version="2.0" encoding="UTF-8"?>
<identifyResult>
  <retCode><!--req,xs: Integer --></retCode> //0: Success 1: Failure
</identifyResult>
```

**Test cases**

**POST /CGI/System/Identify**

**Request XML:**

```
<identifyPara>
  <userName>admin</userName>
  <passWord>1111</passWord>
</identifyPara>
```

**Response XML:**

```
<identifyResult>
  <retCode>0</retCode>
</identifyResult>
```

### 2.3.47 /CGI/System/Identify/Enable/State

/CGI/System/Identify/Enable/State		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire enabling status of authentication	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<enableState>	
<b>PUT</b>		
<b>Description</b>	Set enabling status of authentication	
<b>Query</b>	None	
<b>Inbound Data</b>	<enableState>	
<b>Success Return</b>	<ResponseStatus>	
<p><b>Explanations on protocol:</b> Whether enabling authentication</p> <p><b>Explanations of parameters:</b> &lt;identifyEnable&gt; true: Enable authentication; false: Disable authentication</p>		

#### EnableState XML Block

```
<?xml version="2.0" encoding="UTF-8"?>
<enableState>
  <identifyEnable><!--req,xs:Boolean"true,false"--></identifyEnable>
</enableState>
```

#### Test cases

**GET /CGI/System/Identify/Enable/State**

**Request XML:** none

**Response XML:** <EnableState>

**PUT /CGI/System/Identify/Enable/State**

**Request XML:** <EnableState>

```
<enableState>
  <identifyEnable>true</identifyEnable>
</enableState>
```

**Response XML:** <ResponseStatus>

### 2.3.48 /CGI/System/IOUseful/outputs/<ID>/channels/<ID>

/CGI/System/IOUseful/outputs/<ID>/channels/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire the present usage of port output	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<IOOutputPortUseful>	
<b>PUT</b>		
<b>Description</b>	Set the present usage of port output	
<b>Query</b>	None	
<b>Inbound Data</b>	<IOOutputPortUseful>	
<b>Success Return</b>	<ResponseStatus>	
<p><b>Explanations on protocol:</b> This protocol is prepared for acquiring/setting the present usage of output port.</p> <p><b>Explanations on key parameters:</b> &lt;useful opt = 0,1,2&gt; 0: Reserved; 1: Alarm; 2: Control light; 3: peripheral power switch control</p>		

#### IOOutputPortUseful XML Block

```
<IOOutputPortUseful version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<useful opt=0,1,2><!-- req, xs:integer --></useful>
</IOOutputPortUseful>
```

**Test cases**

**GET /CGI/System/IOUseful/outputs/0/channels/0**

**Request XML:** none

**Response XML:** <IOOutputPortUseful>

**PUT /CGI/System/IOUseful/outputs/0/channels/0**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<IOOutputPortUseful version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<useful>2</useful>
</IOOutputPortUseful >
```

### 2.3.49 /CGI/System/WebService/Info

<b>/CGI/System/WebService/Info</b>	
<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire WebService information
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<WebServiceInfo>
<b>PUT</b>	
<b>Description</b>	Set WebService information
<b>Query</b>	None
<b>Inbound Data</b>	<WebServiceInfo>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for acquiring and setting WebService information.	
<b>Explanations on key parameters:</b> <webUrl>: url http://<ServerIp>:<ServerPort>/VGAlarmReceiver/Receiver.svc <siteNo>: 6-digit figure at most	

**WebServiceInfo XML Block**

```
<webServiceInfo>
<webUrl><!--req, xs:string--></webUrl>
<siteNo><!-- req, xs: string--></siteNo>
</webServiceInfo>
```

**Test cases**

**GET /CGI/System/WebService/Info**

**Request XML:** none

**Response: XML:** <WebServiceInfo>

**PUT /CGI/System/WebService/Info**

**Request XML:** <WebServiceInfo>

**Response XML:** <ResponseStatus>

```
<?xml version="1.0" encoding="UTF-8"?>
<webServiceInfo>
<webUrl>http://<10.30.30.66>:<3000>/VGAlarmReceiver/Receiver.svc</webUrl>
<siteNo>123456</siteNo>
</webServiceInfo>
```

### 2.3.50 /CGI/System/Channel/Expand

<b>/CGI/System/Channel/Expand</b>	<b>General Resource v2.0</b>
-----------------------------------	------------------------------

<b>GET</b>	
<b>Description</b>	Acquire number of expanded channels
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<chnExpand>
<b>PUT</b>	
<b>Description</b>	Set number of expanded channels
<b>Query</b>	None
<b>Inbound Data</b>	<chnExpand>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**  
Set and acquire number of expanded channels

**Explanations of parameters:**  
<expandNum> Number of channel modes supporting expansion; 0-Expansion not supported; 2-Two-way setting supported  
<chnNum> List of number of expanded channels, 4 channels supported at most  
<curChnNum> Actual channel number of present device

**chnExpand XML Block**

```
<?xml version="2.0" encoding="UTF-8"?>
<chnExpand>
  <expandNum>!--req,xs: integer--</expandNum>
  <expandChnList>
    <chnNum><!--req,xs: integer--</chnNum>
      .....
    <chnNum><!--req,xs: integer--</chnNum>
  </expandChnList >
  <curChnNum><!--req,xs: integer--</curChnNum>
</chnExpand>
```

**Test cases**

**GET /CGI/System/Channel/Expand**

**Request XML:** none

**Response XML:** <chnExpand>

```
<chnExpand>
  <expandNum>2</expandNum>
  <expandChnList>
    <chnNum>5</chnNum>
    <chnNum>7</chnNum>
  </expandChnList >
  <curChnNum>5</curChnNum>
</chnExpand>
```

**PUT /CGI/System/Channel/Expand**

**Request XML:** <chnExpand>

```
<chnExpand>
<expandNum>2</expandNum>
<expandChnList>
<chnNum>5</chnNum>
<chnNum>7</chnNum>
</expandChnList >
<curChnNum>5</curChnNum>
</chnExpand>
```

**Response XML:** <ResponseStatus>

**2.3.51/CGI/Event/Touch/channels**

<b>GET</b>	
<b>Description</b>	Acquire the alarm status of all alarm output ports
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<touchChannelList>
<b>PUT</b>	
<b>Description</b>	Set the alarm status of all alarm output ports
<b>Query</b>	None
<b>Inbound Data</b>	<touchChannelList>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b> Acquire and set the alarm status of all alarm output ports</p> <p><b>Explanations on key parameters:</b>          &lt;channelID&gt; NVR channel No. (local alarm output) is 0; frontend alarm output means the actual channel number which is started from 1          &lt;eventType&gt; IO, further expansion supported          &lt;id&gt; Port No. of local alarm output or frontend alarm output          &lt;state&gt;touch: touch: Trigger alarm clear: Clear alarm</p>	

**touch XML Block**

```
<?xml version="2.0" encoding="UTF-8"?>
<touchChannelList>
  <channel>
    <channelID><!--req,xs: integer --></channelID>
    <eventList>
      <event>
        <eventType><!--req,xs: string--></eventType>//IO, for further
expansion
        <id><!--req,xs: integer --></id>
        <state><!--req,xs: string--></state>
      </event>
      <event>
        <eventtype><!--req,xs: string--></eventtype>
        <id><!--req,xs: integer --></id>
        <state><!--req,xs: string--></state>
      </event>
    </eventList>
  </channel>
</touchChannelList>
```

**Test cases**

**GET /CGI/Event/Touch/channels**

**Request XML: none**

**Response XML: <touchChannelList>**

**<touchChannelList>**

```
<touchChannelList>
  <channel>
    <channelID>0</channelID>
    <eventList>
      <event>
        <eventType>IO</eventType>
        <id>1</id>
        <state>touch</state>
      </event>
      <event>
        <eventtype>IO</eventtype>//For further expansion
        <id>2</id>
```

```

        <state>clear</state>
    </event>
</eventList>
</channel>
<channel>
    <channelID>1</channelID>
    <eventList>
        <event>
            <eventType>IO</eventType>
            <id>1</id>
            <state>touch</state>
        </event>
        <event>
            <eventType>IO</eventType>
            <id>2</id>
            <state>clear</state>
        </event>
    </eventList>
</channel>
</touchChannelList>

```

**PUT /CGI/Event/Touch/channels**  
**Request XML:** <touchChannelList>  
**Response XML:** <ResponseStatus>

**2.3.52/CGI/Event/Touch/channels/<ID>**

/CGI/Event/Touch/channels/<ID>	General Resource v2.0
<b>GET</b>	
<b>Description</b>	Acquire the alarm status of the designated alarm output ports
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<touchChannelList>
<b>PUT</b>	
<b>Description</b>	Set the alarm status of the designated alarm output ports
<b>Query</b>	None
<b>Inbound Data</b>	<touchChannelList>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>                      Acquire and set the alarm status of the designated alarm output ports</p> <p><b>Explanations on key parameters:</b>                      &lt;channelID&gt; NVR channel No. (local alarm output) is 0; frontend alarm output means the actual channel number which is started from 1                      &lt;eventType&gt; IO, further expansion supported                      &lt;id&gt; Port No. of local alarm output or frontend alarm output                      &lt;state&gt;touch: touch: Trigger alarm clear: Clear alarm</p>	

**touch XML Block**

```

<?xml version="2.0" encoding="UTF-8"?>
<touchChannelList>
    <channel>
        <channelID><!--req,xs: integer --></channelID>
        <eventList>
            <event>
                <eventType><!--req,xs: string--></eventType>//IO, for further
expansion

```



```

        <id><!--req,xs: integer --></id>
        <state><!--req,xs: string--></state>
    </event>
</eventList>
</channel>
</touchChannelList>

```

**Test cases**

**GET /CGI/Event/Touch/channels/1**

**Request XML: none**

**Response XML: <touchChannelList>**

**<touchChannelList>**

```

<touchChannelList>
  <channel>
    <channelID>0</channelID>
    <eventList>
      <event>
        <eventType>IO</eventType>
        <id>1</id>
        <state>touch</state>
      </event>
    </eventList>
  </channel>
</touchChannelList>

```

**PUT /CGI/Event/Touch/channels/1**

**Request XML: <touchChannelList>**

**Response XML: <ResponseStatus>**

**2.3.53/CGI/System/ipcAlm/output/channel/<ID>**

/CGI/System/ipcAlm/output/channel/<ID>	General Resource v2.0
<b>GET</b>	
<b>Description</b>	Acquire the frontend alarm output parameters of the designated channels
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ipcAlmOutCnfList>
<b>PUT</b>	
<b>Description</b>	Set the frontend alarm output parameters of the designated channels
<b>Query</b>	None
<b>Inbound Data</b>	<ipcAlmOutCnf>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>            This protocol is prepared for acquiring and setting the frontend alarm output parameters of the designated channel</p> <p><b>Explanations on key parameters:</b>            &lt;portCnt&gt; Port count            &lt;portState&gt; Port alarm status; 0: Clear 1: Trigger            &lt;portNum&gt; Port No.</p>	

**ipcAlmOutCnfList XML Block**

```

<?xml version="2.0" encoding="UTF-8"?>
<ipcAlmOutCnfList>
  <portCnt><!--req,xs: integer--></portCnt>
  <portStateList>
    <portState><!--req,xs: integer--></portState>
    .....
    <portState><!--req,xs: integer--></portState>

```

```

</portStateList >
</ipcAlmOutCnfList>

```

**ipcAlmOutCnf XML Block**

```

<?xml version="2.0" encoding="UTF-8"?>
<ipcAlmOutCnf>
  <portNum><!--req,xs: integer--></portNum>
  <portState><!--req,xs: integer--></portState>
</ipcAlmOutCnf>

```

**Test cases**

**GET /CGI/System/ipcAlm/output/channel/01**

**Request XML:** none

**Response XML:** <ipcAlmOutCnfList>

```

<ipcAlmOutCnfList>
  <portCnt>3</portCnt>
  <portStateList>
    <portState>0</portState>
    <portState>1</portState>
    <portState>1</portState>
  </portStateList >
</ipcAlmOutCnfList>

```

**PUT /CGI/System/ipcAlm/output/channel/01**

**Request XML:** <ipcAlmOutCnf>

```

<ipcAlmOutCnf>
  <portNum>1</portNum>
  <portState>0</portState>
</ipcAlmOutCnf>

```

**Response XML:** <ResponseStatus>

**2.3.54 /CGI/System/Video/inputs/channels/<ID>/BackFocus**

/CGI/System/Video/inputs/channels/<ID>/BackFocus	General Resource v2.0
<b>PUT</b>	
<b>Description</b>	<b>Back focus control</b>
<b>Query</b>	<b>None</b>
<b>Inbound Data</b>	<b>&lt;BackFocusData &gt;</b>
<b>Success Return</b>	<b>&lt;ResponseStatus&gt;</b>
<b>Explanations on protocol:</b> This protocol is prepared for setting ABF back focus.	
<b>Explanations on key parameters:</b> <backFocus> 100 means: Increase back focus; -100 means: Decrease back focus; 0 means: Stop back focus	

**BackFocusData XML Block**

```

<BackFocusData version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <backFocus><!-- req, xs:intger --></backFocus> 100 means: Increase back focus; -100 means:
Decrease back focus; 0 means: Stop back focus
</BackFocusData>

```

**Test cases**

**PUT /CGI/System/Video/inputs/channels/<ID>/BackFocus**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```

<BackFocusData version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <backFocus>100</backFocus>
</BackFocusData>

```

### 2.3.55 /CGI/System/AutoBackFocusCtrl

/CGI/System/AutoBackFocusCtrl		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire function enabling information of ABF	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<autoBackFocusCtrl>	
<b>PUT</b>		
<b>Description</b>	Set ABF function enabling	
<b>Query</b>	None	
<b>Inbound Data</b>	<autoBackFocusCtrl >	
<b>Success Return</b>	<ResponseStatus>	
<p><b>Explanations on protocol:</b>            This protocol is prepared for query and setting of ABF(AutoBackFocus) functions of device.</p> <p><b>Explanations on key parameters:</b>            &lt;enable&gt; means enabling/disabling of ABF function; true: Enabled; false: Disabled</p>		

#### autoBackFocusCtrl XML Block

```
<autoBackFocusCtrl>
  <enable><!-- opt, xs:boolean "false,true"--></enable>
</autoBackFocusCtrl>
```

#### Test case:

**GET /CGI/System/AutoBackFocusCtrl**

**Request XML: none**

**Response XML: <autoBackFocusCtrl>**

**PUT /CGI/System/AutoBackFocusCtrl**

**Request XML: <autoBackFocusCtrl>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<?xml version="1.0" encoding="UTF-8"?>
<autoBackFocusCtrl>
  <enable>true</enable>
</autoBackFocusCtrl>
```

### 2.3.56 /CGI/System/Temhum/channels/<ID>

/CGI/System/Temhum/channels/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire temperature/humidity alarm parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<Temhum>	
<b>PUT</b>		
<b>Description</b>	Set temperature/humidity alarm parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<Temhum>	
<b>Success Return</b>	<ResponseStatus>	

**Explanations on protocol:**

This protocol is prepared for acquiring and setting temperature & humidity alarm parameters

**Explanations on key parameters:**

<channelID> Channel No.

<enabled> Whether enabling function; true: Enabled; false: Disabled

<upload> Whether enable uploaded data; true: Enabled; false: Disabled

<interval>Time interval: 1-600 s

<upper> Upper threshold: Actual display (accurate to one digit after decimal point) \*10+1000

<lower> Lower threshold: Actual display (accurate to one digit after decimal point) \*10+1000

**Temhum XML Block**

```
<Temhum version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<enabled><!--req,Boolean,"true,false"--></enabled> // Enabling; true: Enabled; false:
Disabled
<upload><!--req,Boolean,"true,false"--></upload> // Enabling; true: Enabled; false:
Disabled
<interval><!-- req, xs:integer --></interval>
<temperature> //Temperature
<upper><!-- req, xs:integer --></upper>
<lower><!-- req, xs:integer --></lower>
</temperature>
<humidity> //Humidity
<upper><!-- req, xs:integer --></upper>
<lower><!-- req, xs:integer --></lower>
</humidity>
</Temhum>
```

## Test cases

GET /CGI/System/Temhum/channels/<ID>

Request XML: none

Response XML: <Temhum>

PUT /CGI/System/Temhum/channels /<ID>

Response XML: <ResponseStatus>

Request XML: as below

```
<?xml version="1.0" encoding="UTF-8"?>
<Temhum>
<enabled>>true</enabled>
<upload>>false</upload>
<interval>50</interval>
<temperature>
<upper>1085</upper>
<lower>1024</lower>
</temperature>
<humidity>
<upper>1135</upper>
<lower>1050</lower>
</humidity>
</Temhum>
```

**2.3.57 /CGI/System/Network/Tencent/<ID>**

/CGI/System/Network/ Tencent /<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire Tencent setting information	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<TencentSet>	
<b>PUT</b>		

<b>Description</b>	Set Tencent information
<b>Query</b>	None
<b>Inbound Data</b>	<TencentSet>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b> This protocol is prepared for query and setting of device Tencent information, helping client or IE query and set the Tencent information of device via CGI protocol, including domain name, id and key.</p> <p><b>Explanations on key parameters:</b> &lt;url&gt; Domain name, such as: https://smartshop.cloud.tencent.com/upload/api/ &lt;id&gt; Username &lt;key&gt; Password</p>	

#### TencentSet XML Block

<pre>&lt;?xml version="1.0" encoding="UTF-8"?&gt; &lt;TencentSet&gt; &lt; url &gt;&lt;!-- opt, xs:string --&gt;&lt;/ url &gt; &lt; id &gt;&lt;!-- opt, xs:string --&gt;&lt;/ id &gt; &lt; key &gt;&lt;!-- opt, xs:string --&gt;&lt;/ key &gt; &lt;/TencentSet&gt;</pre>
---

#### Test cases

**GET /CGI/System/Network/Tencent/<ID>**

**Request XML:** none

**Response XML:** <TencentSet>

**PUT/CGI/System/Network/Tencent/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** as below

<pre>&lt;?xml version="1.0" encoding="UTF-8"?&gt; &lt;TencentSet&gt; &lt;url&gt;https://smartshop.cloud.tencent.com/upload/api&lt;/url&gt; &lt; id &gt;123456&lt;/ id &gt; &lt; key &gt;654321&lt;/key&gt; &lt;/TencentSet&gt;</pre>
--

### 2.3.58 /CGI/System/Network/Dzcommon/<ID>

<b>/CGI/System/Network/Dzcommon/&lt;ID&gt;</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Acquire Dzcommon setting information	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<DzcommonSet>	
<b>PUT</b>		
<b>Description</b>	Set Dzcommon information	
<b>Query</b>	None	
<b>Inbound Data</b>	<DzcommonSet>	
<b>Success Return</b>	<ResponseStatus>	
<p><b>Explanations on protocol:</b> This protocol is prepared for query and setting of device customization information, helping client or IE query and set the device customization information of device via CGI protocol, including domain name, username and password.</p> <p>Explanations on key parameters: &lt;Name&gt;tencent&lt;/Name&gt; Name of customization platform &lt;Param&gt;cloud.tencent.com&lt;/Param&gt; Parameters</p> <p>YTLF platform: Name [ytlf], parameter list [Platform ip, platform port, device id, key, region id,</p>		

node id]

Dz19572- Multiple identification linkage configuration: Name [facereconum], parameter list [Min. face alarm number], KS active registration platform: Name [ksactive], parameter list [Server ip, server port, login server account, login server password, device name]

YT platform: name [yitu], parameter list [whether enabled, portrait platform address, user name, password, universal port number, platform console port number, portrait camera port number, portrait picture streaming port number]

XM20200062-XVR Taiwan version upgrade project: name [alarmCenter], parameter list [whether enabled, platform IP, platform port, user name, password, random information (for verification)]

Russian customization: name [onvifUserSecurity], parameter list [whether enabled]

Kunshan Portrait Cloud Platform: Name [ksrx]. Parameter list [1. Face storage URL; 2. Device authentication URL; 3. Device keepalive URL; 4. Time calibration URL; 5. Device ID; 6. username; ; 10. Point name]

#### DzcommonSet XML Block

```
<?xml version="1.0" encoding="UTF-8"?>
< DzcommonSet >
<Name><!-- opt, xs:string --></ Name>
<ParamList>
<Param><!-- opt, xs:string --></ Param>
</ ParamList>
</ DzcommonSet >
```

#### Test cases

**GET /CGI/System/Network/ Dzcommon /<ID>**

**Request XML: none**

**Response XML: < DzcommonSet >**

**PUT/CGI/System/Network/ Dzcommon /<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<?xml version="1.0" encoding="UTF-8"?>
< DzcommonSet >
<Name>tencent</ Name>
<ParamList>
<Param>www.tencent.com</ Param>
<Param>admin</ Param>
<Param>1111</ Param>
</ ParamList>
</ DzcommonSet >
```

#### 2.3.59 /CGI/System/Network/DevStatus/<ID>/channels/<ID>

/CGI/System/Network/DevStatus/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire device status	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<DevStatus>	
<b>Explanations on protocol:</b> This protocol is prepared for query whether PPPoE dial is successful, acquiring the IP address and gateway, or 28181 online/offline status after successful dial.		
<b>Explanations on key parameters:</b> <id> means whether acquired PPPoE is 28181 online or offline: PPPoE: 1; 28181: 2, Gat1400: 3, RTMP: 4		

<devStatus> Corresponding function status of id; success: True; failure: False  
 <devInfo> It is valid if id is 1, it means the ip acquired via PPPoE; the return is null if id is 2

**DevStatusXML Block**

```
<?xml version="1.0" encoding="UTF-8"?>
<DevStatus>
<devStatus><!-- ro, req, xs:boolean, "false (failure) ,true (success) "--></devStatus>
<devInfo1><!-- req, xs:string --></devInfo1>
<devInfo2><!-- req, xs:string --></devInfo2>
</DevStatus >
```

**Test cases**

**/CGI/System/ Network/DevStatus/<ID>**

**Request XML: none**

**Response XML: <DevStatus>**

```
<?xml version="1.0" encoding="UTF-8"?>
<DevStatus>
<devStatus>>false</devStatus>
<devInfo1>192.168.1.66</devInfo1>
<devInfo2>192.168.1.1</devInfo2>
</DevStatus>
```

**2.3.60 /CGI/System/SessionId/<ID>/Type/<ID>Progress**

<b>/CGI/System/SessionId/&lt;ID&gt;/Type/&lt;ID&gt;Progress General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire the common import/export progress
<b>Query</b>	<b>None</b>
<b>Inbound Data</b>	<b>None</b>
<b>Success Return</b>	<b>&lt;Progress&gt;</b>
<p><b>Explanations on protocol:</b>          Acquire the common import/export progress</p> <p><b>Explanations of parameters:</b>          URL:          SessionId/&lt;ID&gt; Interaction ID of client and device, see attached table 1          Type/&lt;ID&gt; means acquisition progress type: 1, export face image          Reply xml:          &lt;state&gt; State; 0-Not imported/exported; 1-Import/export in progress; 2-Import/export succeeds;          3-Export/import fails          &lt;pro&gt; Progress, 0-100</p>	

**Progress XML Block**

```
<?xml version="1.0" encoding="UTF-8"?>
<progressversion="1.0">
<state><!--req,sx:integer--></state>
<pro><!--req,sx:integer--></pro>
</progress>
```

**Test cases**

**GET /CGI/System/SessionId/123/Type/1/Progress**

**Response XML: <Progress>**

```
<?xml version="1.0" encoding="UTF-8"?>
<progressversion="1.0">
<state>1</state>
<pro>50</pro>
</progress>
```

### 2.3.61 /CGI/System/SessionId/<ID>/Type/<ID>/Progress

/CGI/System/SessionId/<ID>/Type/<ID>Progress		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire the common import/export progress	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<Progress>	
<p><b>Explanations on protocol:</b> Acquire the common import/export progress</p> <p><b>Explanations of parameters:</b> URL: SessionId/&lt;ID&gt; Interaction ID of client and device, see attached table 1 Type/&lt;ID&gt; means progress type; 1-Face image export; 2-Total face retrieval query count; 3-Asynchronous statistic of heat map; 4-Asynchronous statistics of target alarm; 5- Asynchronous statistics of channel alarm; 6-Export asynchronous report</p> <p><b>Reply xml:</b> &lt;state&gt; State; 0-Not imported/exported; 1-Import/export in progress; 2-Import/export succeeds; 3-Export/import fails &lt;pro&gt; Progress, 0-100 &lt;resultNum&gt; Handling result number</p>		
<b>Progress XML Block</b>		
<pre>&lt;?xml version="1.0" encoding="UTF-8"?&gt; &lt;progressversion="1.0"&gt; &lt;state&gt;&lt;!--req,sx:integer--&gt;&lt;/state&gt; &lt;pro&gt;&lt;!--req,sx:integer--&gt;&lt;/pro&gt; &lt;resultNum&gt;&lt;!--req,sx:integer--&gt;&lt;/resultNum&gt; &lt;/progress&gt;</pre>		

#### Test cases

#### GET /CGI/System/SessionId/123/Type/1/Progress

#### Response XML: <Progress>

<pre>&lt;?xml version="1.0" encoding="UTF-8"?&gt; &lt;progressversion="1.0"&gt; &lt;state&gt;1&lt;/state&gt; &lt;pro&gt;50&lt;/pro&gt; &lt;resultNum&gt;5&lt;/resultNum&gt; &lt;/progress&gt;</pre>
---

### 2.3.62 /CGI/System/ImgUpload/Info

/CGI/System/ImgUpload/Info		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire imgupload information	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<imgUploadInfo>	
<b>PUT</b>		
<b>Description</b>	Set imgupload information	
<b>Query</b>	None	
<b>Inbound Data</b>	<imgUploadInfo>	
<b>Success Return</b>	<ResponseStatus>	



**Explanations on protocol:**

This protocol is prepared for acquiring and setting imgupload information.

**Explanations on key parameters:**

<url> Server path, such as: http://<ServerIp>:<ServerPort>/VGAlarmReceiver/Receiver.svc

**ImgUploadInfo XML Block**

```
<imgUploadInfo>
<url><!--req, xs:string--></url>
</imgUploadInfo>
```

**Test cases****GET /CGI/System/ImgUpload/Info**

**Request XML:** none

**Response XML:** < imgUploadInfo>

**PUT /CGI/System/ ImgUpload /Info**

**Request XML:** < imgUploadInfo>

**Response XML:** <ResponseStatus>

```
<?xml version="1.0" encoding="UTF-8"?>
<imgUploadInfo>
<url>http://<10.30.30.66>:<3000>/VGAlarmReceiver/Receiver.svc</url>
</imgUploadInfo>
```

**2.3.63 /CGI/System/Network/ProtocolAuthType**

/CGI/System/Network/ProtocolAuthType		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire protocol verification method	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<ProtocolAuthType>	
<b>PUT</b>		
<b>Description</b>	Set protocol verification method	
<b>Query</b>	None	
<b>Inbound Data</b>	<ProtocolAuthType >	
<b>Success Return</b>	None	
<b>Explanations on protocol:</b>		
This protocol is prepared for setting and acquiring the verification method of Http and Rtp protocol.		

**ProtocolAuthTypeXML Block**

```
<ProtocolAuthType version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<protocolList>
<protocol>
<name><!-- opt, xs:string--></name> // Protocol name rtsp or http
<digest><!--opt, xs:string--></digest> // Whether enabling digest verification, false=Disabled,
true=Enabled
<basic><!--opt, xs:string--></basic> // Whether enabling basic verification, false=Disabled,
true=Enabled
</protocol>
...
</protocolList>
</ProtocolAuthType>
```

**Test cases****GET /CGI/System/Network/ProtocolAuthType**

**Response XML:** as below

```

<ProtocolAuthType version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<protocolList>
<protocol>
<name>rtsp</name>
<digest>>false</digest>
<basic>>true</basic>
</protocol>
<protocol>
<name>http</name>
<digest>>false</digest>
<basic>>true</basic>
</protocol>
</protocolList>
</ProtocolAuthType>

```

**Test cases**

**PUT /CGI/System/Network/ProtocolAuthType**

**Request XML: as below**

```

<ProtocolAuthType version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<protocolList>
<protocol>
<name>rtsp</name>
<digest>>false</digest>
<basic>>true</basic>
</protocol>
<protocol>
<name>http</name>
<digest>>false</digest>
<basic>>true</basic>
</protocol>
</protocolList>
</ProtocolAuthType>

```

**2.3.64/CGI/System/AutoChangeTime**

/CGI/System/AutoChangeTime		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire IPC time parameters during NVR auto calibration	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<AutoChangeTimePara>	
<b>PUT</b>		
<b>Description</b>	Set IPC time parameters during NVR auto calibration	
<b>Query</b>	None	
<b>Inbound Data</b>	<AutoChangeTimePara>	
<b>Success Return</b>	<ResponseStatus>	
<p><b>Explanations on protocol:</b>  This protocol is prepared for query and setting of IPC configuration during NVR auto calibration.</p> <p><b>Explanations on key parameters:</b>  &lt;frequency&gt; Maintenance frequency, daily/weekly/monthly/year or never  &lt;month&gt; means month if it is set as year  &lt;day&gt; means day if it is set as year and month; means day of week if set as week; value range has minor difference  &lt;hour&gt; means hour</p>		

<minute> means minute

#### AutoChangeTimePara XML Block

```
<AutoChangeTimePara>
  <frequency><!-- req, xs: string,"never,yearly,monthly,weekly,dayly"--></frequency>
  <month><!-- dep: frequency, xs: integer,"1-12"--></month>
  <day><!-- dep: xs: integer,"1-31"--></day>
  <hour><!-- req, xs:integer,"0-23"--></hour>
  <minute><!-- req, xs: integer,"0-59"--></minute>
</AutoChangeTimePara>
```

#### Test cases

**GET /CGI/System/AutoChangeTime**

**Request XML:** none

**Response XML:** <AutoChangeTimePara>

**PUT /CGI/System/AutoChangeTime**

**Response XML:** <ResponseStatus>

**Request XML:** <AutoChangeTimePara>

<AutoChangeTimePara>XML as follows

```
<AutoChangeTimePara>
  <frequency>yearly</frequency>
  <month>7</month>
  <day>3</day>
  <hour>10</hour>
  <minute>0</minute>
</AutoChangeTimePara>
```

### 2.3.65/CGI/System/CloudUpload/Versions/TestState

/CGI/System/CloudUpload/Versions/TestState		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire the auto detection state of cloud upgrade	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<AutoTest>	
<b>Explanations on protocol:</b> This protocol is prepared for helping IE acquire the auto detection state of cloud upgrade via CGI protocol.		
<b>Explanations on key parameters:</b> <testState> Whether detecting cloud upgrade device; 0-Undetected; 1-IPC detected; 2-NVR detected; 3-IPC and NVR detected simultaneously		

#### AutoTest XML Block

```
<AutoTest>
<testState><!-- req, xs: integer --></testState>
</AutoTest>
```

#### Test cases

**GET /CGI/System/CloudUpload/Versions/TestState**

**Request XML:** none

**Response XML:** <AutoTest>

```
<?xml version="1.0" encoding="UTF-8"?>
<AutoTest>
<testState>2</testState>
</AutoTest>
```

### 2.3.66/CGI/System/CloudUpload/Versions/Para

<b>/CGI/System/CloudUpload/Versions/Para</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Acquire information of device which supports cloud upgrade	
<b>Query</b>	<b>None</b>	
<b>Inbound Data</b>	<b>None</b>	
<b>Success Return</b>	<b>&lt;VersionParas&gt;</b>	
<p><b>Explanations on protocol:</b> This protocol is prepared for helping IE acquire the information of device which supports cloud upgrade via CGI protocol.</p> <p><b>Explanations on key parameters:</b>          &lt;totalCnt&gt; Total amount of devices which support cloud upgrade          &lt;chn&gt; Channel No.: 1~n means IPC; 0x7FFFFFFF means NVR          &lt;version&gt; Cloud version          &lt;releaseDate&gt; Release date</p>		

#### **VersionParas XML Block**

<pre> &lt;VersionParas&gt; &lt;totalCnt&gt;&lt;!-- req, xs: integer --&gt;&lt;/totalCnt&gt; &lt;VersionParaList&gt; &lt;VersionPara&gt; &lt;chn&gt;&lt;!--req, xs:integer--&gt;&lt;/chn&gt;   &lt;version&gt;&lt;!--req, xs:string--&gt;&lt;/version&gt;   &lt;releaseDate&gt;&lt;!--req, xs:string--&gt;&lt;/releaseDate&gt; &lt;/VersionPara&gt; //Repeat VersionPara &lt;/VersionParaList&gt; &lt;/VersionParas&gt; </pre>
---

#### **Test cases**

**GET /CGI/System/CloudUpload/Versions/Para**

**Request XML: none**

**Response XML: <VersionParas>**

<pre> &lt;?xml version="1.0" encoding="UTF-8"?&gt; &lt;VersionParas&gt; &lt;totalCnt&gt;2&lt;/totalCnt&gt; &lt;VersionParaList&gt;   &lt;VersionPara&gt;     &lt;chn&gt;1&lt;/chn&gt;     &lt;version&gt;DVRS_V9.9.4.20171124&lt;/version&gt;     &lt;releaseDate&gt;20171128&lt;/releaseDate&gt;   &lt;/VersionPara&gt;   &lt;VersionPara&gt;     &lt;chn&gt;3&lt;/chn&gt;     &lt;version&gt;DVRS_V9.9.4.20171124&lt;/version&gt;     &lt;releaseDate&gt;20171128&lt;/releaseDate&gt;   &lt;/VersionPara&gt; &lt;/VersionParaList&gt; &lt;/VersionParas&gt; </pre>
--

### 2.3.67/CGI/System/Common/ItemPara/Channel/<ID>/ Type/<ID>

<b>/CGI/System/Common/ItemPara/Channel/&lt;ID&gt;/ Type/&lt;ID&gt;</b>	<b>General Resource v2.0</b>
--	------------------------------

<b>GET</b>	
<b>Description</b>	Acquire common parameters of device
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<paraValue>
<b>PUT</b>	
<b>Description</b>	Set common parameters of device
<b>Query</b>	None
<b>Inbound Data</b>	<paraValue>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

This protocol is prepared for query and setting of common parameters.

Channel/<ID>: <ID> means channel No.

Type/<ID>: <ID> means parameter type, as follows:

- 1、 If Type is 1, enable auto detection of IPC cloud upgrade
- 2、 If Type is 2, enable auto detection of NVR cloud upgrade
- 3、 When Type is 3, analog channel live detection
- 4、 When Type is 0x12033, set the thermal image background correction
- 5、 When Type is 0x12034, set manual correction of thermal image

explanations on important parameters:

<paraValue> Returned parameters, the detailed explanation is as follows:

If Type is 1, enable auto detection of IPC cloud upgrade; 1: Enabled; 0: Disabled

If Type is 2, enable auto detection of NVR cloud upgrade; 1: Enabled; 0: Disabled

When Type is 3, analog channel live detection, 1: enabled: 0: not enabled

When the Type is 0x12033, set the thermal imaging background correction, 0, reserved (no parameter required at the moment)

When the Type is 0x12034, set the manual correction of thermal imaging, 0, reserved (no parameters needed at the moment)

**ItemPara XML Block**

```
<ItemPara version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<paraValue><!-- req, xs:integer --></paraValue>//Item parameters
</ItemPara>
```

**Test cases**

**GET /CGI/System/Common/ItemPara/Channel/1/ Type/1**

**Request XML: none**

**Response XML: <ItemPara>**

**PUT /CGI/System/Common/ItemPara/Channel/1/ Type/1**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<ItemPara version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<paraValue>1</paraValue>
</ItemPara>
```

## 2.3.68 /CGI/System/Voltage/channels/<ID>

/CGI/System/Voltage/channels/<ID>	<b>General Resource v2.0</b>
<b>GET</b>	

<b>Description</b>	Get voltage alarm parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<Voltage>
<b>PUT</b>	
<b>Description</b>	Set voltage alarm parameters
<b>Query</b>	None
<b>Inbound Data</b>	<Voltage>
<b>Success Return</b>	<ResponseStatus>
<p><b>Protocol description:</b> This protocol is to realise the query and setting of voltage alarm parameters, and enables the client or IE to query and set the device voltage alarm parameters through CGI protocol, including enabling.</p> <p><b>Key parameter description:</b> &lt;enabled&gt; represents whether it is enabled, true: enabled, false: not enabled</p>	

#### Voltage XML Block

```
<Voltage xmlns="http://www.isapi.org/ver20/XMLSchema">
<enabled!-- req, xs:boolean --></enabled>
</Voltage>
```

#### Test case

**GET /CGI/System/Voltage/channels/1**

**Request XML: None**

**Response XML: <Voltage>**

**PUT /CGI/System/Voltage/channels/1**

**Response XML: <ResponseStatus>**

**Request XML: as follows**

#### Voltage XML Block

```
<Voltage xmlns="http://www.isapi.org/ver20/XMLSchema">
<enabled>true</enabled>
</Voltage>
```

## 2.3.69/CGI/System/GatPicture/<ID>

<b>/CGI/System/GatPicture/&lt;ID&gt;</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Get 1400 information	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<GatPicture>	
<b>PUT</b>		

<b>Description</b>	Set 1400 information
<b>Query</b>	None
<b>Inbound Data</b>	<GatPicture>
<b>Success Return</b>	<ResponseStatus>
<p><b>Protocol description:</b></p> <p>This protocol is to realise the query and setting of the setting information of the device 1400, and enables the client or IE to query and set the setting information of the device 1400 through the CGI protocol. Including port number / server / device ID / channel selection / channel number and other parameters.</p> <p><b>Key parameter description:</b></p> <p>&lt;channelNo&gt; represents channel selection, 1: channel 1  &lt;imageEnable&gt; / VIID / Images enabled state true-enabled false not  &lt;serverIp&gt; represents the server ip, for example: 192.168.1.1  &lt;serverPort&gt; represents the port number  &lt;deviceId&gt; supports numbers with a length of 20 and cannot be empty.  &lt;userName&gt; View gallery user name: limit length is 64, cannot be empty  &lt;passWord&gt; View gallery password: length is 32, you can enter letters, numbers, punctuation and special characters, can not be empty;  &lt;heartbeatInterval&gt; The heartbeat period unit is seconds, the range is 5-255  &lt;heartbeatInterval&gt; The heartbeat period unit is seconds, the range is 5-255  &lt;channelId&gt; The channel number supports a number with a length of 64 and cannot be empty  &lt;deviceName&gt; device name, supports input of 50 characters  &lt;placeCode&gt; Administrative code, supports the input of characters of length 6  &lt;longitude&gt; Longitude, floating point number, can be negative  &lt;latitude&gt; latitude, floating point number, can be negative</p>	

### XML Block

<pre> &lt;?xml version="1.0" encoding="UTF-8"?&gt; &lt;GatPicture&gt; &lt;serverIp&gt;&lt;!-- opt, xs:string --&gt;&lt;/serverIp&gt; &lt;serverPort&gt;&lt;!-- opt, xs:integer--&gt;&lt;/serverPort&gt; &lt;deviceId&gt;&lt;!-- opt, xs:string --&gt;&lt;/deviceId&gt; &lt;userName&gt;&lt;!-- opt, xs:string --&gt;&lt;/userName&gt; &lt;passWord&gt;&lt;!-- opt, xs:string --&gt;&lt;/passWord&gt; &lt;heartbeatInterval&gt;&lt;!-- opt, xs:integer--&gt;&lt;/heartbeatInterval&gt; &lt;heartbeatTimes&gt;&lt;!-- opt, xs:integer--&gt;&lt;/heartbeatTimes&gt; &lt;deviceName&gt;&lt;!-- opt, xs:string --&gt;&lt;/deviceName&gt; &lt;placeCode&gt;&lt;!-- opt, xs:string --&gt;&lt;/placeCode&gt; &lt;longitude&gt;&lt;!-- opt, xs:double --&gt;&lt;/longitude&gt; &lt;latitude&gt;&lt;!-- opt, xs:double --&gt;&lt;/latitude&gt; &lt;channelList&gt; &lt;channel&gt;   &lt;channelNo&gt; &lt;!--opt, xs: integer-&gt; &lt;/ channelNo&gt; // The channel selection is consistent with ie,   &lt;channelId&gt; &lt;!--opt, xs: string-&gt; &lt;/ channelId&gt; // channel number </pre>
--

```

</channel>
</channelList>
</GatPicture>

```

**Test case**

**GET /CGI/System/GatPicture/<ID>**

**Request XML: None**

**Response XML: <GatPicture>**

**PUT/CGI/System/ GatPicture /<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as follows**

```

<?xml version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema" encoding="UTF-8"?>
< GatPictureServerList>
< GatPictureServer >
< GatPicture >
<serverIp>192.168.1.100</serverIp>
<serverPort>10102</serverPort>
<deviceId>1111111111</deviceId>
<viewClassUserName>123</viewClassUserName>
<viewClassPassWord>123</viewClassPassWord>
<heartbeatCycle>5</heartbeatCycle>
<heartbeatExpiredTimes>3</heartbeatExpiredTimes>
<deviceName>1234567890123456</deviceName>
<placeCode>110000</placeCode>
<longitude>117.5</longitude>
<latitude>-32.6</latitude>
<channelList>
  <channel>
    <channelNo> 1 </ channelNo> // The channel selection is consistent with ie,
    <channelId> 3402000123123565 </ channelId> // channel number
  </channel>
</channelList>
</ GatPicture>
</ GatPicture Server>
</ GatPicture ServerList>

```

### 2.3.70/CGI/System/Channels/<ID>/CharSet

<b>/CGI/System/Channels/&lt;ID&gt;/CharSet</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Get the current character set of the device	
<b>Query</b>	None	



<b>Inbound Data</b>	None
<b>Success Return</b>	<CharSet>
<b>Protocol description:</b> This protocol is to realize the query of the device character set and the client or IE to obtain the device character set through the CGI protocol. <b>Key parameter description:</b> <charSetType> represents the character set type, GB2312, UTF-8	

#### CharSet XML Block

```
<CharSet xmlns="http://www.isapi.org/ver20/XMLSchema">
<charSetType!-- req, xs:string --></charSetType>
</CharSet>
```

#### Test case

**GET /CGI/System/Channels/1/CharSet**

**Request XML: None**

**Response XML: <CharSet>**

```
<?xml version="1.0" encoding="UTF-8"?>
<CharSet>
<charSetType>GB2312</charSetType>
</CharSet>
```

## 2.3.71/CGI/System/PublicKey

<b>/CGI/System/ PublicKey</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Get the generated public key	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<ResponseStatus >	
<b>PUT</b>		
<b>Description</b>	Generate encrypted public key	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<ResponseStatus >	

**Protocol description:**

This agreement is to realize the GB35114 public key query and generation of the device, and the client or IE can query or regenerate the device public key information through the CGI protocol.

**Key parameter description:**

- <status> The status of publickey, true means updated, false means not updated
- <publickey> generated public key, public key string, maximum length 256 characters

**publickey XML Block**

```

< PublicKey>
<status><!--req, xs:boolean; --></status>
< publickey><!-- opt, xs:string--></ publickey>
</ PublicKey>

```

**Test case**

**GET /CGI/System/ PublicKey**

**Request XML: None**

**Response XML: <PublicKey>**

**Request XML: as follows**

**PUT /CGI/System/ PublicKey**

**Request XML: None**

**Response XML: <ResponseStatus>**

**Request XML: as follows**

```

<?xml version="1.0" encoding="UTF-8"?>
< PublicKey>
<status>true</status>
<publickey>94AAABB419A9820DC171B43240CEE41</publickey>
</ PublicKey>

```

### 2.3.72 /CGI/System/channels/<ID>/LEDPowerLimit

<b>/CGI/System/LEDPowerLimitGeneral Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Obtain the relevant parameters of the power dissipation limit of the red fill light
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<LEDPowerLimit >
<b>Protocol description:</b> This protocol is used to obtain the parameters related to the power dissipation limit of the fill light.	
<b>Key parameter description:</b>	

<nearLEDPower> Near-unit brightness power dissipation, the actual power dissipation value is expanded by 1000 times

<farLEDPower> Far-light unit brightness power dissipation, the actual power dissipation value is expanded by 1000 times

<basePower> The basic power dissipation of the system, the actual power dissipation value is expanded by 1000 times

<basePowerRatio> System basic power dissipation coefficient

<otherPower> Other power dissipation, the actual power dissipation value is expanded by 1000 times

<otherRatio> Other coefficients

<limitPower> limit power dissipation value, the actual power dissipation value is expanded by 1000 times

#### **LEDPowerLimitXML Block**

```
<LEDPowerLimit version="2.0">
<nearLEDPower><!-- req, xs:integer --></nearLEDPower>
<farLEDPower><!-- req, xs:integer --></farLEDPower>
  <basePower><!-- req, xs:integer --></basePower>
<basePowerRatio><!-- req, xs:integer --></basePowerRatio>
<otherPower><!-- req, xs:integer --></otherPower>
<otherRatio><!-- req, xs:integer --></otherRatio>
<limitPower><!-- req, xs:integer --></limitPower>
</LEDPowerLimit>
```

#### **Test case**

**GET/CGI/Systemchannels/1/LEDPowerLimit**

**Request XML: None**

**Response XML: <LEDPowerLimit>**

#### **As follows:**

```
<LEDPowerLimit version="2.0">
<nearLEDPower>50</nearLEDPower>
<farLEDPower>100</farLEDPower>
<basePower>9000</basePower>
<basePowerRatio>1</basePowerRatio>
<otherPower>0</otherPower>
<otherRatio>1</otherRatio>
<limitPower>19000</limitPower>
</LEDPowerLimit >
```

## **2.3.73/CGI/System/Network/DDNS/DeviceState/Test/Start/Session**

**Id/<ID>**

**/CGI/System/Network/DDNS/DeviceState/Test/Start/SessionId/<ID>      General Resource v2.0**

<b>POST</b>	
<b>Description</b>	DDNS device address test request
<b>Query</b>	None
<b>Inbound Data</b>	<deviceAddrTestStartReq>
<b>Success Return</b>	<deviceAddrTestStartRsp>
<p>Protocol description: Network testing.</p> <p>Key parameter description: &lt;sessionId&gt; transaction ID, see attached table 1 description of transaction ID</p> <p>Request : &lt;deviceAddress&gt;, device domain name-not used temporarily &lt;serverAddress&gt;, server address-temporarily unused</p> <p>Response : &lt;retState&gt; Return type-0 success, -1 failure, 1, other clients are detecting</p>	

#### **deviceAddrTestStartReq XML Block**

```
<?xml version="2.0" encoding="UTF-8"?>
<deviceAddrTestStartReq>
<deviceAddress><!--req,xs:string --></deviceAddress>
<serverAddress><!--req,xs:string --></serverAddress>
</deviceAddrTestStartReq>
```

#### **deviceAddrTestStartRsp XML Block**

```
<?xml version="2.0" encoding="UTF-8"?>
<deviceAddrTestStartRsp>
<sessionId> <!--req, xs: long long-> </ sessionId> // Transaction ID
<retState> <!--req, xs: integer-> </ retState> // Return type – 0 success, -1 failure, 1 other client
is detecting
</deviceAddrTestStartRsp>
```

#### **Test case**

**POST /CGI/System/Network/DDNS/DeviceState/Test/Start/SessionId/65535**

**Request XML: <deviceAddrTestStartReq>**

```
<?xml version="2.0" encoding="UTF-8"?>
<deviceAddrTestStartReq>
<deviceAddress>Nvr</deviceAddress>
<serverAddress>www.myvideo.com</serverAddress>
</deviceAddrTestStartReq>
```

**Response XML: <deviceAddrTestStartRsp>**

```

<?xml version="2.0" encoding="UTF-8"?>
<deviceAddrTestStartRsp>
<sessionId>65535</sessionId>
<retState>0</retState>
</deviceAddrTestStartRsp>

```

## 2.3.74/CGI/System/Network/DDNS/DeviceState/Test/Result/SessionId/<ID>

<b>/CGI/System/Network/DDNS/DeviceState/Test/Result/SessionId/&lt;ID&gt;</b>		<b>General</b>
<b>Resource v2.0</b>		
<b>POST</b>		
<b>Description</b>	DDNS device address test results	
<b>Query</b>	None	
<b>Inbound Data</b>	<b>None</b>	
<b>Success Return</b>	<b>&lt;deviceAddrTestResultRsp&gt;</b>	
<p><b>Protocol description:</b> Network testing.</p> <p><b>Key parameter description:</b>  &lt;sessionId&gt; transaction ID, see attached table 1 description of transaction ID  &lt;state&gt;, 0 detection, 1 is available, 2 is not available, 3 has not started  &lt;cause&gt;, the reason why the device address is unavailable: 1 is already occupied; 2, the detection times out</p>		

### deviceAddrTestResultRsp XML Block

```

<?xml version="2.0" encoding="UTF-8"?>
<deviceAddrTestResultRsp>
<state><!--req,xs: integer --></state>
<cause><!--req,xs: integer --></cause>
</deviceAddrTestResultRsp>

```

### Test case

**POST /CGI/System/Network/DDNS/DeviceState/Test/Result/SessionId/65535**

**Request XML: NONE**

**Response XML: <deviceAddrTestResultRsp>**

```

<?xml version="2.0" encoding="UTF-8"?>
<deviceAddrTestResultRsp>
<state>2</state>
<cause>1</cause>
</deviceAddrTestResultRsp>

```

## 2.3.75/CGI/System/Network/DDNS/EasyDDNS/ServerInfo

<b>/CGI/System/Network/DDNS/DeviceState/EasyDDNS/ServerInfo General Resource v2.0</b>	
<b>POST</b>	
<b>Description</b>	Get EasyDDNS server information request
<b>Query</b>	None
<b>Inbound Data</b>	<b>DDNS</b>
<b>Success Return</b>	<b>&lt;easyDDNSServerInfo&gt;</b>
Protocol description: Network testing. Key parameter description: Response : <serverAddress>, server address <state>, connection status: online online, offline offline <offlineCause> Offline reasons 0. The network is abnormal; 1. The device domain name is not available	

### easyDDNSServerInfo XML Block

```
<?xml version="2.0" encoding="UTF-8"?>
<easyDDNSServerInfo>
<serverAddress><!--req,xs:string --></serverAddress>
<state><!--req,xs:string --></state>
<offlineCause><!--req,xs: integer --></offlineCause>
</easyDDNSServerInfo>
```

### Test case

**POST /CGI/System/Network/DDNS/EasyDDNS/ServerInfo**

**Request XML: NONE**

**Response XML: <easyDDNSServerInfo>**

```
<?xml version="2.0" encoding="UTF-8"?>
<easyDDNSServerInfo>
<serverAddress>www.myvideo.com</serverAddress>
<state>offline</state>
<offlineCause>1</offlineCause>
</easyDDNSServerInfo>
```

## 2.3.76/CGI/System/channels/<ID>/ModulePowerLimit

<b>/CGI/System/channels/&lt;ID&gt;/ModulePowerLimit</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Obtain the relevant parameters of the module power dissipation limit	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<ModulePowerLimit >	
<p><b>Protocol description:</b>  This protocol is used to obtain the relevant parameters of the power dissipation limit of the module.</p> <p><b>Key parameter description:</b>  channels / &lt;ID&gt;: channel number, starting from 1  &lt;ModulePowerLimit&gt; represents the module power dissipation limit  &lt;limitPower&gt; stands for limiting the total power dissipation value, which is actually expanded by 1000 times  &lt;moduleNum&gt; represents the number of power dissipation limit modules  &lt;ModuleList&gt; represents the module list  &lt;Module&gt; stands for module member  &lt;moduleTypeID&gt; represents the module type number, 1: infrared light, 2: white light, 3: laser light  &lt;param1&gt; represents the power dissipation coefficient of the module 1, when the module is an infrared or white light, it indicates the power dissipation value per unit brightness change of the low beam group. Times, 0 if not supported, other modules are defined according to requirements  &lt;param2&gt; represents the power dissipation coefficient of the module 2. When the module is an infrared or white light, it indicates the power dissipation value per unit brightness change of the high beam group. The actual expansion is 1000 times. If it is not supported, it is 0.  &lt;param3&gt; represents the power dissipation coefficient of the module 3. When the module is an infrared light, it represents the power dissipation value per unit brightness change of the mid-light group. The actual expansion is 1000 times. If it is not supported, it is 0. Other modules are defined according to requirements.  Power dissipation calculation formula:  SUM( param1 *NearLampPower + param2*FarLampPower+ param3*MediumLampPower ) ≤ limitPower</p>		

### ModulePowerLimitXML Block

```

<ModulePowerLimit version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  < limitPower ><!-- req, xs:integer --></limitPower>
  < moduleNum><!-- req, xs:integer --></moduleNum>
  < ModuleList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <Module><!-- opt -->
  < moduleTypeID ><!-- req, xs:integer --></moduleTypeID >
  < param1 ><!-- req, xs:integer --></param1 >
  < param2 ><!-- req, xs:integer --></param2 >
  < param3 ><!-- req, xs:integer --></param3 >
  </module>
  </moduleList>
</ModulePowerLimit >

```

**Test case**

**GET /CGI/Systemchannels/1/ ModulePowerLimit**

**Request XML: None**

**Response XML: <ModulePowerLimit>**

**As follows:**

```

<?xml version="1.0" encoding="UTF-8"?>
<ModulePowerLimit >
  < limitPower >9000</limitPower>
  < moduleNum>2</moduleNum>
  < ModuleList>
  <Module>
  < moduleTypeID >1</moduleTypeID >
  < param1 >50</param1 >
  < param2 >100</param2 >
  < param3 >80</param2 >
  </Module>
  <Module>
  < moduleTypeID >2</moduleTypeID >
  < param1 >60</param1 >
  < param2 >120</param2 >
  </Module>
  <Module>
  < moduleTypeID >3</moduleTypeID >
  < param1 >60</param1 >
  </Module>
  </ModuleList>
</ModulePowerLimit >

```

Power dissipation calculation formula:

$$50 * \text{NearLampPower} + 100 * \text{FarLampPower} + 80 * \text{MediumLampPower} \leq 9000$$



## 2.3.77 /CGI/System/Network/FtpService

/CGI/System/Network/FtpService		General Resource v2.0
<b>GET</b>		
Description	Get FtpService service type	
Query	None	
Inbound Data	None	
Success Return	<FtpService>	
<b>PUT</b>		
Description	Set the FtpService service type	
Query	None	
Inbound Data	<FtpService>	
Success Return	<ResponseStatus>	
<p><b>Protocol description:</b>  This protocol is to realize the inquiry and setting of the FtpService service of the device, and realize the inquiry and setting of the FtpService service of the device by the client or IE through the CGI protocol. Including FTP and SFTP services.</p> <p><b>Key parameter description:</b>  &lt;ftpType&gt; Enable FTP service type, 0-reserved, 1-FTP, 2-SFTP</p>		

### FtpService XML Block

```
<?xml version="1.0" encoding="UTF-8"?>
<FtpService>
<ftpType><!-- req, xs:integer --></ftpType>
</FtpService>
```

### Test case

GET /CGI/System/Network/FtpService

**Request XML:** None

**Response XML:** <FtpService>

PUT /CGI/System/Network/FtpService

**Response XML:** <ResponseStatus>

**Request XML:** as follows

```
<?xml version="1.0" encoding="UTF-8"?>
<FtpService>
<ftpType>1</ftpType>
</FtpService>
```

## 2.3.78 /CGI/System/channels/<ID>/SatelliteInfo

```
/CGI/System/channels/<ID>/SatelliteInfo
```

<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Get the parameters of satellite positioning setting information
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	< <b>SatelliteInfo</b> >
<b>PUT</b>	
<b>Description</b>	Set the satellite positioning setting information parameters
<b>Query</b>	None
<b>Inbound Data</b>	< <b>SatelliteInfo</b> >
<b>Success Return</b>	< <b>ResponseStatus</b> >
<b>Protocol description:</b> This protocol is to realize the setting and acquisition of satellite positioning information, and supports the acquisition by channel.	

#### **SatelliteInfo XML Block**

```

< SatelliteInfo version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<type> <!--req, xs: integer--> </ type> // Mode 1: Automatic 2: Manual
<height> <!--req, xs: integer--> </ height> // Height, Unit mm
<offsetHeight> <!--req, xs: integer--> </ offsetHeight> // corrected height, unit mm
< locationCoordinateList>
< locationCoordinate>
<coordinateType> <!--req, xs: integer--> </ coordinateType> Coordinate type 1: Longitude E, 2:
Longitude W, 3: Latitude S, 4: Latitude N 5: Modified longitude 6: Modified latitude
<degree><!-- req, xs:integer --></degree> //Degree 0-180
<minute><!-- req, xs:integer --></minute> //Minute 0-59
<second><!-- req, xs:integer --></second> //Second 0-59.99*100
</locationCoordinate>
< /locationCoordinateList>
< /SatelliteInfo>

```

#### **Test case**

**GET /CGI/System/channels/1/SatelliteInfo**

**Request XML:** None

**Response XML:** <SatelliteInfo>

**PUT /CGI/System/channels/1/ SatelliteInfo**

**Request XML:** <SatelliteInfo>

**Response XML:** <ResponseStatus>

```

<SatelliteInfo version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<type>1</type >
<height>10000</height>
<offsetHeight>10</offsetHeight>
< locationCoordinateList>
< locationCoordinate>
< coordinateType>1< /coordinateType>
<degree>30</degree>
<minute>40</minute>
<second>5000</second>
</locationCoordinate>
< /locationCoordinateList>
< /SatelliteInfo>

```

### 2.3.79 /CGI/System/Network/RTMP/channels/<ID>

/CGI/System/Network/RTMP /channels/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Get RTMP setting information	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<RTMP>	
<b>PUT</b>		
<b>Description</b>	Set RTMP information	
<b>Query</b>	None	
<b>Inbound Data</b>	<RTMP>	
<b>Success Return</b>	<ResponseStatus>	
<b>Protocol description:</b>		
<p>This protocol realizes the query and setting of the RTMP setting information of the device, and enables the client or IE to query and set the device RTMP setting information through the CGI protocol. Including code stream type / address type / server address parameter. The reserved parameters include the server IP / port number.</p>		
<b>Key parameter description:</b>		
<p>&lt;enable&gt; means enable, for decoder, true: on, false: off</p>		
<p>&lt;streamType&gt; represents the main code stream, sub stream main stream, subStream 1 sub stream, subStream 2 three stream</p>		
<p>&lt;addressType&gt; Address type Custom The default value of this project, Non-custom reserved</p>		
<p>&lt;customAddress&gt; Customized address, fill it when required by" Custom", maximum length 255 bits</p>		
<p>&lt;IPAddress&gt; Server address, reserved, required for Non-custom, maximum length 64 bits</p>		
<p>&lt;port&gt; Port, reserved, required for Non-custom, (0 ~ 65535)</p>		

### RTMPXML Block

```
<?xml version="1.0" encoding="UTF-8"?>
<RTMP>
<enable><!-- opt, xs:string,"true,false" --></enable>
<streamType><!-- opt, xs:string,"main,subStream" --></streamType>
<addressType><!-- opt, xs:string,"Custom, Non-custom"--></addressType>
<customAddress><!-- opt, xs:string --></customAddress>
<IPAddress><!-- opt, xs:string--></IPAddress>
<port><!-- opt, xs:integer, (0~65535) --></port>
</RTMP>
```

#### Test case

**GET /CGI/System/Network/RTMP/channel/1**

**Request XML: None**

**Response XML: <RTMP>**

**PUT /CGI/System/Network/RTMP/channel/1**

**Response XML: <ResponseStatus>**

**Request XML: as follows**

```
<?xml version="1.0" encoding="UTF-8"?>
<RTMP>
<enable>>true</enable>
<streamType>main</streamType>
<addressType>Custom</addressType>
<customAddress>http://xxx.xxx.xxx.com</customAddress>
<IPAddress></IPAddress>
<port></port>
</RTMP>
```

## 2.3.80/CGI/System/TempEnable/channels/<ID>

/CGI/Smart/TempEnable/channels/<ID>	
General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Get temperature measurement function enable
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<TempEnable>
<b>PUT</b>	
<b>Description</b>	Enable temperature measurement function
<b>Query</b>	None
<b>Inbound Data</b>	<TempEnable>
<b>Success Return</b>	<ResponseStatus>

**Protocol description:**

This protocol is to realize the setting and query of the temperature measurement function.

**Key parameter description:**

<enabled> represents whether it is valid, true: enabled, false: not enabled

**TempEnable XML Block**

```
<TempEnable version="2.0" >
  <enabled><!-- req, xs:boolean --></enabled>
</TempEnable>
```

**Test case**

**GET** /CGI/Smart/TempEnable/channels/<ID>

**Request XML:** None

**Response XML:** <TempEnable>

**PUT** /CGI/Smart/TempEnable/channels/<ID>

**Response XML:** <ResponseStatus>

**Request XML:** as follows

```
<TempEnable version="2.0">
  <enabled>true</enabled>
</TempEnable>
```

**2.3.81/CGI/System/TempCorrect/channels/<ID>**

/CGI/System/TempCorrect/channels/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Obtain temperature correction parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<TempCorrect>	
<b>PUT</b>		
<b>Description</b>	Set temperature correction parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<TempCorrect>	
<b>Success Return</b>	<ResponseStatus>	
<b>Protocol description:</b>		
This protocol is to realize the setting and query of the temperature calibration parameter.		
<b>Key parameter description:</b>		
<enabled> represents the enabled state, true: enabled, false: not enabled		
<blackBodyCorrect> Blackbody correction		
<blackBodyTemp> represents the blackbody temperature (temperature value * 100)		
<tempStandard> represents the type of temperature scale, celcius: Celsius, fahrenheit:		

Fahrenheit, kelvin: Kelvin

<blackBodyDistance> represents the black body distance (unit: cm)

<blackBodyCorrectType> represents the blackbody correction method, single: single correction, continued: continuous correction, keep: keep the current correction method

<bodyTempCorrect> represents body temperature compensation

<sensitivity> represents sensitivity

<intelligentCorrect> stands for intelligent correction

### TempCorrectionXML Block

```
<TempCorrect version="2.0">
<blackBodyCorrect>
<enabled><!-- req, xs:boolean --></enabled>
  <blackBodyCorrectType><!--opt,xs:string"single,continued,keep"--></blackBodyCorrectType>
  <blackBodyInfo>
    <id><!-- dep, xs:string,id --></id>
    <blackBodyTemp><!-- req, xs: integer --></blackBodyTemp>
    <tempStandard><!--opt,xs:string"celcius, Fahrenheit, kelvin"--></tempStandard>
    <blackBodyDistance><!-- req, xs: integer --></blackBodyDistance>
    <RegionCoordinatesList><!-- opt -->
      <RegionCoordinates><!--opt, -->
        <positionX><!-- req, xs:integer;coordinate --></positionX>
        <positionY><!-- req, xs:integer;coordinate--></positionY>
      </RegionCoordinates>
    </RegionCoordinatesList>
  </blackBodyInfo>
</blackBodyCorrect>
<bodyTempCorrect>
<enabled><!-- req, xs:boolean --></enabled>
<sensitivity><!-- req, xs: integer --></sensitivity>
</bodyTempCorrect>
<intelligentCorrect>
<enabled><!-- req, xs:boolean --></enabled>
<sensitivity><!-- req, xs: integer --></sensitivity>
</intelligentCorrect>
</TempCorrect>
```

### Test case

**GET /CGI/System/TempCorrect/channels/2**

**Request XML: None**

**Response XML: <TempCorrect>**

**PUT /CGI/System/TempCorrect/channels/2**

**Response XML: <ResponseStatus>**

**Request XML: as follows**

```

<TempCorrect version="2.0">
  <blackBodyCorrect>
    <enabled>>false</enabled>
    <blackBodyCorrectType>single</blackBodyCorrectType>
    <blackBodyInfo>
      <id>1</id>
      <blackBodyTemp>3500</blackBodyTemp>
      <tempStandard>celcius</tempStandard>
      <blackBodyDistance>200</blackBodyDistance>
      <RegionCoordinatesList>
        <RegionCoordinates>
          <positionX>2575</positionX>
          <positionY>2700</positionY>
        </RegionCoordinates>
        <RegionCoordinates>
          <positionX>8125</positionX>
          <positionY>2700</positionY>
        </RegionCoordinates>
        <RegionCoordinates>
          <positionX>8125</positionX>
          <positionY>7966</positionY>
        </RegionCoordinates>
        <RegionCoordinates>
          <positionX>2575</positionX>
          <positionY>7366</positionY>
        </RegionCoordinates>
      </RegionCoordinatesList>
    </blackBodyInfo>
  </blackBodyCorrect>
  <bodyTempCorrect>
    <enabled>>false</enabled>
    <sensitivity>50</sensitivity>
  </bodyTempCorrect>
  <intelligentCorrect>
    <enabled>>false</enabled>
    <sensitivity>50</sensitivity>
  </intelligentCorrect>
</TempCorrect>

```

## 2.3.82 /CGI/System/channels/<ID>/SatelliteTime

/CGI/System/channels/<ID>/SatelliteTime

General Resource v2.0

<b>GET</b>	
<b>Description</b>	Obtain satellite positioning time calibration parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	< <b>SatelliteTime</b> >
<b>PUT</b>	
<b>Description</b>	Set the satellite positioning time calibration parameters
<b>Query</b>	None
<b>Inbound Data</b>	< <b>SatelliteTime</b> >
<b>Success Return</b>	< <b>ResponseStatus</b> >
<b>Protocol description:</b> This protocol is to realize the setting and acquisition of the satellite positioning time calibration interval and support acquisition by channel. <Interval> represents the time interval, unit: seconds, range: 1-1440 * 60	

**SatelliteTime XML Block**

```
< SatelliteTime version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
< Interval ><!--req,xs:integer --></Interval>
< /SatelliteTime>
```

**Test case**

**GET /CGI/System/channels/1/SatelliteTime**

**Request XML: None**

**Response XML: <SatelliteTime>**

**PUT /CGI/System/channels/1/ SatelliteTime**

**Request XML: <SatelliteTime>**

**Response XML: <ResponseStatus>**

```
<SatelliteTime version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<Interval>60</Interval>
</SatelliteTime>
```

### 2.3.83/CGI/System/Temperature/channels/<ID>

<b>/CGI/System/Temperature/channels/&lt;ID&gt;</b>	
<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Get general parameters for temperature measurement
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	< <b>Temperature</b> >



<b>PUT</b>	
<b>Description</b>	Set general parameters for temperature measurement
<b>Query</b>	None
<b>Inbound Data</b>	<Temperature>
<b>Success Return</b>	<ResponseStatus>
<b>Protocol description:</b> This agreement is to realize the setting and query of general parameter of temperature measurement. <b>Key parameter description:</b> <tempStandard> represents the type of temperature scale, celcius: Celsius, fahrenheit: Fahrenheit, kelvin: Kelvin	

**TempCorrectionXML Block**

```
<Temperature version="2.0">
<tempStandard><!--opt,xs:string"celcius, fahrenheit, kelvin"--></tempStandard>
</Temperature>
```

**Test case**

**GET /CGI/System/Temperature/<ID>**

**Request XML: None**

**Response XML: <Temperature>**

**PUT /CGI/System/Temperature/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as follows**

```
<Temperature version="2.0">
<tempStandard>celcius</tempStandard>
</Temperature>
```

## 2.3.84/CGI/System/CommonEnable/channels/<ID>/Type/<ID>

<b>/CGI/System/CommonEnable/channels/&lt;ID&gt;/Type/&lt;ID&gt;/</b>	
<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Get general enable parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<CommonEnable>
<b>PUT</b>	
<b>Description</b>	Set general enable parameters
<b>Query</b>	None
<b>Inbound Data</b>	<CommonEnable>
<b>Success Return</b>	<ResponseStatus>

**Protocol description:**

This agreement is to realize the setting and acquisition of universal enablement  
 <type> represents different types of general enable parameters: 0xB008, onvif time calibration status, 0x12035, manual control of peripheral radar power supply

<enable> means enable, true: on, false: off

**CommonEnableXML Block**

```
<CommonEnableversion="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <type><!--req,integer--></type>
  <enable></enable>
</CommonEnable>
```

**Test case**

**GET / CGI / System / CommonEnable / channels / 1 / Type / 45064 (0xB008 decimal)**

**Request XML: none**

**Response XML: <CommonEnable>**

**PUT /CGI/System/CommonEnable/channels/1/Type/45064**

**Request XML: <CommonEnable>**

**Response XML: <ResponseStatus>**

```
<CommonEnableversion="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <type>45064</type>
  <enable>true</enable>
</CommonEnable>
```

**2.4/CGI/Snapshot****2.4.1/CGI/Snapshot/channels/<ID>**

<b>/CGI/Snapshot/channels/&lt;ID&gt;</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Acquire setting parameters of snapshot	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<SnapshotChannel>	
<b>PUT</b>		
<b>Description</b>	Set snapshot parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<SnapshotChannel>	
<b>Success Return</b>	<ResponseStatus>	

**Explanations on protocol:**

This protocol is prepared for query and setting of snapshot device parameters, helping client or IE query and set the snapshot parameters of device via CGI protocol, including linkage FTP/linkage Email/enabling/time interval.

**Explanations on key parameters:**

<captureLinkFTP> means linkage FTP; true: Enabled; false: Disabled

<captureLinkEmail> means linkage Email; true: Enabled; false: Disabled

<timingCapture> means timing snapshot

<enabled> represents enabling, true: start, false: not start

<timeEnable> means time enabling

<captureInterval> means time interval; unit: ms; range: 1\*1000 – 24\*3600\*1000

**SnapshotChannelXML Block**

```
<SnapshotChannel version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<id><!-- req, xs:string;id --></id>
<videoInputChannelID><!-- req, xs:string;id --></videoInputChannelID>
<captureLinkFTP><!--opt,xs:Boolean--></captureLinkFTP>
<captureLinkEmail><!--opt,xs:Boolean--></captureLinkEmail>
<timingCapture><!-- opt -->
<enabled><!-- req, xs:boolean --></enabled>
<supportSchedule><!-- opt, ro, xs:boolean></supportSchedule>
<compress>
  <pictureCodecType><!-- req, xs:string, "JPEG,BMP,GIF,PNG" --></pictureCodecType>
  <pictureWidth><!-- req, xs:integer --></pictureWidth>
  <pictureHeight><!-- req, xs:integer --></pictureHeight>
  <quality><!-- opt, xs:integer, percentage, 0..100 --></quality>
  <captureMode><!-- req, xs:integer "0: Single 1: Multiple"--></captureMode> // Snapshot
mode
  <captureInterval><!-- req, xs:integer --></captureInterval> // Snapshot interval
  <TimeBlockList><!-- req -->
<TimeBlock> // 1 day consists of 4 time ranges
<TimeRange><!-- req --> // Time range 1
<timeEnable><!-- opt, ro, xs:boolean></timeEnable> // Enabling of time range 1
<beginTime><!-- req, xs:time, ISO8601 time --></beginTime> // Begin time; format: 14:42:00
(Hour: Minute: Second; assignment 00)
<endTime><!-- req, xs:time, ISO8601 time --></endTime> // End time; format: 14:42:00
(Hour: Minute: Second; assignment 00)
</TimeRange>
<TimeRange><!-- req --> // Time range 2
<timeEnable><!-- opt, ro, xs:boolean></timeEnable> // Enabling of time range 2
<beginTime><!-- req, xs:time, ISO8601 time --></beginTime> // Begin time; format: 14:42:00
(Hour: Minute: Second; assignment 00)
<endTime><!-- req, xs:time, ISO8601 time --></endTime> // End time; format: 14:42:00
(Hour: Minute: Second; assignment 00)
</TimeRange>
<TimeRange><!-- req --> // Time range 3
<timeEnable><!-- opt, ro, xs:boolean></timeEnable> // Enabling of time range 3
<beginTime><!-- req, xs:time, ISO8601 time --></beginTime> // Begin time; format: 14:42:00
(Hour: Minute: Second; assignment 00)
<endTime><!-- req, xs:time, ISO8601 time --></endTime> // End time; format: 14:42:00
(Hour: Minute: Second; assignment 00)
</TimeRange>
<TimeRange><!-- req --> // Time range 4
<timeEnable><!-- opt, ro, xs:boolean></timeEnable> // Enabling of time range 4
<beginTime><!-- req, xs:time, ISO8601 time --></beginTime> // Begin time; format: 14:42:00
(Hour: Minute: Second; assignment 00)
<endTime><!-- req, xs:time, ISO8601 time --></endTime> // End time; format: 14:42:00
(Hour: Minute: Second; assignment 00)
</TimeRange>
</TimeBlock>
</TimeBlockList>
</compress>
</SnapshotChannel>
```

```

</TimeRange>
  <dayOfWeek> // Week
<!-- opt, xs:integer, ISO8601 weekday number, 1=Monday, ... --> // 1: Monday; 2: Tuesday; 3:
Wednesday; 4: Thursday; 5: Friday; 6: Saturday; 7: Sunday
  <dayOfWeek>
</TimeBlock>
</TimeBlockList>
  <captureLinkFTP><!-- req, xs:boolean --></captureLinkFTP>// Linkage ftp
  <captureLinkEmail><!-- req, xs:boolean --></captureLinkEmail>// Linkage email
</compress>
</timingCapture>
<eventCapture><!-- opt -->
<enabled><!-- req, xs:boolean --></enabled>
<captureMode><!-- req, xs:integer "0: Single 1: Multiple"--><captureMode>// Snapshot mode
<supportSchedule><!-- opt, ro, xs:boolean></supportSchedule>
<compress>
<quality><!-- opt, xs:integer, percentage, 0..100 --></quality>
  <captureInterval><!-- opt,xs:integer, milliseconds --></captureInterval>
  <captureLinkFTP><!-- req, xs:boolean --></captureLinkFTP>
  <captureLinkEmail><!-- req, xs:boolean --></captureLinkEmail>
</compress>
</eventCapture>
</SnapshotChannel>

```

**Test cases**

**GET /CGI/Snapshot/channels/<ID>**

**Request XML:** none

**Response XML:** <SnapshotChannel>

**PUT /CGI/Snapshot/channels/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```

<SnapshotChannel version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <id>1</id>
  <videoInputChannelID>1</videoInputChannelID>
  <timingCapture>
  <enabled>true</enabled>
  <supportSchedule>true</supportSchedule>
  <compress>
  <pictureCodecType>""</pictureCodecType>
  <pictureWidth>0</pictureWidth>
  <pictureHeight>0</pictureHeight>
  <quality>0</quality>
  <captureMode>1<captureMode>// Snapshot mode
  <captureInterval>30000</captureInterval> // Snapshot interval
  <TimeBlockList>
  <TimeBlock> // 1 day consists of 4 time ranges
  <TimeRange>
  <timeEnable>true</timeEnable>
  <beginTime>00:00:00</beginTime>
  <endTime>12:00:00</endTime>
  </TimeRange>
  <TimeRange>
  <timeEnable>>false</timeEnable>
  <beginTime>00:00:00</beginTime>
  <endTime>00:00:00</endTime>
  </TimeRange>
  <TimeRange>
  <timeEnable>>false</timeEnable>
  <beginTime>00:00:00</beginTime>
  <endTime>00:00:00</endTime>
  </TimeRange>
  <TimeRange>
  <timeEnable>>false</timeEnable>
  <beginTime>00:00:00</beginTime>
  <endTime>00:00:00</endTime>
  </TimeRange>
  </TimeBlockList>
  </TimeBlock>
  </TimeRange>
  </TimeBlockList>
  </TimingCapture>
  </VideoInputChannelID>
  </SnapshotChannel>

```

```

<beginTime>00:00:00</beginTime>
<endTime>00:00:00</endTime>
</TimeRange>
<TimeRange>
<timeEnable>false</timeEnable>
<beginTime>00:00:00</beginTime>
<endTime>00:00:00</endTime>
</TimeRange>
  <dayOfWeek>1<dayOfWeek>
</TimeBlock>
</TimeBlockList>
<captureLinkFTP>true</captureLinkFTP>// Linkage ftp
<captureLinkEmail>true</captureLinkEmail>// Linkage email
</compress>
</timingCapture>
<eventCapture>
<enabled>true</enabled>
<captureMode>0<captureMode>// Snapshot mode
<supportSchedule>true</supportSchedule>
<compress>
<quality>0</quality>
<captureInterval>0</captureInterval>
<captureLinkFTP>true</captureLinkFTP>
<captureLinkEmail>true</captureLinkEmail>
</compress>
</eventCapture>
</SnapshotChannel>

```

## 2.5/CGI/ContentMgmt

### 2.5.1/CGI/ContentMgmt/record/tracks/<ID>

/CGI/ContentMgmt/record/tracks/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire video strategy parameter	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<ResponseStatus>	
<b>PUT</b>		
<b>Description</b>	Set video strategy parameter	
<b>Query</b>	None	
<b>Inbound Data</b>	<ResponseStatus>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is prepared for query and setting of video strategy parameters, helping client or IE query and set the video strategy parameters of device via CGI protocol, including state/time range/week, multiple channels supported.		
<b>Explanations on key parameters:</b>		
<statusString> means status; ManualRec: Manual recording; AlarmRec: Alarm recording, Continuous: Continuous recording; defineRec: Customized recording; stop: Stop (This field can be acquired only and it is not settable)		
<manualRec> means manual recording; true: Enabled; false: Disabled		
<alarmRec> means alarm recording; true: Enabled; false: Disabled		
<continuous> means continuous recording; true: Enabled; false: Disabled		
<TimeBlock> 1 day consists of 4 time ranges		
<TimeRange> means time range		

<beginTime> means begin time; format: 14:42:00 (Hour: Minute: Second; assignment 00)  
 <endTime> means end time; format: 14:42:00 (Hour: Minute: Second; assignment 00)  
 <dayOfWeek> means week; 1: Monday; 2: Tuesday; 3: Wednesday; 4: Thursday; 5: Friday; 6: Saturday; 7: Sunday; 8: Holiday  
 <prompt> means offline recording; true: Enabled; false: Disabled

### ResponseStatusXML Block

```

<?xml version="1.0" encoding="UTF-8"?>
<ResponseStatus version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<requestURL>/Streaming/Channels</requestURL>
<Channel><!--req,xs:integer></Channel>
<statusCode><!--req,xs:integer></statusCode>
<!-- O=1-OK, 2-Device Busy, 3-Device Error, 4-Invalid Operation, 5-Invalid XML Format,
6-Invalid XML Content; 7-Reboot Required -->
<statusString><!-- ManualRec, Continuous, AlarmRec, stop></statusString>
<ID><!--req,xs:boolean></ID>
<manualRec><!--req,xs:boolean ></manualRec >
<alarmRec><!--req,xs:boolean></alarmRec >
<continuous><!--req,xs:boolean></continuous>
<TimeBlockList><!-- req -->
<TimeBlock>
<TimeRange><!-- req -->
<beginTime><!-- req, xs:time, ISO8601 time --></beginTime>
<endTime><!-- req, xs:time, ISO8601 time --></endTime>
<AlarmType><!--opt,xs:integer></AlarmType> // 0: No recording; 1: Timing recording; 2:
Alarm input; 3: Motion alarm; 4: Loss alarm; 5: Detection | port; 6: Shielding alarm; 7:
Detection & port
  <Enable><!--dep:AlarmType, xs: integer 0-Disabled 1-Customized1 2-Customized
2></Enable> // Valid during timing recording
</TimeRange>
<TimeRange><!-- req -->
<beginTime><!-- req, xs:time, ISO8601 time --></beginTime>
<endTime><!-- req, xs:time, ISO8601 time --></endTime>
<AlarmType><!--opt,xs:integer></AlarmType> // 0: No recording; 1: Timing recording; 2:
Alarm input; 3: Motion alarm; 4: Loss alarm; 5: Detection | port; 6: Shielding alarm; 7:
Detection & port
  <Enable><!--dep:AlarmType, xs: integer 0-Disabled 1-Customized1 2-Customized
2></Enable> // Valid during timing recording
</TimeRange>
<TimeRange><!-- req -->
<beginTime><!-- req, xs:time, ISO8601 time --></beginTime>
<endTime><!-- req, xs:time, ISO8601 time --></endTime>
<AlarmType><!--opt,xs:integer></AlarmType> // 0: No recording; 1: Timing recording; 2:
Alarm input; 3: Motion alarm; 4: Loss alarm; 5: Detection | port; 6: Shielding alarm; 7:
Detection & port
  <Enable><!--dep:AlarmType, xs: integer 0-Disabled 1-Customized1 2-Customized
2></Enable> // Valid during timing recording
</TimeRange>
<TimeRange><!-- req -->
<beginTime><!-- req, xs:time, ISO8601 time --></beginTime>
<endTime><!-- req, xs:time, ISO8601 time --></endTime>
<AlarmType><!--opt,xs:integer></AlarmType> // 0: No recording; 1: Timing recording; 2:
Alarm input; 3: Motion alarm; 4: Loss alarm; 5: Detection | port; 6: Shielding alarm; 7:
Detection & port
  <Enable><!--dep:AlarmType, xs: integer 0-Disabled 1-Customized1 2-Customized
2></Enable> // Valid during timing recording
  
```

```

2></Enable> // Valid during timing recording
</TimeRange>
  <dayOfWeek>
<!-- opt, xs:integer, ISO8601 weekday number, 1=Monday, ... -->
<dayOfWeek>
</TimeBlock>
</TimeBlockList>
<prompt><!--req,xs:boolean></prompt>
<StorageMode><!-- opt, xs:integer, 0-SD/USB,1-NAS,2-FTP--></StorageMode>
<RedundentVideo><!--req,xs:boolean></RedundentVideo> // Redundant recording; true:
Enabled; false: Disabled
<FrameExtraction><!--req,xs:boolean></FrameExtraction> // Frame extraction; true: Enabled;
false: Disabled
<AudioRecording><!--req,xs:boolean></AudioRecording> // Audio recording; true: Enabled;
false: Disabled
<ANR><!--req,xs:boolean></ANR> // ANR true: Enabled; false: Disabled
<MainStream><!--req,xs:boolean></MainStream> // Main stream recording; true:
Enabled; false: Disabled
<SubStream><!--req,xs:boolean></SubStream> // Sub stream recording; true:
Enabled; false: Disabled
<SavingTime><!-- opt, xs:integer--></SavingTime>// Saving time; range: 0~60; unit: Day
</ResponseStatus>

```

**Test cases**

**GET /CGI/ContentMgmt/record/tracks/1**

**Request XML: none**

**Response XML: <ResponseStatus>**

**PUT/CGI/ContentMgmt/record/tracks/1**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<?xml version="1.0" encoding="UTF-8"?>
<ResponseStatus>
<requestURL>/Streaming/Channels</requestURL>
<Channel>1</Channel>
<statusCode>1</statusCode>
<statusString>stop</statusString>
<ID>true</ID>
<manualRec>>false</manualRec>
<alarmRec>true</alarmRec>
<continuous>true</continuous>
<TimeBlockList>
<TimeBlock>
<TimeRange>
<beginTime>00:00:00</beginTime>
<endTime>23:59:00</endTime>
</TimeRange>
<TimeRange>
<beginTime>00:00:00</beginTime>
<endTime>00:00:00</endTime>
</TimeRange>
<TimeRange>
<beginTime>00:00:00</beginTime>
<endTime>00:00:00</endTime>
</TimeRange>
<TimeRange>
<beginTime>00:00:00</beginTime>
<endTime>00:00:00</endTime>
</TimeRange>

```

```

<dayOfWeek>7</dayOfWeek>
</TimeBlock>
</TimeBlockList>
<prompt>false</prompt>
<StorageMode>0</StorageMode>
<RedundentVideo>true</RedundentVideo> // Redundant video; true: Enabled; false: Disabled
  <FrameExtraction>true</FrameExtraction> // Frame extraction; true: Enabled; false:
  Disabled
  <AudioRecording>true</AudioRecording> // Audio recording; true: Enabled; false: Disabled
  <ANR>true</ANR> // ANR true: Enabled; false: Disabled
  <SubStream>true</SubStream> // Sub stream recording; true: Enabled; false:
  Disabled
  <SavingTime>5</SavingTime> // Saving time; range: 0~60; unit: Day
</ResponseStatus>

```

### 2.5.2/CGI/ContentMgmt/Storage/quota/<ID>

/CGI/ContentMgmt/Storage/quota/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire storage setting parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<diskQuota>	
<b>PUT</b>		
<b>Description</b>	Set storage parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<diskQuota>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is prepared for query and setting of video strategy information, helping client or IE query and set the video strategy information of device via CGI protocol, including the free disk space.		
<b>Explanations on key parameters:</b>		
<freeDiskSpace> means free disk space; range: 512-10240 <whenHDDfull> means storage strategy; DEL_VRF_WHEN_DOS: Circular deletion; DEL_NA_VRF_WHEN_DOS: Circular deletion (except for alarm file); STOP_VR_WHEN_DOS: Stop recording		

#### diskQuotaXML Block

```

<diskQuota version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<id><!-- req, xs:integer; channel --></id>
<freeDiskSpace><!-- opt,xs:integer,MB--></freeDiskSpace>
<packMode><!-- opt,xs:integer "1: Pack by size; 2: Pack by time "--><packMode>
<sizepack><!-- opt,xs:integer></sizepack> // Pack by size
<timepack><!-- opt,xs:integer></timepack> // Pack by time
<whenHDDfull><!-- opt,xs:string, DEL_VRF_WHEN_DOS, DEL_NA_VRF_WHEN_DOS,
STOP_VR_WHEN_DOS--></whenHDDfull>
</diskQuota>

```

#### Test cases

**GET /CGI/ContentMgmt/Storage/quota/0**

**Request XML:** none

**Response XML:** <diskQuota>

**PUT/CGI/ContentMgmt/Storage/quota/0**

**Response XML:** <ResponseStatus>

**Request XML:** as below



```
<?xml version="1.0" encoding="UTF-8"?>
<diskQuota>
<freeDiskSpace>1048576</freeDiskSpace>
<packMode>1</packMode>
<timepack>600</timepack>
<sizepack>1048576</sizepack>
<whenHDDfull>DEL_VRF_WHEN_DOS</whenHDDfull>
</diskQuota>
```

### 2.5.3/CGI/ContentMgmt/preAlarmRecord/channels/<ID>

/CGI/ContentMgmt/preAlarmRecord/channels/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire alarm prerecord parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<PreAlarmRecord>	
<b>PUT</b>		
<b>Description</b>	Set alarm prerecord parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<PreAlarmRecord>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is prepared for query and setting of video strategy information, helping client or IE query and set the video strategy information of device via CGI protocol, including the alarm prerecord enabling/prerecord/delayed recording.		
<b>Explanations on key parameters:</b>		
<policePreRecord> means alarm prerecord enabling; true: Enabled; false: Disabled		
<preRecordTimeSeconds> means prerecord; range: 5, 10 and 15		
<postRecordTimeSeconds> means delayed recording; range: 10, 15, 30 and 60		

#### PreAlarmRecordXML Block

```
<?xml version="1.0" encoding="UTF-8"?>
<PreAlarmRecord version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<policePreRecord><!--req,xs:boolean>< / policePreRecord >
<preRecordTimeSeconds><!--req,xs:interger></ preRecordTimeSeconds >
<postRecordTimeSeconds><!--req,xs:interger></ postRecordTimeSeconds >
</PreAlarmRecord >
```

#### Test cases

**GET /CGI/ContentMgmt/preAlarmRecord/channels/1**

**Request XML:** none

**Response XML:** <PreAlarmRecord>

**PUT/CGI/ContentMgmt/preAlarmRecord/channels/1**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<PreAlarmRecord>
<policePreRecord>true</policePreRecord>
<preRecordTimeSeconds>15</preRecordTimeSeconds>
<postRecordTimeSeconds>10</postRecordTimeSeconds>
</PreAlarmRecord>
```

### 2.5.4/CGI/ContentMgmt/channels/<ID>/NFS/<ID>

/CGI/ContentMgmt/channels/<ID>/NFS/<ID>	General Resource v2.0
---	-----------------------

<b>GET</b>	
<b>Description</b>	Acquire network storage parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<CloudStorage>
<b>PUT</b>	
<b>Description</b>	Set network storage parameters
<b>Query</b>	None
<b>Inbound Data</b>	<CloudStorage>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This protocol is prepared for query and setting of network storage information, helping client or IE query and set the network storage information of device via CGI protocol, including the disk No./IP address/status/usage/mapping path/space.</p> <p><b>Explanations on key parameters:</b>  &lt;id&gt; means disk No.  &lt;ipAddress&gt; means IP address, legal value calibration needed - Support IPv6 address  &lt;status&gt; means status; 1: No disk; 2: Formatting; 3: Unformatted; 4: Mounted; 5: Read/write in progress  &lt;usage&gt; means usage; 1: Recording; 2: Backup; 3: Redundancy; 4: Disk read only  &lt;mappingPath&gt; means mapping path  &lt;totalSize&gt; means total size  &lt;freeSpace&gt; means free space</p>	

**CloudStorageXML Block**

```
<CloudStorage version="2.0">
<id><!--req,xs:integer SATA1~SATA8 No. 0~7, USB0~USB3 No. 8~11, NFS No. 12, esata
No. 32, SD card No. 50, SATA9~SATA16 No. 1008~1015 VD No. 2000~2015 IPSAN No.
3000~3007--></id >
<ipAddress><!--opt,xs:string--></ipAddress>
<status><!--opt,xs: integer --></status>
<usage><!--opt,xs:interger --></usage>
<mappingPath><!--opt,sx:string--></mappingPath >
<totalSize><!--opt,xs:integer--></totalSize>
<freeSpace><!--opt,xs:integer--></ freeSpace >
</CloudStorage>
```

**Test cases**

**GET /CGI/ContentMgmt/channels/<ID>/NFS/<ID>**

**Request XML: none**

**Response XML: <CloudStorage>**

**PUT/CGI/ContentMgmt/channels/<ID>/NFS/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<?xml version="1.0" encoding="UTF-8"?>
<CloudStorage>
<id>1</id>
<ipAddress>0</ipAddress>
<status>1</status>
<usage>1</usage>
<mappingPath>/nfs</mappingPath>
<totalSize>0</totalSize>
<freeSpace>0</freeSpace>
</CloudStorage>
```

**2.5.5/CGI/ContentMgmt/Storage/Policy**

<b>GET</b>	
<b>Description</b>	Acquire disk strategy parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<storagePolicy>
<b>PUT</b>	
<b>Description</b>	Set disk strategy parameters
<b>Query</b>	None
<b>Inbound Data</b>	<storagePolicy>
<b>Success Return</b>	<ResponseStatus>
<p>Explanations on protocol:  This protocol is prepared for query and setting of disk strategy information, helping client or IE query and set the disk strategy information of device via CGI protocol, including disk group and quota.</p> <p>Explanations on key parameters:  Mode: modeSelection(HDD: Disk group, quota: Quota)  Disk group list: hddModelList has &lt;disk group number&gt; nodes  Quota list: quotaModelList has &lt;disk group number&gt; nodes</p>	

**storagePolicyXML Block**

```

<storagePolicy version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<modeSelection><!--req,string --></modeSelection>// Mode
<hddModelList>
<hddMode>
<hdd><!--req,string --></hdd> // Disk group starts from 1
<hddSelectionList>/ Select disk group
<hddSelection><!-- req, xs:integer --></hddSelection>
</hddSelectionList>
<hddChannelList>// Select channel
<hddChannel><!-- req, xs:integer --></hddChannel>
</hddChannelList>
</hddModel>
</hddModelList>
<quotaModelList>// Select quota
<quotaMode>
<id><!-- req, xs:integer; channel --></id>// Channel starts from 1
<useVideoQuota><!-- ro, integer, MB --></useVideoQuota>
<usePictureQuota><!-- ro, integer, MB --></usePictureQuota>
<totalDiskVolume><!-- ro, integer, MB --></totalDiskVolume>
<videoQuota><!-- req, integer, MB --></videoQuota>// Video quota
<pictureQuota><!-- opt, integer, MB --></pictureQuota>// Picture quota
<type><!--opt,xs:string, "volume,ratio"--></type>
<videoQuotaRatio><!-- dep, integer, 0...100
percentage--></videoQuotaRatio><pictureQuotaRatio><!-- dep, 0...100
percentage--></pictureQuotaRatio>
<totalVideoVolume><!-- ro, integer, MB --></totalVideoVolume> // Total video volume
<totalPictureVolume><!-- ro, integer, MB --></totalPictureVolume>// Total picture volume
<freeVideoQuota><!-- ro, integer, MB --></freeVideoQuota >// Free video quota
<freePictureQuota><!-- ro, integer, MB --></freePictureQuota >// Free picture quota
</quotaMode>
</quotaModelList>
</storagePolicy>

```

**Test cases**

**GET /CGI/ContentMgmt/Storage/Policy**

**Request XML: none**

**Response XML: <storagePolicy>**

**PUT/CGI/ContentMgmt/Storage/Policy**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
"<storagePolicy version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<modeSelection>HDD</modeSelection>
<hddModelList>
<hddMode>
<hdd>1</hdd>
<hddselectionlist>
<hddselection>0</hddselection>
<hddselection>2</hddselection>
<hddselection>3</hddselection>
<hddselection>6</hddselection>
</hddselectionlist>
<hddchannellist>
<hddchannel>0</hddchannel>
<hddchannel>3</hddchannel>
<hddchannel>4</hddchannel>
<hddchannel>6</hddchannel>
</hddchannellist>
</hddModel>
</hddModelList>
<quotaModelList>
<quotaMode>
<id>1</id>
<useVideoQuota>0</useVideoQuota>
<usePictureQuota>0</usePictureQuota>
<totalDiskVolume>0</totalDiskVolume>
<videoQuota>0</videoQuota>
<pictureQuota>0</pictureQuota>
<type>0</type>
<videoQuotaRatio>0</videoQuotaRatio>
<pictureQuotaRatio>0</pictureQuotaRatio>
<totalVideoVolume>0</totalVideoVolume>
<totalPictureVolume>0</totalPictureVolume>
<freeVideoQuota>0</freeVideoQuota>
<freePictureQuota>0</freePictureQuota>
</quotaMode>
</quotaModelList>
</storagePolicy>
```

**2.5.6/CGI/ContentMgmt/Storage/RebuildIndex**

/CGI/ContentMgmt/Storage/RebuildIndex General Resource v2.0	
<b>PUT</b>	
<b>Description</b>	Rebuild index
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for rebuilding index of disk.	
<b>Explanations on key parameters:</b> None	

**Test cases**

**PUT/CGI/ContentMgmt/Storage/RebuildIndex**

**Request XML: none**

**Response XML: <ResponseStatus>**

### 2.5.7/CGI/ContentMgmt/Storage/RebuildIndexStatus

<b>/CGI/ContentMgmt/Storage/RebuildIndexStatus</b> <b>General Resource</b> <b>v2.0</b>	
<b>GET</b>	
<b>Description</b>	Obtain formatted disk status
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<RebuildIndexStatus>
<p><b>Explanations on protocol:</b>  This protocol is to realize the query of the formatted disk status, and realize the query of the client sides or IE for the equipment formatted disk status through the CGI protocol.</p> <p><b>Explanations on key parameters:</b>  &lt;formatting&gt; means formatting status; REBUILD_ERRO: Error; REBUILD_DOING: Rebuilding in progress; REBUILD_DONE: Formatting completed; NOT_ REBUILD: No rebuilding</p>	

#### formatStatusXML Block

<pre>&lt;RebuildIndexStatus version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema"&gt; &lt;Rebuilding&gt;&lt;!-- ro, req, xs:string REBUILD_ERROR , REBUILD_DOING , REBUILD_DONE, NOT_REBUILD--&gt;&lt;/formatting&gt; &lt;percent&gt;&lt;!-- ro, req, xs:integer "0-100" --&gt;&lt;/percent&gt; &lt;/RebuildIndexStatus&gt;</pre>
--

#### Test cases

##### GET/CGI/ContentMgmt/Storage/RebuildIndexStatus

**Request XML:** none

**Response XML:** <RebuildIndexStatus>

<pre>&lt;RebuildIndexStatus version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema"&gt; &lt;Rebuilding&gt;REBUILD_DOING&lt;/formatting&gt; &lt;percent&gt;50&lt;/percent&gt; &lt;/RebuildIndexStatus&gt;</pre>
---

### 2.5.8/CGI/ContentMgmt/InputProxy/channels/<ID>/ipcReboot

<b>/CGI/ContentMgmt/InputProxy/channels/&lt;ID&gt;/ipcReboot</b> <b>General Resource</b> <b>v2.0</b>	
<b>PUT</b>	
<b>Description</b>	Restart frontend device via NVR
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This protocol is prepared for restarting frontend device via NVR.</p>	

#### Test cases

##### PUT /CGI/ContentMgmt/InputProxy/ipcConfig

**Request XML:** None

**Response XML:** <ResponseStatus>

### 2.5.9/CGI/ContentMgmt/InputProxy/PlugAndPlay

<b>/CGI/ContentMgmt/InputProxy/PlugAndPlay</b> <b>General Resource</b> <b>v2.0</b>
--

<b>GET</b>	
<b>Description</b>	Acquire plug-and-play status
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<PlugAndPlayPara>
<b>PUT</b>	
<b>Description</b>	Modify plug-and-play status
<b>Query</b>	None
<b>Inbound Data</b>	<PlugAndPlayPara>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for setting and acquiring plug-and-play function.	

**PlugAndPlayPara XML Block**

```
<?xml version="1.0" encoding="UTF-8" ?>
<PlugAndPlayPara>
<Enable><!--req, xs:boolean--></Enable>
<Type><!--req, xs:integer, 1: Auto adding 2: Auto detection--></Type>
</PlugAndPlayPara>
```

**Test cases**

**PUT /CGI/ContentMgmt/InputProxy/PlugAndPlay**

**Response XML:** <ResponseStatus>

**Request XML:** <PlugAndPlayPara>

```
<PlugAndPlayPara>
  <Enable>ture</Enable>
  <Type>1</Type>
</PlugAndPlayPara>
```

**GET /CGI/ContentMgmt/InputProxy/PlugAndPlay**

**Request XML:** None

**Response XML:** <PlugAndPlayPara>

```
<PlugAndPlayPara>
  <Enable>ture</Enable>
  <Type>1</Type>
</PlugAndPlayPara>
```

**2.5.10/CGI/ContentMgmt/Storage/hdd/<ID>/operation**

<b>/CGI/ContentMgmt/Storage/hdd/&lt;ID&gt;/operation</b>	
<b>General Resource v2.0</b>	
<b>PUT</b>	
<b>Description</b>	Manual operation of disk
<b>Query</b>	None
<b>Inbound Data</b>	< HDDOperation>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for manual operation of disk function, helping client or IE implement plug-and-play of device via CGI protocol. Disk number rule is as follows and consistent with the returned value of disk information protocol. SATA1~SATA8 No. 0~7 SD Card No. 50 SATA9~SATA16 No. 1008~1015 IPSAN No. 3000~3007 Add SATA17~SATA24 No. 1016~1023 Add expansion cabinet 1 SATA1~SATA24 No. 1100~1123	

Add expansion cabinet 2 SATA1~SATA24 No. 1200-1223  
 Add expansion cabinet 3 SATA1~SATA24 No. 1300-1323

**HDDOperation XML Block**

```
<HDDOperation version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<operateType><!--req, xs:integer, 1: Offline (prepare for unplugging disk); 2: Online (insert
disk, not supported temporarily); 3: Change application>
</operateType>
<HDDUsage>
<!--dep, xs:integer, 0: Read/write (video recording); 1: Backup; 2: Redundancy; 3: Read-only>
</HDDUsage>
</HDDOperation>
```

**Test cases**

**PUT/CGI/ContentMgmt/Storage/hdd/0/operation**

**Response XML:** <ResponseStatus>

**Request XML:** <HDDOperation> As follows

```
<HDDOperation>
<operateType>3</operateType>
<HDDUsage>0</HDDUsage>
</HDDOperation>
```

**2.5.11/CGI/ContentMgmt/Storage/raids/HDDInfos**

/CGI/ContentMgmt/Storage/raids/HDDInfos		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire information of physical disk	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<HDDInfoList>	
<b>PUT</b>		
<b>Description</b>	Operate physical disk	
<b>Query</b>	None	
<b>Inbound Data</b>	<HDDInfoList>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is prepared for acquiring and setting disk information.		
Disk numbering rules are as follows:		
// Device SATA1~SATA24 No. 0- 23		
// Expansion cabinet 1 SATA1~SATA24 No. 1100-1123		
// Expansion cabinet 2 SATA1~SATA24 No. 1200-1223		
// Expansion cabinet 3 SATA1~SATA24 No. 1300-1323		

**HDDInfoList XML Block**

```
<HDDInfoList version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<HDD>
<id><!--req, xs:integer--></id>
<raidName><!--opt, xs:string--></raidName>
<workMode><!--req, xs:integer0=Common disk;1=Array hot standby disk;2= Overall hot
standby disk;3=RAID disk;4=Invalid RAID disk;5=Faulty disk--></workMode>
<status><!--opt, xs:integer0=Normal;1=Offline;2=Health warning--></status>
<size><!--opt, xs:integer Unit: MB--></size>
<model><!--opt, xs:string--></model>
</HDD>
</HDDInfoList>
```

**Test cases**

**GET/CGI/ContentMgmt/Storage/raids/HDDInfos**

**Response XML:** <HDDInfoList>

**Request XML: None**  
**PUT/CGI/ContentMgmt/Storage/raids/HDDInfos**  
**Response XML: <ResponseStatus>**  
**Request XML: <HDDInfoList> As follows**

```
<HDDInfoList version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<HDD>
<id>1</id>
<raidName>Raid 1</raidName>
<workMode>1</workMode>
</HDD>
</HDDInfoList>
```

**2.5.12/CGI/ContentMgmt/Storage/raids**

<b>/CGI/ContentMgmt/Storage/raids</b>		<b>General Resource v2.0</b>
PUT		
Description	Create array	
Query	None	
Inbound Data	<RaidInfoList>	
Success Return	<ResponseStatus>	
<p>Explanations on protocol:  This protocol is prepared for building, rebuilding and deleting arrays, acquiring array information; array list will be sent if &lt;name&gt; field of url is null; otherwise, the designated array information will be sent.  Disk number rule is as follows and consistent with the returned value of disk information protocol.</p> <pre>// Device SATA1~SATA24 No. 0- 23 // Expansion cabinet 1 SATA1~SATA24 No. 1100-1123 // Expansion cabinet 2 SATA1~SATA24 No. 1200-1223 // Expansion cabinet 3 SATA1~SATA24 No. 1300-1323</pre>		

**RaidInfoListXML Block**

```
<RaidInfoList version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<RaidInfo/>
</RaidInfoList>
```

**RaidInfoXML Block**

```
<RaidInfoversion="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<name><!--req, xs:string including ending character, 64 characters at most --></name>
<operateType><!--opt, xs:integer, 1: Build 2: Rebuild 3: Delete--></operateType>
<raidType><!--req, xs:integer, 0=RAID0; 1=RAID1; 5=RAID5; 6=RAID6; 10=RAID10;
100=JBOD; 50=RAID50;60=RAID60--></raidType>
<HDDLlist>
<id><!--req, xs:integer--></id>
</HDDLlist>
</RaidInfo>
```

**Test cases**

**PUT /CGI/ContentMgmt/Storage/raids**

**Response XML: <ResponseStatus>**

**Request XML: <RaidInfoList> As follows**

```
<RaidInfoList version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<RaidInfo>
<name>123</name>
<operateType>1</operateType>
<raidType>5</raidType>
<HDDLlist>
<id>0</id>
<id>1</id>
```



```

<id>2</id>
</HDDLlist>
</RaidInfo>
</RaidInfoList>

```

### 2.5.13/CGI/ContentMgmt/Storage/raids/status

<b>/CGI/ContentMgmt/Storage/raids/status</b>		<b>General Resource v2.0</b>
GET		
Description	Acquire array status	
Query	None	
Inbound Data	<RaidName>	
Success Return	<RaidStatusList>	
Explanations on protocol: This protocol is prepared for acquiring array status.		

#### RaidStausListXML Block

```

<RaidStausList version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<RaidStaus />
</RaidStausList>

```

#### RaidStaus XML Block

```

<RaidStausversion="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<name><!--req, xs:string including ending character, 64 characters at most --></name>
<allSize><!--req, xs:integer, MB--></allSize >
<useAbleSize><!--req, xs:integer, MB--></useAbleSize>
<status><!--req, xs:integer, 1= Normal ;2= Degraded ;3= Failure--></status>
<task><!--req, xs:integer, 1=None; 2= Initializing; 3= Rebuilding--></task>
<percent><!--req, xs:integer,0-100--></percent>
<leftTime><!--req, xs:integer, Unit: Minute --></leftTime>
<raidType><!--req, xs:integer, 0=RAID0; 1=RAID1; 5=RAID5; 6=RAID6; 10=RAID10;
100=JBOD; 50=RAID50;60=RAID60--></raidType>
<HDDLlist>
<id><!--req, xs:integer--></id>
</HDDLlist>
</RaidStaus>

```

#### Test cases

**GET/CGI/ContentMgmt/Storage/raids/status**

**Response XML: <RaidStatusList>**

**Request XML: None**

**<RaidStatusList> As follows**

```

<RaidStausList version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<RaidStaus>
<name>123</name>
<allSize>1024</allSize>
<useAbleSize>1000</useAbleSize>
<status>1</status>
<task>2</task>
<percent>50</percent>
<leftTime>20</leftTime>
<raidType>5</raidType>
<HDDLlist>
<id>0</id>
<id>1</id>
<id>2</id>
</HDDLlist>

```

```
</RaidStaus>
</RaidStausList>
```

#### 2.5.14/CGI/ContentMgmt/Storage/VDs

/CGI/ContentMgmt/Storage/VDs		General Resource v2.0
<b>POST</b>		
<b>Description</b>	Acquire information of virtual disk	
<b>Query</b>	None	
<b>Inbound Data</b>	<VDName>	
<b>Success Return</b>	<VDList>	
<b>PUT</b>		
<b>Description</b>	Create array	
<b>Query</b>	None	
<b>Inbound Data</b>	<VDList>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is prepared for building, rebuilding and deleting virtual disk, and acquiring information of virtual disk; array list will be sent if <name> field of url is null; otherwise, the designated array information will be sent. This protocol is unused by NVR temporarily.		

##### VDName Block

```
<VDNameversion="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<name><!--req, xs:string including ending character, 64 characters at most --></name>
</VDName>
```

##### VDListXML Block

```
<VDInfoList version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<VDInfo/>
</VDInfoList>
```

##### VDInfoXML Block

```
<VDInfoversion="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<name><!--req, xs:string including ending character, 64 characters at most --></name>
<operateType><!--opt, xs:integer, 1: Build 2: Rebuild 3: Delete--></operateType>
<size><!--req, xs:integer, MB--></size>
<initType><!--opt, xs:integer 1= Frontend; 2= Backend; 3= Fast--></initType>
<raidName><!--req, xs: Name of string raid--></raidName>
</VDInfo>
```

##### Test cases

##### POST/CGI/ContentMgmt/Storage/VDs

**Response XML:** <VDInfoList >

**Request XML:** None

##### PUT/CGI/ContentMgmt/Storage/VDs

**Response XML:** <ResponseStatus>

**<VDNameXML> As follows:**

```
<VDNameversion="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<name>345</name>
</VDName>
```

**Request XML: <VDInfoList> As follows**

```
<VDInfoList version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<VDInfo>
<name>345</name>
<operateType>1</operateType>
<size>512</size>
<initType>2</initType>
<raidName>123</raidName>
```

```
</VDInfo>
</VDInfoList>
```

### 2.5.15/CGI/ContentMgmt/Storage/VDs/status

<b>/CGI/ContentMgmt/Storage/VDs/status</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Acquire virtual disk status	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<VDStatusList>	
<b>Explanations on protocol:</b>		
This protocol is prepared for acquiring virtual disk status. It is unused by NVR temporarily.		

#### VDStausListXML Block

```
<VDStausList version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<VDStaus />
</VDStausList>
```

#### VDStaus XML Block

```
<VDStausversion="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<name><!--req, xs:string including ending character, 64 characters at most --></name>
<useAbleSize><!--req, xs:integer, MB --></useAbleSize>
<status><!--req, xs:integer 1= Normal; 2= Degraded; 3= Offline--></status >
<task><!--req, xs:integer1= None; 2= Initializing; 3= Recovering--></task >
<percent><!--req, xs:integer 0-100--></percent >
<leftTime><!--req, xs:string, x.x Hour--></leftTime >
</VDStaus>
```

#### Test cases

#### GET/CGI/ContentMgmt/Storage/VDs/status

**Response XML:** <VDStatusList>

**Request XML:** None

```
<VDStausList version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<VDStaus>
<name>123</name>
<useAbleSize>512</useAbleSize>
<status>1</ status >
<task>2</ task >
<percent>50</ percent >
<leftTime>0.2</ leftTime >
</VDStaus>
</VDStausList>
```

### 2.5.16/CGI/ContentMgmt/InputProxy/channels/<ID>/pseStatus

<b>/CGI/ContentMgmt/InputProxy/channel/&lt;ID&gt;/pseStatus</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Request status of one PSE port	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<PseStatus>	

**Explanations on protocol:**

This protocol is prepared for acquiring status request of independent PSE port.

**Explanations on key parameters:**

<ID> and <id> means PSE port No.; range: 0-Max. PSE port number of device

<LinkState> means connection status; Disconnect: Disconnected; connect: Connected; overload: Disconnected due to overload

<Power> means POE power; value is PSE port power \*100; for example, 500 means 5W

**PseStatusXML Block**

```
<PseStatus version="2.0">
  <id>!--req, xs:integer --</id>
  <LinkState>!--req, xs:string --</LinkState>
  <Power>!--req, xs:integer --</Power>
</PseStatus>
```

**Test cases**

**GET /CGI/ContentMgmt/InputProxy/channels/<ID>/pseStatus**

**Request XML: none**

**Response XML: <PseStatus>**

```
<PseStatusversion="2.0" >
  <id>1</id>
  <LinkState>1</LinkState>
  <Power >500</Power >
</PseStatus>
```

**2.5.17/CGI/ContentMgmt/InputProxy/channels/pseStatus****/CGI/ContentMgmt/InputProxy/channels/pseStatus General Resource v2.0****GET**

<b>Description</b>	Request status of all PSE ports
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<PseStatusList>

**Explanations on protocol:**

This protocol is prepared for acquiring status request of all PSE ports

**Explanations on key parameters:**

<id> means PSE port No.; range: 0-Max. PSE port number of device

<LinkState> means connection status; Disconnect: Disconnected; connect: Connected; overload: Disconnected due to overload

<Power> means POE power; value is PSE port power \*100; for example, 500 means 5W

**PseStatusListXML Block**

```
<PseStatusList version="2.0">
<PseStatus version="2.0">
  <id>!--req, xs:integer --</id>
  <LinkState>!--req, xs:integer --</LinkState>
  <Power>!--req, xs:integer --</Power>
</PseStatus>
</PseStatusList>
```

**Test cases**

**GET /CGI/ContentMgmt/InputProxy/channels/pseStatus**

**Request XML: none**

**Response XML: <PseStatusList>**

**PseStatusListXML Block**

```

<PseStatusList version="2.0" >
<PseStatusversion="2.0" >
  <id>1</id>
  <LinkState>1</LinkState>
  <Power >500</Power >
</PseStatus>
<PseStatusversion="2.0">
  <id>2</id>
  <LinkState>1</LinkState>
  <Power>630</Power>
</PseStatus>
</PseStatusList>

```

### 2.5.18/CGI/ContentMgmt/InputProxy/channels/<ID>/pseMode

/CGI/ContentMgmt/InputProxy/channels/<ID>/pseMode General Resourcev2.0	
<b>GET</b>	
<b>Description</b>	Acquire working mode of PSE channel
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<PseMode>
<b>PUT</b>	
<b>Description</b>	Set working mode of PSE channel
<b>Query</b>	None
<b>Inbound Data</b>	<PseMode>
<b>Success Return</b>	<ResponseStatus >
<b>Explanations on protocol:</b> This protocol is prepared for setting and acquiring working mode of PSE channel.	
<b>Explanations on key parameters:</b> <WorkMode > means channel working mode; disable: Plug-and-play disabled; autoadd: Auto adding; reserved: Reserved	

#### PseMode XML Block

```

<PseMode version="2.0">
  <WorkMode >!--req, xs:string--</ WorkMode >
</PseMode>

```

#### Test cases

**GET /CGI/ContentMgmt/InputProxy/channels/1/pseMode**

**Request XML:** none

**Response XML:**<PseMode>

**PUT/CGI/ContentMgmt/InputProxy/channels/1/pseMode**

**Response XML:** ResponseStatus

**Request XML:** as below

#### PseMode XML Block

```

<PseMode version="2.0">
  <WorkMode >1</ WorkMode >
</PseMode>

```

### 2.5.19 /CGI/ContentMgmt/Storage/raids/enable

/CGI/ContentMgmt/Storage/raids/enable		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire array enabling	
<b>Query</b>	None	

<b>Inbound Data</b>	None
<b>Success Return</b>	<RaidEnable>
<b>PUT</b>	
<b>Description</b>	Enable/disable array
<b>Query</b>	None
<b>Inbound Data</b>	<RaidEnable>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for enabling/disabling of array and acquiring array enabling status.	

**RaidEnable XML Block**

```
<RaidEnable version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<enabled><!-- req, xs:boolean --></enabled>
</RaidEnable>
```

**Test cases**

**GET/CGI/ContentMgmt/Storage/raids/enable**

**Response XML:** <RaidEnable>

**Request XML:** None

**PUT/CGI/ContentMgmt/Storage/raids/enable**

**Response XML:** <ResponseStatus>

**Request XML:** <RaidEnable> As follows

```
<RaidEnable version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<enabled>true</enabled>
</RaidEnable>
```

**2.5.20/CGI/ContentMgmt/InputProxy/OnvifLanSearch/enable**

<b>/CGI/ContentMgmt/InputProxy/OnvifLanSearchEn General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire onvif intranet searching functions
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<OnvifLanSearch>
<b>PUT</b>	
<b>Description</b>	Set onvif intranet searching functions
<b>Query</b>	None
<b>Inbound Data</b>	<OnvifLanSearch>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for acquiring or setting enabling status of onvif ntranet searching functions of device <b>Explanations on key parameters:</b>	

**OnvifSearchXML Block**

```
<OnvifLanSearch>
<enabled><!--req, xs:boolean--></enabled>
</OnvifLanSearch>
```

**Test cases**

**GET /CGI/ContentMgmt/InputProxy/OnvifLanSearch/enable**

**Request XML:** none

**Response XML:** <OnvifLanSearch>

**PUT /CGI/ContentMgmt/InputProxy/OnvifLanSearch/enable**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```

<OnvifLanSearch>
  <enabled>true</enabled>
</OnvifLanSearch>

```

### 2.5.21/CGI/ContentMgmt/InputProxy/channels/<ID>/PortMapped

/CGI/ContentMgmt/InputProxy/channels/<ID>/PortMapped    General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire port mapping parameters
<b>Query</b>	<b>None</b>
<b>Inbound Data</b>	<b>None</b>
<b>Success Return</b>	<PortMapParameter>
<b>PUT</b>	
<b>Description</b>	Set port mapping parameters
<b>Query</b>	<b>None</b>
<b>Inbound Data</b>	<PortMapParameter>
<b>Success Return</b>	<ResponseStatus>
Explanations on protocol: IE acquires or sets port mapping parameters via CGI protocol. Explanations on key parameters: <httpEnable> Whether enable http; true, false <httpSrcPort> Whether enable http source port No. <httpProxyPort> Mapping port No. <tcpEnable> Whether enable tcp; true, false <tcpSrcPort> tcp source port No. <tcpProxyPort> Mapping port No. <radarEnable> Whether radar mapping is enabled true, false <radarSrcPort> Radar source port number <radarProxyPort> radar mapping port number Mapping port No. is [4000,65534]	

#### PortMapParameter XML Block

```

<PortMapParameter>
  <httpEnable><!--req, xs:boolean --></httpEnable>
  <httpSrcPort><!--req, xs:integer --></httpSrcPort>
  <httpProxyPort><!--req, xs:integer --></httpProxyPort>
  <tcpEnable><!--req, xs:boolean --></tcpEnable>
  <tcpSrcPort><!--req, xs:integer --></tcpSrcPort>
  <tcpProxyPort ><!--req, xs:integer --></tcpProxyPort>
  <radarEnable><!--req, xs:boolean --></radarEnable>
  <radarSrcPort><!--req, xs:integer --></radarSrcPort>
  <radarProxyPort ><!--req, xs:integer --></radarProxyPort>
</PortMapParameter>

```

#### Test cases

**GET /CGI/ContentMgmt/InputProxy/channels/<ID>/PortMapped**

**Request XML:** none

**Response XML:** <PortMapParameter>

**PUT /CGI/ContentMgmt/InputProxy/channels/<ID>/PortMapped**

**Response XML:** <ResponseStatus>

**Request XML:** <PortMapParameter> As follows

```

<PortMapParameter>
<httpEnable>true</httpEnable>
<httpSrcPort>80</httpSrcPort>
<httpProxyPort>4567</httpProxyPort>

```

```

<tcpEnable>true</tcpEnable>
<tcpsrcport>3000</tcpsrcport>
<tcpproxyport>5555</tcpproxyport>
<radarEnable>true</radarEnable>
<radarSrcPort>5000</radarSrcPort>
<radarProxyPort>5001</radarProxyPort>
</PortMapParameter>

```

### 2.5.22 /CGI/ContentMgmt/Storage/ModeAndHddInfo

/CGI/ContentMgmt/Storage/ModeAndHddInfo General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire the present disk group mode and status
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<storagePolicy>
<p><b>Explanations on protocol:</b> This protocol is prepared for helping IE acquire the disk group mode and status of present device via CGI protocol.</p> <p><b>Explanations on key parameters:</b> Mode: modeSelection (HDD: Disk group, QUOTA: Quota) Disk group list: hddModelList has &lt;disk group number&gt; nodes</p>	

#### storagePolicy XML Block

```

<storagePolicy version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<modeSelection><!--req,string --></modeSelection>// Mode
<hddModelList>
<hddMode>
<hdd><!--req,string --></hdd> // Disk group
<hddSelectionList>/ Select disk group
<hddSelection><!-- req, xs:integer --></hddSelection>
</hddSelectionList>
<hddChannelList>// Select channel
<hddChannel><!-- req, xs:integer --></hddChannel>
</hddChannelList>
</hddMode>
</hddModelList>
</storagePolicy>

```

#### Test cases

#### GET /CGI/ContentMgmt/Storage/ModeAndHddInfo

**Request XML:** none

**Response XML:** <storagePolicy>

```

<storagePolicy version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<modeSelection>HDD</modeSelection>// Mode
<hddModelList>
<hddMode>
<hdd>1</hdd> // Disk group
<hddSelectionList>/ Select disk group
<hddSelection>1</hddSelection>
<hddSelection>2</hddSelection>
<hddSelection>3</hddSelection>
<hddSelection>6</hddSelection>
</hddSelectionList>
<hddChannelList>// Select channel
<hddChannel>9</hddChannel>
<hddChannel>31</hddChannel>

```



```

<hddChannel>42</hddChannel>
<hddChannel>60</hddChannel>
</hddChannelList>
</hddMode>
</hddModelList>
</storagePolicy>

```

### 2.5.23/CGI/ContentMgmt/InputProxy/channels/<ID>/PseNetLanStatus

/CGI /ContentMgmt/InputProxy/channels/<ID>/PseNetLanStatus v2.0		General Resource
<b>GET</b>		
<b>Description</b>	Acquire enabling status of PSE long/short wire	
<b>Query</b>	<b>None</b>	
<b>Inbound Data</b>	<b>None</b>	
<b>Success Return</b>	<PseNetLanStatus>	
<b>PUT</b>		
<b>Description</b>	Set enabling status of PSE long/short wire	
<b>Query</b>	<b>None</b>	
<b>Inbound Data</b>	<PseNetLanStatus>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b> IE acquires or sets enabling status parameters of PSE long/short wire via CGI protocol.		
<b>Explanations on key parameters:</b> <enable>: true: Enabling false: Disabling		

#### PseNetLanStatus XML Block

```

<?xml version="2.0" encoding="UTF-8"?>
<PseNetLanStatus>
  <enable><!--req, xs:boolean --></enable>
</PseNetLanStatus>

```

#### Test cases

**GET /CGI/ContentMgmt/InputProxy/channels/<ID>/PseNetLanStatus**

**Request XML:** none

**Response XML:** <PseNetLanStatus>

**PUT /CGI/ContentMgmt/InputProxy/channels/<ID>/PseNetLanStatus**

**Response XML:** <ResponseStatus>

**Request XML:** <PseNetLanStatus> As follows

```

<?xml version="2.0" encoding="UTF-8"?>
<PseNetLanStatus>
  <enable>true</enable>
</PseNetLanStatus>

```

### 2.5.24/CGI/ContentMgmt/Storage/Raids/Progress/type/<ID>

/CGI/ContentMgmt/Storage/Raids/Progress/type/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire the present progress of array	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<raidProgress>	

**Explanations on protocol:**

This protocol is prepared for helping IE acquire the present array progress via CGI protocol.

**Explanations on key parameters:**

Sent XML:

<type>: Integer, range: "0-2", which means: 0: Array creation progress; 1: Array rebuilding progress; 2: Array deletion progress; the rest means return fails

Returned XML:

<state> : 0: No array operation; 1: Array operation in progress; 2: Array operation succeeds; 3: Array operation fails

<progress>: Progress "0-100"

**raidProgress XML Block**

```
<raidProgress version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<state><!-- ro, req, xs:integer--></state>
<progress><!-- ro, req, xs:integer--></progress>
</raidProgress>
```

**Test cases**

**GET /CGI/ContentMgmt/Storage/Raids/Progress/type/<ID>**

**Request XML:** none

**Response XML:** <raidProgress>

```
<?xml version="1.0" encoding="UTF-8"?>
<raidProgress>
<state>1</state>
<progress >99</progress>
</raidProgress>
```

**2.5.25/CGI/ContentMgmt/Storage/SmartHddList**

/CGI/ContentMgmt/Storage/SmartHddList		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire the disk list of array	
<b>Query</b>	<NONE>	
<b>Inbound Data</b>	<NONE>	
<b>Success Return</b>	<SmartHddList>	
<b>Explanations on protocol:</b>		
This protocol is prepared for helping IE acquire disk list via CGI protocol under the array mode.		

**SmartHddList XML Block**

```
<SmartHddList>
<SmartHdd>
<id><!-- req, xs:integer--></id> // Disk id
<hddName><!-- req, xs:string--></hddName> // Disk name
</SmartHdd>
<SmartHdd>
<id><!-- req, xs:integer--></id>
<hddName><!-- req, xs:string--></hddName>
</SmartHdd>
</SmartHddList>
```

**Test cases**

**GET /CGI/ContentMgmt/Storage/SmartHddList**

**Request XML:** None

**Response XML:** <SmartHddList>

<SmartHddList> As follows:

```

<SmartHddList version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<SmartHdd>
<id>2</id>
<hddName>sata3</hddName>
</SmartHdd>
<SmartHdd>
<id>3</id>
<hddName>sata4</hddName>
</SmartHdd>
<SmartHdd>
<id>4</id>
<hddName>sata5</hddName>
</SmartHdd>
<SmartHdd>
<id>6</id>
<hddName>sata7</hddName>
</SmartHdd>
</SmartHddList>

```

### 2.5.26 /CGI/ContentMgmt/Storage/Picture/Tracks/<ID>

/CGI/ContentMgmt/Storage/Picture/Tracks/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire picture storage and setting parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<picStore>	
<b>PUT</b>		
<b>Description</b>	Set picture storage and setting parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<picStore>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is prepared for query and setting of picture storage information, helping client or IE query and set the picture storage information via CGI protocol, including picture retention days and picture retention type.		
<b>Explanations on key parameters:</b>		
<ID> means channel No.		
<storeTime> means picture storage period (unit: Day)		
<storeEnable> means picture storage enabling; true: Enabled; false: Disabled		
<facePicSnap> means whether face snapshot pictures are saved; true: Saved; false: Not saved		
<facePicBase> Whether face picture base is saved; true: Saved; false: Not saved		
<facePicBackdrop> Whether face background picture is saved; true: Saved; false: Not saved		

#### picStore XML Block

```

<picStore version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<storeTime><!--req,xs:integer--></storeTime>
<storeEnable><!-- opt, xs:boolean "true, false" --></storeEnable>
<facePicSnap><!-- opt, xs:boolean "true, false" --></facePicSnap>
<facePicBase><!-- opt, xs:boolean "true, false" --></facePicBase>
<facePicBackdrop><!-- opt, xs:boolean "true, false" --></ facePicBackdrop>
</picStore>

```

#### Test cases

**GET /CGI/ContentMgmt/Storage/Picture/Tracks/0**

**Request XML:** none

**Response XML:** <picStore>

**PUT /CGI/ContentMgmt/Storage/Picture/Tracks/0**

**Response XML:** <ResponseStatus>

**Request XML: as below**

```
<?xml version="1.0" encoding="UTF-8"?>
<picStore>
<storeTime>30</storeTime>
<storeEnable>true</storeEnable>
<facePicSnap>true</facePicSnap>
<facePicBase>false</facePicBase>
<facePicBackdrop>true</facePicBackdrop>
</picStore>
```

**2.5.27/CGI/ContentMgmt/InputProxy/OnvifActive/Enable**

/CGI/ContentMgmt/InputProxy/OnvifActive/Enable General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire IPC switch which has auto access to onvif
<b>Query</b>	None
<b>Inbound Data</b>	<b>None</b>
<b>Success Return</b>	<onvifActive>
<b>PUT</b>	
<b>Description</b>	Set IPC switch which has auto access to onvif
<b>Query</b>	None
<b>Inbound Data</b>	<onvifActive>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for acquiring or setting the IPC switch which has auto access to onvif of device	
<b>Explanations on key parameters:</b>	
<b>enabled: Means enabling/disabling of IPC switch which has auto connection to onvif; true: Enabled; false: Disabled</b>	

**onvifActive XML Block**

```
<onvifActive >
  <enabled><!-- opt, xs:boolean "true, false" --></enabled>
</onvifActive >
```

**Test cases****GET /CGI/ContentMgmt/InputProxy/OnvifActive/Enable****Request XML: none****Response XML: <onvifActive>****PUT /CGI/ContentMgmt/InputProxy/OnvifActive/Enable****Response XML: <ResponseStatus>****Request XML: as below**

```
<onvifActive>
  <enabled>true</enabled>
</onvifActive>
```

**2.5.28/CGI/ContentMgmt/InputProxy/OnvifInsertHEVC /Enable**

/CGI/ContentMgmt/InputProxy/OnvifInsertHEVC/Enable General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire NVR switch which allows onvif access to H265
<b>Query</b>	None
<b>Inbound Data</b>	<b>None</b>
<b>Success Return</b>	<InsertEnable>

<b>PUT</b>	
<b>Description</b>	Set NVR switch which allows onvif access to H265
<b>Query</b>	None
<b>Inbound Data</b>	<InsertEnable>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for acquiring or setting the NVR switch which allows access of onvif to H265 <b>Explanations on key parameters:</b> <b>enabled: Means enabling/disabling of NVR which allows onvif access to H265; true: Enabled; false: Disabled</b>	

**InsertEnable XML Block**

```
<InsertEnable>
  <enabled><!-- opt, xs:boolean "true, false" --></enabled>
</InsertEnable>
```

**Test cases**

**GET /CGI/ContentMgmt/InputProxy/OnvifInsertHEVC/Enable**

**Request XML: none**

**Response XML: <InsertEnable>**

**PUT /CGI/ContentMgmt/InputProxy/OnvifInsertHEVC/Enable**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<InsertEnable>
  <enabled>true</enabled>
</InsertEnable>
```

**2.6/CGI/Common**

**2.6.1/CGI/Common/channels/<ID>/RealTimeValue**

<b>/CGI/Common/channels/&lt;ID&gt;/RealTimeValue</b>		<b>General Resource v2.0</b>
<b>POST</b>		
<b>Description</b>	Acquire real-time parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<RealTimeValue>	
<b>Success Return</b>	<RealTimeValue>	
<b>Explanations on protocol:</b> This protocol is prepared for real-time query of information, helping client or IE query the real-time information of device via CGI protocol, including type/value. <b>Explanations on key parameters:</b> <type> means type; brightness: Brightness; cpu: CPU information; memory: Memory information; flash: Flash information <value> means value		
<b>RealTimeValueXML Block</b>		
<pre>&lt;RealTimeValue version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema"&gt;   &lt;ElementList&gt;     &lt;Element&gt;       &lt;type&gt;&lt;!--req, xs:string --&gt;&lt;/type &gt;       &lt;value&gt;&lt;!--req, xs:integer--&gt;&lt;/value &gt;     &lt;/Element&gt;   &lt;/ElementList&gt; &lt;/RealTimeValue&gt;</pre>		
<b>Test cases</b>		
<b>POST/CGI/Common/channels/&lt;ID&gt;/RealTimeValue</b>		

**Response XML: <RealTimeValue>**

**Request XML: <RealTimeValue> As follows**

```
<?xml version="1.0" encoding="UTF-8"?>
<RealTimeValue>
<ElementList>
<Element>
<type>brightness</type>
<value>98</value>
</Element>
</ElementList>
</RealTimeValue>
```

### 2.6.2/CGI/Common/session

<b>/CGI/Common/session      General Resource    v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire talk information
<b>Query</b>	None
<b>Inbound Data</b>	<b>None</b>
<b>Success Return</b>	<b>&lt;SessionInfo&gt;</b>
<b>Explanations on protocol:</b> This protocol is prepared for acquiring the protocol of present talk information	
<b>Explanations on key parameters:</b> <SessionID> means talk ID	

#### SessionInfo XML Block

```
<SessionInfo version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<SessionID><!--req, xs:integer--></SessionID>
</SessionInfo>
```

#### Test cases

**GET /CGI/Common/session**

**Request XML: none**

**Response XML: <SessionInfo> As follows**

```
<SessionInfo version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<SessionID>1479998710</SessionID>
</SessionInfo>
```

### 2.6.3/CGI/Common/PlatFromParam

<b>/CGI/System/PlatFromParam      General Resource    v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire parameters of access platform
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<b>&lt;PlatFromParam&gt;</b>
<b>PUT</b>	
<b>Description</b>	Set parameters of access platform
<b>Query</b>	None
<b>Inbound Data</b>	<b>&lt;PlatFromParam&gt;</b>
<b>Success Return</b>	<b>&lt;ResponseStatus&gt;</b>

**Explanations on protocol:**

This protocol is prepared for setting the platform parameters which need to be accessed to customize the DZ19749 signal converter, including the URL address and device portal No.

**Explanations on key parameters:**

<type>url type: 1 Means http protocol, further expansion supported as needed

<platFromUrl> means the URL address of access platform

For example: http:// 127.0.0.5/dfs/G000111001000110010/jsonapi/{filename}

<number>DZ19749 DZ19749 signal converter means portal No. For example: G000111001000110010

**NTPXML Block**

```
<PlatFromParam xmlns="http://www.isapi.org/ver20/XMLSchema">
```

```
<platFromUrl><!-- req, xs:string --></platFromUrl>
```

```
<number><!-- req,xs:string --><number>
```

```
</PlatFromParam>
```

**Test cases**

**GET /CGI/System/PlatFromParam**

**Request XML: none**

**Response XML: <PlatFromParam>**

**PUT /CGI/System/PlatFromParam**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<PlatFromParam xmlns="http://www.isapi.org/ver20/XMLSchema">
```

```
<platFromUrl>http:// 127.0.0.5/dfs/G000111001000110010/jsonapi/{filename}</platFromUrl>
```

```
<number>G000111001000110010<number>
```

```
</PlatFromParam>
```

**2.7/CGI/Smart****2.7.1/CGI/Smart/AlarmInfo**

<b>/CGI/Smart/AlarmInfo</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Acquire alarm information and parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<AlarmItemList>	
<b>Explanations on protocol:</b>		
This protocol is prepared for query and setting of alarm information and parameters, helping client or IE query and set the alarm information parameters via CGI protocol, including channel No./screen No./rule No./rule name.		
<b>Explanations on key parameters:</b>		
<channelID> Channel No.		
<SceneID> represents scene No.		
<ruleID> means rule No.		
<ruleName> means rule name		
<alarmCaptureImage > means alarm snapshot picture		
<eventType> Event type: faceDetect: Frontend face detection; ipcComPare: Frontend comparison; ipcStranger: Frontend stranger; nvrDetect: Backend face detection; nvrComPare: Backend comparison; nvrStranger: Backend stranger; nvrFrequency: Backend frequency; nvrHold: Backend delay; plateShade: Plate shading; helmet: Helmet		
PeptIntrusion: Oilfield monitoring - Defense area intrusion alarm; PeptResident: Oilfield monitoring - Abnormal lingering alarm		
Ielddetection: Perimeter -intrusion, regionEntrance: Perimeter -Entrance, regionExiting: Perimeter -exiting, linedetection: Line, doubleLineDetection: Double line, loitering: Loitering, parking: Parking, rapidMove: Run, unattendedBaggage: unattended baggage, attendedBaggage: Theft, platLicenseRecog: Plate license recognition, audioDetection: Audio		

detection, videoDetection: Video detection, group: Gathering, onDutyDetection: On-duty detection, demographics: Flow statistics, alert: Alert, heatMap: Heat map, parkGuard: Park guard, illegalPark: Illegal park, helmet: Helmet detection, PeopleNumAlarm: People number error, PrctdutySingle: Single interrogation, PrctdutyNone: Unattended, Sleep: Sleep, NewFight: New fight, GetUp: Get up, HeightLimit: Height limit, NewDuty: New duty, Stranded: Stranded, Alone: Alone, Delivergoods: Deliver Goods, Smoke: Smoking, Telephone: making a call, fireworks: pyrotechnic detection, temDetectDiff :temperature detection-temperature difference alarm, temDetectHigh :temperature detection-high temperature alarm

**AlarmItemListXML Block**

```
<AlarmItemList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<AlarmItem>
<dateTime>2012-04-18T21:26:20+08:00</dateTime>
<channelID><!-- req, xs:string --></channelID>
<SceneID><!-- req, xs:string --></SceneID>
<ruleID><!-- req, xs:string --></ruleID>
<ruleName><!-- req, xs:string --></ruleName>
<eventType>"linedetection,fielddetection,regionEntrance,regionExiting,loitering,group
,rapidMove,parking,unattendedBaggage,attendedBaggage,faceDetect,platLicenseRecog,
audioDetection,videoDetection,group,onDutyDetection,demographics,doubleLineDetection,
alert,heatMap, parkGuard,illegalPark, ipcComPare, ipcStranger, nvrDetect, nvrComPare,
nvrStranger,
nvrFrequency,
nvrHold,
helmet,PeptIntrusion,PeptResident,Prctduty,Sleep,NewFight,GetUp,HeightLimit,NewDuty,Stran
ded,Alone,Delivergoods"
```

**2.7.2/CGI/Smart/AlarmInfoClean**

<b>/CGI/Smart/AlarmInfoClean</b>		<b>General Resource v2.0</b>
<b>PUT</b>		
<b>Description</b>	Clear alarm information	
<b>Query</b>	None	
<b>Inbound Data</b>	<b>&lt;AlarmInfoClean&gt;</b>	
<b>Success Return</b>	<b>&lt;ResponseStatus&gt;</b>	
<p><b>Explanations on protocol:</b>  This protocol is prepared for clearing alarm information, helping client or IE clear the alarm information via CGI protocol, including event type/rule No.</p> <p><b>Explanations on key parameters:</b>  &lt;eventType&gt; means event type, including: "all, linedetection, doubleLineDetection, fielddetection, regionEntrance, regionExiting, loitering, group, rapidMove, parking, unattendedBaggage, attendedBaggage, alert, heatMap, faceDetect, platLicenseRecog, audioDetection, videoDetection, onDutyDetection, Demographics, IllegalPark, ParkGuard, alerttemplate, helmet PeptIntrusion, PeptResident, PeopleNumAlarm, PrctdutySingle, PrctdutyNone, Sleep, NewFight, GetUp, HeightLimit, NewDuty, Stranded, Alone and Delivergoods, Smoke: smoking, Telephone: calling, fireworks :fireworks detection, temDetectDiff :temperature detection-temperature difference alarm, temDetectHigh: temperature detection-high temperature alarm ""</p> <p>&lt;ruleID&gt; means rule No., range: 0~11; 0 means all rule numbers; No. 11 rule is occupied by alert template</p>		

**AlarmInfoCleanXML Block**



```

<?xml version="1.0" encoding="UTF-8"?>
<AlarmInfoClean>
<channelID><!-- req, xs:integer --></channelID>
<SceneID><!-- req, xs: integer --></SceneID>
<eventType><!-- req, xs:string --></eventType>
<ruleID><!-- req, xs:string --></ruleID>
</AlarmInfoClean>

```

**Test cases**

**PUT/CGI/Smart/AlarmInfoClean**

**Response XML: <ResponseStatus>**

**Request XML: <RuleMatch>**

```

<AlarmInfoClean>
<channelID>1</channelID>
<SceneID>0</SceneID>
<eventType>linedetection</eventType>
<ruleID>1</ruleID>
</AlarmInfoClean>

```

**2.7.3/CGI/Smart/LineDetection/<ID>/Channels/<ID>/Scene/<ID>**

/CGI/Smart/LineDetection/<ID>/Channels/<ID>/Scene/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire line parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<LineDetection>	
<b>PUT</b>		
<b>Description</b>	Set line parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<LineDetection>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is prepared for query and setting of line parameters, helping client or IE query and set the line parameters via CGI protocol, including rule No./rule enabling/line No./rule name/percentage/arrow direction/coordinates/statistics type/alarm count.		
<b>Explanations on key parameters:</b>		
<id> represents rule No., range: 1-8		
<enabled> represents rule enabling, true: start, false: not start		
<id> means channel No.		
<ruleName> represents rule name, maximum 16-bit characters and 5 Chinese characters		
<sensitivityLevel> means percentage		
<directionSensitivity> means arrow direction: Degree		
<CoordinatesList> means coordinates		
<identifyType > means statistics type, including people, car, all, people and car		
<alarmColor> represents alarm color default is red		
<noAlarmColor> represents no alarm color default is green		
<displayStat > represents alarm counting, true: start, false: not start		
<alarmRule> represents alarm rules, true: start, false: not start		
<twoWayAlarm> represents two-way alarm, true: start, false: not start		
<displyTarget> represents display target, true: start, false: not start		

**LineDetectionXML Block**

```

<LineDetection version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<id><!-- req, xs:string --></id>
<enabled><!-- req, xs:boolean --></enabled>
<intelliBackSearch><!-- opt, xs:boolean --></intelliBackSearch>
<startTriggerTime><!-- req, xs:integer, milliseconds --></startTriggerTime>
<endTriggerTime><!-- req, xs:integer, milliseconds --></endTriggerTime>
<normalizedScreenSize>
<normalizedScreenWidth><!-- req, xs:integer --></normalizedScreenWidth>
<normalizedScreenHeight><!-- req, xs:integer --></normalizedScreenHeight>
</normalizedScreenSize>
<minObjectSize>
<!-- opt, xs:integer, min number of pixels per object -->
</minObjectSize>
<maxObjectSize>
<!-- opt, xs:integer, max number of pixels per object -->
</maxObjectSize>
<LineItemList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<LineItem version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<id><!-- req, xs:string --></id>
<ruleName><!-- req, xs:string --></ruleName>
<enabled><!-- req, xs:boolean --></enabled>
<sensitivityLevel>
<!--req, xs:integer-->
</sensitivityLevel>
<directionSensitivity>
<!-- opt, xs:integer -->
</directionSensitivity>
<CoordinatesList>
<Coordinates><!-- req, -->
<positionX><!-- req, xs:integer;coordinate --></positionX>
<positionY><!-- req, xs:integer;coordinate --></positionY>
</Coordinates>
</CoordinatesList>
<identifyType ><!-- req, xs: string --></identifyType>
<alarmColor><!-- req, xs:string"red" --></alarmColor>
<noAlarmColor><!-- req, xs:string "green"--></noAlarmColor>
<displayStat ><!-- req, xs:boolean --></displayStat >
<alarmRule><!-- req, xs:boolean --></alarmRule>
<twoWayAlarm><!-- req, xs:boolean --></twoWayAlarm>
<displyTarget><!-- req, xs:boolean --></displyTarget >
</LineItem>
</LineItemList>
</LineDetection>

```

**Test cases**

**GET /CGI/Smart/LineDetection/1/Channels/1/Scene/0**

**Request XML: none**

**Response XML: <LineDetection>**

**PUT/CGI/Smart/LineDetection/1/Channels/1/Scene/0**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<?xml version="1.0" encoding="UTF-8"?>
<LineDetection>
<id>1</id>
<enabled>true</enabled>
<LineItemList>
<LineItem>
<id>1</id>

```

```

<ruleName>Rule1</ruleName>
<enabled>true</enabled>
<sensitivityLevel>20</sensitivityLevel>
<CoordinatesList>
<Coordinates>
<positionX>2500</positionX>
<positionY>7968</positionY>
</Coordinates>
<Coordinates>
<positionX>7400</positionX>
<positionY>2413</positionY>
</Coordinates>
</CoordinatesList>
<alarmColor>red</alarmColor>
<noAlarmColor>green</noAlarmColor>
<twoWayAlarm>true</twoWayAlarm>
<displayStat>true</displayStat>
<identifyType>all</identifyType>
<displayTarget>true</displayTarget>
<alarmRule>true</alarmRule>
</LineItem>
</LineItemList>
</LineDetection>

```

#### 2.7.4/CGI/Smart/attendedBaggage/<ID>/Channels/<ID>/Scene/<ID>

General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire item loss parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<AttendedBaggage>
<b>PUT</b>	
<b>Description</b>	Set item loss parameters
<b>Query</b>	None
<b>Inbound Data</b>	<AttendedBaggage>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This protocol is prepared for clearing alarm information, helping client or IE query and set the item loss parameters, including rule No./rule name/alarm count/alarm rule/display target/percentage.</p> <p><b>Explanations on key parameters:</b>  &lt;id&gt; represents rule No., range: 1-8  &lt;enabled&gt; represents rule enabling, true: start, false: not start  &lt;ruleName&gt; represents rule name, maximum 16-bit characters and 5 Chinese characters  &lt;alarmColor&gt; represents alarm color default is red  &lt;noAlarmColor&gt; represents no alarm color default is green  &lt; alarmTime &gt; means alarm time; 0-8s  &lt;displayStat &gt; represents alarm counting, true: start, false: not start  &lt;alarmRule&gt; represents alarm rules, true: start, false: not start  &lt;displyTarget&gt; represents display target, true: start, false: not start  &lt;id&gt; represents region No., note: currently it only supports one region, the value of which is 1.  &lt;sensitivityLevel&gt; means percentage (sensitivity)  &lt;IgnoreRegionList&gt; corresponding ignored regions (maximum three)</p>	

### AttendedBaggageXML Block

```
< AttendedBaggage version="2.0" xmlns="http://www.std-cgi.org/ver20/XMLSchema">
<id><!-- req, xs:string --></id>
<enabled><!-- req, xs:boolean --></enabled>
<ruleName><!-- req, xs:string --></ruleName>
<alarmColor><!-- req, xs:string "red" --></alarmColor>
<noAlarmColor><!-- req, xs:string "green"--></noAlarmColor>
< alarmTime ><!-- req, xs:integer --></alarmTime >
<displayStat ><!-- req, xs:boolean --></displayStat >
<alarmRule><!-- req, xs:boolean --></alarmRule>
<displayTarget><!-- req, xs:boolean --></displayTarget >
<normalizedScreenSize>
<normalizedScreenWidth><!-- req, xs:integer --></normalizedScreenWidth>
<normalizedScreenHeight><!-- req, xs:integer --></normalizedScreenHeight>
</normalizedScreenSize>
<attendedBaggageRegionList version="2.0"
xmlns="http://www.std-cgi.org/ver20/XMLSchema">
<attendedBaggageRegion version="2.0"
xmlns="http://www.std-cgi.org/ver20/XMLSchema">
<id><!-- req, xs:string --></id>
<sensitivityLevel><!--req, xs:integer, 0..100, 0 is the least sensitive --></sensitivityLevel>
<timeThreshold><!--opt, xs:integer--></timeThreshold>
<RegionCoordinatesList><!-- opt -->
<RegionCoordinates><!-- opt -->
<positionX><!-- req, xs:integer;coordinate --></positionX>
<positionY><!-- req, xs:integer;coordinate --></positionY>
</RegionCoordinates>
</RegionCoordinatesList>
<IgnoreRegionList version="2.0" xmlns="http://www.std-cgi.org/ver20/XMLSchema">
<IgnoreRegion>
<RegionCoordinatesList><!-- opt -->
<RegionCoordinates><!-- opt -->
<positionX><!-- req, xs:integer;coordinate --></positionX>
<positionY><!-- req, xs:integer;coordinate --></positionY>
</RegionCoordinates>
</RegionCoordinatesList>
</IgnoreRegion>
</IgnoreRegionList>
</attendedBaggageRegion>
</attendedBaggageRegionList>
<mutexAbility opt="PDC"/><!--opt,ro, xs:string, "PDC" -->
<isSupportMultiScene><!-- opt, xs:boolen --></isSupportMultiScene>
</ AttendedBaggage >
```

#### Test cases

**GET /CGI/Smart/attendedBaggage/1/Channels/1/Scene/0**

**Request XML:** none

**Response XML:** <AttendedBaggage>

**PUT/CGI/Smart/attendedBaggage/1/Channels/1/Scene/0**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<AttendedBaggage>
<id>3</id>
<enabled>true</enabled>
<ruleName>Rule3</ruleName>
<alarmColor>red</alarmColor>
<noAlarmColor>green</noAlarmColor>
```

```
<alarmTime>5</alarmTime>
<displayStat>true</displayStat>
<displayTarget>true</displayTarget>
<alarmRule>true</alarmRule>
<attendedBaggageRegionList>
<attendedBaggageRegion>
<id>1</id>
<sensitivityLevel>15</sensitivityLevel>
<RegionCoordinatesList>
<RegionCoordinates>
<positionX>1377</positionX>
<positionY>399</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>426</positionX>
<positionY>4878</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>426</positionX>
<positionY>9131</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>8522</positionX>
<positionY>9600</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>9147</positionX>
<positionY>1545</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>5781</positionX>
<positionY>312</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>1349</positionX>
<positionY>277</positionY>
</RegionCoordinates>
</RegionCoordinatesList>
<IgnoreRegionList>
<IgnoreRegion>
<RegionCoordinatesList>
<RegionCoordinates>
<positionX>2272</positionX>
<positionY>1701</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>1448</positionX>
<positionY>3125</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>2982</positionX>
<positionY>4670</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>4474</positionX>
<positionY>2343</positionY>
</RegionCoordinates>
<RegionCoordinates>
```

```
<positionX>3480</positionX>
<positionY>1631</positionY>
</RegionCoordinates>
</RegionCoordinatesList>
</IgnoreRegion>
<IgnoreRegion>
<RegionCoordinatesList>
<RegionCoordinates>
<positionX>2002</positionX>
<positionY>6545</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>3125</positionX>
<positionY>8750</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>6150</positionX>
<positionY>8333</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>6178</positionX>
<positionY>5538</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>2826</positionX>
<positionY>5277</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>2073</positionX>
<positionY>6545</positionY>
</RegionCoordinates>
</RegionCoordinatesList>
</IgnoreRegion>
<IgnoreRegion>
<RegionCoordinatesList>
<RegionCoordinates>
<positionX>6150</positionX>
<positionY>1840</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>7130</positionX>
<positionY>3715</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>7428</positionX>
<positionY>1979</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>6335</positionX>
<positionY>1631</positionY>
</RegionCoordinates>
</RegionCoordinatesList>
</IgnoreRegion>
</IgnoreRegionList>
</attendedBaggageRegion>
</attendedBaggageRegionList>
</AttendedBaggage>
```

## 2.7.5/CGI/Smart/loitering/<ID>/Channels/<ID>/Scene/<ID>

/CGI/Smart/loitering/<ID>/Channels/<ID>/Scene/<ID>General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire loitering parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<loitering>
<b>PUT</b>	
<b>Description</b>	Set loitering parameters
<b>Query</b>	None
<b>Inbound Data</b>	<loitering>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>            This protocol is prepared for query and setting of loitering, helping client or IE query and set the loitering parameters via CGI protocol, including rule No./region No./sensitivity/alarm count/alarm rule/display target.</p> <p><b>Explanations on key parameters:</b>            &lt;id&gt; represents rule No., range: 1-8            &lt;enabled&gt; represents whether it is effective, true: start, false: not start            &lt;id&gt; represents region No., note: currently it only supports one region, the value of which is 1.            &lt;ruleName&gt; represents rule name, maximum 16-bit characters and 5 Chinese characters            &lt;sensitivityLevel&gt; represents sensibility level            &lt;alarmColor&gt; means alarm color, red as default            &lt;noAlarmColor&gt; means color of no alarm, green as default            &lt; alarmTime &gt; means alarm period: 1-60s            &lt;minArea&gt; means the min. area            &lt;displayStat &gt; represents alarm counting, true: start, false: not start            &lt;alarmRule&gt; represents alarm rules, true: start, false: not start            &lt;displyTarget&gt; represents display target, true: start, false: not start</p>	
<b>loiteringXML Block</b>	
<pre> &lt;loitering version="2.0" xmlns="http://www.std-cgi.org/ver20/XMLSchema"&gt; &lt;id&gt;&lt;!-- req, xs:string --&gt;&lt;/id&gt; &lt;enabled&gt;&lt;!-- req, xs:boolean --&gt;&lt;/enabled&gt; &lt;normalizedScreenSize&gt; &lt;normalizedScreenWidth&gt;&lt;!-- req, xs:integer --&gt;&lt;/normalizedScreenWidth&gt; &lt;normalizedScreenHeight&gt;&lt;!-- req, xs:integer --&gt;&lt;/normalizedScreenHeight&gt; &lt;/normalizedScreenSize&gt; &lt;LoiteringRegionList version="2.0" xmlns="http://www.std-cgi.org/ver20/XMLSchema"&gt; &lt;LoiteringRegion version="2.0" xmlns="http://www.std-cgi.org/ver20/XMLSchema"&gt; &lt;id&gt;&lt;!-- req, xs:string --&gt;&lt;/id&gt; &lt;ruleName&gt;&lt;!-- req, xs:string --&gt;&lt;/ruleName&gt; &lt;sensitivityLevel&gt;&lt;!--req, xs:integer, 0..100, 0 is the least sensitive --&gt;&lt;/sensitivityLevel&gt; &lt;timeThreshold&gt;&lt;!--opt, xs:integer--&gt;&lt;/timeThreshold&gt; &lt;RegionCoordinatesList&gt;&lt;!-- opt --&gt; &lt;RegionCoordinates&gt;&lt;!--opt, --&gt; &lt;positionX&gt;&lt;!-- req, xs:integer;coordinate --&gt;&lt;/positionX&gt; &lt;positionY&gt;&lt;!-- req, xs:integer;coordinate--&gt;&lt;/positionY&gt; &lt;/RegionCoordinates&gt; &lt;/RegionCoordinatesList&gt; &lt;alarmColor&gt;&lt;!-- req, xs:string"red" --&gt;&lt;/alarmColor&gt; &lt;noAlarmColor&gt;&lt;!-- req, xs:string "green"--&gt;&lt;/noAlarmColor&gt; &lt; alarmTime &gt;&lt;!-- req, xs:integer --&gt;&lt;/alarmTime &gt; &lt;minArea&gt;&lt;!-- req, xs:integer --&gt;&lt;/minArea &gt; &lt;displayStat &gt;&lt;!-- req, xs:boolean --&gt;&lt;/displayStat &gt;           </pre>	

```
<alarmRule><!-- req, xs:boolean --></alarmRule>
<displyTarget><!-- req, xs:boolean --></displyTarget >
</LoiteringRegion>
</LoiteringRegionList>
<mutexAbility opt="PDC"/><!--opt,ro, xs:string, "PDC" -->
<isSupportMultiScene><!-- opt, xs:boolen --></isSupportMultiScene>
</loitering>
```

**Test cases**

**GET /CGI/Smart/loitering/1/Channels/1/Scene/0**

**Request XML: none**

**Response XML: <loitering>**

**PUT/CGI/Smart/loitering/1/Channels/1/Scene/0**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<?xml version="1.0" encoding="UTF-8"?>
<loitering>
<id>4</id>
<enabled>true</enabled>
<LoiteringRegionList>
<LoiteringRegion>
<id>1</id>
<ruleName>Rule4</ruleName>
<sensitivityLevel>0</sensitivityLevel>
<alarmTime>10</alarmTime>
<RegionCoordinatesList>
<RegionCoordinates>
<positionX>2258</positionX>
<positionY>781</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>397</positionX>
<positionY>5000</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>4048</positionX>
<positionY>8715</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>9673</positionX>
<positionY>8246</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>9105</positionX>
<positionY>1666</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>5752</positionX>
<positionY>1041</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>3210</positionX>
<positionY>937</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>2258</positionX>
<positionY>868</positionY>
</RegionCoordinates>
```



```

</RegionCoordinatesList>
<alarmColor>red</alarmColor>
<noAlarmColor>green</noAlarmColor>
<minArea>3</minArea>
<displayStat>true</displayStat>
<displayTarget>true</displayTarget>
<alarmRule>true</alarmRule>
</LoiteringRegion>
</LoiteringRegionList>
</loitering>

```

### 2.7.6/CGI/Smart/PlatLicenseRecog/<ID>/channels/<ID>/Scene/<ID>

General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire plate recognition parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<PlatLicenseRecogList>
<b>PUT</b>	
<b>Description</b>	Set plate recognition parameters
<b>Query</b>	None
<b>Inbound Data</b>	<PlatLicenseRecogList>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>            This protocol is prepared for query and setting of plate recognition, helping client or IE query and set the plate recognition parameters via CGI protocol, including plate recognition id/first Chinese character/percentage/list of coordinates of detection area/coordinates of detection area.</p> <p><b>Explanations on key parameters:</b>            &lt;id&gt; means plate recognition id; value is 1            &lt;enableBWlist&gt; Enabling of black/white plate list; true, false            &lt;firstWord&gt; means the first Chinese character            &lt;firstLetter&gt; means the first letter            &lt;percentage&gt; means percentage, range: 1-100            &lt;topRange&gt; means top range; range: 0-100            &lt;bottomRange&gt; means bottom range; range: 0-100            &lt;leftRange&gt; means left range; range: 0-100            &lt;rightRange&gt; means right range; range: 0-100            &lt;RegionCoordinatesList&gt; represents detection region coordinate list            &lt;RegionCoordinates&gt; represents detection region coordinate            &lt;positionX&gt; represents detection region abscissa            &lt;positionY&gt; represents detection region ordinate</p>	

#### PlatLicenseRecogListXML Block

```

< PlatLicenseRecogList  version="2.0" xmlns="http://www.std-cgi.org/ver20/XMLSchema">
<PlatLicenseRecog version="2.0" xmlns="http://www.std-cgi.org/ver20/XMLSchema">
<id><!-- req, xs:string --></id>
<enabled><!-- req, xs:boolean --></enabled>
<enableBWlist><!-- req, xs:boolean --></enableBWlist>
<firstWord><!-- req, xs:string --></firstWord>
<firstLetter><!-- req, xs:string --></firstLetter>
<percentage><!-- req, xs:integer --></percentage>
<topRange><!-- req, xs:integer --></topRange>
<bottomRange><!-- req, xs:integer --></bottomRange>
<leftRange><!-- req, xs:integer --></leftRange>
<rightRange><!-- req, xs:integer --></rightRange>

```

```

<RegionCoordinatesList>
<RegionCoordinates><!-- req, -->
<positionX><!-- req, xs:integer;coordinate --></positionX>
<positionY><!-- req, xs:integer;coordinate --></positionY>
</RegionCoordinates>
</RegionCoordinatesList>
</PlatLicenseRecog>
</PlatLicenseRecogList >

```

**Test cases**

**GET /CGI/Smart/PlatLicenseRecog/1/Channels/1/Scene/0**

**Request XML: none**

**Response XML: <PlatLicenseRecogList>**

**PUT/CGI/Smart/PlatLicenseRecog/1/Channels/1/Scene/0**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<PlatLicenseRecogList>
<PlatLicenseRecog>
<id>1</id>
<enabled>>true</enabled>
<enableBWlist>>false</enableBWlist>
<firstWord> J </firstWord>
<firstLetter>A</firstLetter>
<platsize>1</platsize>
<percentage>50</percentage>
<topRange>6</topRange>
<bottomRange>90</bottomRange>
<leftRange>5</leftRange>
<rightRange>96</rightRange>
<RegionCoordinatesList>
<RegionCoordinates>
<positionX>3590</positionX>
<positionY>7333</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>6613</positionX>
<positionY>6636</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>6340</positionX>
<positionY>3909</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>3045</positionX>
<positionY>2787</positionY>
</RegionCoordinates>
</RegionCoordinatesList>
</PlatLicenseRecog>
</PlatLicenseRecogList>

```

**2.7.7/CGI/Smart/GuardPark/<ID>/channels/<ID>/scene/<ID>**

<b>/CGI/Smart/GuardPark/&lt;ID&gt;/channels/&lt;ID&gt;/scene/&lt;ID&gt;General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire stall parameters
<b>Query</b>	None
<b>Inbound Data</b>	None

<b>Success Return</b>	<GuardPark>
<b>PUT</b>	
<b>Description</b>	Set stall parameters
<b>Query</b>	None
<b>Inbound Data</b>	< GuardPark>
<b>Success Return</b>	<ResponseStatus >
<p><b>Explanations on protocol:</b> This protocol is prepared for query and setting of intelligent analysis on stall, helping client or IE query and set stall parameters via CGI protocol.</p> <p><b>Explanations on key parameters:</b>          &lt;RightRecoRange&gt; Unit: Second (1~7200)          &lt;AreaName&gt; Area name; 31 characters at most          &lt;TimeRange&gt; means time frame; format: 19:35:00 (hour; minute; second, second assignment 00)</p>	

**GuardPark XML Block**

```

<GuardPark version="2.0" >
  <id><!--req, xs:integer --></id>// Channel No.
  <PresetID><!--req, xs:integer --></PresetID>// Preset bit No.
  <iAreaID><!--req, xs:integer --></ iAreaID >// Area No.
  <iIllegalParkTime ><!--req, xs:integer --><iIllegalParkTime >// Illegal parking detection time
  <TimeRangeList>
    <TimeRange><!-- req -->// Enabling time range; 4 time ranges supported
      <beginTime><!-- req, xs:time, ISO8601 time --></beginTime>
      <endTime><!-- req, xs:time, ISO8601 time --></endTime>
    </TimeRange>
  </TimeRangeList>
  <CheckParkTime ><!--req, xs:integer --><CheckParkTime >// Parking check time
  <Sensitivity><!--req, xs:integer --><Sensitivity>// Sensitivity level; 0: Low 1: Intermediate 2: High
  <AreaName><!-- req, xs:string --><AreaName>// Area name
  <AreaEnable><!-- req, xs:boolean --><AreaEnable>// Area enabling
  <Valid><!-- req, xs:boolean --><Valid>// Whether event detection is valid
  <CapEnable><!--req, xs:integer --><CapEnable>// Snapshot enabling
  <RegionCoordinatesList> // List of area point coordinates
    <RegionCoordinates><!-- req, --> // Area coordinates
      <positionX><!-- req, xs:integer;coordinate --></positionX>// X coordinates of area points
      <positionY><!-- req, xs:integer;coordinate --></positionY>// Y coordinates of area points
    </RegionCoordinates>
  </RegionCoordinatesList>
  <Enable><!-- req, xs:boolean --></Enable>// Whether enable plate whitelist
  <WhiteCnt><!--req, xs:integer --></WhiteCnt>// Whitelist count
  <PlateList><!--opt>
    <Plate>// Plate information
      < PlateNum>!-- req, xs:string --></ PlateNum>// Plate number
      < PlateType>!--opt, xs:integer --></ PlateType >// Plate type; black plate: 1; white plate: 2 (only white plate is available now)
    </Plate>
  </ PlateList>
</GuardPark>

```

**Test cases**

**GET /CGI/Smart/GuardPark/<ID>/channels/<ID>/scene/<ID>**  
**Request XML: none**  
**Response XML: <GuardPark>**  
**PUT /CGI/Smart/GuardPark/<ID>/channels/<ID>/scene/<ID>**  
**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<GuardPark version="2.0" >
<PresetID>0</PresetID>
<iAreaID>0</iAreaID>
<iIllegalParkTime>30</iIllegalParkTime>
<TimeRangeList>
  <TimeRange>
    <beginTime>00:00:00</beginTime>
    <endTime>4:59:59</endTime>
  </TimeRange>
  <TimeRange>
    <beginTime>00:00:00</beginTime>
    <endTime>4:59:59</endTime>
  </TimeRange>
  <TimeRange>
    <beginTime>00:00:00</beginTime>
    <endTime>4:59:59</endTime>
  </TimeRange>
  <TimeRange>
    <beginTime>00:00:00</beginTime>
    <endTime>4:59:59</endTime>
  </TimeRange>
</TimeRangeList>
<CheckParkTime>100</CheckParkTime>
<Sensitivity>1</Sensitivity>
<AreaName>0</AreaName>
<AreaEnable>true</AreaEnable>
<Valid>true</Valid>
<CapEnable>true</CapEnable>
<RegionCoordinatesList>
<RegionCoordinates>
  <positionX>50</positionX>
  <positionY>75</positionY>
</RegionCoordinates>
</RegionCoordinatesList>
<Enable>true</Enable>
<WhiteCnt>2</WhiteCnt>
<PlateList>
  <Plate>
    <PlateNum> Jin A1111</PlateNum>
    <PlateType>2</PlateType>
  </Plate>
</PlateList>
</GuardPark>

```

**2.7.8/CGI/Smart/group/<ID>/channels/<ID>/Scene/<ID>**

<b>/CGI/Smart/group/&lt;ID&gt;/channels/&lt;ID&gt;/Scene/&lt;ID&gt;General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire group parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<GroupList>
<b>PUT</b>	
<b>Description</b>	Set group parameters
<b>Query</b>	None

<b>Inbound Data</b>	<b>&lt;GroupList&gt;</b>
<b>Success Return</b>	<b>&lt;ResponseStatus&gt;</b>

**Explanations on protocol:**

This protocol is prepared for query and setting of group, helping client or IE query and set the group parameters via CGI protocol, including group id/alarm time/alarm count/alarm rule/percentage.

**Explanations on key parameters:**

- <id> means group id; value: 1
- <alarmTime> means alarm time; range: 1-255
- <displayStat > represents alarm counting, true: start, false: not start
- <alarmRule> represents alarm rules, true: start, false: not start
- <percentage> means percentage, range: 1-100
- <id> Only one is supported by now
- <basicValue> represents the dense reference value
- <sceneMode> stands for large and small scenes, smallScene: small scenes, bigScene: large scenes

**GroupListXML Block**

```

<GroupList version="2.0" xmlns="http://www.std-cgi.org/ver20/XMLSchema">
<Group version="2.0" xmlns="http://www.std-cgi.org/ver20/XMLSchema">
<id><!-- req, xs:string --></id>
<enabled><!-- req, xs:boolean --></enabled>
<normalizedScreenSize>
<normalizedScreenWidth><!-- req, xs:integer --></normalizedScreenWidth>
<normalizedScreenHeight><!-- req, xs:integer --></normalizedScreenHeight>
</normalizedScreenSize>
<GroupRegionList version="2.0" xmlns="http://www.std-cgi.org/ver20/XMLSchema">
<GroupRegion>
<id><!-- req, xs:string;id --></id>
<RegionCoordinatesList><!-- opt -->
<RegionCoordinates><!-- opt -->
<positionX><!-- req, xs:integer;coordinate --></positionX>
<positionY><!-- req, xs:integer;coordinate --></positionY>
</RegionCoordinates>
</RegionCoordinatesList>
</GroupRegion>
</GroupRegionList>
<mutexAbility opt="PDC"/><!--opt,ro, xs:string, "PDC" -->
<isSupportMultiScene><!-- opt, xs:boolean --></isSupportMultiScene>
<alarmTime><!-- req, xs:integer --></alarmTime>
<displayStat ><!-- req, xs:boolean --></displayStat >
<alarmRule><!-- req, xs:boolean --></alarmRule>
<percentage><!-- req, xs:integer --></percentage>
</Group>
</GroupList>

```

**Test cases**

**GET /CGI/Smart/group/<ID>/1/Channels/1/Scene/0**

**Request XML: none**

**Response XML: <GroupList>**

**PUT/CGI/Smart/group/1/Channels/1/Scene/0**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<?xml version="1.0" encoding="UTF-8"?>
<Group>
<id>1</id>
<enabled>true</enabled>
<GroupRegionList>
<GroupRegion>

```

```

<id>1</id>
<RegionCoordinatesList>
<RegionCoordinates>
<positionX>2556</positionX>
<positionY>1805</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>1406</positionX>
<positionY>6666</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>8508</positionX>
<positionY>8541</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>8607</positionX>
<positionY>2274</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>2755</positionX>
<positionY>625</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>2457</positionX>
<positionY>1736</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>2457</positionX>
<positionY>1909</positionY>
</RegionCoordinates>
</RegionCoordinatesList>
</GroupRegion>
</GroupRegionList>
<alarmTime>74</alarmTime>
<displayStat>true</displayStat>
<alarmRule>true</alarmRule>
<percentage>42</percentage>
</Group>

```

### 2.7.9/CGI/Smart/Advance/channels/<ID>/Scene/<ID>/SceneType/<ID>

/CGI/Smart/Advance/channels/<ID>/Scene/<ID>/SceneType/<ID> General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire senior parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<Advance>
<b>PUT</b>	
<b>Description</b>	Set senior parameters
<b>Query</b>	None
<b>Inbound Data</b>	<Advance>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

This protocol is prepared for query and setting of senior parameters, helping client or IE query and set the senior parameters via CGI protocol, including target size/target confirmation frame.

**Explanations on key parameters:**

Scene means screen No.; when high 16-bit number is 0, low 16-bit number means intelligent analysis, range: 0~31;

When high 16-bit number is 1, low 16-bit number means alarm, range: 0~3; SceneType: Screen type; intelligent analysis, 0; guard, 1;

<maxTargetSize> means max. target size, range: 0% -100%

<minTargetSize> means min. target size; range: 0% -100%

<targetComfirmedFrame> means target confirmation frame; range: 10-30

<enable> means whether target parameters are enabled; false: Disabled; true: Enabled

**AdvanceXML Block**

```
< Advance version="2.0" xmlns="http://www.std-cgi.org/ver20/XMLSchema">
<SceneNumber><!-- req, xs:string --></ SceneNumber >
<MaxTargetSize><!-- req, xs:string --></ MaxTargetSize >
<MinTargetSize><!-- req, xs:string --></ MinTargetSize >
<IntegrateBackgroundTime><!-- req, xs:string --></ IntegrateBackgroundTime >
<TargetCombinedSensitivity ><!-- req, xs:string --></ TargetCombinedSensitivity >
<TargetCheckSensitivity ><!-- req, xs:string --></TargetCombinedSensitivity >
<BackgroundUpdateSpeed><!-- req, xs:string --></ BackgroundUpdateSpeed >
<ForegroundMaxDifference><!-- req, xs:string --></ ForegroundMaxDifference >
<ForegroundMinDifference><!-- req, xs:string --></ ForegroundMinDifference >
<TargetComfirmedFrame><!-- req, xs:string --></ TargetComfirmedFrame >
<enable><!-- req, xs:string --></enable>
</ Advance >
```

**Test cases**

**GET /CGI/Smart/Advance/channels/1/Channels/1/Scene/0**

**Request XML:** none

**Response XML:** <Advance>

**PUT/CGI/Smart/Advance/channels/1/Channels/1/Scene/0**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<Advance>
<maxTargetSize>30</maxTargetSize>
<minTargetSize>3</minTargetSize>
<targetComfirmedFrame>15</targetComfirmedFrame>
<enable>false</enable>
</Advance>
```

**2.7.10/CGI/Smart/Behavior/RuleMatch/<ID>/channels/<ID>/Scene/<ID>**

/CGI/Smart/Behavior/RuleMatch/<ID>/channels/<ID>/Scene/<ID>General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire the behavior analysis rule events
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<RuleMatch>

**Explanations on protocol:**

This protocol is prepared for query and setting of behavior analysis rule events, helping client or IE query and set the behavior analysis rule events via CGI protocol, including rule No./intelligent analysis type.

**Explanations on key parameters:**

- <id> means rule No.
- <smartType> means intelligent analysis type
- <enable> means rule enabling

**RuleMatchXML Block**

```
<RuleMatch>
<id><!-- req, xs: integer --></id >
<smartType> "
,linedetection, doubleLineDetection,fielddetection,regionEntrance,regionExiting,loitering
,rapidMove,parking,unattendedBaggage,attendedBaggage,Alert,HeatMap"
</smartType >
<enable><!-- req, xs:Boolean"true,false" --></ enable >
</RuleMatch>
```

**Test cases**

**GET/CGI/Smart/Behavior/RuleMatch/1/channels/1/Scene/0**

**Request XML: none**

**Response XML: <RuleMatch>**

```
<?xml version="1.0" encoding="UTF-8"?>
<RuleMatch>
<id>1</id>
<smartType>linedetection</smartType>
<enable>true</ enable >
</RuleMatch>
```

**2.7.11/CGI/Smart/Demographics/<ID>/channels/<ID>/Scene/<ID>**

<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire statistical parameters of behavior analysis count
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<DemographicsList>
<b>PUT</b>	
<b>Description</b>	Set statistical parameters of behavior analysis count
<b>Query</b>	None
<b>Inbound Data</b>	<DemographicsList>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol is prepared for query and setting of statistics functions of analysis people count.	
<b>Explanations on key parameters:</b>	
maxTargetSize: Max. target size 6-30, 15 as default	
minTargetSize: Min. target size: 5-20, 10 as default	
sensitivity: Sensitivity 0-100, 50 as default	
minSizeEx: 1~10000 picture width ten-thousandth, 10000 means the entire screen width. Not handled if this field is 0.	
mode: Mode: VERTICAL: vertical people statistics, HORIZONTAL: horizontal people statistics (inclined people statistics), ZONE: regional people statistics	
detectionType: the detection type of vertical people counting mode LINE: detection line, AREA: detection area	



### DemographicsList XML Block

```
<DemographicsList version="2.0" xmlns="http://www.std-cgi.org/ver20/XMLSchema">
< Demographics ><!-- opt -->
</DemographicsList>

<Demographics version="2.0" xmlns="http://www.std-cgi.org/ver20/XMLSchema">
<id><!-- req, xs:string --></id> means people statistics count and only one is available. This
value is 1.
<enabled><!-- req, xs:boolean --></enabled>
<dispalyTarget><!-- req, xs:boolean --></dispalyTarget>// Display target; true: Displayed; false:
Not displayed
<detectionType><!-- req, xs:string --> </detectionType>// Detection type: LINE: Detection line
AREA: Detection area is consistent with Ie
<mode><!-- req, xs:string --> </mode>// Mode: VERTICAL: Vertical people count statistics;
HORIZONTAL: Horizontal people count statistics is consistent with Ie
<detectionType> <!--req, xs: string--> </ detectionType> // Detection type of vertical people
counting mode LINE: detection line, AREA: detection area
<mode opt = "VERTICAL, HORIZONTAL, ZONE"> <!--req, xs: string--> </ mode> // Mode:
VERTICAL: vertical people statistics, HORIZONTAL: horizontal people statistics (tilted
people statistics), ZONE : Regional People Statistics
<maxTargetSize><!-- req, xs: integer --></maxTargetSize>// Max. target size 0-100, default
<minTargetSize><!-- req, xs: integer --></minTargetSize>// Min. target size 0-100, default
<sensitivity><!-- req, xs: integer--></sensitivity>// Sensitivity 0-100, default 50
<minSizeEx><!-- opt, xs:integer--></ minSizeEx> //1~10000 picture width ten-thousandth,
10000 means the entire screen width. Not handled if this field is 0.
<RegionCoordinatesList> // List of coordinates of detection area
<RegionCoordinates><!-- req, --> // Coordinates of detection area
<positionX><!-- req, xs:integer;coordinate --></positionX>// X coordinates of detection area
<positionY><!-- req, xs:integer;coordinate --></positionY>// Y coordinates of detection area
</RegionCoordinates>
</RegionCoordinatesList>
<RegionExCoordinatesList> // List of coordinates of detection line
<RegionCoordinates><!-- req, --> // Coordinates of detection line
<positionX><!-- req, xs:integer;coordinate --></positionX>// X coordinates of detection line
<positionY><!-- req, xs:integer;coordinate --></positionY>// Y coordinates of detection line
</RegionCoordinates>
</RegionExCoordinatesList>
</Demographics>
```

#### Test cases

**GET/CGI/Smart/Demographics/1/channels/1/scenes/0**

**Request XML:** none

**Response XML:** <DemographicsList>

**PUT/CGI/Smart/Demographics/1/channels/1/scenes/0**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<DemographicsList>
<Demographics>
<id>1</id>
<enabled>ture</enabled>
<dispalyTarget>>true</dispalyTarget>
<detectionType>LINE</detectionType>
<mode>VERTICAL</mode>
<maxTargetSize>50</maxTargetSize>
<minTargetSize>50</minTargetSize>
<sensitivity>50</sensitivity>
<minSizeEx>256</minSizeEx>
```

```

<RegionCoordinatesList>
<RegionCoordinates>
<positionX>0</positionX>
<positionY>0</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>1000</positionX>
<positionY>0</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>0</positionX>
<positionY>1000</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>1000</positionX>
<positionY>1000</positionY>
</RegionCoordinates>
</RegionCoordinatesList>
<RegionExCoordinatesList>
<RegionCoordinates>
<positionX>0</positionX>
<positionY>0</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>500</positionX>
<positionY>0</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>0</positionX>
<positionY>500</positionY>
</RegionCoordinates>
</RegionExCoordinatesList>
</Demographics>
</DemographicsList>

```

**2.7.12/CGI/Smart/FaceDetect/<ID>/channels/<ID>/Scene/<ID>/Model/<ID>**

/CGI/Smart/FaceDetect/<ID>/channels/<ID>/Scene/<ID>/Model/<ID> General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire face recognition parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<FaceDetect>
<b>PUT</b>	
<b>Description</b>	Set face recognition parameters
<b>Query</b>	None
<b>Inbound Data</b>	<FaceDetect>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

This protocol is prepared for query and setting of face recognition functions. Model face detection mode, 0 nvr 1 ipc.

explanations on important parameters:

minObjectSize: Min. face size 8-100, 8 as default

maxObjectSize: Max. face size 9-100 (the max. face size should be higher than the min. face size), 16 as default

sensitivityLevel: Sensitivity, 60 as default

<pushMode> means picture push strategy; fastest: Fastest; optimal; Optimal; custom: Customized; timing: Timing

access: Door access (continuous call in interface), compare: compare (interface called channel)

**FaceDetect XML Block**

```

<FaceDetect version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<id/><!-- req, xs:string, id --> Face detection id, this value is 1
<enabled><!-- req, xs:boolean --></enabled>
<dispalyTarget><!-- req, xs:boolean --></dispalyTarget>// Display target; true: Displayed; false:
Not displayed
<minObjectSize>
<!-- opt, xs:integer, min number of pixels per object --> // Min. face size 8-99, 8 as default
</minObjectSize>
<maxObjectSize>
<!-- opt, xs:integer, max number of pixels per object --> //d Max. face size 9-100 (the max.
face size should be higher than the min. face size), 16 as default
</maxObjectSize>
<ROI><!--opt-->
<minHorizontalResolution><!-- req, xs:integer --></minHorizontalResolution>
<minVerticalResolution><!-- req, xs:integer --></minVerticalResolution>
</ROI>
  <RegionCoordinatesList>
    <RegionCoordinates>
      <positionX>
        <!--req-->
        <!--req,xs:integer-->
      </positionX>
      <positionY>
        <!--req-->
        <!--req,xs:integer-->
      </positionY>
    </RegionCoordinates>
  </RegionCoordinatesList>
<sensitivityLevel><!-- req -->
<!-- req, xs:integer --> // Sensitivity 0-5, IE presentation form is 0-100
</sensitivityLevel>
<detectionThreshold><!-- dep-->
<!-- req, xs:integer-->
</detectionThreshold>
<highlightsenabled><!-- req, xs:boolean --></highlightsenabled>
<snapshotenabled><!-- req, xs:boolean --></snapshotenabled >// Face snapshot
<snapSpace><!-- opt, xs:integer--></snapSpace> // Snapshot interval, enabled when picture
push strategy is timing
<algorithmRunLevel ><!-- opt, xs:integer"0-5" --> </algorithmRunLevel > // Algorithm run
level
<picScal><!-- opt, xs:integer"1-10" --></picScal>// Picture scaling proportion
<snapTimes><!-- opt, xs:integer"1-10"--></snapTimes> // Snapshot times
<exposureBright><!-- opt, xs:integer"0-255"--></exposureBright> // Exposure brightness
Follow this item when setting exposure brightness
"/CGI/Image/channels/<ID>/brightness/template/<ID>"

```

```

<displayRule><!-- req, xs:Boolean"true,false"--></ displayRule> // Whether display rule frame
< livingbodyEnable ><!-- req, xs:Boolean"true,false"--></livingbodyEnable>// Whether enable
living body detection
<minSizeEx><!-- opt, xs:integer--></ minSizeEx> //1~10000 picture width ten-thousandth,
10000 means the entire screen width. Not handled if this field is 0.
<maxSizeEx><!-- opt, xs:integer--></ maxSizeEx>// 1~10000 picture width ten-thousandth,
10000 means the entire screen width. Not handled if this field is 0.
<pushMode opt = "fastest,optimal,custom,timing,collisionLine,access,compare ">
<!-- opt, xs:string"fastest,optimal,custom,timing,collisionLine,access,compare"-->
</ pushMode> // Picture push mode option will occur when picture push strategy is custom;
delay will occur when picture push strategy is optimal
<pushLevel opt = "hspeed,mspeed,lspeed">
<!-- opt, xs:string "hspeed,mspeed,lspeed"-->
</ pushLevel> // Picture push level is valid when picture push strategy is custom
<snapMode opt="all, highquality,custom">
<!-- opt, xs:string "all, highquality,custom"-->
</ snapMode> // Snapshot strategy; Snapshot level will display only if snapshot strategy is
custom
<snapLevel><!-- opt, xs:integer"0-100"--></ snapLevel> // Snapshot level is valid when
snapshot strategy is custom
<delayTime><!-- opt, xs:integer"500,1000,2000"--></ delayTime>// Delay time; it is valid
when snapshot strategy is optimal; unit: ms
<timeSpace><!-- opt, xs:integer"100,200,300,500,1000,2000"--></ timeSpace> // Time space;
unit: ms
</FaceDetect>
<FaceAttrLinkList>
<faceMask> <!--req, xs: Boolean "true, false" </ faceMask> // Face wearing face mask linkage
enable
<faceNoMask> <!--req, xs: Boolean "true, false" </ faceNoMask> // Face without face mask
linkage enable
</FaceAttrLinkList>

```

#### Test cases

**GET /CGI/Smart/FaceDetect/1/channels/1/scenes/0**

**Request XML: none**

**Response XML: <FaceDetect>**

**PUT /CGI/Smart/FaceDetect/1/channels/1/scenes/0**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<FaceDetect version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<id>1</id>
<enabled>>true</enabled>
<dispalyTarget>>true</dispalyTarget>
<minObjectSize>8</minObjectSize>
<maxObjectSize>16</maxObjectSize>
<RegionCoordinatesList>
<RegionCoordinates>
<positionX>0</positionX>
<positionY>0</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>1000</positionX>
<positionY>0</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>0</positionX>
<positionY>1000</positionY>

```

```

</RegionCoordinates>
<RegionCoordinates>
<positionX>1000</positionX>
<positionY>1000</positionY>
</RegionCoordinates>
</RegionCoordinatesList>
<sensitivityLevel>50</sensitivityLevel>
<snapSpace>0</snapSpace>
<algorithmRunLevel>5</algorithmRunLevel>
<picScal>5</picScal>
<snapTimes>5</snapTimes>
<exposureBright>138</exposureBright>
<displayRule>true</displayRule>
<livingbodyEnable>true</livingbodyEnable>
<minSizeEx>0</minSizeEx>
<maxSizeEx>0</maxSizeEx>
<pushMode opt ="fastest,optimal,custom,compare">custom</pushMode>
<pushLevel opt ="hspeed,mspeed,lspeed">hspeed</pushLevel>
<snapMode opt="all,highquality,custom">custom</snapMode>
<snapLevel>80</snapLevel>
<timeSpace>200</timeSpace>
<FaceAttrLinkList>
<faceMask>true</faceMask>
<faceNoMask>true</faceNoMask>
</FaceAttrLinkList>
</FaceDetect>

```

### 2.7.13/CGI/Smart/Alert/<ID>/channels/<ID>/Scene/<ID>

/CGI/Smart/Alert/<ID>/channels/<ID>/Scene /<ID> General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire guard parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<Alert>
<b>PUT</b>	
<b>Description</b>	Set guard parameters
<b>Query</b>	None
<b>Inbound Data</b>	<Alert>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol is prepared for query and setting of guard parameters, helping client or IE query and set the guard parameters via CGI protocol, including rule No./rule enabling/region No./rule name/sensitivity/coordinates of detection area/alarm count.	
<b>Explanations on key parameters:</b>	
None	

#### Alert XML Block

```

<Alert version="2.0" >
<id><!-- req, xs:string --></id>
<enabled><!-- req, xs:boolean --></enabled>
<intelliBackSearch><!-- opt, xs:boolean --></intelliBackSearch>
<startTriggerTime><!-- req, xs:integer, milliseconds --></startTriggerTime>
<endTriggerTime><!-- req, xs:integer, milliseconds --></endTriggerTime>
<normalizedScreenSize>

```

```

<normalizedScreenWidth><!-- req, xs:integer --></normalizedScreenWidth>
<normalizedScreenHeight><!-- req, xs:integer --></normalizedScreenHeight>
</normalizedScreenSize>
<minObjectSize>
<!-- opt, xs:integer, min number of pixels per object -->
</minObjectSize>
<maxObjectSize>
<!-- opt, xs:integer, max number of pixels per object -->
</maxObjectSize>
<AlertRegionList version="2.0" >
<AlertRegion version="2.0" >
<id><!-- req, xs:string --></id>// Means rule No.; range: 1-8
<ruleName><!-- req, xs:string --></ruleName>// Rule name, 16 characters and 5 Chinese
characters at most
<enabled><!-- req, xs:Boolean"true,false" --></enabled>// Whether enabled
<RegionCoordinatesList>//detection region coordinate list
<RegionCoordinates><!-- req, -->//detection region coordinates
<positionX><!-- req, xs:integer;coordinate --></positionX>// X coordinates
<positionY><!-- req, xs:integer;coordinate --></positionY>// Y coordinates
</RegionCoordinates>
</RegionCoordinatesList>
<alarmColor><!-- req, xs:string"red" --></alarmColor>// Alarm color
<noAlarmColor><!-- req, xs:string "green"--></noAlarmColor>// Color of no alarm
<identifyType><!-- req, xs:string "all,human,vehicle,humanAndVehicle"-->
</identifyType>// Distinguish target type
<mode><!-- req, xs:string "invade,entry,leave"--></mode>// Detection mode
<minDistance ><!-- req, xs:integer --></ minDistance > // Min. distance
<minTime><!-- req, xs:integer --></ minTime>// Min. time
<type><!-- req, xs:integer --></ type>// Direction limit
<direction><!-- req, xs:integer --></ direction>// Forbidden direction angle
<miniSize><!--req,xs: integer "0-100"></miniSize>// 5 as default, multiplexing sensitivity
<maxSize><!--req,xs: integer "0-100"></ maxSize>// 30 as default
<resortTime><!-- req, xs: integer --></ resortTime>// Detention time; unit: ms
< displayStat ><!-- req, xs:Boolean"true,false" --></displayStat>// Alarm count
< displayRule ><!-- req, xs:boolean"true,false" --></ displayRule >// Alarm rule
<displyTarget><!-- req, xs:boolean"true,false" --></displyTarget >// Display target
</AlertRegion>
</AlertRegionList >
</Alert>

```

#### Test cases

**GET /CGI/Smart/Alert/<ID>/channels/<ID>/scene/<ID>**

**Request XML: none**

**Response XML: <Alert>**

**PUT/CGI /Smart/Alert /<ID>/channels/<ID>/scene/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<?xml version="1.0" encoding="UTF-8"?>
<Alert>
<AlertRegionList>
<AlertRegion>
<id>1</id>
<ruleName>rule1</ruleName>
<enabled>true</enabled>
<RegionCoordinatesList>
<RegionCoordinates>
<positionX>2656</positionX>
<positionY>1302</positionY>

```

```

</RegionCoordinates>
<RegionCoordinates>
<positionX>951</positionX>
<positionY>5468</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>752</positionX>
<positionY>8906</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>3806</positionX>
<positionY>9548</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>7357</positionX>
<positionY>9548</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>9375</positionX>
<positionY>8940</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>9375</positionX>
<positionY>5381</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>8480</positionX>
<positionY>2013</positionY>
</RegionCoordinates>
</RegionCoordinatesList>
<alarmColor>red</alarmColor>
<noAlarmColor>green</noAlarmColor>
<identifyType>all</identifyType>
<mode>invade</mode>
<minDistance>0</minDistance>
<minTime>0</minTime>
<type>0</type>
<direction>0</direction>
<miniSize>5</miniSize>
<maxSize>30</maxSize>
<resortTime>30000</resortTime>
<displayStat>true</displayStat>
<displayRule> true</displayRule>
<displyTarget>>false</displyTarget>
</AlertRegion>
</AlertRegionList>
</Alert>

```

#### 2.7.14/CGI/Smart/HeatMap/<ID>/channels/<ID>/Scene/<ID>

/CGI/Smart/HeatMap/<ID>/channels/<ID>/Scene/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire heat parameter	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<HeatMap>	

<b>PUT</b>	
<b>Description</b>	Set heat parameter
<b>Query</b>	None
<b>Inbound Data</b>	<HeatMap >
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This protocol is prepared for query and setting of heat parameters, helping client or IE query and set the heat parameters via CGI protocol, including rule No./rule enabling/region No./rule name/sensitivity/coordinates of detection area/alarm count.</p> <p><b>Explanations on key parameters:</b>  None</p>	

### HeatMap XML Block

```

<HeatMap version="2.0" >
  <id><!-- req, xs:string --></id>
  <enabled><!-- req, xs:boolean --></enabled>
  <intelliBackSearch><!-- opt, xs:boolean --></intelliBackSearch>
  <startTriggerTime><!-- req, xs:integer, milliseconds --></startTriggerTime>
  <endTriggerTime><!-- req, xs:integer, milliseconds --></endTriggerTime>
  <normalizedScreenSize>
  <normalizedScreenWidth><!-- req, xs:integer --></normalizedScreenWidth>
  <normalizedScreenHeight><!-- req, xs:integer --></normalizedScreenHeight>
</normalizedScreenSize>
  <minObjectSize>
  <!-- opt, xs:integer, min number of pixels per object -->
</minObjectSize>
  <maxObjectSize>
  <!-- opt, xs:integer, max number of pixels per object -->
</maxObjectSize>
  <HeatMapRegionList version="2.0">
    <HeatMapRegion version="2.0">
      <id><!-- req, xs:string --></id>// Means rule No.; range: 1-8
      <ruleName><!-- req, xs:string --></ruleName>// Rule name, 16 characters and 5 Chinese
characters at most
      <enabled><!-- req, xs:Boolean"true,false" --></enabled>// Whether enabled
      <RegionCoordinatesList>//detection region coordinate list
        <RegionCoordinates><!-- req, -->//detection region coordinates
          <positionX><!-- req, xs:integer;coordinate --></positionX>// X coordinates
          <positionY><!-- req, xs:integer;coordinate --></positionY>// Y coordinates
        </RegionCoordinates>
      </RegionCoordinatesList>
      <minDistance ><!-- req, xs:integer --></ minDistance > // Min. distance [0-100]
      <minTime><!-- req, xs:integer --></ minTime>// [0-100] Min. time [0-100]
      <miniSize><!-- req,xs: integer "0-100"></miniSize>// 5 as default, multiplexing sensitivity
      <maxSize><!-- req,xs: integer "0-100"></ maxSize>// 30 as default
    </HeatMapRegion>
  </HeatMapRegionList>
</HeatMap>

```

### Test cases

**GET /ISAPI/Smart/HeatMap/<ID>/channels/<ID>/scene/<ID>**

**Request XML:** none

**Response XML:** <HeatMap>

**PUT/ISAPI/Smart/HeatMap/<ID>/channels/<ID>/scene/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** as below



```

<?xml version="1.0" encoding="UTF-8"?>
<HeatMap>
<HeatMapRegionList version="2.0" >
<HeatMapRegion version="2.0" >
<id>1</id>
<ruleName>rule1</ruleName>
<enabled>true</enabled>
<RegionCoordinatesList>
<RegionCoordinates>
<positionX>2656</positionX>
<positionY>1302</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>951</positionX>
<positionY>5468</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>752</positionX>
<positionY>8906</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>3806</positionX>
<positionY>9548</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>7357</positionX>
<positionY>9548</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>9375</positionX>
<positionY>8940</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>9375</positionX>
<positionY>5381</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>8480</positionX>
<positionY>2013</positionY>
</RegionCoordinates>
</RegionCoordinatesList>
<minDistance>0</minDistance>
<minTime>0</minTime>
<miniSize>5</miniSize>
<maxSize>30</maxSize>
</HeatMapRegion>
</HeatMapRegionList>
</HeatMap>

```

### 2.7.15/CGI/Smart/OnDutyDetection/<ID>/channels/<ID>/Scene/<ID>

<b>/CGI/Smart/OnDutyDetection/&lt;ID&gt;/channels/&lt;ID&gt;/Scene/&lt;ID&gt;    General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire duty detection parameters
<b>Query</b>	None

<b>Inbound Data</b>	None
<b>Success Return</b>	<OnDutyDetection>
<b>PUT</b>	
<b>Description</b>	Set duty detection parameters
<b>Query</b>	None
<b>Inbound Data</b>	<OnDutyDetection>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This protocol is prepared for query and setting of duty detection parameters, helping client or IE query and set the duty detection parameters via CGI protocol, including rule No./rule enabling/region No./rule name/sensitivity/coordinates of detection area/alarm count.</p> <p><b>Explanations on key parameters:</b>  &lt;absencesAlarmTime&gt; Absence alarm time; unit: Second; range: 60-3600  &lt;onDutyNum &gt; On-duty personnel number; range: 1-2</p>	

### OnDutyDetectionXML Block

```

<OnDutyDetectionversion="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <id><!-- req, xs:string --></id>
  <enabled><!-- req, xs:boolean --></enabled>
  <intelliBackSearch><!-- opt, xs:boolean --></intelliBackSearch>
  <startTriggerTime><!-- req, xs:integer, milliseconds --></startTriggerTime>
  <endTriggerTime><!-- req, xs:integer, milliseconds --></endTriggerTime>
  <normalizedScreenSize>
  <normalizedScreenWidth><!-- req, xs:integer --></normalizedScreenWidth>
  <normalizedScreenHeight><!-- req, xs:integer --></normalizedScreenHeight>
</normalizedScreenSize>
  <minObjectSize>
  <!-- opt, xs:integer, min number of pixels per object -->
</minObjectSize>
  <maxObjectSize>
  <!-- opt, xs:integer, max number of pixels per object -->
</maxObjectSize>
  <RegionCoordinatesList>//detection region coordinate list
  <RegionCoordinates><!-- req, -->//detection region coordinates
  <leftpositionX><!-- req, xs:integer;coordinate --></leftpositionX>// X coordinate of upper
left corner
  <leftpositionY><!-- req, xs:integer;coordinate --></leftpositionY>//upper left corner y-point
coordinate
  <rightpositionX><!-- req, xs:integer;coordinate --></rightpositionX>// X coordinates of
lower right corner
  <rightpositionY><!-- req, xs:integer;coordinate --></rightpositionY>// Y coordinates of
lower right corner
  </RegionCoordinates>
</RegionCoordinatesList>
  <alarmColor><!-- req, xs:string"red" --></alarmColor>// Alarm color
  <noAlarmColor><!-- req, xs:string "green"--></noAlarmColor>// Color of no alarm
  <absencesAlarmTime ><!-- req, xs:string "60-3600"-->
</absencesAlarmTime >// Absence alarm time; unit: Second; default value: 120S
  <onDutyNum ><!-- req, xs:integer"1,2" --></onDutyNum > // On-duty personnel number
  <minDistance><!--req,xs: integer "1-50"></minDistance>// 3 as default
  <maxDistance><!--req,xs: integer "5-100"></maxDistance>// 15 as default
  <sensitivity ><!-- req, xs: integer"0-5" --></sensitivity >// Default value of sensitivity: 2
  < displayStat ><!-- req, xs:Boolean"true,false" --></displayStat>// Alarm count
  <alarmRule ><!-- req, xs:boolean"true,false" --></alarmRule >// Alarm rule
  <dispalyTarget ><!-- req, xs:boolean"true,false" --> /dispalyTarget >// Display target
</OnDutyDetection>

```

**Test cases**

**GET /CGI/Smart/OnDutyDetection/<ID>/channels/<ID>/Scene/<ID>**

**Request XML: none**

**Response XML: <OnDutyDetection>**

**PUT/CGI /Smart/OnDutyDetection/<ID>/channels/<ID>/Scene/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<?xml version="1.0" encoding="UTF-8"?>
<OnDutyDetection>
<id>1</id>
<enabled>>true</enabled>
<RegionCoordinatesList>
<RegionCoordinates>
<leftpositionX>1420</leftpositionX>
<leftpositionY>1076</leftpositionY>
<rightpositionX>7230</rightpositionX>
<rightpositionY>8593</rightpositionY>
</RegionCoordinates>
</RegionCoordinatesList>
<alarmColor >red</alarmColor>
<noAlarmColor>green</noAlarmColor>
<onDutyNum>2</onDutyNum>
<absencesAlarmTime>240</absencesAlarmTime>
<sensitivity>3</sensitivity>
<maxDistance>35</maxDistance>
<minDistance>20</minDistance>
<displayStat>>true</displayStat>
<alarmRule>true</alarmRule>
<dispalyTarget>>false</dispalyTarget>
</OnDutyDetection>
```

**2.7.16/CGI/Smart/IllegalPark/<ID>/channels/<ID>/Scene/<ID>**

<b>/CGI/Smart/IllegalPark/&lt;ID&gt;/channels/&lt;ID&gt;/Scene/&lt;ID&gt;</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Acquire illegal parking parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<IllegalPark>	
<b>PUT</b>		
<b>Description</b>	Set illegal parking parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<IllegalPark>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is prepared for query and setting of illegal parking, helping client or IE query and set the illegal parking parameters via CGI protocol, including rule No./rule enabling/region No./rule name/sensitivity/coordinates of detection area/alarm count.		
<b>Explanations on key parameters:</b>		
None		

**IllegalPark XML Block**

```

<IllegalPark version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<id><!-- req, xs:string --></id>
<enabled><!-- req, xs:boolean --></enabled>
<intelliBackSearch><!-- opt, xs:boolean --></intelliBackSearch>
<startTriggerTime><!-- req, xs:integer, milliseconds --></startTriggerTime>
<endTriggerTime><!-- req, xs:integer, milliseconds --></endTriggerTime>
<normalizedScreenSize>
<normalizedScreenWidth><!-- req, xs:integer --></normalizedScreenWidth>
<normalizedScreenHeight><!-- req, xs:integer --></normalizedScreenHeight>
</normalizedScreenSize>
<minObjectSize>
<!-- opt, xs:integer, min number of pixels per object -->
</minObjectSize>
<maxObjectSize>
<!-- opt, xs:integer, max number of pixels per object -->
</maxObjectSize>
<IllegalParkRegionList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<IllegalParkRegion version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<areaId><!-- req, xs: integer --></areaId> // Region No. supported is 1
< iIllegalParkTime><!-- req, xs: integer"1-7200" --></ iIllegalParkTime> // Unit: Second
<timeRange><!-- opt, xs:string --></timeRange>// Default 0,0,0 support 4 time ranges,
bit24-bit31: Start hour,bit16-bit23: Start minute bit8-bit15: End hour bit0-bit7: End minute
<outerRegionCoordinatesList>// List of coordinates of outer detection region
<RegionCoordinates><!-- req, -->//detection region coordinates
<positionX><!-- req, xs:integer;coordinate --></positionX>// X coordinates
<positionY><!-- req, xs:integer;coordinate --></positionY>// Y coordinates
</RegionCoordinates>
</ outerRegionCoordinatesList>
<InnerRegionList>// List of coordinates of inner detection region
<RegionCoordinates><!-- req, -->//detection region coordinates
<leftpositionX><!-- req, xs:integer;coordinate --></leftpositionX>// X coordinate of upper left
corner
<leftpositionY><!-- req, xs:integer;coordinate --></leftpositionY>//upper left corner y-point
coordinate
<rightpositionX><!-- req, xs:integer;coordinate --></rightpositionX>// X coordinates of lower
right corner
<rightpositionY><!-- req, xs:integer;coordinate --></rightpositionY>// Y coordinates of lower
right corner
</RegionCoordinates>
</InnerRegionList >
<checkParkTime><!-- req, xs:integer --></ checkParkTime> // Min. judgment time of
parking: 1
<sensitivity><!-- req, xs: integer --></ sensitivity> // Sensitivity level; 0: Low; 1:
Intermediate; 2: High
<areaName><!-- req, xs:string--></areaName> // Region name: 31 characters
<areaEnable><!-- req, xs:Boolean"true,false"--></areaEnable> // Region enabling
<capEnable><!-- req, xs:Boolean"true,false" --></ capEnable>// Snapshot enabling
<parkWarningEnable><!--req,xs:Boolean"true,false"-->
</ parkWarningEnable>// Park warning enabling
<parkWarningTime><!-- req, xs:integer"0-300" -->
</parkWarningTime>// Park warning time; unit: Second
</IllegalParkRegion>
</IllegalParkRegionList>
</IllegalPark>

```

#### Test cases

**GET /CGI/Smart/IllegalPark/<ID>/channels/<ID>/Scene/<ID>**

**Request XML: none**

**Response XML: <IllegalPark>**

**PUT/CGI /Smart/IllegalPark/<ID>/channels/<ID>/Scene/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<IllegalPark>
<enabled>>false</enabled>
<IllegalParkRegionList>
<IllegalParkRegion>
<areaId>0</areaId>
<iIllegalParkTime>30</iIllegalParkTime>
<timeRange>0,0,0,0</timeRange>
<checkParkTime>2</checkParkTime>
<sensitivity>2</sensitivity>
<areaName>1</areaName>
<areaEnable>1</areaEnable>
<capEnable>>false</capEnable>
<outerRegionCoordinatesList>
<RegionCoordinates>
<positionX>5497</positionX>
<positionY>9131</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>752</positionX>
<positionY>2256</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>7755</positionX>
<positionY>798</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>9034</positionX>
<positionY>8750</positionY>
</RegionCoordinates>
</outerRegionCoordinatesList>
<InnerRegionList>
<RegionCoordinates>
<leftpositionX>3792</leftpositionX>
<leftpositionY>2500</leftpositionY>
<rightpositionX>5653</rightpositionX>
<rightpositionY>5225</rightpositionY>
</RegionCoordinates>
<RegionCoordinates>
<leftpositionX>7500</leftpositionX>
<leftpositionY>5850</leftpositionY>
<rightpositionX>7784</rightpositionX>
<rightpositionY>7881</rightpositionY>
</RegionCoordinates>
<RegionCoordinates>
<leftpositionX>4247</leftpositionX>
<leftpositionY>6250</leftpositionY>
<rightpositionX>5468</rightpositionX>
<rightpositionY>6944</rightpositionY>
</RegionCoordinates>
<RegionCoordinates>
<leftpositionX>6619</leftpositionX>
<leftpositionY>2256</leftpositionY>
<rightpositionX>7585</rightpositionX>
<rightpositionY>4652</rightpositionY>
</RegionCoordinates>
</InnerRegionList>
</IllegalParkRegion>
</IllegalParkRegionList>
</IllegalPark>
```

```

</InnerRegionList>
</IllegalParkRegion>
</IllegalParkRegionList>
</IllegalPark>

```

### 2.7.17/CGI/Smart/CPCQuery/<ID>/channels/<ID>

<b>General Resource v2.0</b>	
<b>POST</b>	
<b>Description</b>	Query statistical result of passenger flow
<b>Query</b>	None
<b>Inbound Data</b>	<CPCQuery>
<b>Success Return</b>	<CPCQueryResult>
<b>Explanations on protocol:</b> This protocol is prepared for query of statistical result of passenger flow	
<b>Explanations on key parameters:</b>	

#### CPCQuery XML Block

```

<CPCQuery version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <type><!-- req, xs: integer --></type> // 0: Default type; 1: By hour; 2: By day; 3: By month; 4:
  By year
  <timeSpan>
  <startTime>2013-05-18T10:31:26Z</startTime>
  <endTime> 2013-05-18T10:31:26Z</endTime>
  </timeSpan>
</CPCQuery >

```

#### CPCQueryResult XML Block

```

<CPCQueryResult version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <total><!-- req, xs: integer --></total> // Total count
  <type><!-- req, xs: integer --></type> // 0: Default type; 1: By hour; 2: By day; 3: By month; 4:
  By year
  <showNum><!-- req, xs: integer --></showNum> // Max. item should not exceed 80
  <queryResultList> // List of query results
  <queryResult>
  <channelNo><!-- req, xs: integer --></channelNo> // Channel No.
  <pushPerson><!-- req, xs: integer --></ pushPerson> // Amount of entering person
  <popPerson><!-- req, xs: integer --></ popPerson> // Amount of leaving person
  <time>2017-07-18T10:31.26</time> // Occurrence time
  </queryResult>
  </queryResultList >
</CPCQueryResult >

```

#### Test cases

##### POST/ISAPI/Smart/QueryReport /<ID>/channels/<ID>

##### Request XML: as below

```

<CPCQuery version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <type>3</type>
  <timeSpan>
  <startTime>2017-07-01T00:00:00Z</startTime>
  <endTime>2017-07-31T23:59:59Z</endTime>
  </timeSpan>
</CPCQuery>

```

##### Response XML: <CPCQueryResult >

```
<CPCQueryResult version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<total>12</total> // Total number
<type>3</type> // 0: Default type; 1: By hour; 2: By day; 3: By month; 4: By year
<showNum>12</showNum> // Max. item should not exceed 80
<queryResultList> // List of query results
<queryResult>
<channelNo>4</channelNo> // Channel No.
<pushPerson>304</ pushPerson> // Amount of entering person
<popPerson>299</ popPerson> // Amount of leaving person
<time>2017-07-18T10:31.26</time> // Occurrence time
</queryResult>
<queryResult>
<channelNo>4</channelNo> // Channel No.
<pushPerson>306</ pushPerson> // Amount of entering person
<popPerson>301</ popPerson> // Amount of leaving person
<time>2017-07-18T10:32.26</time> // Occurrence time
</queryResult>
<queryResult>
<channelNo>4</channelNo> // Channel No.
<pushPerson>245</ pushPerson> // Amount of entering person
<popPerson>239</ popPerson> // Amount of leaving person
<time>2017-07-18T10:33.26</time> // Occurrence time
</queryResult>
<queryResult>
<channelNo>4</channelNo> // Channel No.
<pushPerson>264</ pushPerson> // Amount of entering person
<popPerson>259</ popPerson> // Amount of leaving person
<time>2017-07-18T10:34.26</time> // Occurrence time
</queryResult>
<queryResult>
<channelNo>4</channelNo> // Channel No.
<pushPerson>238</ pushPerson> // Amount of entering person
<popPerson>233</ popPerson> // Amount of leaving person
<time>2017-07-18T10:35.26</time> // Occurrence time
</queryResult>
<queryResult>
<channelNo>4</channelNo> // Channel No.
<pushPerson>269</ pushPerson> // Amount of entering person
<popPerson>263</ popPerson> // Amount of leaving person
<time>2017-07-18T10:36.26</time> // Occurrence time
</queryResult>
<queryResult>
<channelNo>4</channelNo> // Channel No.
<pushPerson>285</ pushPerson> // Amount of entering person
<popPerson>280</ popPerson> // Amount of leaving person
<time>2017-07-18T10:37.26</time> // Occurrence time
</queryResult>
<queryResult>
<channelNo>4</channelNo> // Channel No.
<pushPerson>230</ pushPerson> // Amount of entering person
<popPerson>221</ popPerson> // Amount of leaving person
<time>2017-07-18T10:38.26</time> // Occurrence time
</queryResult>
<queryResult>
<channelNo>4</channelNo> // Channel No.
<pushPerson>103</ pushPerson> // Amount of entering person
<popPerson>100</ popPerson> // Amount of leaving person
<time>2017-07-18T10:39.26</time> // Occurrence time
```

```

</queryResult>
<queryResult>
<channelNo>4</channelNo> // Channel No.
<pushPerson>209</ pushPerson> // Amount of entering person
<popPerson>205</ popPerson> // Amount of leaving person
<time>2017-07-18T11:31.26</time> // Occurrence time
</queryResult>
<queryResult>
<channelNo>4</channelNo> // Channel No.
<pushPerson>109</ pushPerson> // Amount of entering person
<popPerson>108</ popPerson> // Amount of leaving person
<time>2017-07-18T12:31.26</time> // Occurrence time
</queryResult>
<queryResult>
<channelNo>4</channelNo> // Channel No.
<pushPerson>23</ pushPerson> // Amount of entering person
<popPerson>21</ popPerson> // Amount of leaving person
<time>2017-07-18T13:31.26</time> // Occurrence time
</queryResult>
</queryResultList>
</CPCQueryResult>

```

### 2.7.18/CGI/Smart/QueryHeatMap/channels/<ID>

<b>/CGI/Smart/ QueryHeatMap/channels/&lt;ID&gt;General Resource v2.0</b>	
<b>POST</b>	
<b>Description</b>	Query spatial heat map
<b>Query</b>	None
<b>Inbound Data</b>	<QueryHeatMap >
<b>Success Return</b>	<QueryHeatMapResult>
<p><b>Explanations on protocol:</b>  This protocol is prepared for query of spatial heat map  Only E16 of NVR supports heat map; it needs at least 1h to generate the heat map of NVR, or data will be null if it is less than this period.</p> <p><b>Explanations on key parameters:</b></p>	
<b>QueryHeatMap XML Block</b>	
<pre> &lt;QueryHeatMap version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema"&gt; &lt;timeSpan&gt; &lt;startTime&gt;2017-07-18T00:00:00Z&lt;/startTime&gt; &lt;endTime&gt; 2017-07-18T23:59:59Z&lt;/endTime&gt; &lt;/timeSpan&gt; &lt;/QueryHeatMap&gt; </pre>	
<b>QueryHeatMapResultResult</b>	
<pre> &lt;QueryHeatMapResult version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema"&gt; &lt;heatMapUrl &gt;&lt;!-- req, xs:string--&gt;&lt;/heatMapUrl &gt;//url address &lt;/QueryHeatMapResult &gt; </pre>	
<b>Test cases</b>	
<b>POST/ISAPI/Smart/QueryHeatMap /&lt;ID&gt;/channels/&lt;ID&gt;</b>	
<b>Response XML: &lt;QueryHeatMapResult&gt;</b>	
<pre> &lt;QueryHeatMapResult version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema"&gt; &lt;heatMapUrl &gt;http://10.30.31.233:80/heatmap.jpg&lt;/heatMapUrl &gt; &lt;/QueryHeatMapResult &gt; </pre>	
<b>Request XML: as below</b>	



```

<QueryHeatMap version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<timeSpan>
<startTime>2017-07-18T00:00:00Z</startTime>
<endTime> 2017-07-18T23:59:59Z</endTime>
</timeSpan>
</QueryHeatMap>

```

### 2.7.19/CGI/Smart/QueryReport/channels/<ID>

<b>General Resource v2.0</b>	
<b>POST</b>	
<b>Description</b>	Query report
<b>Query</b>	None
<b>Inbound Data</b>	<QueryReport>
<b>Success Return</b>	<QueryReportResult>
<p><b>Explanations on protocol:</b> This protocol is prepared for query of report</p> <p><b>Explanations on key parameters:</b> iReportType// Query type: 0: Time heat map; 1: Age bracket; 2: Gender; 3: Person amount; 6: Nationality; 7: Glasses; 8: Mask; 12: Pedestrian - Gender; 13: Pedestrian - Amount; 14: Pedestrian - Motion direction; 15: Vehicle - Type; 16: Vehicle - Motion direction</p> <p>logContent// Max. length of query content is 128 bits</p> <p>When iReportType=0, format is "%d", it means the target duration; unit: Second</p> <p>When iReportType=1, format is "%d:%d:%d:%d", it means the juvenile, youth, middle-aged person, the aged; unit: Person</p> <p>When iReportType=2, format is "%d:%d:%d", it means the male, female, unidentified person; unit: Person</p> <p>When iReportType=3, format is "%d", it means the person amount; unit: Person</p> <p>When iReportType=4, format is "%d", it means temperature</p> <p>When iReportType=5, format is "%d", it means humidity</p> <p>When iReportType=6, format is "%d:%d", it means [Han nationality, minority]; unit: Person</p> <p>When iReportType=7, format is "%d:%d", it means [Wear glasses, not wear glasses]; unit: Person</p> <p>When iReportType=8, format is "%d:%d", it means [Wear mask, not wear mask]; unit: Person</p> <p>When iReportType=12, format is "%d:%d:%d", it means the male, female, unidentified person; unit: Person</p> <p>When iReportType=13, format is "%d", it means person amount; unit: Person</p> <p>When iReportType=14, format is "%d:%d:%d:%d:%d", it means unknown, up, down, left, right; unit: Person</p> <p>When iReportType=15, format is "%d:%d:%d", it means [unknown, motor vehicle and non-motor vehicle]; unit: Vehicle</p> <p>When iReportType=16, format is "%d:%d:%d:%d:%d", it means unknown, up, down, left, right; unit: Vehicle</p>	

#### QueryReport XML Block

```

<QueryReport version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<reportType ><!-- req, xs: integer -->
</reportType >// Type; 0: Time heat map; 1: Age bracket; 2: Gender; 3: Person amount; 6:
Nationality; 7: Glasses; 8: Mask
<reportPre ><!-- req, xs: integer -->
</reportPre >// Report type; 0: Daily report; 1: Weekly report; 2: Monthly report; 3: Yearly
report
<timeSpan>
<startTime>2017-07-18T00:00:00Z</startTime>
<endTime> 2017-07-18T23:59:59Z</endTime>
</timeSpan>

```

```
</QueryReport >
```

### QueryReportResultXML Block

```
<QueryReportResult version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">  
  <reportType><!-- req, xs: integer -->  
  </reportType>//0: Time heat map; 1: Age bracket; 2: Gender; 3: Person amount; 6: Nationality;  
  7: Glasses; 8: Mask  
  <showNum><!-- req, xs: integer --></showNum> // Max. item should not exceed 80  
  <queryResultList> // List of query results  
  <queryResult>  
    <logContent><!-- req, xs:string--></logContent> // Contents  
    <channelNo><!-- req, xs: integer --></channelNo> // Channel No.  
    <time>2013-05-18T10:31.26</time>  
  </queryResult>  
</queryResultList >  
</QueryReportResult >
```

### Test cases

**POST/ISAPI/Smart/QueryReport/channels/<ID>**

**Request XML: as below**

```
<QueryReport version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">  
  <reportType>0</reportType>  
  <reportPre>1</reportPre>  
  <timeSpan>  
    <startTime>2017-07-18T00:00:00Z</startTime>  
    <endTime> 2017-07-18T23:59:59Z</endTime>  
  </timeSpan>  
</QueryReport>
```

### Response XML: <QueryReportResult >

```
<QueryReportResult version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">  
  <reportType>0</reportType>  
  <showNum>7</showNum>  
  <queryResultList>  
    <queryResult>  
      <logContent>0  
        </logContent>  
      <channelNo>240</channelNo>  
      <time>2017-07-18T10:31.26</time>  
    </queryResult>  
    <queryResult>  
      <logContent>0</ logContent>  
      <channelNo>240</channelNo>  
      <time>2017-07-18T11:35.26</time>  
    </queryResult>  
    <queryResult>  
      <logContent>0</ logContent>  
      <channelNo>240</channelNo>  
      <time>2017-07-18T11:39.26</time>  
    </queryResult>  
    <queryResult>  
      <logContent>0</ logContent>  
      <channelNo>240</channelNo>  
      <time>2017-07-18T12:31.26</time>  
    </queryResult>  
  </queryResult>
```

```

<logContent>0</ logContent>
<channelNo>240</channelNo>
<time>2017-07-18T13:31.26</time>
  </queryResult>
  <queryResult>
<logContent>0</ logContent>
<channelNo>240</channelNo>
<time>2017-07-18T14:31.26</time>
  </queryResult>
  <queryResult>
<logContent>0</ logContent>
<channelNo>240</channelNo>
<time>2017-07-18T15:31.26</time>
  </queryResult>
< /queryResultList >
</QueryReportResult >

```

### 2.7.20/CGI/Smart/BlackWhitePlate

/CGI/Smart/BlackWhitePlate      General Resource v2.0	
<b>POST</b>	
<b>Description</b>	Query list of black and white plate
<b>Query</b>	None
<b>Inbound Data</b>	<BWSearchDescription>
<b>Success Return</b>	<BLackWhitePlate>
<p><b>Explanations on protocol:</b> This protocol is prepared for plate recognition and query of black and white plate.</p> <p><b>Explanations on key parameters:</b>            &lt;BWsearchPostion&gt; means the start number of searching plate (assignment is 1 if searching from the 1st plate; 0 means the total amount of pictures searched)            &lt;BWmaxResults&gt; means query amount (not above 50), this field is not omissible            &lt; BWCurCnt&gt; means current query amount, or it means total amount of plate if request is query of total amount</p>	

#### BWSearchDescription XML Block

```

<BWSearchDescription version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
< BWsearchPostion ><!--req,sx:integer--></BWsearchPostion >
< BWmaxResults ><!--opt,sx:integer--></BWmaxResults >
</ BWSearchDescription >

```

#### BLackWhitePlateXML Block

```

<BLackWhitePlate ersion="2.0" >
< BWCurCnt><!--req, xs:integer --></BWCurCnt> // Current query amount/total query amount
<PlateList>!--opt,
  <Plate> // Plate information
  <PlateNum><!-- req, xs:string --></PlateNum> // Plate No.
  < PlateType><!--opt, xs:integer --></ PlateType > // Plate type; black plate: 1; white plate:
2
  <Plate>
</ PlateList>
</BLackWhitePlate></CMSearchResult>

```

#### Test cases

#### POST /CGI/Smart/BlackWhitePlate

**Request XML:** as below

```
<BWSearchDescription version="1.0"xmlns="http://www.isapi.org/ver20/XMLSchema">
< BWsearchPostion >1</ BWsearchPostion >
<BWmaxResults>50</BWmaxResults>
</BWSearchDescription >
```

**Response XML: as below**

```
<BLackWhitePlate ersion="2.0">
<BWCurCnt>50</BWCurCnt>
<PlateList>
<Plate>
    <PlateNum> Jin 0A1111</PlateNum>
    <PlateType>1</PlateType>
    <Plate>
</PlateList>
</BLackWhitePlate>
```

**2.7.21/CGI/Smart/AlertTemplate/channels/<ID>/capabilities**

/CGI/Smart/AlertTemplate/channels/<ID>/capabilities		General Resource	v2.0
<b>GET</b>			
<b>Description</b>	Acquire alert plan capability set of single channel		
<b>Query</b>	None		
<b>Inbound Data</b>	None		
<b>Success Return</b>	< AlertCap>		
<b>Explanations on protocol:</b>			
This protocol is prepared for acquiring alert plan capability set of single channel, helping client or IE acquire the plans supported by device, linkage sound amount, flashing times of linked white light and plan name via CGI protocol.			
<b>Explanations on key parameters:</b>			
<ID>: Channel No.			
<templateName>: 0: Linkage white light; 1: Linkage white light, single warning sound; 2: Linkage laser, circular warning sound; 3: Linkage laser, white light, circular warning sound; 4: Linkage white light, circular warning sound; 5: Linkage single warning sound; 6: Linkage circular warning sound; 7: Linkage multilevel audible/visual warning			
<SupportTemplateNum>: Amount of alert template supported: 0: Not supported; 4: Support 4 templates; 5: Support 5 templates (customization supported)			

**AlerCap XML Block**

```
<AlertCapversion="2.0" xmlns="http://urn:selfextension:ISAPIext-ver10-xsd">
<templateNameList>
<templateName>
<id><!-- req, xs: integer;id --></id>// Template No. 1,2,.....
<name><!-- req xs: integer;--></name>// Template name 1 - 7
</templateName>
<templateNameList>
<supportTemplateNum><!-- req, xs: integer;--></SupportTemplateNum>// Amount of alert
templates supported: 0: Not supported; 4: Support 4 templates; 5: Support 5 templates
<supportSoundSampleNum><!-- dep, xs: integer;--></ supportSoundSampleNum> // Amount of
linkage alert sounds supported
<supportSoundCustomNum><!-- dep, xs: integer;--></supportSoundCustomNum> // Amount of
linkage customized alert sounds supported
<earlyWarnCap><!-- dep>
<iMaxLevel><!-- req, xs:integer;--></iMaxLevel>// Max. alert level supported
<earlyWarnLevelCap List>
<earlyWarnLevelCap>
<level><!-- req, xs:integer; --></ level >// Level 1,2,.....
<supportFlashNum><!-- dep, xs:integer;--></ supportFlashNum > // Flash number supported
<isSupportFlash><!-- dep, xs:boolean;--></isSupportFlash>// Whether support flash
```

```

<earlyWarnLevelCap>
<earlyWarnLevelCap List>
</earlyWarnCap >
</AlertCap>

```

**Test cases**

**GET /CGI/Smart/AlertTemplate/channels/4/capabilities**

**Request XML: none**

**Response XML: <AlertCap>**

```

< AlertCap  version="2.0" xmlns="http://urn:selfextension:ISAPIext-ver10-xsd">
<templateNameList>
<templateName>
<id>1</id>
<name>0</name>
</templateName>
<templateName>
<id>2</id>
<name>1</name>
</templateName>
<templateNameList>
<supportTemplateNum>5</SupportTemplateNum>
<supportSoundSampleNum>7</ supportSoundSampleNum>
<supportSoundCustomNum>2</supportSoundCustomNum>
<earlyWarnCap><!-- dep >
<iMaxLevel>3</iMaxLevel>
<earlyWarnLevelCap List>
<earlyWarnLevelCap>
<level>1</ level >
<support FlashNum>10</ support FlashNum >
<isSupport Flash>true</isSupport Flash>
<earlyWarnLevelCap>
<earlyWarnLevelCap>
<level>2</ level >
<support FlashNum>10</ support FlashNum >
<isSupport Flash>false</isSupport Flash>
<earlyWarnLevelCap>
<earlyWarnLevelCap>
<level>3</ level >
<support FlashNum>10</ support FlashNum >
<isSupport Flash>true</isSupport Flash>
<earlyWarnLevelCap>
<earlyWarnLevelCap List>
</earlyWarnCap >
</AlertCap>

```

**2.7.22/CGI/Smart/AlertTemplate/<ID>/channels/<ID>/Scene/<ID>**

/CGI/Smart/AlertTemplate/<ID>/channels/<ID>/Scene/<ID> v2.0		General Resource
<b>GET</b>		
<b>Description</b>	Acquire alert template parameter of single channel	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<AlertTemplate >	
<b>PUT</b>		
<b>Description</b>	Set alert template parameter of single channel	
<b>Query</b>	None	

<b>Inbound Data</b>	<AlertTemplate >
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This protocol is prepared for query and setting of alert template parameters of single channel, helping client or IE query and set the alert template parameters via CGI protocol, including enabling, template No. and customization.</p> <p><b>Explanations on key parameters:</b>  &lt;ID&gt;: Rule No.; alert template No. is 10  /scene/&lt;ID&gt;: Screen No.: Alert template No. is 31  &lt;enabled&gt;: Enabled  &lt;earlyWarn&gt;: Early warning parameters  &lt;prohibit&gt;: Prohibition parameters</p>	

**AlertTemplate XML Block**

```

<AlertTemplate version="2.0" xmlns="http://urn:selfextension:ISAPIext-ver10-xsd">
<enabled>< xs:xs:boolean --></enabled> // Enabled: True; Disabled: False
<RegionCoordinatesList><!-- opt -->
<RegionCoordinates><!-- opt, -->
<positionX><!-- req, xs:integer;coordinate --></positionX>
<positionY><!-- req, xs:integer;coordinate --></positionY>
</RegionCoordinates>
</RegionCoordinatesList>
<templateID><req, xs:integer ></templateID>// Template No.: 1-5
<type><dep, xs:integer ></type>// When template No. is 5; 0: Prohibited; 1: Early warning (this field is -1 when template No. is 1-4)
<templateSet>< dep, xs:integer ></templateSet>// Whether belong to customized parameter; 0: No customized value as default; 1: Customized parameters (this field is -1 when template No. is 1-4)
<earlyWarn><!-- dep>
<earlyWarnLevelList>
<earlyWarnLevel>
<level opt = "LinkSound, LinkWhite, LinkLaser, LinkFollow"><!-- req, xs:integer; --></ level >// Level 1,2,.....
<detainedTime><!-- req, xs: integer;--></detainedTime>// Detention time; unit: Second: 5 10 30 45 60
<flashNum><!-- req, xs: integer;--></ supportFlashNum > // Flash times; 0: Disabled; 1-10 means flash times; 0xff means strobing
<linkSoundNum><!-- req, xs:integer;--></ linkSound Num >// Linkage sound No.: Number of linked alert sound
<enabledLinkFollow><!-- req, xs:boolean;--></enabledLinkFollow>// Enabling of linkage traction: Enable: True; disable: False
<enabledLinkLaser><!-- req, xs:boolean;--></enabledLinkLaser >// Linkage laser enabling: Enable: True; disable: False
<earlyWarnLevel>
<earlyWarnLevelList>
</earlyWarn>
<prohibit opt = "LinkSound, LinkFollow" >
<detainedTime><!-- req, xs: integer;--></detainedTime>
<linkSoundNum><!-- req, xs:integer;--></ linkSound Num >// Linkage sound No.: Number of linked alert sound
<enabledLinkFollow><!-- req, xs:boolean;--></enabledLinkFollow>// Enabling of linkage traction: Enable: True; disable: False
</prohibit>
</AlertTemplate>

```

**Test cases**

**GET /CGI/Smart/AlertTemplate/10/channels/4/scene/31**

**Request XML: none**

**Response XML: <AlertTemplate >**

**PUT /CGI/Smart/AlertTemplate/10/channels/4/scene/31**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<AlertTemplateversion="2.0" xmlns="http://urn:selfextension:ISAPIext-ver10-xsd">
<enabled>true </enabled>
<RegionCoordinatesList>
<RegionCoordinates>
<positionX>5000</positionX>
<positionY>5000</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>6000</positionX>
<positionY>6000</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>7000</positionX>
<positionY>8000</positionY>
</RegionCoordinates>
</RegionCoordinatesList>
<templateID>5</templateID>
<type>1</type>
<templateSet>1</templateSet>
<earlyWarn>
<earlyWarnLevelList>
<earlyWarnLevel>
<level opt="LinkSound, LinkWhite, LinkLaser,">1</level><detainedTime>5</detainedTime>
<flashNum>10</ supportFlashNum >
<linkSoundNum>8 </ linkSound Num >
<enabledLinkFollow>false</enabledLinkFollow>
<enabledLinkLaser>true</enabledLinkLaser >
<earlyWarnLevel>
<earlyWarnLevel>
<level opt="LinkSound, LinkWhite, LinkLaser,">2</level>
<detainedTime>5</detainedTime>
<flashNum>10</ supportFlashNum >
<linkSoundNum>8 </ linkSound Num >
<enabledLinkFollow>false</enabledLinkFollow>
<enabledLinkLaser>true</enabledLinkLaser >
<earlyWarnLevel>
<earlyWarnLevelList>
<earlyWarnLevel>
<level opt="LinkSound, LinkWhite, LinkLaser, LinkFollow">3</level>
<detainedTime>5</detainedTime>
<flashNum>10</ supportFlashNum >
<linkSoundNum>8</ linkSound Num >
<enabledLinkFollow>false</enabledLinkFollow>
<enabledLinkLaser>true</enabledLinkLaser >
<earlyWarnLevel>
<earlyWarnLevelList>
</earlyWarn>
<prohibit opt = "LinkSound, LinkFollow" >
<detainedTime>5</detainedTime>
<linkSoundNum>9</ linkSoundNum>
<enabledLinkFollow>true</ enabledLinkFollow>
</prohibit>
</ AlertTemplate>
```

2.7.23/CGI/Smart/ReportData/channels/<ID>/export/<FileName>

<b>General Resource v2.0</b>	
<b>POST</b>	
<b>Description</b>	Export report
<b>Query</b>	None
<b>Inbound Data</b>	<QueryReport>
<b>Success Return</b>	<b>File content</b>
<p><b>Explanations on protocol:</b> This protocol is prepared for exporting report, sending 0x7ffffff as url of target alarm and channel alarm, and analyzing library and channel in xml</p> <p><b>Explanations on key parameters:</b> iReportType// Query type: 0: Statistics of passenger flow; 1: Time heat map; 2: Spatial heat map; 3: Face - Age bracket; 4: Face - Gender; 5: Face - Person amount; 6: Face - Nationality; 7: Feature statistics: Glasses; 8: Feature statistics: Mask; 9: Target alarm statistics; 10: Channel alarm statistics - All types; 11: Face detection; 12: Comparison alarm; 13: Stranger alarm; 14: Frequency alarm; 15: Detention alarm; 16: Pedestrian - Gender; 17: Pedestrian - Motion direction; 18: Pedestrian - Person amount; 19: Vehicle - Vehicle type; 20; Vehicle - Motion direction language// Means language; 2: English; 1: Chinese</p>	

**QueryReport XML Block**

```
<QueryReport version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <reportType ><!-- req, xs: integer -->
  </reportType >// Type
  <reportPre ><!-- req, xs: integer -->
  </reportPre >// Report type; 0: Daily report; 1: Weekly report; 2: Monthly report; 3: Yearly report
  < language><!-- req, xs: integer -->
  </language >// Means language; 2: English; 1: Chinese
  <timeSpan>
  <startTime>2017-07-18T00:00:00Z</startTime>
  <endTime> 2017-07-18T23:59:59Z</endTime>
  </timeSpan>
  <faceLibList>
  <faceLib><!-- dep, xs: integer --></faceLib>
  // Repeat faceLib
  </faceLibList>
  <channelList>
  <channel><!-- dep, xs: integer --></channel>
  // Repeat channel
  </channelList>
</QueryReport >
```

**Test cases**

**POST/ISAPI/Smart/ReportData/channels/<ID>/export/<FileName>**

**Request XML: as below**

```
<QueryReport version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <reportType >0</reportType>
  <reportPre >1</reportPre>
  <language>0</language>
  <timeSpan>
  <startTime>2017-07-18T00:00:00Z</startTime>
  <endTime> 2017-07-18T23:59:59Z</endTime>
  </timeSpan>
  <faceLibList>
  <faceLib>1234567890</faceLib>
  ...
```



```

</faceLibList>
<channelList>
<channel>1</channel>
...
</channelList>
</QueryReport>

```

#### 2.7.24/CGI/Smart/channels/<ID>/PicStream/enable

/CGI/Smart/channels/<ID>/PicStream/enable		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire enabling of picture stream receiving	
<b>Query</b>	None	
<b>Inbound Data</b>	<b>None</b>	
<b>Success Return</b>	<PicStream>	
<b>PUT</b>		
<b>Description</b>	Set enabling of picture stream receiving	
<b>Query</b>	None	
<b>Inbound Data</b>	<PicStream>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b> This protocol is prepared for acquiring or setting intelligent analysis function and determining whether enabling picture stream receiving function when intelligent analysis function is enabled		
<b>Explanations on key parameters:</b>		

#### PicStreamXML Block

```

<PicStream>
  <enabled><!--req, xs:boolean--></enabled>
</PicStream>

```

#### Test cases

**GET /CGI/Smart/channels/0/PicStream/enable**

**Request XML:** none

**Response XML:** <PicStream>

**PUT /CGI/Smart/channels/0/PicStream/enable**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```

<PicStream>
  <enabled>true</enabled>
</PicStream>

```

#### 2.7.25/CGI/Smart/QueryCheck/channels/<ID>

/CGI/Smart/QueryCheck/channels/<ID>		General Resource v2.0
<b>POST</b>		
<b>Description</b>	Query result	
<b>Query</b>	None	
<b>Inbound Data</b>	<QueryCheck>	
<b>Success Return</b>	<QueryCheckResult>	
<b>Explanations on protocol:</b> This protocol is prepared for checking if required files exist		
<b>Explanations on key parameters:</b> CheckType: Type of checked events: heatMap, faceHeatMap		

#### QueryCheck XML Block

```
<QueryCheck version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<checkType><!-- req, xs:string,"heatMap", " faceHeatMap"--></checkType>
</QueryCheck>
```

**QueryCheckResult**

```
<QueryCheckResult version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<checkType><!-- req, xs:string,"heatMap"--></checkType>
<checkResult><!-- opt, xs:Boolean,"true,false" --></checkResult>
</QueryCheckResult>
```

**Test cases**

**POST /CGI/Smart/QueryCheck/channels/<ID>**

**Request XML: as below**

```
<QueryCheck version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<checkType>faceHeatMap</checkType>
</QueryCheck>
```

**Response XML: <QueryCheckResult >**

```
<QueryCheckResult version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<checkType>faceHeatMap</checkType>
<checkResult>true</checkResult>
</QueryCheckResult>
```

**2.7.26/CGI/Smart/regionExiting/<ID>/Channels/<ID>/Scene/<ID>**

/CGI/Smart/regionExiting/<ID>/Channels/<ID>/Scene/<ID>	<b>General Resource v2.0</b>
<b>GET</b>	
<b>Description</b>	Acquire the functional parameters of leaving area detection
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	< <b>RegionExiting</b> >
<b>PUT</b>	
<b>Description</b>	Set the functional parameters of leaving area detection
<b>Query</b>	None
<b>Inbound Data</b>	< <b>RegionExiting</b> >
<b>Success Return</b>	< <b>ResponseStatus</b> >
<p><b>Explanations on protocol:</b>  This protocol is prepared for query and setting of detection of leaving area, helping client or IE query and set the detection of device area and leaving area, including rule name, coordinates of detection area, alarm color, color of no alarm, alarm type, alarm count, alarm rule and display target.</p> <p><b>Explanations on key parameters:</b>  &lt;id&gt; represents rule No., range: 1-8  &lt;enabled&gt; represents rule enabling, true: start, false: not start  &lt;RegionExitingRegion&gt; represents exiting detection implementation region  &lt;id&gt; represents region No., note: currently the perimeter only supports one region, the value of which is 1.  &lt;ruleName&gt; represents rule name, maximum 16-bit characters and 5 Chinese characters  &lt;sensitivityLevel&gt; represents sensibility level 0-100  &lt;RegionCoordinatesList&gt; represents detection region coordinate list  &lt;RegionCoordinates&gt; represents detection region coordinate  &lt;positionX&gt; represents detection region abscissa  &lt;positionY&gt; represents detection region ordinate  &lt;alarmColor&gt; means alarm color; 1: Red; 2: Green; 3: Yellow; 4: Blue; 5: Purple; 6: Cyan; 7: Black; 8: White  &lt;noAlarmColor&gt; means color of no alarm; 1: Red; 2: Green; 3: Yellow; 4: Blue; 5: Purple; 6:</p>	

Cyan; 7: Black; 8: White

<identifyType> means alarm type; 1-Person; 2-Vehicle; 3-Person and vehicle; 0-Unlimited  
<displayStat > represents alarm counting, true: start, false: not start  
<alarmRule> represents alarm rules, true: start, false: not start  
<displyTarget> represents display target, true: start, false: not start  
<displyTarget> means display target; true: Enable; false: Disable

### RegionExiting XML Block

```
<RegionExiting version="2.0" xmlns="http://www.std-cgi.org/ver20/XMLSchema">
<id><!-- req, xs:string --></id> // Rule No.; range: 1-8
<enabled><!-- req, xs:boolean --></enabled>Valid: true: Enable; false: Disabled
<normalizedScreenSize>
<normalizedScreenWidth><!-- req, xs:integer --></normalizedScreenWidth>
<normalizedScreenHeight><!-- req, xs:integer --></normalizedScreenHeight>
</normalizedScreenSize>
<RegionExitingRegionList>
<RegionExitingRegion>
<id><!-- req, xs:string --></id> // Region No.; Note: Only one region supported in current
perimeter; this value is 1
<ruleName><!-- req, xs:string --></ruleName> // Rule name is
consistent with ie; 16 characters and 5 Chinese characters at most
<sensitivityLevel><!--req, xs:integer, 0..100, 0 is the least sensitive --></sensitivityLevel> //
Sensitivity is consistent with ie
<RegionCoordinatesList><!-- opt --> // List of
coordinates of detection area
<RegionCoordinates><!-- opt, --> // Coordinates of
detection area
<positionX><!-- req, xs:integer;coordinate --></positionX> // X coordinates of
detection area
<positionY><!-- req, xs:integer;coordinate --></positionY> // Y coordinates of
detection area
</RegionCoordinates>
</RegionCoordinatesList>
<alarmColor><!-- req, xs:string"red" --></alarmColor>// Alarm color
<noAlarmColor><!-- req, xs:string "green"--></noAlarmColor>// Color of no alarm
<identifyType><!-- req, xs:string "all"--></identifyType> // Alarm type
<displayStat ><!-- req, xs:boolean --></displayStat>// Alarm count; true: Enabled; false:
Disabled
<alarmRule><!-- req, xs:boolean --></alarmRule>// Alarm rule; true: Enabled; false: Disabled
<displyTarget><!-- req, xs:boolean --> /displyTarget>// Display target; true: Enabled; false:
Disabled
< /RegionExitingRegion > // Leaving detection
implementation region
</RegionExitingRegionList>
<mutexAbility opt="PDC"/><!--opt,ro, xs:string, "PDC" -->
<isSupportMultiScene><!-- opt, xs:boolen --></isSupportMultiScene>
</RegionExiting>
```

Test cases

GET /CGI/Smart/regionExiting/<ID>/Channels/<ID>/Scene/<ID>

Request XML: none

Response XML: <RegionExiting>

PUT /CGI/Smart/regionExiting/<ID>/Channels/<ID>/Scene/<ID>

Response XML: <ResponseStatus>

Request XML: as below

```

<?xml version="1.0" encoding="UTF-8"?>
<RegionExiting>
<id>1</id>
<enabled>>true</enabled>
<RegionExitingRegionList>
<RegionExitingRegion>
<id>1</id>
<ruleName>Rule 1</ruleName>
<alarmColor>red</alarmColor>
<noAlarmColor>green</noAlarmColor>
<displayStat>>true</displayStat>
<displayTarget>>true</displayTarget>
<identifyType>all</identifyType>
<alarmRule>true</alarmRule>
<sensitivityLevel>20</sensitivityLevel>
<RegionCoordinatesList>
<RegionCoordinates>
<positionX>2848</positionX>
<positionY>5037</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>7083</positionX>
<positionY>2388</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>8312</positionX>
<positionY>9037</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>1395</positionX>
<positionY>8166</positionY>
</RegionCoordinates>
</RegionCoordinatesList>
</RegionExitingRegion>
</RegionExitingRegionList>
</RegionExiting>

```

**2.7.27/CGI/Smart/GuardDetection/<ID>/Channels/<ID>/Scene/<ID>**

/CGI/Smart/GuardDetection/<ID>/Channel s/<ID>/Scene/<ID>	General Resource v2.0
<b>GET</b>	
<b>Description</b>	Acquire alert function parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	< GuardDetection >
<b>PUT</b>	
<b>Description</b>	Set alert function parameters
<b>Query</b>	None
<b>Inbound Data</b>	< GuardDetection >
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

This protocol is prepared for query and setting of alert, helping client or IE query and set the device alert via CGI protocol, including alert detection type, lateral mode, direction limit, min. pixel distance, shortest alarm period, rule line, alarm count, rule line color without alarm, rule line color with alarm, whether display size and target frame, detention time and guard region.

**Explanations on key parameters:**

<TargetTypeCheck> means detection type: 1-Person; 2-Vehicle; 3-Person and vehicle;

0-Unlimited

<Mode> means detection mode: Intrusion, entering and leaving

<Direction> means direction limit

<MinDistance> means min. pixel distance of alarm: 0 as default

<MinTime> means shortest alarm period: Default

<DisplayRule> means whether display line: 0-Not displayed; 1-Displayed

<DisplayStat> means whether display alarm count: 0-Not displayed 1: Displayed\*/

<Color> means rule line color without alarm; 1: Red; 2: Green; 3: Yellow; 4: Blue; 5: Purple; 6: Cyan; 7: Black; 8: White

<AlarmColor> means rule line color with alarm; 1: Red; 2: Green; 3: Yellow; 4: Blue; 5: Purple; 6: Cyan; 7: Black; 8: White

<MinSize> means the min. size [0, 100] 5 as default

<MaxSize> means the max. size [0, 100] 30 as default

<DisplayTgt> means whether display target frame; 0: Not displayed; 1: Displayed

<ResoreTime> means detention period; unit: ms 0x7fffffff: Permanent detention

<GuardRegionList> means guard region

Note: Screen 31, rule 10, means alert template; other parameter setting beyond region are invalid

**GuardDetection XML Block**

```
<GuardDetection version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <id><!-- req, xs:string --></id> // Rule No.; range: 1-8
  <enabled><!-- req, xs:boolean --></enabled> // Rule is valid: true: Enable false: Disabled
  <SceneName><!-- opt, xs:string --></SceneName> // Screen name
  <RuleName><!-- opt, xs:string --></RuleName> // Rule name
  <TargetTypeCheck><!-- req, xs:integer--></TargetTypeCheck> /* Detection type: 1-Person;
2-Vehicle; 3-Person and vehicle; 0-Unlimited*/
  <Mode><!-- req, xs:integer--></Mode> /* Lateral mode: Intrusion, entering, leaving*/
  <Type><!-- req, xs:integer--></Type> /* Whether has direction*/
  <Direction><!-- req, xs:integer--></Direction> /* Direction limit*/
  <MinDistance><!-- req, xs:integer--></MinDistance> /* Min. pixel distance of alarm: 0 as
default */
  <MinTime><!-- req, xs:integer--></MinTime> /* Shortest alarm time: 0 as default */
  <DisplayRule><!-- req, xs:integer--></DisplayRule> /* Whether display rule line: 0-Not
displayed; 1-Displayed */
  <DisplayStat><!-- req, xs:integer--></DisplayStat> /* Whether display alarm count: 0-Not
displayed; 1-Displayed */
  <AlarmCount><!-- req, xs:integer--></AlarmCount> /* Alarm count: Display the number on
screen*/
  <Color><!-- req, xs:integer--></Color> /* Rule line color without alarm */
  <AlarmColor><!-- req, xs:integer--></AlarmColor> /* Rule line color with alarm */
  <MinSize><!-- req, xs:integer--></MinSize> // Min. size
  <MaxSize><!-- req, xs:integer--></MaxSize> // Max. size
  <DisplayTgt><!-- req, xs:integer--></DisplayTgt> // Whether display target frame
  <ResoreTime><!-- req, xs:integer--></ResoreTime> /* Detention time*/
  <GuardRegionList> // Guard region
    <GuardRegion>
      <RegionCoordinatesList><!-- opt -->
        <RegionCoordinates><!-- opt -->
          <positionX><!-- req, xs:integer;coordinate --></positionX>
          <positionY><!-- req, xs:integer;coordinate --></positionY>
```

```
        </RegionCoordinates>
      </RegionCoordinatesList>
    </GuardRegion>
  </GuardRegionList>
</GuardDetection>
```

Test cases

GET /CGI/Smart/GuardDetection/<ID>/Channels/<ID>/Scene/<ID>

Request XML: none

Response XML: <GuardDetection>

PUT /CGI/Smart/GuardDetection/<ID>/Channels/<ID>/Scene/<ID>

Response XML: <ResponseStatus>

Request XML: as below

```
<?xml version="1.0" encoding="UTF-8"?>
<GuardDetection>
  <id>1</id>
  <enabled>true</enabled>
  <SceneName>Scene1</SceneName>
  <RuleName>Rule1</RuleName>
  <TargetTypeCheck>0</TargetTypeCheck>
  <Mode>0</Mode>
  <Type>0</Type>
  <Direction>0</Direction>
  <MinDistance>0</MinDistance>
  <MinTime>3000</MinTime>
  <DisplayRule>1</DisplayRule>
  <DisplayStat>1</DisplayStat>
  <AlarmCount>0</AlarmCount>
  <Color>2</Color>
  <AlarmColor>1</AlarmColor>
  <MinSize>20</MinSize>
  <MaxSize>0</MaxSize>
  <DisplayTgt>1</DisplayTgt>
  <ResoreTime>10000</ResoreTime>
  <GuardRegionList>
  <GuardRegion>
  <RegionCoordinatesList>
  <RegionCoordinates>
  <positionX>1536</positionX>
  <positionY>2444</positionY>
  </RegionCoordinates>
  <RegionCoordinates>
  <positionX>8072</positionX>
  <positionY>1444</positionY>
  </RegionCoordinates>
  <RegionCoordinates>
  <positionX>7296</positionX>
  <positionY>7694</positionY>
  </RegionCoordinates>
  <RegionCoordinates>
  <positionX>1489</positionX>
  <positionY>7694</positionY>
  </RegionCoordinates>
  </RegionCoordinatesList>
  </GuardRegion>
</GuardRegionList>
</GuardDetection>
```

2.7.29/CGI/Smart/VideoDetection/<ID>/channels/<ID>/Scene/<ID>

/CGI/Smart/VideoDetection/<ID>/channels/<ID>/Scene/<ID>	General Resource v2.0
<b>GET</b>	
<b>Description</b>	Acquire video error detection parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	< VideoDetection >
<b>PUT</b>	
<b>Description</b>	Set video exception detection parameters
<b>Query</b>	None
<b>Inbound Data</b>	<VideoDetection >
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>          This protocol is prepared for query and setting of video error, helping client or IE query and set the video error of device via CGI protocol, including lens diagnosis, sensitivity and screen switch diagnosis</p> <p><b>Explanations on key parameters:</b>          &lt;id&gt; represents video exception detection id, the value of which is 1.          &lt;LensDignose&gt; represents lens diagnosis.          &lt;enabled&gt; represents whether to start, true: start, false: not start          &lt;sensitivityLevel&gt; represents sensibility level, range: 0-5          &lt; ScenSwitchDignose&gt; represents scene switch diagnosis</p>	

**VideoDetection XML Block**

```
<VideoDetection version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<id><!-- req, xs:string;id --></id> Video error detection id; this value is 1
<VideoInputException>
<enabled><!-- req, xs:boolean --></enabled>
</VideoInputException>
<LensDignose><!-- req --> // Lens diagnosis
<enabled><!-- req, xs:boolean --></enabled> // true: Enabled; false: Disabled
<sensitivityLevel>
<!--req, xs:integer--> // Sensitivity 0-5
</sensitivityLevel>
</ LensDignose >
< ScenSwitchDignose><!-- req --> // Screen switch diagnosis
<enabled><!-- req, xs:boolean --></enabled> // true: Enabled; false: Disabled
<sensitivityLevel>
<!--req, xs:integer--> // Sensitivity 0-5
</sensitivityLevel>
</ ScenSwitchDignose >
</VideoDetection>
```

Test cases

GET /CGI/Smart/VideoDetection/<ID>/channels/<ID>/Scene/<ID>

Request XML: none

Response XML: <VideoDetection>

PUT /CGI/Smart/VideoDetection/<ID>/channels/<ID>/Scene/<ID>

Response XML: <ResponseStatus>

Request XML: as below

```
<?xml version="1.0" encoding="UTF-8"?>
<VideoDetection>
<id>1</id>
<VedioInputException/><LensDignose>
<enabled>true</enabled>
<sensitivityLevel>3</sensitivityLevel>
</LensDignose>
```

```

<ScenSwitchDignose>
<enabled>true</enabled>
<sensitivityLevel>3</sensitivityLevel>
</ScenSwitchDignose>
</VideoDetection>

```

### 2.7.30/CGI/Smart/FieldDetection/<ID>/Channels/<ID>/Scene/<ID>

/CGI/Smart/FieldDetection/<ID>/Channels/<ID>/Scene/<ID>	<b>General Resource v2.0</b>
<b>GET</b>	
<b>Description</b>	Acquire perimeter intrusion parameter
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	< VideoDetection >
<b>PUT</b>	
<b>Description</b>	Set perimeter intrusion parameter
<b>Query</b>	None
<b>Inbound Data</b>	<VideoDetection >
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This protocol is prepared for query and setting of perimeter intrusion, helping client or IE query and set the perimeter intrusion of device via CGI protocol, including rule No., rule name, coordinates of detection region, alarm color, alarm type, intrusion time, alarm count, alarm rule and display target.  Detection mode: Intrusion</p> <p><b>Explanations on key parameters:</b>  &lt;id&gt; represents rule No., range: 1-8  &lt;enabled&gt; represents whether it is effective, true: start, false: not start  &lt;FieldDetectionRegion&gt; represents invasion detection implementation region  &lt;id&gt; represents region No., note: currently the perimeter only supports one region, the value of which is 1.  &lt;ruleName&gt; represents rule name, maximum 16-bit characters and 5 Chinese characters  &lt;sensitivityLevel&gt; means sensitivity; range: 0-100; 80 as default  &lt;RegionCoordinatesList&gt; represents detection region coordinate list  &lt;RegionCoordinates&gt; represents detection region coordinate  &lt;positionX&gt; represents detection region abscissa  &lt;positionY&gt; represents detection region ordinate  &lt;alarmColor&gt; means alarm color: Red  &lt;noAlarmColor&gt; represents no alarm color  &lt;invasionTime&gt; means intrusion time; range: 1-10s; 3s as default  &lt;displayStat &gt; represents alarm counting, true: start, false: not start  &lt;alarmRule&gt; represents alarm rules, true: start, false: not start  &lt;displyTarget&gt; represents display target, true: start, false: not start</p>	

#### FieldDetection XML Block

```

<FieldDetection version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<id><!-- req, xs:string --></id> Rule No.; range: 1-8
<enabled><!-- req, xs:boolean --></enabled>Valid: true: Enable; false: Disabled
<intelliBackSearch><!-- opt, xs:boolean --></intelliBackSearch>
<startTriggerTime><!-- req, xs:integer, milliseconds --></startTriggerTime>
<endTriggerTime><!-- req, xs:integer, milliseconds --></endTriggerTime>
<normalizedScreenSize>
<normalizedScreenWidth><!-- req, xs:integer --></normalizedScreenWidth>
<normalizedScreenHeight><!-- req, xs:integer --></normalizedScreenHeight>
</normalizedScreenSize>
<minObjectSize>

```



```

<!-- opt, xs:integer, min number of pixels per object -->
</minObjectSize>
<maxObjectSize>
<!-- opt, xs:integer, max number of pixels per object -->
</maxObjectSize>
<FieldDetectionRegionList size="4"/>
</FieldDetection>

<FieldDetectionRegionList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<FieldDetectionRegion/> // Intrusion detection
implementation region
</FieldDetectionRegionList>

```

Note:

```

<FieldDetectionRegion version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<id><!-- req, xs:string --></id> // Region No.; Note: Only one region supported in current
perimeter; this value is 1
<ruleName><!-- req, xs:string --></ruleName> // Rule name is consistent with ie; 16 characters
and 5 Chinese characters at most
<enabled><!-- req, xs:boolean --></enabled>
<sensitivityLevel><!-- req, xs:integer --></sensitivityLevel> // Sensitivity is consistent with ie
<timeThreshold><!-- req, xs:integer --></timeThreshold>
<objectOccupation><!-- req, xs:integer --></objectOccupation>
<RegionCoordinatesList // List of coordinates of detection area
<RegionCoordinates><!-- req, --> // Coordinates of detection area
<positionX><!-- req, xs:integer;coordinate --></positionX> // X coordinates of detection area
<positionY><!-- req, xs:integer;coordinate --></positionY> // Y coordinates of detection area
</RegionCoordinates>
</RegionCoordinatesList>
<alarmColor><!-- req, xs:string "red" --></alarmColor> // Alarm color
<noAlarmColor><!-- req, xs:string "green" --></noAlarmColor> // Color of no alarm
<identifyType><!-- req, xs:string "all" --></identifyType> // Alarm type
<invasionTime><!-- req, xs:integer --></invasionTime> // Intrusion time is consistent with
ie
<displayStat ><!-- req, xs:boolean --></displayStat> // Alarm count; true: Enabled; false: Disabled
< displayRule ><!-- req, xs:boolean --></alarmRule> // Alarm rule; true: Enabled; false: Disabled
<displyTarget><!-- req, xs:boolean --> /displyTarget // Display target; true: Enabled; false:
Disabled
</FieldDetectionRegion>

```

Test cases

```

GET /CGI/Smart/FieldDetection/<ID>/Channels/<ID>/Scene/<ID>
Request XML: none
Response XML: <FieldDetection>
PUT /CGI/Smart/FieldDetection/<ID>/Channels/<ID>/Scene/<ID>
Response XML: <ResponseStatus>
Request XML: as below

```

```

<?xml version="1.0" encoding="UTF-8"?>
<FieldDetection>
<id>1</id>
<enabled>true</enabled>
<FieldDetectionRegionList>
<FieldDetectionRegion>
<id>1</id>
<ruleName>Rule1</ruleName>
<alarmColor>red</alarmColor>
<noAlarmColor>green</noAlarmColor>
<displayStat>true</displayStat>

```

```

<displayTarget>true</displayTarget>
<identifyType>all</identifyType>
<alarmRule>true</alarmRule>
<invasionTime>3</invasionTime>
<sensitivityLevel>20</sensitivityLevel>
<RegionCoordinatesList>
<RegionCoordinates>
<positionX>1109</positionX>
<positionY>1250</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>8664</positionX>
<positionY>1625</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>8875</positionX>
<positionY>8944</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>484</positionX>
<positionY>9152</positionY>
</RegionCoordinates>
</RegionCoordinatesList>
</FieldDetectionRegion>
</FieldDetectionRegionList>
</FieldDetection>

```

### 2.7.31/CGI/Smart/DoubleLineDetection/<ID>/channels/<ID>/Scene/<ID>

/CGI/Smart/DoubleLineDetection/<ID>/channels/<ID>/Scene/<ID>	General Resource v2.0
<b>GET</b>	
<b>Description</b>	Acquire double line function parameter
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	< DoubleLineDetection >
<b>PUT</b>	
<b>Description</b>	Set double line function parameter
<b>Query</b>	None
<b>Inbound Data</b>	<b>DoubleLineDetection</b>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This protocol is prepared for query and setting of regional intrusion, helping client or IE query and set the regional intrusion of device via CGI protocol, including rule name, percentage, alarm color, arrow direction, max. time, min. time, alarm count, alarm rule and display target.</p> <p><b>Explanations on key parameters:</b>  &lt;id&gt; represents rule No., range: 1-8  &lt;SceneID&gt; represents scene No.  &lt;enabled&gt; represents whether it is effective, true: start, false: not start  &lt;id&gt; represents trip-line No., note: the current trip-line only supports one double trip-line, the value of which is 1.  &lt;ruleName&gt; represents rule name, maximum 16-bit characters and 5 Chinese characters  &lt;sensitivityLevel&gt; means percentage  &lt;directionSensitivity&gt; means arrow direction  &lt;CoordinatesList&gt; means line coordinates  &lt;alarmColor&gt; represents alarm color  &lt;noAlarmColor&gt; represents no alarm color</p>	

<tripwireMaxTimeInterval > means max. time  
 <tripwireMaxTimeInterval > means min. time  
 <identifyType > means statistics type, people, car, all, people, car  
 <displayStat > represents alarm counting, true: start, false: not start  
 <alarmRule> represents alarm rules, true: start, false: not start  
 <twoWayAlarm> represents two-way alarm, true: start, false: not start  
 <displyTarget> represents display target, true: start, false: not start

#### DoubleLineDetection XML Block

```

<DoubleLineDetection version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<id><!-- req, xs:string --></id> Rule No.; range: 1-8
<enabled><!-- req, xs:boolean --></enabled>Valid: true: Enable; false: Disabled
<intelliBackSearch><!-- opt, xs:boolean --></intelliBackSearch>
<startTriggerTime><!-- req, xs:integer, milliseconds --></startTriggerTime>
<endTriggerTime><!-- req, xs:integer, milliseconds --></endTriggerTime>
<normalizedScreenSize>
<normalizedScreenWidth><!-- req, xs:integer --></normalizedScreenWidth>
<normalizedScreenHeight><!-- req, xs:integer --></normalizedScreenHeight>
</normalizedScreenSize>
<minObjectSize>
<!-- opt, xs:integer, min number of pixels per object -->
</minObjectSize>
<maxObjectSize>
<!-- opt, xs:integer, max number of pixels per object -->
</maxObjectSize>
<DoubleLineItemList>
<DoubleLineItem>
<id><!-- req, xs:string --></id> // Line No.; Note: Only 1 double line is supported by now; this
value is 1
<ruleName><!-- req, xs:string --></ruleName>// Rule name is consistent with IE. 16 characters
and 5 Chinese characters at most
<enabled><!-- req, xs:boolean --></enabled>
<sensitivityLevel> // Percentage
<!--req, xs:integer-->
</sensitivityLevel>
<directionSensitivity>
<!-- opt,integer, 0-360 -->
</directionSensitivity> // Arrow direction
<CoordinatesList> // Line coordinates
<Coordinates><!-- req, -->
<positionX><!-- req, xs:integer;coordinate --></positionX>
<positionY><!-- req, xs:integer;coordinate --></positionY>
</Coordinates>
</CoordinatesList>
<CoordinatesExList>
<CoordinatesEx><!-- req, -->
<positionX><!-- req, xs:integer;coordinate --></positionX>
<positionY><!-- req, xs:integer;coordinate --></positionY>
</CoordinatesEx>
</CoordinatesExList>
<alarmColor><!-- req, xs:string"red" --></alarmColor>// Alarm color
<noAlarmColor><!-- req, xs:string "green"--></noAlarmColor>// Color of no alarm
<tripwireMaxTimeInterval ><!-- req, xs:integer --></tripwireMaxTimeInterval>// Max. time
<tripwireMaxTimeInterval ><!-- req, xs:integer --></tripwireMaxTimeInterval >// Min. time
<identifyType ><!-- req, xs: string --></identifyType>// Statistics type: people, car , all, people
and car
<displayStat ><!-- req, xs:boolean --></displayStat>// Alarm count; true: Enabled; false:
Disabled
  
```

```
<alarmRule><!-- req, xs:boolean --></alarmRule>// Alarm rule; true: Enabled; false: Disabled
<twoWayAlarm><!-- req, xs:boolean --></twoWayAlarm>// Two-way alarm; true: Enabled;
false: Disabled
<displyTarget><!-- req, xs:boolean --></displyTarget>// Display target; true: Enabled; false:
Disabled
</DoubleLineItem>
</DoubleLineItemList>
</ DoubleLineDetection >
```

Test cases

GET /CGI/Smart/DoubleLineDetection/<ID>/channels/<ID>/Scene/<ID>

Request XML: none

Response XML: <DoubleLineDetection>

PUT /CGI/Smart/DoubleLineDetection/<ID>/channels/<ID>/Scene/<ID>

Response XML: <ResponseStatus>

Request XML: as below

```
<?xml version="1.0" encoding="UTF-8"?>
<DoubleLineDetection>
<id>1</id>
<enabled>>true</enabled>
<DoubleLineItemList>
<DoubleLineItem>
<id>1</id>
<ruleName>Rule1</ruleName>
<enabled>>true</enabled>
<sensitivityLevel>20</sensitivityLevel>
<directionSensitivity>0</directionSensitivity>
<alarmColor>red</alarmColor>
<noAlarmColor>green</noAlarmColor>
<tripwireMaxTimeInterval>30</tripwireMaxTimeInterval>
<tripwireMinTimeInterval>0</tripwireMinTimeInterval>
<identifyType>all</identifyType>
<displayStat>true</displayStat>
<alarmRule>true</alarmRule>
<twoWayAlarm>true</twoWayAlarm>
<displayTarget>true</displayTarget>
<CoordinatesList>
<Coordinates>
<positionX>4804</positionX>
<positionY>2500</positionY>
</Coordinates>
<Coordinates>
<positionX>6945</positionX>
<positionY>5291</positionY>
</Coordinates>
</CoordinatesList>
<CoordinatesExList>
<CoordinatesEx>
<positionX>3507</positionX>
<positionY>3930</positionY>
</CoordinatesEx>
<CoordinatesEx>
<positionX>5500</positionX>
<positionY>8013</positionY>
</CoordinatesEx>
</CoordinatesExList>
</DoubleLineItem>
</DoubleLineItemList>
```

</DoubleLineDetection>

### 2.7.32/CGI/Smart/AudioDetection/channels/<ID>/status

/ISAPI/Smart/AudioDetection/channels/<ID>/status		General Resource	v2.0
<b>GET</b>			
<b>Description</b>	Obtain audio exception detection real-time volume parameters		
<b>Query</b>	None		
<b>Inbound Data</b>	None		
<b>Success Return</b>	<AudioStrengthStatus>		
<b>PUT</b>			
<b>Description</b>	Set audio exception detection real-time volume parameters		
<b>Query</b>	None		
<b>Inbound Data</b>	<AudioStrengthStatus>		
<b>Success Return</b>	<ResponseStatus>		
<b>Explanations on protocol:</b> This protocol is prepared for query and setting of real-time volume in audio error detection, helping client or IE query and set the real-time volume parameters during detection of audio error.			
<b>Explanations on key parameters:</b> <audioStrength> represents audio exception detection real-time volume			

#### AudioStrengthStatusXML Block

```
<AudioStrengthStatus version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">  
<id><!-- req, xs:string --></id>  
<audioStrength><!--ro, req, xs:integer--></audioStrength>  
</AudioStrengthStatus>
```

#### Test cases

**GET /ISAPI/Smart/AudioDetection/channels/<ID>/status**

**Request XML:** none

**Response XML:** <AudioStrengthStatus>

**PUT/ISAPI/Smart/AudioDetection/channels/<ID>/status**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>  
<AudioStrengthStatus>  
<id>1</id>  
<audioStrength>-1</audioStrength>  
</AudioStrengthStatus>
```

### 2.7.33/CGI/Smart/channels/<ID>/capabilities

/ISAPI/Smart/channels/<ID>/capabilities		General Resource	v2.0
<b>GET</b>			
<b>Description</b>	Obtain intelligent analysis algorithm capability set		
<b>Query</b>	None		
<b>Inbound Data</b>	None		
<b>Success Return</b>	<SmartCapList>		
<b>Explanations on protocol:</b> This protocol is to query the intelligent analysis support algorithm capability set.			
<b>Explanations on key parameters:</b>			

<Type> means intelligent analysis type; Behavior: Behavior analysis; Face: Face recognition  
 Audio: Audio diagnosis; Video: Video diagnosis; Group: Group; OnDuty: On-duty detection;  
 Demographics: Person statistics; PlatLicense: Plate recognition; ParkGuard: Park guard;  
 IllegalPark: Illegal park; IntelliTrace: Intelligent traction; Helmet: Helmet  
 Behavior analysis type:  
 LineDetection: Line; DoubleLineDetection: Double line; FieldDetection: Perimeter detection;  
 Loitering: Loitering; Parking: Parking; RapidMove: Run; AttendedBaggage: Attended  
 baggage; UnattendedBaggage: Unattended baggage; Alert: Alert; HeatMap: Heat map  
 Demographics:  
 Vertical: vertical, Horizontal: horizontal  
 Video diagnosis type:  
 Noise: noise diagnosis, Clarity: clarity diagnosis, Brightness: brightness diagnosis,  
 ColourCast: Color cast diagnosis; Frezze: Picture freeze diagnosis; Lost: Signal lost  
 diagnosis; SceneChange: Scene change detection; Jamming: Jamming diagnosis  
 Video diagnosis type:  
 Lost: Audio lost; Abnormal: Audio abnormal; NoiseSupr: Noise suppression  
 EchoSupr: echo suppression, FeedbackSupr: audio signal feedback abnormal  
 Human face detection type:  
 Tiandy: Tiandy algorithm; ST: ST algorithm; FacePlusPlus: FACE++ algorithm

### SmartCap XML Block

```
<SmartCapList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  < SmartTypeCap>
    <MainType>
      <Type>
        <!--req,xs:string"Behavior,Face,Audio,Video,Group,OnDuty,PlatLicense,
          Demographics,ParkGuard, IllegalPark, IntelliTrace, Helmet" -->
      </Type>
      <IsSupport><!-- req, xs: boolean --></IsSupport >
    </MainType>
    < SubTypeList>
      <subtype>
        < Type><!--req,xs:string></ Type>
        < IsSupport ><!-- req, xs: boolean -->< IsSupport >
      </subtype>
    </SubTypeList>
  </ SmartTypeCap >
</SmartTypeCapList>
```

### Test cases

/ISAPI/Smart/channels/<ID>/ capabilities

Request XML: none

Response XML: <SmartCap >

```
<SmartTypeCapList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  < SmartTypeCap>
    <MainType>
      <Type>Behavior</Type>
      <IsSupport>True</IsSupport >
    </MainType>
    < SubTypeList>
      <subtype>
        < Type>LineDetection</ Type>
        < IsSupport > True< IsSupport >
      </subtype>
      <subtype>
        < Type>DoubleLineDetection</ Type>
        < IsSupport > True< IsSupport >
      </subtype>
      <subtype>
```

```

    < Type>Alert</ Type>
    < IsSupport >False< IsSupport >
  </subtype>
  <subtype>
    < Type>Loitering</ Type>
    < IsSupport > True< IsSupport >
  </subtype>
  <subtype>
    < Type>HeatMap</ Type>
    < IsSupport >False< IsSupport >
  </subtype>
</SubTypeList>
< / SmartTypeCap >
< SmartTypeCap>
  <Main Type>
    <Type>Face</Type>
    <IsSupport>True< /IsSupport >
  </MainType>
  < SubTypeList>
    <subtype>
      < Type>Tiandy</ Type>
      < IsSupport >False< IsSupport >
    </subtype>
    <subtype>
      < Type>ST</ Type>
      < IsSupport >False< IsSupport >
    </subtype>
    <subtype>
      < Type>FacePlusPlus</ Type>
      < IsSupport > True< IsSupport >
    </subtype>
  </SubTypeList>
< / SmartTypeCap >
< /SmartTypeCapList>

```

### 2.7.34/CGI/Smart/Alert/ApplyScene/channels/<ID>

/CGI/Smart/Alert/ApplyScene/channels/<ID>General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire the scene called by special alert
<b>Query</b>	None
<b>Inbound Data</b>	<b>None</b>
<b>Success Return</b>	<SceneInfo>
<b>PUT</b>	
<b>Description</b>	Set the scene called by special alert
<b>Query</b>	None
<b>Inbound Data</b>	<SceneInfo>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>            This protocol is prepared for helping client acquire or set the called scenes via CGI protocol.</p> <p><b>Explanations on key parameters:</b>            Type: Scene type; 0-Special alert scene; 1-Common scene; 2-Privacy shading; 3-Fast enabling of smart scene            4-Fast enabling of alert scene</p>	

#### SceneInfo Block

```

<SceneInfo>
  <scene><!--req, xs:integer--></scene>
  < type ><!--req, xs:integer--></ type >
</SceneInfo>

```

**Test cases**

**GET /CGI/Smart/Alert/ApplyScene/channels/<ID>**

**Request XML:** none

**Response XML:** <SceneInfo>

**PUT /CGI/Smart/Alert/ApplyScene/channels/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```

<SceneInfo>
  <scene>3</scene>
  < type >0</ type >
</SceneInfo>

```

**2.7.35/CGI/Smart/Alert/TemplateName/channels/<ID>/scene/<ID>/type/<ID>**

/CGI/Smart/Alert/TemplateName/channels/<ID>/scene/<ID>/type/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire the list of templates supported by special alert	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<AlertTemplate>	
<p><b>Explanations on protocol:</b>            This protocol is prepared for helping client acquire the list of templates (name) supported by special alert via CGI protocol.</p> <p><b>Explanations on key parameters:</b>            scene: Scene No., starts from 0            type: Algorithm type; 0: Perimeter; 1: Line; other values: Return fails            alertNum: Number of alert templates supported, 6 at most            id: Number of template support list, defined as follows:            Snapshot and link white light when id is 1            Snapshot and link white light and single warning sound when id is 2            Snapshot and link white light and circular warning sound when id is 3            Snapshot and link burst multistage audible and visual alarm when id is 4            Snapshot and link gradual multistage audible and visual alarm when id is 5            Snapshot white light flash and circular alarm sound when id is 6            Snapshot and link alarm light when id is 7            Snapshot and link alarm light and single alarm sound when id is 8            Snapshot and link alarm light and circular sound alarm when id is 9            Snapshot and link burst multistage audible and visual alarm (alarm light) when id is 10            Snapshot and link gradual multistage audible and visual alarm (alarm light) when id is 11</p>		

**AlertTemplate XML Block**

```

<AlertTemplate>
<alertNum><!--req, xs:integer --></alertNum>
  <AlertTemplateList>
    <template>
      <id><!--req, xs:integer --></id>// Number of template support list
    </template>
  </AlertTemplateList>
</AlertTemplate>

```

**Test cases**

**GET /Smart/Alert/TemplateName/channels/<ID>/scene/<ID>/type/<ID>**



**Request XML:** none

**Response XML:** <AlertTemplate >

```
<AlertTemplate>
<alertNum>5</alertNum>
  <AlertTemplateList>
    <template>
      <id>1</id>
    </template>
    <template>
      <id>2</id>
    </template>
    <template>
      <id>3</id>
    </template>
    <template>
      <id>4</id>
    </template>
    <template>
      <id>5</id>
    </template>
  </AlertTemplateList>
</AlertTemplate>
```

### 2.7.36/CGI/Smart/Alert/AlgTypeParam/channels/<ID>

/CGI/Smart/Alert/AlgTypeParam/channels/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire the algorithm type and parameters of special alert	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<AlgTypeParamList>	
<b>Explanations on protocol:</b> This protocol is prepared for helping client acquire the algorithm type and parameters supported by special alert via CGI protocol.		
<b>Explanations on key parameters:</b> type: Algorithm type; PERI: Perimeter; TRIP: Line. param: Parameters of algorithm type; if type is perimeter; invade: Invade; leave: Leave. If type is line, no such value.		

### AlgTypeParamList XML Block

```
<AlgTypeParamList>
<channels><!-- ro, rsp, xs:integer --></channels>
<Param>
  <type><!--req, xs:string --></type>
  <invade><!--req, xs:boolean --></invade>
  <leave><!--req, xs:boolean --></leave>
</Param>
</AlgTypeParamList>
```

### Test cases

**GET /Smart/Alert/AlgTypeParam/channels/<ID>**

**Request XML:** none

**Response XML:** <AlgTypeParamList>

```

<AlgTypeParamList>
<Param>
<type>PERI</type>
<invade>>true</invade>
<leave>>true</leave>
</Param>
<Param>
<type>TRIP</type>
</Param>
</AlgTypeParamList>

```

### 2.7.37/CGI/Smart/Alert/WhiteLightMode/channels/<ID>/type/<ID>/capabilities

/CGI/Smart/Alert/WhiteLightMode/channels/<ID>/type/<ID>/capabilities General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire the white light linkage mode parameters of special alert
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<WhiteLightParam>
<p><b>Explanations on protocol:</b> This protocol is prepared for helping client acquire the white light linkage mode parameters of special alert via CGI protocol.</p> <p><b>Explanations on key parameters:</b>  supportGrade: Total amount of levels supported. 3 level supported at most. 0 means not supported.  grade: Grade  defaultMode: Whether support default mode. True: Supported; false: Not supported  num: Max. flash times supported  ficker: Whether support flicker; true: Supported; false: Not supported  alwaysLight: Whether support always light; true: Supported; false: Not supported.  time: Delayed off time supported by always light. 0: Not supported. Other values indicate the max. time support; unit: Second. Max.: 999.</p>	

#### WhiteLightParam XML Block

```

<WhiteLightParam>
  <supportGrade><!--req, xs:integer --></supportGrade>
  <whiteLightParamList>
    <param>
      <grade><!--req, xs:integer --></grade>
      <defaultMode><!--req, xs:boolean --></defaultMode>
      <num><!--req, xs:integer --></num>
      <ficker><!--req, xs:boolean --></ficker>
      <alwaysLight><!--req, xs:boolean --></alwaysLight>
      <time><!--req, xs:integer --></time>
    </param>
    <param>
      <grade><!--req, xs:integer --></grade>
      <defaultMode><!--req, xs:boolean --></defaultMode>
      <num><!--req, xs:integer --></num>
      <ficker><!--req, xs:boolean --></ficker>
      <alwaysLight><!--req, xs:boolean --></alwaysLight>
      <time><!--req, xs:integer --></time>
    </param>
    <param>
      <grade><!--req, xs:integer --></grade>

```

```

<defaultMode><!--req, xs:boolean --></defaultMode>
<num><!--req, xs:integer --></num>
<ficker><!--req, xs:boolean --></ficker>
<alwaysLight><!--req, xs:boolean --></alwaysLight>
<time><!--req, xs:integer --></time>
  </param>
</whiteLightParamList>
</WhiteLightParam>

```

**Test cases**

**GET /Smart/Alert/WhiteLightMode/channels/<ID>/type/<ID>/capabilities**

**Request XML: none**

**Response XML: <WhiteLightParam>**

```

<WhiteLightParam>
  <supportGrade>3</supportGrade>
  <whiteLightParamList>
    <param>
      <grade>1</grade>
      <defaultMode>false</defaultMode>
      <num>3</num>
      <ficker>false</ficker>
      <alwaysLight>true</alwaysLight>
      <time>60</time>
    </param>
    <param>
      <grade>2</grade>
      <defaultMode>true</defaultMode>
      <num>5</num>
      <ficker>true</ficker>
      <alwaysLight>true</alwaysLight>
      <time>120</time>
    </param>
    <param>
      <grade>3</grade>
      <defaultMode>true</defaultMode>
      <num>8</num>
      <ficker>true</ficker>
      <alwaysLight>true</alwaysLight>
      <time>180</time>
    </param>
  </whiteLightParamList>
</WhiteLightParam>

```

**2.7.38/CGI/Smart/Alert/ALGEnable/channels/<ID>/type/<ID>**

/CGI/Smart/Alert/ALGEnable/channels/<ID>/type/<ID>General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire the enabling of special alert algorithm
<b>Query</b>	None
<b>Inbound Data</b>	<b>None</b>
<b>Success Return</b>	<ALGEnableInfo>
<b>PUT</b>	
<b>Description</b>	Set the enabling of enabling of special alert algorithm
<b>Query</b>	None
<b>Inbound Data</b>	<ALGEnableInfo>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

This protocol is prepared for acquiring or setting enabling of special alert algorithm via CGI protocol.

**Explanations on key parameters:**

type: Algorithm type; 0: Local channel; 1: Frontend channel. Other values: Return fails  
enable: Whether enable special alert. False: Disabled; true: Enabled.

**ALGEnableInfo Block**

```
<ALGEnableInfo>
  <enable><!--rsp, xs:boolean--></enable>
</ALGEnableInfo>
```

**Test cases**

**GET /CGI/Smart/Alert/ALGEnable/channels/<ID>/type/<ID>**

**Request XML:** none

**Response XML:** <ALGEnableInfo>

**PUT /CGI/Smart/Alert/ALGEnable/channels/<ID>/type/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** <ALGEnableInfo> As follows

```
<ALGEnableInfo>
  <enable>false</enable>
</ALGEnableInfo>
```

**2.7.39/CGI/Smart/Alert/ALGParam/channels/<ID>/scene/<ID>/type/<ID>**

<b>/CGI/Smart/Alert/ALGParam/channels/&lt;ID&gt;/scene/&lt;ID&gt;/type/&lt;ID&gt;General Resource v2.0</b>
--

**GET**

<b>Description</b>	Acquire algorithm parameters of special alert
--------------------	---

<b>Query</b>	None
--------------	------

<b>Inbound Data</b>	<b>None</b>
---------------------	-------------

<b>Success Return</b>	<ALGParameter>
-----------------------	----------------

**PUT**

<b>Description</b>	Set algorithm parameters of special alert
--------------------	---

<b>Query</b>	None
--------------	------

<b>Inbound Data</b>	<ALGParameter>
---------------------	----------------

<b>Success Return</b>	<ResponseStatus>
-----------------------	------------------

**Explanations on protocol:**

This protocol is prepared for helping client acquire or set parameters of special alert algorithm via CGI protocol.

**Explanations on key parameters:**

type: Algorithm type; 0: Perimeter; 1: Line.

channelNo: Channel No., starts from 1

scene: Scene No., starts from 1

linkMode: Linkage mode under the valid event type; 0: Customized; 1-6: Template No.

eventVaild: Whether event detection is enabled; false: Disabled; true: Enabled

sensitivity: Sensitivity: 0-100

displayRule: Whether display rules; 0: Not displayed; 1: Displayed.

displayStat: Whether display alarm count; 0: Not displayed; 1: Displayed

displayTarget: Whether display target frame; 0: Not displayed; 1: Displayed; displayed by default

color: Region color without alarm; 0: Default; 1: Red; 2: Green; 3: Yellow; 4: Blue; 5: Purple; 6: Cyan; 7: Black; 8: White

alarmColor: Region color with alarm; 0: Default; 1: Red; 2: Green; 3: Yellow; 4: Blue; 5: Purple; 6: Cyan; 7: Black; 8: White

targetTypeCheck: 0: Not distinguished; 1: Distinguish person; 2: Distinguish vehicle; 3: Distinguish person and vehicle

invade: Invade; true: Enabled; false: Disabled  
 leave: Leave; true: Enabled; false: Disabled  
 trackTime: Track time; unit: Second; 300 as default  
 trackTime: Track time; unit: Second; 300 as default  
 minDistance: Min. alarm distance; 0 as default  
 minTime: Min. alarm time; 0 as default  
 directionAstrict: Whether direction is limited. 0: Unlimited; 1: Limited (perimeter algorithm)  
 direction: Prohibit direction angle. Angle: 0~359 °(perimeter algorithm)  
 minSize: Min. size; 0-100, 5 as default (perimeter algorithm)  
 maxSize: Max. size; 0-100, 30 as default (perimeter algorithm)  
 resortTime: Detention time; unit: Second; 0 as default (perimeter algorithm)  
 tripwireType: Cross type; 0: One-way; 1: Two-way. Two-way as default (line algorithm)  
 tripwireDirection: Prohibit direct crossing; 0~359 °(line algorithm)  
 noAlarmMode: Alarm elimination mode. leaveDeteArea: leave the detection area to clear the alarm,  
 leaveVideoArea: leave the video area to clear the alarm

### ALGParameter Block

```

<ALGParameter>
  <linkMode><!--rsp, xs:integer--></linkMode>// Link mode 0-5
  <CoordinatesList>// Line coordinates in scene
  <Coordinates>
    <positionX><!--rsp, xs:integer--></positionX> // Ten-thousandth X coordinates
    <positionY><!--rsp, xs:integer--></positionY>// Ten-thousandth Y coordinates
  </Coordinates>
  <Coordinates>
    <positionX><!--rsp, xs:integer--></positionX> // Ten-thousandth X coordinates
    <positionY><!--rsp, xs:integer--></positionY>// Ten-thousandth Y coordinates
  </Coordinates>
</CoordinatesList>
  <ALGParam><!-- dep, xs:integer: type -->// Rely on valid type; not send line algorithm
  parameters when effectType is 0; not send perimeter algorithm when effectType is 1
  <eventVaild><!--rsp, xs:boolean--></eventVaild>
  <sensitivity><!--rsp, xs:integer--></sensitivity>
  <displayRule><!--rsp, xs:integer--></displayRule>
  <displayStat><!--rsp, xs:integer--></displayStat>
  <displayTarget><!--rsp, xs:integer--></displayTarget>
  <noAlarmMode><!--rsp, xs:string--></noAlarmMode>
  <color><!--rsp, xs:integer--></color>
  <alarmColor><!--rsp, xs:integer--></alarmColor>
  <targetTypeCheck>
  <person><!--rsp, xs:boolean--></person>
  <car><!--rsp, xs:boolean--></car>
  <other><!--rsp, xs:boolean--></other>
</targetTypeCheck>
  <trackTime><!--rsp, xs:integer--></trackTime>
  <minDistance><!--rsp, xs:integer--></minDistance>
  <minTime><!--rsp, xs:integer--></minTime>
  <mode>
    <invade><!--rsp, xs:boolean--></invade>// Perimeter algorithm
    <leave><!--rsp, xs:boolean--></leave>// Perimeter algorithm
  </mode>
  <directionAstrict><!--rsp, xs:integer--></directionAstrict>// Perimeter algorithm
  <direction><!--rsp, xs:integer--></direction>// Perimeter algorithm
  <minSize><!--rsp, xs:integer--></minSize>// Perimeter algorithm
  <maxSize><!--rsp, xs:integer--></maxSize>// Perimeter algorithm
  <resortTime><!--rsp, xs:integer--></resortTime>// Perimeter algorithm
  <tripwireType><!--rsp, xs:integer--></tripwireType>// Line algorithm
  <tripwireDirection><!--rsp, xs:integer--></tripwireDirection>// Line algorithm
  
```

```
</ALGParam>
</ALGParameter>
```

**Test cases**

**GET /CGI/Smart/Alert/ALGParam/channels/<ID>/scene/<ID>/type/<ID>**

**Request XML:** none

**Response XML:** <ALGParameter>

**PUT /CGI/Smart/Alert/ALGParam/channels/<ID>/scene/<ID>/type/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** <ALGParameter> As follows

```
<ALGParameter>
<linkMode>1</linkMode>
<RegionCoordinatesList>
<RegionCoordinates>
<positionX>1850</positionX>
<positionY>7433</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>7850</positionX>
<positionY>4133</positionY>
</RegionCoordinates>
</RegionCoordinatesList>
<eventVaild>true</eventVaild>
<sensitivity>100</sensitivity>
<displayRule>1</displayRule>
<displayStat>1</displayStat>
<displayTarget>1</displayTarget>
<noAlarmMode>leaveDeteArea<noAlarmMode>
<color>2</color>
<alarmColor>1</alarmColor>
<targetTypeCheck>0</targetTypeCheck>
<trackTime>300</trackTime>
<minDistance>5</minDistance>
<minTime>0</minTime>
<tripwireType>1</tripwireType>
<tripwireDirection>270</tripwireDirection>
</ALGParameter>
```

**2.7.40/CGI/Smart/Alert/SceneTime/channels/<ID>/scene/<ID>**

<b>/CGI/Smart/Alert/SceneTime/channels/&lt;ID&gt;/scene/&lt;ID&gt;General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire the scene patrol time of special alert
<b>Query</b>	None
<b>Inbound Data</b>	<b>None</b>
<b>Success Return</b>	<SceneTimeInfo>
<b>PUT</b>	
<b>Description</b>	Special the scene patrol time of special alert
<b>Query</b>	None
<b>Inbound Data</b>	<SceneTimeInfo>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

This protocol is prepared for helping client acquire or set scene patrol time of special alert via CGI protocol.

**Explanations on key parameters:**

scene: Scene No., starts from 0

enable: Whether enable patrol time; false: Disabled; true: Enabled

startTime: Start time

endTime: End time

**SceneTimeInfo Block**

```
<SceneTimeInfo>
<channels><!-- ro, rsp, xs:integer --></channels>
  <enable><!--rsp, xs:boolean--></enable>
  <startTime><!--rsp, xs:string--></startTime>
  <endTime><!--rsp, xs:string--></endTime>
</SceneTimeInfo>
```

**Test cases**

**GET** /CGI/Smart/Alert/SceneTime/channels/<ID>/scene/<ID>

**Request XML:** none

**Response XML:** <SceneTimeInfo>

**PUT** /CGI/Smart/Alert/SceneTime/channels/<ID>/scene/<ID>

**Response XML:** <ResponseStatus>

**Request XML:** <SceneTimeInfo> As follows

```
<SceneTimeInfo>
<channels>1</channels>
  <enable>true</enable>
  <startTime>14:00</startTime>
  <endTime>15:59</endTime>
</SceneTimeInfo>
```

**2.7.41/CGI/Smart/Alert/CurrentEffectALGType/channels/<ID>/scene/<ID>**

<b>/CGI/Smart/Alert/CurrentEffectALGType/channels/&lt;ID&gt;/scene/&lt;ID&gt;General Resource v2.0</b>
--

**GET**

<b>Description</b>	Acquire the valid algorithm type of special alert
--------------------	---

<b>Query</b>	None
--------------	------

<b>Inbound Data</b>	None
---------------------	------

<b>Success Return</b>	<CurrentTypeList>
-----------------------	-------------------

**PUT**

<b>Description</b>	Set the valid algorithm type of special alert
--------------------	---

<b>Query</b>	None
--------------	------

<b>Inbound Data</b>	<CurrentTypeList>
---------------------	-------------------

<b>Success Return</b>	<ResponseStatus>
-----------------------	------------------

**Explanations on protocol:**

This protocol is prepared for helping client acquire or set the valid algorithm type of special alert via CGI protocol.

**Explanations on key parameters:**

channelNo: Channel No., starts from 1

scene: Scene No., starts from 1

effectType: Valid algorithm type. PERI: Perimeter; TRIP: Line. Only one type is valid by now, or both types will be valid latterly.

**CurrentTypeList Block**

```

<CurrentTypeList>
  <CurrentType>
    <effectType><!--req, xs:string--></effectType>
  </CurrentType>
</CurrentTypeList>

```

**Test cases**

**GET /CGI/Smart/Alert/CurrentEffectALGType/channels/<ID>/scene/<ID>**

**PUT /CGI/Smart/Alert/CurrentEffectALGType/channels/<ID>/scene/<ID>**

**Request XML: none**

**Response XML: <CurrentTypeList> As follows**

```

<?xml version="1.0" encoding="UTF-8"?>
<CurrentTypeList>
  <CurrentType>
    <effectType>PERI</effectType>
  </CurrentType>
</CurrentTypeList>

```

**2.7.42/CGI/Smart/Command/channels/<ID>/Suspend**

/CGI/Smart/Command/channels/<ID>/Suspend		General Resource v2.0
<b>PUT</b>		
<b>Description</b>	Pause intelligent analysis	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is prepared for helping client pause intelligent analysis via CGI protocol.		

**Test cases**

**PUT /CGI/Smart/Command/channels/<ID>/Suspend**

**Request XML: None**

**Response XML: <ResponseStatus>**

**2.7.43/CGI/Smart/Command/channels/<ID>/Resume**

/CGI/Smart/Command/channels/<ID>/Resume		General Resource v2.0
<b>PUT</b>		
<b>Description</b>	Recover intelligent analysis	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is prepared for helping client recover intelligent analysis via CGI protocol.		

**Test cases**

**PUT /CGI/Smart/Command/channels/<ID>/Resume**

**Request XML: None**

**Response XML: <ResponseStatus>**

**2.7.44 /CGI/Smart/FaceCnf/FaceCnfEnable/channels/<ID>/Event/<ID>/Scene/<ID>**

/CGI/Smart/FaceCnf/FaceCnfEnable/channels/<ID>/Event/<ID>/Scene/<ID>	
<b>GET</b>	
<b>Description</b>	Acquire enabling status of face configuration



	channel
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<FaceCnfEnable>
<b>PUT</b>	
<b>Description</b>	Set enabling status of face configuration channel
<b>Query</b>	None
<b>Inbound Data</b>	<FaceCnfEnable>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b> This protocol is prepared for acquiring and setting the intelligent analysis on enabling status of face configuration channel.</p> <p><b>Explanations on key parameters:</b> Event type; 1: Face detection; 2: Face recognition, sent to url Scene id, sent to url</p> <p>&lt;ipcEnable&gt;ipc enabling &lt;nvrEnable&gt;nvr enabling</p>	

#### FaceCnfEnable XML Block

```
<?xml version="1.0" encoding="UTF-8"?>
<FaceCnfEnable>
<ipcEnable><!-- req, xs: boolean --></ipcEnable>
<nvrEnable><!-- req, xs: boolean --></nvrEnable>
</FaceCnfEnable>
```

#### Test cases

**GET /CGI/Smart/FaceCnf/FaceCnfEnable/channels/1/Event/1/Scene/1**

**Request XML:** none

**Response XML:** <FaceCnfEnable>

**PUT /CGI/Smart/FaceCnf/FaceCnfEnable/channels/1/Event/1/Scene/1**

**Request XML:** <FaceCnfEnable>

**Response XML:** <ResponseStatus>

```
<?xml version="1.0" encoding="UTF-8"?>
<FaceCnfEnable>
<ipcEnable>true</ipcEnable>
<nvrEnable>true</nvrEnable>
</FaceCnfEnable>
```

#### 2.7.45 /CGI/Smart/FaceCnf/FaceDiscernParam/channels/<ID>/Scene/<ID>/Model/<ID>/Type/<ID>

<b>/CGI/Smart/FaceCnf/FaceDiscernParam/channels/&lt;ID&gt;/Scene/&lt;ID&gt;/Model/&lt;ID&gt;/Type/&lt;ID&gt;</b>	
<b>GET</b>	
<b>Description</b>	Acquire face recognition alarm parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<FaceDiscernParam>
<b>PUT</b>	
<b>Description</b>	Set face recognition alarm parameters
<b>Query</b>	None
<b>Inbound Data</b>	<FaceDiscernParam>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

Acquire and set the intelligent analysis on alarm parameters of face recognition.

**Explanations on key parameters:**

Model recognition mode; 0 nvr, 1 ipc

Type: Alarm type; 0: Comparison alarm; 1: Stranger alarm; 2: Frequency alarm; 3: Detention alarm

<alarmParam> Parameter structure

<enable> Alarm enabling

<timeRange> Time range (frequency); unit: Second

<frequency> Frequency

<standTime> Detention time (detention); unit: Second

<similarityDegree> Similarity

<upMsgEnable> Whether upload recognition information

<faceLib> Stranger has no face library concept, this field does not apply

<key> 0: Disabled; key value: Enabled; list name is acquired from face library protocol; only enabling status is acquired here

**FaceDiscernParam XML Block**

```
<?xml version="1.0" encoding="UTF-8"?>
<FaceDiscernParam>
  <enable><!-- req, xs: boolean--></enable>
  <timeRange><!-- dep, xs: integer --></timeRange>
  <frequency><!-- dep, xs: integer --></frequency>
  <standTime><!-- dep, xs: integer --></standTime>
  <similarityDegree><!-- req, xs: integer --></similarityDegree>
  <upMsgEnable><!-- req, xs: boolean--></upMsgEnable>
  <faceLibList>
    <faceLib>
      <key><!-- req, xs: long long --></key>
    </faceLib>
  // Repeat faceLib
  </faceLibList>
</FaceDiscernParam>
```

**Test cases**

**GET /CGI/Smart/FaceCnf/FaceDiscernParam/channels/1/Scene/0**

**Request XML:** none

**Response XML:** <FaceDiscernParam>

**PUT /CGI/Smart/FaceCnf/FaceDiscernParam/channels/1/Scene/0**

**Request XML:** <FaceDiscernParam>

**Response XML:** <ResponseStatus>

```
<?xml version="1.0" encoding="UTF-8"?>
<FaceDiscernParam>
  <enable>true</enable>
  <similarityDegree>100</similarityDegree>
  <upMsgEnable>>false</upMsgEnable>
  <faceLibList>
    <faceLib>
      <key>123456790</key>
    </faceLib>
    <faceLib>
      <key>9876543210</key>
    </faceLib>
  </faceLibList>
</FaceDiscernParam>
```

**2.7.46/CGI/Smart/FaceLib/<Key>/Manage**

/CGI/Smart/FaceLib/<Key>/Manage
---------------------------------

POST
------

<b>Description</b>	Add face recognition library
<b>Query</b>	None
<b>Inbound Data</b>	<FaceLibParas>
<b>Success Return</b>	<FaceLibResult>
<b>PUT</b>	
<b>Description</b>	Set face recognition library
<b>Query</b>	None
<b>Inbound Data</b>	<FaceLibParas>
<b>Success Return</b>	<ResponseStatus>
<b>DELETE</b>	
<b>Description</b>	Delete face recognition library
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

Acquire, set, add and delete parameters of face recognition library and check if library has lock and password.

Introduction to key parameters: URL

<Key> key value of face library; key=0 means adding of face library; key>0 means setting of face library parameters; long: Long type

Request xml

<name> Face library name, 64 bits at most

<descripInfo> Description information, 64 bits at most

<threshold> Face library dependability, >=0

<lock> Whether library is locked; 1: Locked; 0: Unlocked

<access> Random information, for calibration use; 32 bits

<password> Lock password, encrypted, 16 bits at most

Response xml

<key> key value of face library, responded when adding value. -1 means failure

**FaceLibParas XML Block**

```
<?xml version="1.0" encoding="UTF-8"?>
<faceLibParas>
<name><!-- req, xs:string --></name>
<descripInfo><!-- dep, xs:string --></descripInfo>
<threshold><!-- dep, xs: integer --></threshold>
<picstreamEnable><!-- req, xs:boolean--></picstreamEnable>
<lock><!-- req, xs:integer --></lock>
<access><!-- req, xs:string --></access>
<password><!-- req, xs:string --></password>
</faceLibParas>
```

**ResponseResult XML Block**

```
<?xml version="1.0" encoding="UTF-8"?>
<faceLibResult>
<key><!-- dep, xs: integer --></key>
</faceLibResult>
```

**Test cases**

**POST /CGI/Smart/FaceLib/0/Manage**

**Request XML: <FaceLibParas>**

```
<?xml version="1.0" encoding="UTF-8"?>
<faceLibParas>
<key>2</key>
<name> R&D library</name>
<descripInfo> R&D staff library</descripInfo>
<threshold>80</threshold>
<picstreamEnable>>false</picstreamEnable>
<lock>1</lock>
```

```
<access>94AAABB419A9820DC171B43240CEEF41</access>
<password>T6g05arqzu4=</password>
</faceLibParas>
```

**Response XML: <FaceLibResult>**

```
<?xml version="1.0" encoding="UTF-8"?>
<responseResult>
<key>456</key>
</responseResult>
```

**PUT /CGI/Smart/FaceLib/123/Manage**

**Request XML: <FaceLibParas>**

```
<?xml version="1.0" encoding="UTF-8"?>
<faceLibParas>
<key>2</key>
<name> R&D library</name>
<descripInfo> R&D staff library</descripInfo>
<threshold>70</threshold>
<picstreamEnable>ture</picstreamEnable>
<lock>1</lock>
<access>94AAABB419A9820DC171B43240CEEF41</access>
<password>T6g05arqzu4=</password>
</faceLibParas>
```

**Response XML: <ResponseStatus>**

**DELETE /CGI/Smart/FaceLib/123/Manage**

**Request XML: none**

**Response XML: <ResponseStatus>**

**2.7.47/CGI/Smart/FaceLib/Manage**

<b>/CGI/Smart/FaceLib/Manage</b>	
<b>GET</b>	
<b>Description</b>	Acquire parameters of face recognition library in batch
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<FaceLibInfo>
<p><b>Explanations on protocol:</b> Acquire parameters of face recognition library in batch</p> <p><b>Explanations on key parameters:</b>            &lt;facePicModelNum&gt; Picture amount of established models            &lt;facePicNum&gt; Total number of base map            &lt;key&gt; key value of face library            &lt;name&gt; Face library name, 64 bits at most            &lt;descripInfo&gt; Description information, 64 bits at most            &lt;lock&gt; Whether locked; 1: Locked; 0: Unlocked</p>	

**FaceLibParas XML Block**

```
<?xml version="1.0" encoding="UTF-8"?>
<faceLibInfo>
<facePicModelNum><!-- req, xs: integer --></facePicModelNum>
<facePicNum><!-- req, xs: integer --></facePicNum>
<faceLibParasList>
<faceLibParas>
<key><!-- req, xs: integer --></key>
<name><!-- req, xs:string --></name>
<descripInfo><!-- dep, xs:string --></descripInfo>
<lock><!-- req, xs: integer --></lock>
```

```

</faceLibParas>
//...Repeat <faceLibParas > Structure
</faceLibParasList>

```

**Test cases**

**GET /CGI/Smart/FaceLib/Manage**

**Request XML:** none

**Response XML:** <FaceLibParas>

```

<?xml version="1.0" encoding="UTF-8"?>
<faceLibInfo>
<facePicModelNum>100</facePicModelNum>
<facePicNum>500</facePicNum>
<faceLibParasList>
<faceLibParas>
<key>2</key>
<name> R&D library</name>
<descripInfo> R&D staff library</descripInfo>
<lock>1</lock>
</faceLibParas>
...
</faceLibParasList>
</faceLibInfo>

```

**2.7.48 /CGI/Smart/Import/FaceLib/<Key>/SessionId/<ID>/Access/<Access>/Password/<Password>**

<b>/CGI/Smart/Import/FaceLib/&lt;Key&gt;/SessionId/&lt;ID&gt;/Access/&lt;Access&gt;/Password/&lt;Password&gt; General Resource v2.0</b>	
<b>PUT</b>	
<b>Description</b>	Import face library
<b>Query</b>	<b>None</b>
<b>Inbound Data</b>	<b>File content</b>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> Import of face library <b>Explanations of parameters:</b> <Key> key value of face library <sessionId> client side and equipment interaction ID, refer to Schedule 1 <Access> means random information, for calibration use, 32 bits <PassWord> Import password, encrypted transmission, 16 bits	

**Test cases**

**PUT**

**/CGI/Smart/Import/FaceLib/123/SessionId/456/Access/94AAABB419A9820DC171B43240CEEF41/Password/T6g05arqzu4=**

**Request XML:** none

**Response XML:** <ResponseStatus>

**2.7.49**

**/CGI/Smart/StartExport/FaceLib/<Key>/SessionId/<ID>/File/<FileName>/Access/<Access>/Password/<Password>**

<b>/CGI/Smart/StartExport/FaceLib/&lt;Key&gt;/SessionId/&lt;ID&gt;/File/&lt;FileName&gt;/Access/&lt;Access&gt;/Password/&lt;Password&gt; General Resource v2.0</b>	
<b>PUT</b>	
<b>Description</b>	Export face library, request of starting export

<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> Export face library <b>Explanations of parameters:</b> <Key> key value of face library <sessionId> client side and equipment interaction ID, refer to Schedule 1 <FileName> Export filename, 128 bits <Access> means random information, for calibration use, 32 bits <PassWord> Export password, encrypted transmission, 16 bits	

**Test cases**

**PUT**

/CGI/Smart/StartExport/FaceLib/123/SessionId/456/File/0.jpg/Access/94AAABB419A9820DC171B43240CEE41/Password/T6g05arqu4=

**Request XML:** none

**Response XML:** <ResponseStatus>

**2.7.50 /CGI/Smart/FaceLib/SessionId/<ID>/Progress**

<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Import/export face library progress
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<Progress>
<b>Explanations on protocol:</b> Progress of importing/exporting face library <b>Explanations of parameters:</b> URL: <sessionId> client side and equipment interaction ID, refer to Schedule 1 Reply xml: <state> State; 0-Not imported/exported; 1-Import/export in progress; 2-Import/export succeeds; 3-Export/import fails <pro> Progress, 0-100	

**Progress XML Block**

```
<?xml version="1.0" encoding="UTF-8"?>
<progressversion="1.0">
<state><!--req,sx:integer--></state>
<pro><!--req,sx:integer--></pro>
</progress>
```

**Test cases**

**GET /CGI/Smart/FaceLib /SessionId/123/Progress**

**Response XML:** <Progress>

```
<?xml version="1.0" encoding="UTF-8"?>
<progressversion="1.0">
<state>1</state>
<pro>50</pro>
</progress>
```

**2.7.51 /CGI/Smart/FaceLib/<Key>/SyncToIpc/State**

<b>General Resource v2.0</b>	
<b>GET</b>	

<b>Description</b>	Status of synchronizing face library to frontend
<b>Query</b>	<b>None</b>
<b>Inbound Data</b>	<b>None</b>
<b>Success Return</b>	<SyncState>
<b>Explanations on protocol:</b> Acquire status of synchronizing face library to frontend <b>Explanations of parameters:</b> <channel> Channel <state> Status; 0: Unsynchronized; 1: Synchronization in progress; 2: Synchronization succeeds; 3: Synchronization fails; 4: To be synchronized <progress> Progress percentage <successdCnt> Success count <failedCnt> Failure count	

**SyncPara XML Block**

```
<?xml version="2.0" encoding="UTF-8"?>
<syncState version="2.0">
<elementList>
<element>
<channel><!--req,sx:integer--></channel>
<state><!--dep,sx: integer--></state>
<progress><!--dep,sx: integer--></progress>
<successdCnt><!--dep,sx: integer--></successdCnt>
<failedCnt><!--dep,sx: integer--></failedCnt>
</element>
...
</elementList >
</syncState>
```

**Test cases**

**GET /CGI/Smart/FaceLib/xxxx/SyncToIpc/State**

**Request XML: none**

**Response XML: <SyncState>**

```
<?xml version="2.0" encoding="UTF-8"?>
<syncState version="2.0">
<elementList>
<element>
<channel>1</channel>
<state>0</state>
<progress>50</progress>
<successdCnt>5</successdCnt>
<failedCnt>0</failedCnt>
</element>
...
</elementList >
</syncState>
```

**2.7.52 /CGI/Smart/FaceLib/<Key>/SyncToIpc/Cmd**

<b>/CGI/Smart/FaceLib/&lt;key&gt;/SyncToIpc/Cmd</b>		<b>General Resource v2.0</b>
<b>PUT</b>		
<b>Description</b>	Synchronize face library to frontend	
<b>Query</b>	<b>None</b>	
<b>Inbound Data</b>	<SyncCmd>	
<b>Success Return</b>	<ResponseStatus>	

**Explanations on protocol:**

Synchronize face library to frontend and acquire status.

**Explanations of parameters:**

&lt;channel&gt; Channel

&lt;cmd&gt; Command; start: 20; stop: 21; delete: 22

**SyncPara XML Block**

```
<?xml version="2.0" encoding="UTF-8"?>
<syncCmd version="2.0">
<elementList>
<element>
<channel><!--req,sx:integer--></channel>
<cmd><!--dep,sx: integer--></cmd>
</element>
...
</elementList>
</syncCmd>
```

**Test cases****PUT /CGI/Smart/FaceLib/xxxx/SyncToIpc/Cmd****Request XML: <SyncCmd>****Response XML: <ResponseStatus>**

```
<?xml version="2.0" encoding="UTF-8"?>
<syncCmd version="2.0">
<elementList>
<element>
<channel>1</channel>
<cmd>20</cmd>
</element>
...
</elementList >
</syncCmd>
```

**2.7.53/CGI/Smart/Import/FacePic**

/CGI/Smart/Import/FacePic		General Resource v2.0
<b>PUT</b>		
<b>Description</b>	Add face picture, import picture firstly	
<b>Query</b>	None	
<b>Inbound Data</b>	File content	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b> Query by picture and analyze the face in group photo		
<b>Explanations of parameters:</b> None		

**Test cases****PUT /CGI/Smart/Import/FacePic****Request XML: none****Response XML: <ResponseStatus>****2.7.54 /CGI/Smart/FacePic/<Key>/Manage**

/CGI/Smart/FacePic/<Key>/Manage	
<b>POST</b>	
<b>Description</b>	Add face picture, import picture firstly
<b>Query</b>	None



<b>Inbound Data</b>	<FacePicParas>
<b>Success Return</b>	<FacePicResult>
<b>PUT</b>	
<b>Description</b>	Set face parameters
<b>Query</b>	None
<b>Inbound Data</b>	<FacePicParas>
<b>Success Return</b>	<ResponseStatus>
<b>DELETE</b>	
<b>Description</b>	Delete face
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

Acquire, set, add and delete face parameters.

**Explanations on key parameters:**

URL

<facePicKey> key value of face, faceKey=0: Add face; faceKey>0: Modify face

Request xml

<libKey> key value of face library

<checkCode> File check code; valid when faceKey=0, for calibrating face picture; no calibration needed when transmitted file is null

<model> Whether modeling; 0-Not establish model; 1-Establish model; send 1 during single import; send 0 during batch import

<name> Name, 64 bits at most

<sex> Gender; 0-Unknown; 1-Male; 2-Female

<birthday> Birthday; format: 2018-07-24, 16 bits at most

<nation> Nationality, as per national standard code

<province> Native place, province, as per code of national administrative division; 0 means unknown

<city> Native place, city, as per code of national administrative division; 0 means unknown

<certType> Certificate type; 0-Unknown; 1-ID card; 2-Certificate of officer; 3-Passport; 4-Staff No.

<certNum> Certificate No., 64 bits at most

<facePath> Path; upload upload.jpg or upload.png to add path, or transmit the file name to copy the path

<country> Country, as per national and local ISO 3166-1 code table (see figure)

<address> Address, 64 bits at most

<company> Company name, 64 bits at most

Response xml

<key> key value of face library, responded when adding value.

When successful: face database key value

When failure:

-1: Face analysis failed

-2: The base gallery is full

(Reply when added)

**FaceParas XML Block**

```
<?xml version="1.0" encoding="UTF-8"?>
<facePicParas>
<libKey><!-- req, xs: integer --></libKey>
<checkCode><!-- req, xs:string --></checkCode>
<model><!-- req, xs: integer --></model>
<name><!-- req, xs:string --></name>
<sex><!-- req, xs: integer --></sex>
<birthday><!-- req, xs: string--></birthday>
<nation><!-- req, xs: integer --></nation>
<province><!-- req, xs: integer --></province>
```

```

<city><!-- req, xs: integer --></city>
<certType ><!-- req, xs: integer --></certType>
<certNum ><!-- req, xs: string --></certNum>
<facePath><!-- req, xs: string --></facePath>
<country><!-- req, xs: integer --></country>
<address ><!-- req, xs: string --></address>
<company ><!-- req, xs: string --></company>
</facePicParas>

```

**ResponseResult XML Block**

```

<?xml version="1.0" encoding="UTF-8"?>
<facePicResult>
<key><!-- req, xs: integer --></key>
</facePicResult>

```

**Test cases**

**POST /CGI/Smart/FacePic/0/Manage**

**Request XML:**

```

<?xml version="1.0" encoding="UTF-8"?>
<facePicParas>
<libKey>2</libKey>
<checkCode>120142</checkCode>
<model>1</model>
<name> Zhang San</name>
<sex>1</sex>
<birthday>2017-10-19</birthday>
<nation>66</nation>
<place>33</place>
<certType>1</certType>
<certNum>341886199212171516</certNum>
<facePath>P_01_50.jpg</facePath>
<country >0</country>
<address >huake</address>
<company >Tiandy</company>
</facePicParas>

```

**Response XML: <FaceParas>**

```

<?xml version="1.0" encoding="UTF-8"?>
<facePicResult>
<key>456</key>
</facePicResult>

```

**PUT /CGI/Smart/FacePic/1/Manage**

**Request XML:** <FacePicParas>

**Response XML:** <ResponseStatus>

**DELETE /CGI/Smart/FacePic/1/Manage**

**Request XML:** none

**Response XML:** <ResponseStatus>

**2.7.55 /CGI/Smart/FacePic/Query**

/CGI/Smart/FacePic/Query		General Resource v2.0
<b>POST</b>		
<b>Description</b>	Query face information	
<b>Query</b>	<b>None</b>	
<b>Inbound Data</b>	<FacePicQueryCondition>	
<b>Success Return</b>	<FacePicQueryResult>	

**Explanations on protocol:**

Query face data

**Explanations of parameters:**

Query xml:

&lt;pageNo&gt; Page, pageNo &gt;=0

&lt;pageSize&gt; Item per page, pageSize&gt;=0

&lt;libKey&gt; key value of face library, LibKey&gt;=0, No retrieval -1

&lt;model&gt; Modeling status; 0-Neglected; 1-Modeling succeeds; 2-Modeling fails; 3-No modeling

&lt;name&gt; Name, 64 bits at most, support query of wildcard characters, such as Zhang \*, Li Si \*, Wang \* Wu, \* Liu, no retrieval "####"

&lt;sex&gt; Gender; 0-Neglected; 1-Male; 2-Female; no retrieval -1

&lt;birthDayStart&gt; Start time of birthday, 2017-10-19, 16 bits at most

&lt;birthDayEnd&gt; End time of birthday, 2017-10-19, 16 bits at most

&lt;nation&gt; Nationality, as per national standard code, no retrieval-1

&lt;province&gt; Native place, province, as per code of national administrative division; 0 means unknown; no retrieval-1

&lt;city&gt; Native place, city, as per code of national administrative division; 0 means unknown; no retrieval-1

&lt;certType&gt; Certificate type; 0-Unknown; 1-ID card; 2-Certificate of officer; 3-Passport; 4-Staff No; no retrieval-1

&lt;certNum&gt; Certificate No., 64 bits at most, no retrieval "####"

&lt;country&gt; Country, as per national and local ISO 3166-1 code table (see figure); no retrieval-1

&lt;address&gt; Address, 64 bits at most, no retrieval "####"

&lt;company&gt; Company name, 64 bits at most, no retrieval "####"

&lt;access&gt; Random information, for calibration use; 32 bits

&lt;password&gt; Library password, encryption supports 16 bits at most

Return statusCode:9 if password authentication fails

statusString:"Securitycode Failed"

subStatusCode:"CodeError"

Reply xml:

&lt;totalCount&gt; Total count

&lt;pageSize&gt; Total count of current page

&lt;index&gt; Page No.

&lt;libKey&gt; key value of face library

&lt;faceKey&gt; Face key value

&lt;facePath&gt; http path

&lt;downloadfacePath&gt; File download path (encrypted, avoid digest authentication to satisfy CGI)

&lt;model&gt; Whether modeling; 0-Not establish model; 1-Establish model; send 1 during single import; send 0 during batch import

&lt;name&gt; Name, 64 bits at most

&lt;sex&gt; Gender; 0-Unknown; 1-Male; 2-Female

&lt;birthday&gt; Birthday; format: 2018-07-24, 16 bits at most

&lt;province&gt; Native place, province, as per code of national administrative division; 0 means unknown

&lt;city&gt; Native place, city, as per code of national administrative division; 0 means unknown

&lt;place&gt; Native place, higher 16 digits means province, lower 16 digits means city; as per code of national administrative division; 0 means unknown

&lt;certType&gt; Certificate type; 0-Unknown; 1-ID card; 2-Certificate of officer; 3-Passport; 4-Staff No.

&lt;certNum&gt; Certificate No., 64 bits at most

&lt;country&gt; Country, as per national and local ISO 3166-1 code table (see figure)

&lt;address&gt; Address, 64 bits at most

&lt;company&gt; Company name, 64 bits at most

**FacePicQueryCondition XML Block**

```

<?xml version="1.0" encoding="UTF-8"?>
<facePicQueryCondition version="1.0">
<pageNo><!--req,sx:integer--></pageNo>
<pageSize><!--req,sx:integer--></pageSize>
<faceKey><!--req,sx: integer--></faceKey>
<model><!--req,sx:integer--></model>
<name><!--req,sx:string--></name>
<sex><!--req,sx:integer--></sex>
<timeSpanList>
<timeSpan>
<birthdayStart><!-- req, xs: datetime --></birthdayStart>
<birthdayEnd><!-- req, xs: datetime --></birthdayEnd>
</timeSpan>
</timeSpanList>
<nation><!--req,sx:integer--></nation>
<province><!-- req, xs: integer --></province>
<city><!-- req, xs: integer --></city>
<certType><!--req,sx:integer--></certType>
<certNum><!--req,sx: string--></certNum>
<country ><!-- req, xs: integer --></country>
<address ><!-- req, xs: string --></address>
<company ><!-- req, xs: string --></company>
</facePicQueryCondition>

```

#### FacePicQueryResult XML Block

```

<facePicQueryResult version="2.0">
<totalCount><!--req,sx:integer--></totalCount>
<pageSize><!--req,sx:integer--></pageSize>
<matchList>
<matchElement>
<index><!--req,sx:integer--></index>
<libKey><!--req,sx: integer--></libKey>
<faceKey><!--req,sx: integer--></faceKey>
<facePath><!--req,sx: string--></facePath>
<downloadfacePath><!--req,sx: string--></downloadfacePath>
<model><!--req,sx:integer--></model>
<name><!--req,sx:integer--></name>
<sex><!--req,sx:integer--></sex>
<birthday><!-- req, xs: datetime --></birthday>
<nation><!--req,sx:integer--></nation>
<province><!-- req, xs: integer --></province>
<city><!-- req, xs: integer --></city>
<certType><!--req,sx:integer--></certType>
<certNum><!--dep,sx: string--></certNum>
</matchElement>
</matchList>
<country ><!-- req, xs: integer --></country>
<address ><!-- req, xs: string --></address>
<company ><!-- req, xs: string --></company>
</facePicQueryResult>

```

#### Test cases

##### POST /CGI/Smart/FacePic/Query

**Request XML:** <facePicQueryCondition> As follows

```

<?xml version="1.0" encoding="UTF-8"?>
<facePicQueryCondition version="1.0">
<pageNo>1</pageNo>
<pageSize>12</pageSize>
<libKey>123</libKey>

```

```

<faceKey>456</faceKey>
<model>1</model>
<name> Zhang San</name>
<sex>1</sex>
<timeSpanList>
<timeSpan>
<birthdayStart>1991-2-1</birthdayStart>
<birthdayEnd>2001-2-1</birthdayEnd>
</timeSpan>
</timeSpanList>
<nation>55</nation>
<province>66</province>
<city>77</city>
<certType>1</certType>
<certNum>341886199212171516</certNum>
<access>94AAABB419A9820DC171B43240CEEF41</access>
<password>/T6g05arqzu4=</password>
<country >0</country>
<address >huake</address>
<company >Tiandy</company>
</facePicQueryCondition>

```

**Response XML: <facePicQueryResult>**

```

<facePicQueryResult version="2.0">
<totalCount>120</totalCount>
<pageNo>1</pageNo>
<pageSize>12</pageSize>
<matchList>
<matchElement>
<index>1</index>
<libKey>123</libKey>
<faceKey>456</faceKey>
<facePath>XXXXXXXXXX</facePath>
<downloadfacePath>XXXXXXXXXX</downloadfacePath>
<model>1</model>
<name> Zhang San</name>
<sex>1</sex>
<birthday>1991-2-1</birthday>
<nation>55</nation>
<province>66</province>
<city>77</city>
<certType>1</certType>
<certNum>341886199212171516</certNum>
</matchElement>
...
</matchList>
<country >0</country>
<address >huake</address>
<company >Tiandy</company>
</facePicQueryResult>

```

**2.7.56/CGI/Smart/Import/AnalysisImage/SessionId/<ID>**

/CGI/Smart/Import/AnalysisImage/SessionId/<ID>		<b>General Resource v2.0</b>
<b>PUT</b>		
<b>Description</b>	Query by picture and analyze the face in group photo	
<b>Query</b>	<b>None</b>	

<b>Inbound Data</b>	<b>File content</b>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> Query by picture and analyze the face in group photo <b>Explanations of parameters:</b> None	

**Test cases**  
**PUT /CGI/Smart/Import/AnalysisImage/SessionId/1**  
**Request XML:** none  
**Response XML:** <ResponseStatus>

**2.7.57/CGI/Smart/Query/AnalysisImage/SessionId/<ID>**

<b>General Resource v2.0</b>	
<b>POST</b>	
<b>Description</b>	Query analyzed face
<b>Query</b>	None
<b>Inbound Data</b>	<FaceCondition>
<b>Success Return</b>	<FaceResult>
<b>Explanations on protocol:</b> Acquire analyzed face <b>Explanations of parameters:</b> URL <sessionId> client side and equipment interaction ID, refer to Schedule 1 Query xml <pageNo> Page, pageNo >=0 <pageSize> Item per page, pageSize>=0 Response xml <faceNum> Total file number (-2=Error handling; -1-Handling in progress; 0-Finished, no face; >0Finished, face found) <faceName> Picture name <faceSrc> Picture path	

**FaceCondition XML Block**

```
<faceCondition version="1.0">
<pageNo><!--req,sx: integer--></pageNo>
<pageSize><!--req,sx: integer--></pageSize>
</faceCondition>
```

**FaceResult XML Block**

```
<faceResult version="1.0">
<faceNum><!--req,sx: integer--></faceNum>
<faceInfoList>
<faceInfo>
<faceName><!--req,sx:string--></faceName>
<faceSrc><!--req,sx:string--></faceSrc>
</faceInfo>
...
</faceInfoList>
</faceResult>
```

**POST /CGI/Smart/Query/AnalysisImage/SessionId/<ID>**

**Request XML:** <FaceCondition>

```
<faceCondition version="1.0">
<pageNo>1</pageNo>
<pageSize>20</pageSize>
</faceCondition>
```

**Response XML:** <FaceResult>

```

<faceResult version="1.0">
<faceNum>20</faceNum>
<faceInfoList>
<faceInfo>
<faceName>name0.jpg</faceName>
<faceSrc>/tmp/face/face/name0.jpg</faceSrc>
</faceInfo>
...
</faceInfoList>
</faceResult>

```

### 2.7.58 /CGI/Smart/FacePic/QueryByPic/Condition

/CGI/Smart/FacePic/QueryByPic/Condition		General Resource v2.0
<b>PUT</b>		
<b>Description</b>	Search by picture, send picture	
<b>Query</b>	None	
<b>Inbound Data</b>	<Condition>	
<b>Success Return</b>	<ResponseStatus>	
<p><b>Explanations on protocol:</b> Search and send query picture by base map of face</p> <p><b>Explanations of parameters:</b> Query xml: &lt;sessionId&gt; Interaction ID between client and device &lt;libKey&gt; key value of face library, LibKey&gt;=0 &lt;similarity&gt; Similarity &lt;faceName&gt; Name of analyzed face picture</p>		

#### FaceQueryPicture XML Block

```

<?xml version="1.0" encoding="UTF-8"?>
<condition version="1.0">
<sessionId><!--req,sx:integer--></sessionId>
<libKey><!--req,sx:integer--></ libKey>
<similarity><!--req,sx:integer--></similarity>
<faceName><!--req,sx:string--></faceName>
</condition>

```

#### Test cases

#### PUT /CGI/Smart/FacePic/QueryByPic/Condition

#### Request XML: <Condition> As follows

```

<?xml version="1.0" encoding="UTF-8"?>
<condition version="1.0">
<sessionId>1</sessionId>
<libKey>123</libKey>
<similarity>50</similarity>
<faceName>1.jpg</faceName>
</condition>

```

### 2.7.59 /CGI/Smart/FacePic/QueryByPic/Result

/CGI/Smart/Face/QueryByPic/Result		General Resource v2.0
<b>POST</b>		
<b>Description</b>	Search face information by picture	
<b>Query</b>	None	
<b>Inbound Data</b>	<FacePicQueryCondition>	
<b>Success Return</b>	<FacePicQueryResult>	

**Explanations on protocol:**

Query face data by picture

**Explanations of parameters:**

Query xml:

<sessionId> Interaction ID between client and device  
 <libKey> key value of face library, LibKey>=0  
 <similarity> Similarity  
 <faceName> Name of analyzed face picture  
 <pageNo> Page, pageNo >=0  
 <pageSize> Item per page, pageSize>=0  
 <access> Random information, for calibration use; 32 bits  
 <password> Library password, max. length of encryption is 16 bits  
 Return statusCode:9 if password authentication fails  
     statusString:"Securitycode Failed"  
     subStatusCode:"CodeError"

Reply xml:

<sessionId> Interaction ID between client and device  
 <totalCount> Total count  
 <pageSize> Total count of current page  
 <index> Page No.  
 <libKey> key value of face library  
 <faceKey> Face key value, faceKey=0 if it is put, means adding of face; faceKey>0 means face modification  
 <model> Whether modeling; 0-Not establish model; 1-Establish model; send 1 during single import; send 0 during batch import  
 <name> Name, 64 bits at most  
 <sex> Gender; 0-Unknown; 1-Male; 2-Female  
 <birthday> Birthday; format: 2018-07-24, 16 bits at most  
 <nation> Nationality, as per national standard code  
 <province> Native place, province, as per code of national administrative division; 0 means unknown  
 <city> Native place, city, as per code of national administrative division; 0 means unknown  
 <certType> Certificate type; 0-Unknown; 1-ID card; 2-Certificate of officer;  
 <certNum> Certificate No., 64 bits at most  
 <country> Country, as per national and local ISO 3166-1 code table (see figure)  
 <address> Address, 64 bits at most  
 <company> Company name, 64 bits at most  
 <similarity> Similarity

**FacePicQueryCondition XML Block**

```

<?xml version="1.0" encoding="UTF-8"?>
<facePicQueryCondition version="1.0">
<sessionId><!--req,sx:integer--></sessionId>
<libKey><!--req,sx:integer--></libKey>
<similarity><!--req,sx:integer--></similarity>
<faceName><!--req,sx:string--></faceName>
<pageNo><!--req,sx:integer--></pageNo>
<pageSize><!--req,sx:integer--></pageSize>
<access><!--req,sx:string--></access>
<password><!--req,sx:string--></password>
</facePicQueryCondition>
  
```

**FacePicQueryResult XML Block**

```

<facePicQueryResult version="2.0">
<sessionId><!--req,sx:integer--></sessionId>
<totalCount><!--req,sx:integer--></totalCount>
<pageSize><!--req,sx:integer--></pageSize>
  
```



```

<matchList>
<matchElement>
<index><!--req,sx:integer--></index>
<libKey><!--req,sx: integer--></libKey>
<faceKey><!--req,sx: integer--></faceKey>
<fileType><!--req,sx:integer--></fileType>
<model><!--req,sx:integer--></model>
<name><!--req,sx:integer--></name>
<sex><!--req,sx:integer--></sex>
<timeSpanList>
<timeSpan>
<birthday><!-- req, xs: datetime --></birthday>
</timeSpan>
</timeSpanList>
<nation><!--req,sx:integer--></nation>
<province><!--req,sx:integer--></province>
<city><!--req,sx:integer--></city>
<certType><!--req,sx:integer--></certType>
<certNum><!--dep,sx: string--></certNum>
</matchElement>
</matchList>
<country ><!-- req, xs: integer --></country>
<address ><!-- req, xs: string --></address>
<company ><!-- req, xs: string --></company>
<similarity><!--req,sx:integer--></similarity>
</facePicQueryResult>

```

#### Test cases

#### POST /CGI/Smart/FacePic/QueryByPic/Result

**Request XML:** <facePicQueryCondition> As follows

```

<?xml version="1.0" encoding="UTF-8"?>
<facePicQueryCondition version="1.0">
<sessionId>1</sessionId>
<libKey>456</libKey>
<similarity>50</similarity>
<faceName>1.jpg</faceName>
<pageNo>1</pageNo>
<pageSize>12</pageSize>
<access>94AAABB419A9820DC171B43240CEEF41</access>
<password>/T6g05arqzu4=</password>
</facePicQueryCondition>

```

**Response XML:** <facePicQueryResult>

```

<facePicQueryResult version="2.0">
<sessionId>1</sessionId>
<totalCount>120</totalCount>
<pageSize>12</pageSize>
<matchList>
<matchElement>
<index>1</index>
<libKey>123</libKey>
<faceKey>456</faceKey>
<fileType>0</fileType>
<model>1</model>
<name> Zhang San</name>
<sex>1</sex>
<birthday>1991-2-1</birthday>
<nation>55</nation>
<province>66</province>

```

```

<city>77</city>
<certType>1</certType>
<certNum>341886199212171516</certNum>
<similarity>50</similarity>
</matchElement>
...
</matchList>
<country >0</country>
<address >huake</address>
<company >Tiandy</company>
</facePicQueryResult>

```

### 2.7.60/CGI/Smart/Export/FacePic/<Key>/SessionId/<ID>/File/<FileName>

/CGI/Smart/Export/FacePic/<Key>/SessionId/<ID>/File/<FileName>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Export face picture	
<b>Query</b>	<b>None</b>	
<b>Inbound Data</b>	<b>None</b>	
<b>Success Return</b>	<b>File content</b>	
<b>Explanations on protocol:</b> Export face picture <b>Explanations of parameters:</b> <key> Face key value <sessionId> client side and equipment interaction ID, refer to Schedule 1 <fileName> File name		

#### Test cases

**GET /CGI/Smart/Export/FacePic/123/SessionId/456/File/0.jpg**

**Request XML:** none

**Response XML:** File contents

### 2.7.61 /CGI/Smart/SessionId/<ID>/Release

/CGI/Smart/SessionId/<ID>/Release		General Resource v2.0
<b>PUT</b>		
<b>Description</b>	Release cache data of affair	
<b>Query</b>	<b>None</b>	
<b>Inbound Data</b>	<b>None</b>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b> Release affair cache <b>Explanations of parameters:</b> <sessionId> Interaction ID of client and device, see attached Table 1		

#### Test cases

**PUT /CGI/Smart/SessionId/0/Release**

**Request XML:** none

**Response XML:** <ResponseStatus>

### 2.7.62 /CGI/Smart/FaceCount/TargetAlm

/CGI/Smart/FaceCount/TargetAlm	
<b>POST</b>	
<b>Description</b>	Statistics of face and target alarm
<b>Query</b>	None

<b>Inbound Data</b>	<TargetAlmReq>
<b>Success Return</b>	<TargetAlmRsp>
<p><b>Explanations on protocol:</b>  Statistics of target alarm</p> <p><b>Explanations on key parameters:</b>  Request:  &lt;sort&gt; Sort type; 1: Positive; 2: Reverse  &lt;libKey&gt; Library key, unique  &lt;accuracy&gt; Accuracy; 0: Day; 1: Week; 2: Month; 3: Year  &lt;beginTime&gt; Begin time  &lt;endTime&gt; End time  &lt;page&gt; Page, the first page is 0  &lt;perPageCnt&gt; Count per page</p> <p>Reply:  &lt;totalCnt&gt; Total count, calculate the total pages  &lt;countTargetAlmMsgList&gt;  &lt;countTargetAlmMsg&gt;  &lt;almCnt&gt; Total alarm count  &lt;libKey&gt; Key of face library  &lt;faceKey&gt; Key of face library  &lt;picFileName&gt; Base map path and name, 63 bits  &lt;name&gt; Name, 63 bits  &lt;sex&gt; Gender; 0: Unknown; 1: Male; 2: Female  &lt;nation&gt; Nationality; 0: Unknown; 10000: Minority  &lt;birthday&gt; Birthday: 1970-1-1 number of seconds  &lt;certType&gt; Certificate type; 0-Unknown; 1- Certificate of officer; 2-ID card  &lt;certNum&gt; Certificate No., 63 bits  &lt;country&gt; Country, as per national and local ISO 3166-1 code table (see figure)  &lt;address&gt; Address, 64 bits at most  &lt;company&gt; Company name, 64 bits at most</p>	

**TargetAlmReq XML Block**

<pre>&lt;?xml version="1.0" encoding="UTF-8"?&gt; &lt;targetAlmReq&gt; &lt;sort&gt;&lt;!-- req, xs: integer --&gt;&lt;/sort&gt; &lt;libKeyList&gt; &lt;libKey&gt;&lt;!-- req, xs: long long --&gt;&lt;/libKey&gt; // Repeat &lt;libKey&gt; &lt;/libKeyList&gt; &lt;accuracy&gt;&lt;!-- req, xs: integer --&gt;&lt;/accuracy&gt; &lt;beginTime&gt;&lt;!-- req, xs: datetime --&gt;&lt;/beginTime&gt; &lt;endTime&gt;&lt;!-- req, xs: datetime --&gt;&lt;/endTime&gt; &lt;page&gt;&lt;!-- req, xs: integer --&gt;&lt;/page&gt; &lt;perPageCnt&gt;&lt;!-- req, xs: integer --&gt;&lt;/perPageCnt&gt; &lt;/targetAlmReq&gt;</pre>
---

**TargetAlmRsp XML Block**

<pre>&lt;?xml version="1.0" encoding="UTF-8"?&gt; &lt;targetAlmRsp&gt; &lt;totalCnt&gt;&lt;!-- req, xs: integer --&gt;&lt;/totalCnt&gt; &lt;countTargetAlmMsgList&gt; &lt;countTargetAlmMsg&gt; &lt;almCnt&gt;&lt;!-- req, xs: integer --&gt;&lt;/almCnt&gt; &lt;libKey&gt;&lt;!-- req, xs: long long --&gt;&lt;/libKey&gt; &lt;faceKey&gt;&lt;!-- req, xs: long long --&gt;&lt;/faceKey&gt; &lt;picFileName&gt;&lt;!-- req, xs:string --&gt;&lt;/picFileName&gt; &lt;name&gt;&lt;!-- req, xs:string --&gt;&lt;/name&gt; &lt;sex&gt;&lt;!-- req, xs: integer --&gt;&lt;/sex&gt; &lt;nation&gt;&lt;!-- req, xs: integer --&gt;&lt;/nation&gt;</pre>
--

```

<birthday><!-- req, xs: datetime --></birthday>
<certType><!-- req, xs: integer --></certType>
<certNum><!-- req, xs:string --></certNum>
<facePicQueryResult version="2.0">
<sessionId><!--req,sx:integer--></sessionId>
<totalCount><!--req,sx:integer--></totalCount>
<pageSize><!--req,sx:integer--></pageSize>
<matchList>
<matchElement>
<index><!--req,sx:integer--></index>
<libKey><!--req,sx: integer--></libKey>
<faceKey><!--req,sx: integer--></faceKey>
<fileType><!--req,sx:integer--></fileType>
<model><!--req,sx:integer--></model>
<name><!--req,sx:integer--></name>
<sex><!--req,sx:integer--></sex>
<timeSpanList>
<timeSpan>
<birthday><!-- req, xs: datetime --></birthday>
</timeSpan>
</timeSpanList>
<nation><!--req,sx:integer--></nation>
<province><!--req,sx:integer--></province>
<city><!--req,sx:integer--></city>
<certType><!--req,sx:integer--></certType>
<certNum><!--dep,sx: string--></certNum>
</matchElement>
</matchList>
<country><!-- req, xs: integer --></country>
<address ><!-- req, xs: string --></address>
<company ><!-- req, xs: string --></company>
</countTargetAlmMsg>
// Repeat countTargetAlmMsg
</countTargetAlmMsgList>
</targetAlmRsp>

```

**Test cases**

**POST /CGI/Smart/FaceCount/TargetAlm**

**Request XML: TargetAlmReq>**

**Response XML: <TargetAlmRsp>**

```

<?xml version="1.0" encoding="UTF-8"?>
<targetAlmReq>
<sort>1</sort>
<libKeyList>
<libKey>1234567890</libKey>
....
<libKey>9876543210</libKey>
</libKeyList>
<accuracy>1</accuracy>
<beginTime>2018-07-10T12:00:00Z</beginTime>
<endTime>2018-07-10T13:00:00Z</endTime>
<page>0</page>
<perPageCnt>10</perPageCnt>
</targetAlmReq>

```

```

<?xml version="1.0" encoding="UTF-8"?>
<targetAlmRsp>
<totalCnt>5000</totalCnt>
<countTargetAlmMsgList>
<countTargetAlmMsg>
<almCnt>155</almCnt>
<libKey>1234567890</libKey>
<faceKey>111111111</faceKey>
<picFileName>/tmp/face/0.jpg</picFileName>
<name> Zhang San</name>
<sex>1</sex>
<nation>55</nation>
<birthday>2018-07-10T12:00:00Z</birthday>
<certType>2</certType>
<certNum>120105196407051154</certNum>
<country >0</country>
<address >huake</address>
<company >Tiandy</company>
</countTargetAlmMsg>
<countTargetAlmMsg>
...
</countTargetAlmMsg>
</countTargetAlmMsgList>
</targetAlmRsp>

```

### 2.7.63/CGI/Smart/FaceCount/TargetMsg

/CGI/Smart/FaceCount/TargetMsg	
<b>POST</b>	
<b>Description</b>	Details of face statistics and target alarm
<b>Query</b>	None
<b>Inbound Data</b>	<TargetMsgReq>
<b>Success Return</b>	<TargetMsgRsp>
<p><b>Explanations on protocol:</b> This protocol is prepared for query of statistics of target alarms.</p> <p><b>Explanations on key parameters:</b> Request:            &lt;faceKey&gt; Key of face library            &lt;beginTime&gt; Begin time            &lt;endTime&gt; End time            &lt;page&gt; Page, the first page is 0            &lt;perPageCnt&gt; Count per page            Reply:            &lt;targetAlmMsgList&gt;            &lt;targetAlmMsg&gt;            &lt;similarityDegree&gt; Similarity            &lt;picFileName&gt; Picture path and name, 63 bits            &lt;beginTime&gt; Begin time            &lt;endTime&gt; End time, not needed in interface            &lt;channel&gt; Channel</p>	

#### TargetMsgReq XML Block

```

<?xml version="1.0" encoding="UTF-8"?>
<targetMsgReq>
<faceKey><!-- req, xs: long long --></faceKey>
<beginTime><!-- req, xs: datetime --></beginTime>
<endTime><!-- req, xs: datetime --></endTime>
<page><!-- req, xs: integer --></page>

```

```
<perPageCnt><!-- req, xs: integer --></perPageCnt>
</targetMsgReq>
```

#### TargetMsgRsp XML Block

```
<?xml version="1.0" encoding="UTF-8"?>
<targetMsgRsp>
<targetAlmMsgList>
<targetAlmMsg>
<similarityDegree><!-- req, xs: integer --></similarityDegree>
<picFileName><!-- req, xs:string --></picFileName>
<beginTime><!-- req, xs: datetime --></beginTime>
<endTime><!-- req, xs: datetime --></endTime>
<channel><!-- req, xs: integer --></channel>
</targetAlmMsg>
// Repeat targetAlmMsg
</targetAlmMsgList>
</targetMsgRsp>
```

#### Test cases

##### POST /CGI/Smart/FaceCount/TargetMsg

**Request XML:** <TargetMsgReq>

**Response XML:** <TargetMsgRsp>

```
<?xml version="1.0" encoding="UTF-8"?>
<targetMsgReq>
<faceKey>1234567890</faceKey>
<beginTime>2018-07-10T12:00:00Z</beginTime>
<endTime>2018-07-10T13:00:00Z</endTime>
<page>0</page>
<perPageCnt>10</perPageCnt>
</targetMsgReq>
```

```
<?xml version="1.0" encoding="UTF-8"?>
<TargetMsgRsp>
<targetAlmMsgList>
<targetAlmMsg>
<similarityDegree>95</similarityDegree>
<picFileName>/tmp/face/0.jpg</picFileName>
<beginTime>2018-07-10T12:00:00Z</beginTime>
<endTime>2018-07-10T12:00:10Z</endTime>
<channel>1</channel>
</targetAlmMsg>
<targetAlmMsg>
...
</targetAlmMsg>
</targetAlmMsgList>
</TargetMsgRsp>
```

#### 2.7.64 /CGI/Smart/FaceCount/ChannelAlm

/CGI/Smart/FaceCount/ChannelAlm	
<b>POST</b>	
<b>Description</b>	Alarm statistics of face statistics channel
<b>Query</b>	None
<b>Inbound Data</b>	<ChannelAlmReq>
<b>Success Return</b>	<ChannelAlmRsp>

**Explanations on protocol:**

This protocol is prepared for statistics of channel alarms

**Explanations on key parameters:**

Request:

<channelList>

<channel>

<eventType> Event type; 0: All; 1: Face; 2: Comparison alarm; 3: Stranger alarm; 4:  
Frequency alarm; 5:  
Detention alarm

<accuracy> Accuracy; 0: Day; 1: Week; 2: Month; 3: Year

<beginTime> Begin time format: (Y-M-D T Hour: Minute: Second Z), for example,  
2018-07-10T12:00:00Z

<endTime> End time format (Y-M-D T Hour: Minute: Second Z), for example,  
2018-07-10T23:59:59Z

Reply:

<channelAlmList>

<channelAlm>

<channel> Channel

<almCnt> Alarm count

**ChnAlmReq XML Block**

```
<?xml version="1.0" encoding="UTF-8"?>
<channelAlmReq>
<channelList>
<channel><!-- req, xs:integer --></channel>
// Repeat <channel>
</channelList>
<eventType><!-- req, xs: integer --></eventType>
<accuracy><!-- req, xs: integer --></accuracy>
<beginTime><!-- req, xs: datetime --></beginTime>
<endTime><!-- req, xs: datetime --></endTime>
</channelAlmReq>
```

**ChnAlmRsp XML Block**

```
<?xml version="1.0" encoding="UTF-8"?>
<channelAlmRsp>
<channelAlmList>
<channelAlm>
<channel><!-- req, xs: integer --></channel>
<almCnt><!-- req, xs: integer --></almCnt>
</channelAlm>
// Repeat channelAlm
</channelAlmList>
</channelAlmRsp>
```

**Test cases**

**POST /CGI/Smart/FaceCount/ChannelAlm/**

**Request XML: <ChannelAlmReq>**

**Response XML: <ChannelAlmRsp>**

```
<?xml version="1.0" encoding="UTF-8"?>
<channelAlmReq>
<channelList>
<channel>1</channel>
...
<channel>5</channel>
</channelList>
<eventType>2</eventType>
<accuracy>1</accuracy>
<beginTime>2018-07-10T12:00:00Z</beginTime>
```

```
<endTime>2018-07-10T13:00:00Z</endTime>
</channelAlmReq>
```

```
<?xml version="1.0" encoding="UTF-8"?>
<channelAlmRsp >
<channelAlmList>
<channelAlm>
<channel>1</channel>
<almCnt>152</almCnt>
</channelAlm>
...
<channelAlm>
<channel>5</channel>
<almCnt>75</almCnt>
</channelAlm>
</channelAlmList>
</channelAlmRsp>
```

### 2.7.65 /CGI/Smart/FaceDiscern/channels/<ID>/capabilities

/CGI/Smart/FaceDiscern/channels/<ID>/capabilities	
<b>GET</b>	
<b>Description</b>	Acquire frontend face recognition capability set of single channel
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	< FaceDiscernCap>
<b>Explanations on protocol:</b> This protocol is prepared for acquiring frontend face recognition capability set of single channel	
<b>Explanations on key parameters:</b> <support> True: Supported; false: Not supported	

#### FaceDiscernCap XML Block

```
<?xml version="1.0" encoding="UTF-8"?>
<FaceDiscernCap>
<support><!--req,xs:Boolean--></support>
</FaceDiscernCap>
```

#### Test cases

**GET /CGI/Smart/FaceDiscern/channels/4/capabilities**

**Request XML:** none

**Response XML:** <FaceDiscernCap>

```
<?xml version="1.0" encoding="UTF-8"?>
<FaceDiscernCap>
<support>true</support>
</FaceDiscernCap>
```

### 2.7.66 /CGI/Smart/Property/Dev/<ID>/Channels/<ID>/Scene/<ID>/

/CGI/Smart/Property/Dev/<ID>/Channels/<ID>/Scene/<ID>/	
<b>GET</b>	
<b>Description</b>	Acquire NVR performance
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<Property>



**Explanations on protocol:**

This protocol is prepared for acquiring the NVR performance. Dev: Device No., reserved, 0 as default; device type: 0 nvr 1 ipc.

**Explanations on key parameters:**

<total> Total device performance, 16 as default

<itemList>

<item>

<type> Type: 1. NVR face detection; 2. NVR face recognition; 3. IPC face detection; 4. IPC face recognition

<algtype> Algorithm type: Behavior: Behavior analysis; face: Face recognition; Human: Human detection; Pept: Oilfield monitoring; PeopleNumAlarm: People number error alarm; Audio: Audio diagnosis; Video: Video diagnosis; Group: Group; OnDuty: On-duty detection; person amount statistics, PlatLicense: Place recognition; ParkGuard: Park guard; IllegalPark: Illegal park; IntelliTrace: Intelligent traction; structurization: Structuration; Helmet: Helmet; Prctduty: Single interrogation/unattended; Sleep: Sleep; NewFight: New fight; GetUp: Get up; HeightLimit: Height limit; NewDuty: New duty; Stranded: Stranded; Alone: Alone; Delivergoods: Deliver goods; FaceMosaic: Face mosaic; ColorTrack: Color traction; Loitering: Loitering; AttendedBaggage: Attended baggage; UnattendedBaggage: Unattended baggage; HeatMap: heat map, Smoke: smoking, Telephone: phone call, fireworks :pyrotechnic detection, temDetect: temperature detection

<everyProperty> Performance of every circuit

<cnt> Enabling amount

<maxCnt> Max. enabling amount

<itemModelID> The model ID corresponding to the algorithm

<modelProperty> The computing power occupied by this algorithm model

**Property XML Block**

```
<?xml version="1.0" encoding="UTF-8"?>
<Property>
<total><!-- req, xs: integer --></total>
<itemList>
<item>
<type><!-- req, xs: integer --></type>
<algType>
  <!--req,xs:string"Behavior,Face,Human,Pept,Prctduty,Sleep,NewFight,GetUp,HeightLimit,NewDuty,Stranded,Alone,Delivergoods,FaceMosaic,ColorTrack,Loitering,AttendedBaggage,UnattendedBaggage,PeopleNumAlarm,Audio,Video,Group,OnDuty,PlatLicense, Demographics,ParkGuard, IllegalPark, IntelliTrace,HeatMap, Smoke,Telephone, fireworks,temDetect" -->
</algType>
<everyProperty><!-- req, xs: integer --></everyProperty>
<cnt><!-- req, xs: integer --></cnt>
<maxCnt><!-- req, xs: integer --></maxCnt>
<itemModelID><!-- req, xs: integer --></itemModelID>
<modelProperty><!-- req, xs: integer --></modelProperty>
</item>
</itemList>
</Property>
```

**Test cases**

**GET /CGI/Smart/Property/Dev/0**

**Request XML: none**

**Response XML: <Property>**

```
<?xml version="1.0" encoding="UTF-8"?>
<Property>
<total>16</total>
<itemList>
<item>
```

```

<type>1</type>
<everyProperty>1</everyProperty>
<cnt>1</cnt>
<itemModelID>1</itemModelID>
<modelProperty>6</modelProperty>
</item>
<item>
<type>2</type>
<everyProperty>1</everyProperty>
<cnt>1</cnt>
<itemModelID>1</itemModelID>
<modelProperty>6</modelProperty>
</item>
</itemList>
</Property>

```

### 2.7.67 /CGI/Smart/AlertSoundCnt/Channels/<ID>

/CGI/Smart/AlertSoundCnt/Channels/<ID>	
<b>GET</b>	
<b>Description</b>	Acquire amount of new alarm sound
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<AlertSound>
<p><b>Explanations on protocol:</b> This protocol is prepared for acquiring the amount of new alarm sounds</p> <p><b>Explanations on key parameters:</b>            &lt;total&gt; Total number of sound record, max. value is 100            &lt;sample&gt; Amount of fixed audio, max. value is 100            &lt;custom&gt; Amount of customized audio (total amount of audio file – fixed audio amount)            &lt;tts&gt; tts audio amount (total amount of audio file – fixed audio amount – customized audio amount) (frontend audio broadcast)</p>	

#### Property XML Block

```

<?xml version="1.0" encoding="UTF-8"?>
<AlertSound>
<total><!-- req, xs: integer --></total>
<sample><!-- req, xs: integer --></sample>
<custom><!-- req, xs: integer --></custom>
<tts><!-- req, xs: integer --></tts>
</AlertSound>

```

#### Test cases

**GET /CGI/Smart/AlertSoundCnt/Channels/1**

**Request XML: none**

**Response XML: <AlertSound>**

```

<?xml version="1.0" encoding="UTF-8"?>
<AlertSound>
<total>5</total>
<sample>3</sample>
<custom>1</custom>
<tts>1</tts>
</AlertSound>

```

### 2.7.68 /CGI/Smart/IpFaceLib/Manage/Channels/<ID>

```

/CGI/Smart/IpFaceLib/Manage/Channels/<ID>

```

<b>POST</b>	
<b>Description</b>	Acquire parameters of frontend face recognition library
<b>Query</b>	None
<b>Inbound Data</b>	<IpcFaceLibReq>
<b>Success Return</b>	<ipcFaceLibRspList>

**Explanations on protocol:**

Acquire parameters of frontend face recognition library

**Explanations on key parameters:**

Request:

<type> Type; 0: NVR local; 1: Frontend (send 1 only)

<pageNo> Page (send 0)

<pageSize> Count per page (send 32)

Reply:

<pageNo> Page >=0

<index> Page No.>=0

<key> key value of face library

<name> Face library name, 64 bits at most

<threshold> Threshold >=0

<descripInfo> Description information, 64 bits at most

<alarmType> Deployment type; 0: No deployment; 1: Blacklist; 2: Black and white list; 3: Black and white list

**IpcFaceLibReq XML Block**

```
<?xml version="1.0" encoding="UTF-8"?>
<ipcFaceLibReq>
<type><!-- req, xs: integer --></type>
<pageNo><!-- req, xs: integer --></pageNo>
<pageSize><!-- req, xs:integer --></pageSize>
</ipcFaceLibReq>
```

**IpcFaceLibRsp XML Block**

```
<?xml version="1.0" encoding="UTF-8"?>
<ipcFaceLibRspList>
<ipcFaceLibRsp>
<pageNo><!-- req, xs: integer --></pageNo>
<index><!-- req, xs: integer --></index>
<key><!-- req, xs: integer --></key>
<name><!-- req, xs:string --></name>
<threshold><!-- req, xs: integer --></threshold>
<descripInfo><!-- req, xs:string --></descripInfo>
<alarmType><!-- req, xs: integer --></alarmType>
</ipcFaceLibRsp>
//...Repeat <ipcFaceLibRsp> Structure
</ipcFaceLibRspList>
```

**Test cases**

**POST /CGI/Smart/IpcFaceLib/Manage/Channels/1**

**Request XML: <ipcFaceLibReq>**

**Response XML: <ipcFaceLibRspList>**

```
<?xml version="1.0" encoding="UTF-8"?>
<ipcFaceLibReq>
<type>1</type>
<pageNo>0</pageNo>
<pageSize>32</pageSize>
</ipcFaceLibReq>
```

```

<?xml version="1.0" encoding="UTF-8"?>
<ipcFaceLibRspList>
<ipcFaceLibRsp>
<pageNo>0</pageNo>
<index>0</index>
<key>2</key>
<name> R&D library</name>
<threshold>11</threshold>
<descripInfo> R&D staff library</descripInfo>
<alarmType>0</alarmType>
</ipcFaceLibRsp>
...
</ipcFaceLibRspList>

```

### 2.7.69 /CGI/Smart/Face/Reset/Model

<b>/CGI/Smart/Face/Reset/Model</b>	
<b>PUT</b>	
<b>Description</b>	Remodel face library
<b>Query</b>	None
<b>Inbound Data</b>	<ResetFaceModel>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b> Remodel face library, reserve protocol parameters; send 1 to do remodeling completely; send 0 for libKey and faceKey</p> <p><b>Explanations on key parameters:</b>  &lt;libKey&gt; Face library key, 0: Invalid  &lt;faceKey&gt; Face library key; 0: Invalid  &lt;resetOpt&gt; Remodeling type; 1: Remodel all; 2: Designated faceKey; 3. Designated libKey</p>	

#### ResetFaceModel XML Block

```

<?xml version="1.0" encoding="UTF-8"?>
<resetFaceModel>
<libKey><!-- req, xs: long long --></libKey>
<faceKey><!-- req, xs: long long --></faceKey>
<resetOpt><!-- req, xs:integer --></resetOpt>
</resetFaceModel>

```

#### Test cases

##### PUT /CGI/Smart/Face/Reset/Model

**Request XML:** <ResetFaceModel>

**Response XML:** <ResponseStatus>

```

<?xml version="1.0" encoding="UTF-8"?>
<resetFaceModel>
<libKey>0</libKey>
<faceKey>0</faceKey>
<resetOpt>1</resetOpt>
</resetFaceModel>

```

### 2.7.70 /CGI/Smart/TargetPicture/channels/<ID>/Scene/<ID>

<b>/CGI/Smart/TargetPicture/channels/&lt;ID&gt;/Scene/&lt;ID&gt; General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire target picture parameters
<b>Query</b>	None
<b>Inbound Data</b>	None

<b>Success Return</b>	<TargetPicture>
<b>PUT</b>	
<b>Description</b>	Set target picture parameters
<b>Query</b>	None
<b>Inbound Data</b>	<TargetPicture>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

This protocol is prepared for query and setting of target picture parameters, helping client or IE query and set the target picture parameters via CGI protocol, including target picture type, width, face height and body height.

**Explanations on key parameters:**

<targetPictureType> means target picture type, custom-Customized, bigHeadPhoto- Big head photo, halfBody-Half body picture, fullBodyPicture-Full body picture

<pictureWidth> means picture width, range: 1-5. Settable if target picture type is customizable

<faceHeight> Face height, range: 1-3. Settable if target picture type is customizable

<bodyHeight> Body height, range: 0-10. Settable if target picture type is customizable

**TargetPicture XML Block**

```
<TargetPicture version="2.0" xmlns="http://www.std-cgi.org/ver20/XMLSchema">
<targetPictureType><!-- req, xs:string --></targetPictureType>
<pictureWidth><!-- req, xs:string --></pictureWidth><!-- dep-->
<faceHeight><!-- req, xs:string --></faceHeight><!-- dep-->
<bodyHeight><!-- req, xs:string --></bodyHeight><!-- dep-->
</TargetPicture>
```

**Test cases**

**GET /CGI/Smart/TargetPicture/channels/1/Scene/0**

**Request XML:** none

**Response XML:** <TargetPicture>

**PUT /CGI/Smart/TargetPicture/channels/1/Scene/0**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<TargetPicture version="2.0" xmlns="http://www.std-cgi.org/ver20/XMLSchema">
<targetPictureType>custom</targetPictureType>
<pictureWidth>2</pictureWidth>
<faceHeight>3</faceHeight>
<bodyHeight>5</bodyHeight>
</TargetPicture>
```

**2.7.71/CGI/Smart/MixedTargetDetect/<ID>/channels/<ID>/Scene/<ID>**

<b>/CGI/Smart/MixedTargetDetect/&lt;ID&gt;/channels/&lt;ID&gt;/Scene/&lt;ID&gt;</b>	
<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire mixed target detection parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<MixedTargetDetect>
<b>PUT</b>	
<b>Description</b>	Set mixed target parameters
<b>Query</b>	None
<b>Inbound Data</b>	<MixedTargetDetect>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

This protocol is prepared for query and setting of mixed target detection functions.

explanations on important parameters:

<enabled> Whether enable mixed target detection; true: Enabled; false: Disabled.

<structureMode> Structuration algorithm mode; face-Face; pedestrian-Pedestrian; plate-Plate; vehicle-Vehicle; noMotor-Non-motor vehicle  
 <modeEnabled> Enable structuration algorithm mode; True: Enable  
 <minObjectSize> Min. face size; 1~10000 picture width ten-thousandth, 10000 means the entire screen width. Not handled if this field is 0.  
 <sensitivityLevel> Sensitivity: 0-5; IE presentation form is 0-100, 60 as default  
 <alarmRule> Alarm rule; true: Enabled; false: Disabled  
 <dispalyTarget> Display target; true: Displayed; false: Not displayed  
 <licensePlateSize> Plate size. 1~10000 picture width ten-thousandth, 10000 means the entire screen width. Not handled if this field is 0.  
 <faceQuality> Face quality, [0-100]  
 <humanQuality> Pedestrian quality, [0-100]  
 <plateQuality> Plate quality, [0-100]  
 <vehicleQuality> Non-motor vehicle quality, [0-100]  
 <cycleQuality> Non-motor vehicle quality, [0-100]  
 <backgroundQPvalue> Background picture quality,[0-100]  
 <featurePictureQPvalue> Feature picture quality,[0-100]  
 <exposureBright> Exposure brightness, 0-255  
 <pushMode> Picture push strategy; 0: Reserved; 1: Fastest; 2: Optimal; 3: Customized; 4: Timing; 5: Collision line  
 <pushLevel> Picture push level; Valid when pushMode is 3; 0: Reserved; 1: Fast; 2: Intermediate; 3: Slow  
 <pushTimeSpace> Picture push interval; valid when picture push strategy is timing; unit: Frame  
 <snapMode> Snapshot strategy; 0: Reserved; 1: Full snapshot mode; 2: High-quality mode; 3: Customization mode  
 <snapSpace> Snapshot interval, interval frame, valid when pushMode is 4  
 <snapTimes> Snapshot times, 1-8

#### **MixedTargetDetect XML Block**

```

<MixedTargetDetect version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <id/><!-- req, xs:string, id --> Mixed target detection id, this value is 1
  <enabled/><!-- req, xs:boolean --></enabled>
  <StructureList>
    <StructureItem>
      <structureMode/><!--req,xs:string--><structureMode>
      <modeEnabled/><!-- req, xs:boolean --></modeEnabled>
    </StructureItem>
  </StructureList>
  <minObjectSize>
    <!-- opt, xs:integer, min number of pixels per object -->
  </minObjectSize>
  <alarmRule/><!-- req, xs:boolean --></alarmRule>// Whether display alarm rule
  <dispalyTarget/><!-- req, xs:boolean --></dispalyTarget>// Display target
  <licensePlateSize opt=""><!--opt, xs:integer ="1,2..."></licensePlateSize>
  <RegionCoordinatesList>
    <RegionCoordinates>
      <positionX>
        <!--req-->
        <!--req,xs:integer-->
      </positionX>
      <positionY>
        <!--req-->
        <!--req,xs:integer-->
      </positionY>
    </RegionCoordinates>
  </RegionCoordinatesList>
  <sensitivityLevel/><!-- req, xs:integer -->   </sensitivityLevel>//   Sensitivity,   0-5,   IE
  presentation form is 0-100
  
```

```

<snapSpace><!-- opt, xs:integer--></snapSpace> // Snapshot interval, enabled when picture
push strategy is timing
<snapTimes><!-- opt, xs:integer"1-8"--></snapTimes> // Snapshot times
<displayRule><!-- req, xs:Boolean"true,false"--></displayRule> // Whether display rule frame
<pushMode opt = " fastest,optimal,custom,timing,collisionLine">
<!-- opt, xs:string" fastest,optimal,custom,timing,collisionLine"-->
</pushMode> // Picture push level option will occur when picture push strategy is custom;
draw collision line when collisionLine occurs
<pushLevel opt = "hspeed,mspeed,lspeed">
<!-- opt, xs:string "hspeed,mspeed,lspeed"-->
</pushLevel> // Picture push level is valid when picture push strategy is custom
<CollisionLineList>
  <CollisionLineItem>
    <positionX>
      <!--req-->
      <!--req,xs:integer-->
    </positionX>
    <positionY>
      <!--req-->
      <!--req,xs:integer-->
    </positionY>
  </CollisionLineItem>
</CollisionLineList> // Coordinates of collision line, valid when picture push strategy is
collisionLine
<snapMode opt="all, highquality,custom">
<!-- opt, xs:string "all, highquality,custom"-->
</snapMode> // Snapshot strategy; Snapshot level will display only if snapshot strategy is
custom
</MixedTargetDetect>

```

**Test cases**

**GET /CGI/Smart/MixedTargetDetect/1/channels/1/Scene/0**

**Request XML: none**

**Response XML: <MixedTargetDetect>**

**PUT /CGI/Smart/MixedTargetDetect/1/channels/1/Scene/0**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<MixedTargetDetect version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<id>1</id>
<enabled>true</enabled>
<StructureList>
<StructureItem>
<structureMode>face</structureMode>
<modeEnabled>ture</modeEnabled>
</StructureItem>
</StructureList>
<minObjectSize>8</minObjectSize>
<alarmRule>true</alarmRule>
<licensePlateSize>0</licensePlateSize>
<sensitivityLevel>50</sensitivityLevel>
<displayRule>true</displayRule>
<dispalyTarget>true</dispalyTarget>
<RegionCoordinatesList>
<RegionCoordinates>
<positionX>0</positionX>
<positionY>0</positionY>
</RegionCoordinates>
<RegionCoordinates>

```

```

<positionX>1000</positionX>
<positionY>0</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>0</positionX>
<positionY>1000</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>1000</positionX>
<positionY>1000</positionY>
</RegionCoordinates>
</RegionCoordinatesList>
<pushMode opt = "fastest,optimal,custom,timing,collisionLine">collisionLine</ pushMode>
<CollisionLineList>
  <CollisionLineItem>
    <positionX>1000</positionX>
    <positionY>1000</positionY>
  </CollisionLineItem>
  <CollisionLineItem>
    <positionX>1200</positionX>
    <positionY>1200</positionY>
  </CollisionLineItem>
</CollisionLineList>
<snapMode opt="all, highquality,custom">custom</ snapMode>
<snapLevel>80</ snapLevel>
<snapTimes>5</snapTimes>
</MixedTargetDetect>

```

### 2.7.72/CGI/Smart/PlateShade/<ID>/channels/<ID>/Scene/<ID>

/CGI/Smart/PlateShade/<ID>/channels/<ID>/Scene/<ID> General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire parameters of shielded plate
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<PlateShade>
<b>PUT</b>	
<b>Description</b>	Set parameters of shielded plate
<b>Query</b>	None
<b>Inbound Data</b>	<PlateShade>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol is prepared for query and setting of parameters of shielded plate. This protocol is reserved for further expansion and not introduced temporarily. explanations on important parameters:	

#### PlateShade XML Block

```

<PlateShadeversion="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
</PlateShade>

```

#### Test cases

**GET /CGI/Smart/PlateShade/<ID>/channels/1/Scene/0**

**Request XML:** none

**Response XML:** <PlateShade>

**PUT /CGI/Smart/PlateShade/<ID>/channels/1/Scene/0**

**Response XML:** <ResponseStatus>

**Request XML:** as below



```
<PlateShade version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
</PlateShade>
```

### 2.7.73 /CGI/Smart/Export/LocalFile/<FileName>

/CGI/Smart/Export/LocalFile/<FileName>		General Resource v2.0
<b>POST</b>		
<b>Description</b>	Export local files of face library	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	File content	
<b>Explanations on protocol:</b> Export face library <b>Explanations of parameters:</b> <FileName> Export filename, 128 bits		

#### Test cases

**GET /CGI/Smart/Export/LocalFile/0.jpg**

**Request XML:** none

**Response XML:** File contents

### 2.7.74 /CGI/Smart/Helmet/<ID>/Channels/<ID>/Scene/<ID>

/CGI/Smart/Helmet/<ID>/Channels/<ID>/Scene/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire parameters of helmet detection	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<Helmet>	
<b>PUT</b>		
<b>Description</b>	Set parameters of helmet detection	
<b>Query</b>	None	
<b>Inbound Data</b>	<Helmet>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b> This protocol is prepared for query and setting of helmet detection parameters via intelligent analysis, helping client or web query and set the stall parameters via CGI protocol. <b>Explanations on key parameters:</b> <monitorArea> Monitoring area: 0: Entrance/exit; 1: Construction area (default: 0) <sensitivity> Sensitivity: 0~100 (default: 80) <colorEnable> Whether detect helmet color: true: Detect; false: Not detect <colorType> Helmet color: None: 0; red: 1; blue: 2; white: 3; yellow: 4; other: Others; 31 <displayRule > Display rule; true-Display, false-Not display <displayStat > Display alarm count: true-Display; false: Not display <isplayTarget > Display target: true-Display; false: Not display <calibrationSize> Calibration frame size: 0~100 picture width percentage (default: 15, adjustment range: 10~25) <regionCoordinatesList> means list of detection area coordinates <regionCoordinates> means coordinates of detection area <positionX> means X coordinates of detection area: ten-thousandth <positionY> means Y coordinates of detection area: ten-thousandth <targetColor> Target color <alarmAreaColor> Color of alarm area <minSize> Min. size 0-100, 20 as default		

<maxSize> Max. size 0-100

### Helmet XML Block

```
<helmet version="2.0" >
<monitorArea><!-- req, xs: integer --></monitorArea>
  <sensitivity ><!-- req, xs: integer --></sensitivity>
  <colorEnable><!-- req, xs: string --></colorEnable>
  <colorTypeList>
    <colorType><!-- req, xs: integer --></colorType>
    </colorType><!-- req, xs: integer --></colorType>
  </ColorTypeList>
  <targetColor><!--opt,xs:string"red,green,yellow,blue,purple,cyan,black,white"--></targetColor>
// Target color
  <alarmAreaColor><!--opt,xs:string"red,green,yellow,blue,purple,cyan,black,white"--></alarmAreaColor>
// Alarm area color
  <displayRule><!-- req, xs: string --></displayRule>
  <displayStat><!-- req, xs: string --></displayStat>
  <displyTarget><!-- req, xs: string --></displyTarget>
  <minSize><!-- opt, xs:integer,"0-100"--></minSize > // Min. size, 20 as default
  <maxSize><!-- opt, xs:integer, "0-100"--></maxSize > //maximum size
  <calibrationSize><!-- req, xs: string --></calibrationSize>
  <regionCoordinatesList>
    <regionCoordinates>
      <positionX><!-- req, xs: integer --></positionX>
      <positionY><!-- req, xs: integer --></positionY>
    </regionCoordinates>
    <regionCoordinates>
      <positionX><!-- req, xs: integer --></positionX>
      <positionY><!-- req, xs: integer --></positionY>
    </regionCoordinates>
  </regionCoordinatesList>
</helmet>
```

### Test cases

**GET** /CGI/Smart/Helmet/<ID>/channels/<ID>/scene/<ID>

**Request XML:** none

**Response XML:** <Helmet >

**PUT** /CGI/Smart/Helmet /<ID>/channels/<ID>/scene/<ID>

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<helmet version="2.0">
<monitorArea >0</monitorArea>
  <sensitivity >80</sensitivity>
  <colorEnable >true</colorEnable>
  <colorTypeList>
    <colorType >blue</colorType>
    <colorType >other</colorType>
  </colorTypeList>
  <targetColor>red</targetColor>
  <alarmAreaColor>green</alarmAreaColor>
  <displayRule >true</displayRule>
  <displayStat >false</displayStat>
  <displyTarget >false</displyTarget >
  <calibrationSize >15</calibrationSize>
  <minSize>20</minSize >
  <maxSize>50</maxSize >
  <regionCoordinatesList>
    <regionCoordinates>
      <positionX>100</positionX>
```

```

    <positionY>200</positionY>
  </regionCoordinates>
  <regionCoordinates>
    <positionX>123</positionX>
    <positionY>456</positionY>
  </regionCoordinates>
</regionCoordinatesList>
</helmet>

```

### 2.7.75 /CGI/Smart/FaceLib/<key>/Del/Progress

/CGI/Smart/FaceLib/<key>/Del/Progress		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Face library deletion progress	
<b>Query</b>	<b>None</b>	
<b>Inbound Data</b>	<b>None</b>	
<b>Success Return</b>	<Progress>	
<b>Explanations on protocol:</b> Deletion progress of face library <b>Explanations of parameters:</b> URL: <key>: Face library key value Reply xml: <state> State; 0-Undeleted; 1-Delete in progress; 2-Deleted; 3-Deletion fails <pro> Progress, 0-100		

#### Progress XML Block

```

<?xml version="1.0" encoding="UTF-8"?>
<progressversion="1.0">
<state><!--req,sx:integer--></state>
<pro><!--req,sx:integer--></pro>
</progress>

```

#### Test cases

#### GET /CGI/Smart/FaceLib/<key>/Del/Progress

#### Response XML: <Progress>

```

<?xml version="1.0" encoding="UTF-8"?>
<progressversion="1.0">
<state>1</state>
<pro>50</pro>
</progress>

```

### 2.7.76 /CGI/Smart/AIResource/channels/<ID>/Managment

/CGI/Smart/AIResource/<Key>/Manage	
<b>GET</b>	
<b>Description</b>	Intelligent resource management and switching
<b>Query</b>	None
<b>Inbound Data</b>	<aiList>
<b>Success Return</b>	<responseStatus>
<b>PUT</b>	
<b>Description</b>	Intelligent resource management and switching
<b>Query</b>	None
<b>Inbound Data</b>	<aiList>
<b>Success Return</b>	<responseStatus>

**Explanations on protocol:**

Realize intelligent management and switching of resources.

Introduction to key parameters: URL

<ID> Channel No.

Response xml

<ID> Channel No.; 1-Failure

<aiName> means resource type: IVS –Intelligent monitoring; FaceDetect-Face snapshot; FaceRecognition-Face recognition; WaterMode-Water monitoring, WaterAlertStation- Water alert station; TrafficFlow-Traffic flow; ControlCommission-Intelligent supervision; PublicSecurity-Intelligent security; Education-Intelligent education; Discipline-Intelligent discipline; RoadMonitor-Road monitoring; MixedDetect-Mixed detection , IntelligentTraffic-intelligent traffic mode, Supervise-intelligent supervision, TrafficWarning-road safety warning, EventDetect-road incident detection

<aiEnable> Whether enable; false-Disable; true-Enable

**FaceLibParas XML Block**

```
<?xml version="1.0" encoding="UTF-8"?>
```

```
<aiList>
```

```
<aiElement>
```

```
<aiName>
```

```
<!-- req, xs:string -->
```

```
</aiName>
```

```
<aiEnable>
```

```
<!--req, xs:boolean-->
```

```
</aiEnable >
```

```
</aiElement >
```

```
</aiList >
```

**Test cases**

**PUT /CGI/Smart/AIResource/channels/0/Managment**

**Request XML: <aiList >**

```
<?xml version="1.0" encoding="UTF-8"?>
```

```
<aiList>
```

```
<aiElement>
```

```
<aiName>IVS</aiName>
```

```
<aiEnable>ture</aiEnable >
```

```
</aiElement >
```

```
<aiElement>
```

```
<aiName>FaceDetect</aiName>
```

```
<aiEnable>>false</aiEnable >
```

```
</aiElement >
```

```
<aiElement>
```

```
<aiName>FaceRecognition</aiName>
```

```
<aiEnable>>false</aiEnable >
```

```
</aiElement >
```

```
<aiElement>
```

```
<aiName>WaterMode</aiName>
```

```
<aiEnable>>false</aiEnable >
```

```
</aiElement >
```

```
<aiElement>
```

```
<aiName>WaterAlertStation</aiName>
```

```
<aiEnable>>false</aiEnable >
```

```
</aiElement >
```

```
<aiElement>
```

```
<aiName>TrafficFlow</aiName>
```

```
<aiEnable>>false</aiEnable >
```

```
</aiElement >
```

```
<aiElement>
```

```
<aiName> RoadMonitor </aiName>
```

```

    <aiEnable>>false</aiEnable >
  </aiElement >
  <aiElement>
    <aiName> MixedDetect </aiName>
    <aiEnable>>false</aiEnable >
  </aiElement >
  <aiElement>
    <aiName>IntelligentTraffic</aiName>
    <aiEnable>>false</aiEnable>
  </aiElement>
  <aiElement>
    <aiName>Supervise</aiName>
    <aiEnable>>true</aiEnable >
  </aiElement >
</aiList>

```

**Response XML:** <responseStatus>

### 2.7.77 /CGI/Smart/Face/Unmode/libKey/<ID>/Model

/CGI/Smart/Face/Unmode/Model	
<b>PUT</b>	
<b>Description</b>	Do modeling of unmolded picture in face library
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> Set modeling of unmolded picture in face library <b>Explanations on key parameters:</b> <libKey> Face library key; 0: Invalid; 0x7fffffff: All libraries	

#### Test cases

**PUT /CGI/Smart/Face/Unmode/libKey/<ID>/Model**

**Response XML:** <ResponseStatus>

### 2.7.78 /CGI/Smart/QueryFaceHeatMap/channels/<ID>/sence/<senceID>

/CGI/Smart/QueryFaceHeatMap/channels/<ID>/sence/<senceID>General Resource v2.0	
<b>POST</b>	
<b>Description</b>	Query spatial heat map of face
<b>Query</b>	None
<b>Inbound Data</b>	<QueryFaceHeatMap >
<b>Success Return</b>	<QueryFaceHeatMapResult>
<b>Explanations on protocol:</b> This protocol is prepared for query of spatial heat map of face <b>Explanations on key parameters:</b> iQueryType// Query type: 0: Statistics of passenger flow; 1: Time heat map; 2: Spatial heat map; 3: Face - Age bracket; 4: Face - Gender; 5: Face - Person amount; 6: Face - Nationality; 7: Feature statistics: Glasses; 8: Feature statistics: Mask; 9: Target alarm statistics; 10: Channel alarm statistics - All types; 11: Face detection; 12: Comparison alarm; 13: Stranger alarm; 14: Frequency alarm; 15: Detention alarm; 16: Pedestrian - Gender; 17: Pedestrian - Motion direction; 18: Pedestrian - Person amount; 19: Vehicle - Vehicle type; 20; Vehicle - Motion direction	

typeValue// Type value; means age (upper limit of age: Lower limit of age) when iQueryType is 3; means gender when iQueryType is 4 (0-All, 1-Male, 2-Female)

**QueryFaceHeatMap XML Block**

```
<QueryFaceHeatMap version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<timeSpan>
<startTime>2017-07-18T00:00:00Z</startTime>
<endTime> 2017-07-18T23:59:59Z</endTime>
</timeSpan>
<queryTypeList>
<queryTypeElement>
  <queryType><!-- req, xs: integer --></queryType>// Type
  <typeValue ><!-- req, xs: string --></typeValue>// Type value
</queryTypeElement>
  ...
</queryTypeList>
</QueryFaceHeatMap>
```

**QueryHeatMapResultResult**

```
<QueryFaceHeatMapResult version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<faceHeatMapUrl ><!-- req, xs:string--></faceHeatMapUrl >//url address
</QueryFaceHeatMapResult >
```

**Test cases**

**PUT/ISAPI/Smart/QueryFaceHeatMap /<ID>/channels/<ID>**

**Response XML: <QueryFaceHeatMapResult>**

```
<QueryFaceHeatMapResult version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<faceHeatMapUrl >http://10.30.31.233:80/heatmap.jpg</faceHeatMapUrl >
</QueryFaceHeatMapResult >
```

**Request XML: as below**

```
<QueryFaceHeatMap version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<timeSpan>
<startTime>2017-07-18T00:00:00Z</startTime>
<endTime> 2017-07-18T23:59:59Z</endTime>
</timeSpan>
<queryTypeList>
<queryTypeElement>
  <queryType>3</queryType>// Type
  <typeValue >0</typeValue>// Type value
</queryTypeElement>
<queryTypeElement>
  <queryType>4</queryType>// Type
  <typeValue >0</typeValue>// Type value
</queryTypeElement>
  ...
</queryTypeList>
</QueryFaceHeatMap>
```

**2.7.79/CGI/Smart/ReportFaceData/channels/<ID>/export/<FileName>**

<b>/CGI/Smart/ReportData/channels/&lt;ID&gt;General Resource v2.0</b>	
<b>POST</b>	
<b>Description</b>	Export report of face spatial heat map
<b>Query</b>	None
<b>Inbound Data</b>	<b>&lt;QueryReport&gt;</b>
<b>Success Return</b>	<b>File content</b>

**Explanations on protocol:**

This protocol is prepared for exporting report, sending 0x7fffffff as url of target alarm and channel alarm, and analyzing library and channel in xml

**Explanations on key parameters:**

iReportType// Query type: 0: Statistics of passenger flow; 1: Time heat map; 2: Spatial heat map; 3: Face - Age bracket; 4: Face - Gender; 5: Face - Person amount; 6: Face - Nationality; 7: Feature statistics: Glasses; 8: Feature statistics: Mask; 9: Target alarm statistics; 10: Channel alarm statistics - All types; 11: Face detection; 12: Comparison alarm; 13: Stranger alarm; 14: Frequency alarm; 15: Detention alarm; 16: Pedestrian - Gender; 17: Pedestrian - Motion direction; 18: Pedestrian - Person amount; 19: Vehicle - Vehicle type; 20: Vehicle - Motion direction

typeValue// Type value; means age (upper limit of age: Lower limit of age) when iQueryType is 3; means gender when iQueryType is 4 (0-All, 1-Male, 2-Female)

language// Means language; 2: English; 1: Chinese

**QueryReport XML Block**

```
<QueryReport version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<reportTypeList>
<reportTypeElement>
  <reportType><!-- req, xs: integer --></reportType>// Type
  <typeValue ><!-- req, xs: string --></typeValue>// Type value
</reportTypeElement>
...
</reportTypeList>
<reportPre ><!-- req, xs: integer -->
</reportPre >// Report type; 0: Daily report; 1: Weekly report; 2: Monthly report; 3: Yearly
report
< language><!-- req, xs: integer -->
</language >// Means language; 2: English; 1: Chinese
<timeSpan>
<startTime>2017-07-18T00:00:00Z</startTime>
<endTime> 2017-07-18T23:59:59Z</endTime>
</timeSpan>
<faceLibList>
<faceLib><!-- dep, xs: integer --></faceLib>
// Repeat faceLib
</faceLibList>
<channelList>
<channel><!-- dep, xs: integer --></channel>
// Repeat channel
</channelList>
</QueryReport >
```

**Test cases**

**POST/ISAPI/Smart/ReportData/channels/<ID>/export/<FileName>**

**Request XML: as below**

```
<QueryReport version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
< reportTypeList>
  <reportType >3</reportType >// Type
  <typeValue >0</typeValue>// Type value
  <reportType >4</reportType >// Type
  <typeValue >0</typeValue>// Type value
<\reportTypeList >
<reportPre >1</ reportPre >
< language>0</language>
<timeSpan>
<startTime>2017-07-18T00:00:00Z</startTime>
<endTime> 2017-07-18T23:59:59Z</endTime>
</timeSpan>
```

```

<faceLibList>
<faceLib>1234567890</faceLib>
...
</faceLibList>
<channelList>
<channel>1</channel>
...
</channelList>
</QueryReport >

```

### 2.7.80 /CGI/Smart/FaceLib/Model/Progress

<b>/CGI/Smart/FaceLib/&lt;key&gt;/Model/Progress</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Modeling progress of face library base map	
<b>Query</b>	<b>None</b>	
<b>Inbound Data</b>	<b>None</b>	
<b>Success Return</b>	<b>&lt;Progress&gt;</b>	
<p><b>Explanations on protocol:</b> Modeling progress of face library base map</p> <p><b>Explanations of parameters:</b> URL: &lt;key&gt;: Face library key value Reply xml: &lt;state&gt; State; 0-Unmodeled; 1-Modeling in progress; 2-Modeling completed; 3-Modeling fails &lt;pro&gt; Progress, 0-100 &lt;sum&gt; Total amount of modeling pictures &lt;pos&gt; Amount of modeled pictures &lt;okcnt&gt; Amount of pictures with successful modeling &lt;errcnt&gt; Amount of pictures with failed modeling</p>		

#### Progress XML Block

```

<?xml version="1.0" encoding="UTF-8"?>
<progressversion="1.0">
<state><!--req,sx:integer--></state>
<pro><!--req,sx:integer--></pro>
<sum><!--req,sx:integer--></sum>
<pos><!--req,sx:integer--></pos>
<okcnt><!--req,sx:integer--></okcnt>
<errcnt><!--req,sx:integer--></errcnt>
</progress>

```

#### Test cases

#### GET /CGI/Smart/FaceLib/Model/Progress

#### Response XML: <Progress>

```

<?xml version="1.0" encoding="UTF-8"?>
<progress version="1.0">
<state>1</state>
<pro>50</pro>
<sum>5000</sum>
<pos>2500</pos>
<okcnt>1500</okcnt>
<errcnt>1000</errcnt>
</progress>

```

### 2.7.81/CGI/Smart/DetectExParam/<ID>/channels/<ID>/Scene/<ID>/Model/<ID>

```

/CGI/Smart/DetectExParam/<ID>/channels/<ID>/Scene/<ID>/Model/<ID>

```



<b>General Resource v2.0</b>
------------------------------

<b>GET</b>	
<b>Description</b>	Acquire snapshot expansion parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<DetectExParam>
<b>PUT</b>	
<b>Description</b>	Set snapshot expansion parameters
<b>Query</b>	None
<b>Inbound Data</b>	<DetectExParam >
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**  
 This protocol is prepared for query and setting of snapshot expansion parameters; Model: Face detection mode; 0 nvr 1 ipc.  
 explanations on important parameters:  
 <BigPicEnable> Enabling of uploaded background picture (big)  
 <BigPicQp> Quality of background picture (big)  
 <BigPicOSD> Whether OSD is added in background picture (big)  
 <SmallPicEnable> Enabling of uploaded feature picture (small)  
 <SmallPicQp> Quality of feature picture (small)  
 <BigPicFaceMark> Whether face frame is overlapped in background picture (big)

**DetectExParam XML Block**

```
<DetectExParam version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <BigPicEnable><!-- req, xs:boolean --></BigPicEnable>
  <BigPicQp><!-- opt, xs:integer--></ BigPicQp>
  <BigPicOSD><!-- req, xs:boolean --></BigPicOSD>
  <SmallPicEnable><!-- req, xs:boolean --></SmallPicEnable>
  <SmallPicQp><!-- opt, xs:integer--></SmallPicQp>
  <BigPicFaceMark><!-- req, xs: boolean --></BigPicFaceMark>
</DetectExParam >
```

**Test cases**  
**GET /CGI/Smart/DetectExParam/1/channels/1/scenes/0**  
**Request XML:** none  
**Response XML:** <DetectExParam>  
**PUT /CGI/Smart/DetectExParam/1/channels/1/scenes/0**  
**Response XML:** <ResponseStatus>  
**Request XML:** as below

```
<DetectExParam version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <BigPicEnable>>true</BigPicEnable>
  <BigPicQp>50</ BigPicQp>
  <BigPicOSD>>false</BigPicOSD>
  <SmallPicEnable>>true</SmallPicEnable>
  <SmallPicQp>85</SmallPicQp>
  <BigPicFaceMark>>true</BigPicFaceMark>
</DetectExParam>
```

**2.7.82/CGI/Smart/VerifylockFaceLib/<key>**

<b>/CGI/Smart/VerifylockFaceLib/&lt;key&gt;</b>	
<b>PUT</b>	
<b>Description</b>	Unlock face library password
<b>Query</b>	None
<b>Inbound Data</b>	<FaceLibPasswordParas>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

Unlock the face recognition library

**Explanations of parameters:**

URL

<key> key value of face library

XML

<access> Random information, for calibration use; 32 bits

<password > Face library password, encrypted transmission of 16 bits at most

**Test cases**

**PUT**

/CGI/Smart/VerifylockFaceLib/123

**Request XML: < faceLibPasswordParas > As follows**

```
<?xml version="1.0" encoding="UTF-8"?>
<faceLibPasswordParas version="1.0">
<access>94AAABB419A9820DC171B43240CEEF41</access>
<password>/T6g05arqzu4=</password>
</faceLibPasswordParas>
```

**Response XML: <ResponseStatus>**

Successful return statusCode:1

statusString:"OK"

subStatusCode:"ok"

Failed return statusCode:9

statusString:"Securitycode Failed"

subStatusCode:"CodeError"

**2.7.83/CGI/Smart/FaceDetectAreaPara/channels/<ID>/Scene/<ID>**

/CGI/Smart/FaceDetectAreaPara/channels/<ID>/Scene/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire parameters of face detection area	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<FaceDetectAreaPara >	
<b>PUT</b>		
<b>Description</b>	Set parameters of face detection area	
<b>Query</b>	None	
<b>Inbound Data</b>	<FaceDetectAreaPara>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is prepared for query and setting of parameters of face detection area.		
explanations on important parameters:		
<detectLoop> Loop of detection area: 1~128		
<detectTime> Stay period of detection area: 1~3600 (unit: Second)		
<detectPTZMode> Set preset mode of detection area; 0: Manual; 1: Auto		

**FaceDetectAreaPara XML Block**

```
<FaceDetectAreaPara version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <detectLoop><!-- req, xs: integer --></detectLoop>
  <detectTime><!-- req, xs:integer--></detectTime>
  <detectPTZMode><!-- req, xs:integer--></detectPTZMode>
</FaceDetectAreaPara>
```

**Test cases**

**GET /CGI/Smart/FaceDetectAreaPara/channels/1/scene/0**

**Request XML:** none

**Response XML:** <FaceDetectAreaPara>

**PUT /CGI/Smart/FaceDetectAreaPara/channels/1/scene/0**

**Response XML:** <ResponseStatus>

**Request XML:** <FaceDetectAreaPara>

```
<FaceDetectAreaPara version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <detectLoop>50</detectLoop>
  <detectTime>55</detectTime>
  <detectPTZMode>1</detectPTZMode>
</FaceDetectAreaPara>
```

## 2.7.84/CGI/Smart/FaceDetectAreaList/channels/<ID>/Scene/<ID>

/CGI/Smart/FaceDetectAreaList/channels/<ID>/Scene/<ID>	
General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire list of face detection area
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<FaceDetectAreaList>
<b>PUT</b>	
<b>Description</b>	Set/call/delete face detection area
<b>Query</b>	None
<b>Inbound Data</b>	<FaceDetectAreaList>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol is prepared for setting/call/deletion and acquisition of face ball detection area. explanations on important parameters:	
<detectAreaNum> Total amount of detection area (set/call/delete face detection area; assignment is 1; it means the total amount of acquired detection area when face detection area list is acquired)	
<areaNum> Detection area No. 0~47	
<operationType> Operation type; 1: Set detection area; 2-Call detection area; 3-Delete detection area (attention not attached to this parameter when acquiring detection area list IE; coordinate parameter is not attached with attention in main procedure when calling/deleting detection area)	

### FaceDetectAreaList XML Block

```
<FaceDetectAreaList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <detectAreaNum ><!-- req, xs: integer --></detectAreaNum >
  <detectAreaList >
    <detectArea>
      <areaNum ><!-- req, xs: integer --></areaNum >
      <operationType ><!-- req, xs: integer --></ operationType >
      <RegionCoordinatesList>
        <RegionCoordinates>
          <positionX><!-- req, xs:integer --></positionX>
          <positionY><!-- req, xs:integer --></positionY>
        </RegionCoordinates>
        ...
      </RegionCoordinatesList>
    </detectArea>
    ...
  </detectAreaList >
</FaceDetectAreaList>
```

**Test cases**

**GET /CGI/Smart/FaceDetectAreaList/channels/1/scene/0**

**Request XML: none**

**Response XML: <FaceDetectAreaList>**

```
<FaceDetectAreaList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <detectNum >2</detectNum >
  <detectAreaList >
    <detectArea >
      <areaNum >2</areaNum >
      <operationType >0</ operationType >// (attention not attached to this parameter
when acquiring detection area list IE)
      <RegionCoordinatesList>
        <RegionCoordinates>
          <positionX>0</positionX>
          <positionY>0</positionY>
        </RegionCoordinates>
        <RegionCoordinates>
          <positionX>0</positionX>
          <positionY>1000</positionY>
        </RegionCoordinates>
        <RegionCoordinates>
          <positionX>1000</positionX>
          <positionY>0</positionY>
        </RegionCoordinates>
        <RegionCoordinates>
          <positionX>1000</positionX>
          <positionY>1000</positionY>
        </RegionCoordinates>
      </RegionCoordinatesList >
    </detectArea >
    <detectArea >
      <areaNum >45</areaNum >
      <operationType >0</ operationType >// (attention not attached to this parameter
when acquiring detection area list IE)
      <RegionCoordinatesList >
        <RegionCoordinates >
          <positionX>0</positionX>
          <positionY>0</positionY>
        </RegionCoordinates >
        <RegionCoordinates >
          <positionX>0</positionX>
          <positionY>1000</positionY>
        </RegionCoordinates >
        <RegionCoordinates >
          <positionX>1000</positionX>
          <positionY>0</positionY>
        </RegionCoordinates >
        <RegionCoordinates >
          <positionX>1000</positionX>
          <positionY>1000</positionY>
        </RegionCoordinates >
      </RegionCoordinatesList>
    </detectArea >
  </detectAreaList>
</FaceDetectAreaList>
```

**PUT /CGI/Smart/FaceDetectAreaList/channels/1/scene/0**

**Response XML: <ResponseStatus>**

**Request XML: <FaceDetectAreaList>**

```

<FaceDetectAreaList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <detectNum >1</DetectNum >
  <detectAreaList >
    <detectArea >
      <areaNum >2</areaNum >
      <operationType >1</ operationType >
      <RegionCoordinatesList >
        <RegionCoordinates >
          <positionX>0</positionX>
          <positionY>0</positionY>
        </RegionCoordinates >
        <RegionCoordinates >
          <positionX>0</positionX>
          <positionY>1000</positionY>
        </RegionCoordinates >
        <RegionCoordinates >
          <positionX>1000</positionX>
          <positionY>0</positionY>
        </RegionCoordinates >
        <RegionCoordinates >
          <positionX>1000</positionX>
          <positionY>1000</positionY>
        </RegionCoordinates >
      </RegionCoordinatesList >
    </detectArea >
  </detectAreaList>
</FaceDetectAreaList

```

**2.7.85/CGI/Smart/SceneRecoveryTime/channels/<ID>**

/CGI/Smart/SceneRecoveryTime/channels/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire the recovery time of intelligent analysis scene	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<SceneRecoveryTime>	
<b>PUT</b>		
<b>Description</b>	Set the recovery time of intelligent analysis scene	
<b>Query</b>	None	
<b>Inbound Data</b>	<SceneRecoveryTime>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is prepared for setting and acquiring the recovery time of intelligent analysis scene.		
explanations on important parameters:		
<recoveryTime> Scene recovery time: 0~3600s; 10s as default		

**SceneRecoveryTime XML Block**

```

<SceneRecoveryTime version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <recoveryTime><!-- req, xs: integer --></recoveryTime>
</SceneRecoveryTime>

```

**Test cases**

**GET /CGI/Smart/SceneRecoveryTime/channels/1**

**Request XML: none**

**Response XML:** <SceneRecoveryTime>  
**PUT /CGI/Smart/SceneRecoveryTime/channels/1**  
**Request XML:** < SceneRecoveryTime >  
**Response XML:** <ResponseStatus>

**2.7.86/CGI/Smart/SmartCuriseType/channels/<ID>**

<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire enabling type of intelligent analysis cruise
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<SmartCuriseType>
<b>PUT</b>	
<b>Description</b>	Set enabling type of intelligent analysis cruise
<b>Query</b>	None
<b>Inbound Data</b>	<SmartCuriseType>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for setting and acquiring the enabling type of intelligent analysis cruise. explanations on important parameters: <enableType> Cruise enabling type; 1-Timing enabling; 2-Time frame enabling; 3-Timing cruise of time bracket	

**SmartCuriseType XML Block**

```

<SmartCuriseType version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  < enableType><!-- req, xs: integer --></ enableType>
</SmartCuriseType >
  
```

**Test cases**

**GET /CGI/Smart/SmartCuriseType /channels/1**  
**Request XML:** none  
**Response XML:** < SmartCuriseType >  
**PUT /CGI/Smart/SmartCuriseType /channels/1**  
**Request XML:** < SmartCuriseType >  
**Response XML:** <ResponseStatus>

**2.7.87/CGI/Smart/SmartCuriseMould/channels/<ID>/CuriseType/<ID>**

<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire the cruise template of intelligent analysis
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<SmartCuriseMould>
<b>PUT</b>	
<b>Description</b>	Set the cruise template of intelligent analysis
<b>Query</b>	None
<b>Inbound Data</b>	<SmartCuriseMould>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

This protocol is prepared for setting and acquiring cruise template of intelligent analysis.

curiseType: Cruise type; 1-Timing cruise; 2-Time frame cruise; 3-Timing cruise in time frame  
 explanations on important parameters:

<curiseWeekday > Week; from Sunday to Saturday: 0~6; this parameter is neglected when value is 100

<weekDay> Weekdays Monday to Sunday is 1-7, when 100 means that this parameter is ignored

<sectionIndex> The serial number of the mixed mode, range 0-15

<startTime> Start time of time frame cruise

<endTime> End time of time frame cruise; StartTime is 00:00 during timing cruise, v is 23: 59

<curiseNum> Timing cruise means cruise No. (cruise sequence); time frame cruise means cruise time frame No., range: 0-15

<sceneType> Scene type, intelligent analysis: 0; alert: 1;

<sceneId> Scene No., intelligent analysis; range: 0-31; alert; range: 0-3

<curiseTime> Timing cruise, period of timing cruise in time frame: 15-86400s (this parameter is neglected in time frame cruise)

Note: 16 timing cruises are supported in one time frame of timing cruise at most, which means, a maximum of 16<ClockItem> is supported

**SmartCuriseMould XML Block**

```
<SmartCuriseMould version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <curiseWeekday><!-- req, xs: integer --></CuriseWeekday>
  <sectionList>
    <sectionItem>
      <weekDay><!-- req, xs: integer --></weekDay>
      <sectionIndex><!-- req, xs: integer --></sectionIndex>
      <startTime><!-- req, xs: string --><startTime/>
      <endTime><!-- req, xs: string --><endTime/>
      <clockList>
        <clockItem>
          <curiseNum><!-- req, xs: integer --></curiseNum>
          <sceneType><!-- req, xs: integer --></sceneType>
          <sceneId><!-- req, xs: integer --></sceneId>
          <curiseTime><!-- req, xs: integer --></curiseTime>
        </clockItem>
        ...
      </clockList>
    </sectionItem>
    ...
  </sectionList>
</SmartCuriseMould>
```

**Test cases**

**GET /CGI/Smart/SmartCuriseMould/channels/1/CuriseType/1**

**Request XML: none**

**Response XML: <SmartCuriseMould>**

```
<SmartCuriseMould version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <curiseWeekday>100</curiseWeekday>
  <sectionlist>
    <sectionItem>
      <startTime>00:00<startTime/>
      <endTime>23:59<endTime/>
      <clockList>
        <clockItem>
          <weekDay>100</weekDay>
          <sectionIndex>0</sectionIndex>
```

```

        <curiseNum>0</curiseNum>
        <sceneType>0</sceneType>
        <sceneId>1</sceneId>
        <curiseTime>50</curiseTime>
    </clockItem>
    <clockItem>
        <curiseNum>1</curiseNum>
        <sceneType>0</sceneType>
        <sceneId>5</sceneId>
        <curiseTime>600</curiseTime>
    </clockItem >
    ...
</clockList>
</sectionItem>
</sectionlist>
</SmartCuriseMould>

```

**GET /CGI/Smart/SmartCuriseMould/channels/1/CuriseType/2**

**Request XML: none**

**Response XML: <SmartCuriseMould>**

```

<SmartCuriseMould version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
    <curiseWeekday>100</curiseWeekday>
    <sectionList>
        <sectionItem>
            <weekDay>0</weekDay>
            <sectionIndex>0</sectionIndex>
            <startTime>00:00<startTime/>
            <endTime>08:59<endTime/>
            <clockList>
                <clockItem>
                    <curiseNum>0</curiseNum>
                    <sceneType>0</sceneType>
                    <sceneId>2</sceneId>
                    <curiseTime>0</curiseTime>
                </clockItem>
            </clockList>
        </sectionItem>
        <sectionItem>
            <weekDay>0</weekDay>
            <sectionIndex>1</sectionIndex>
            <startTime>10:00<startTime/>
            <endTime>15:59<endTime/>
            <clockList>
                <clockItem>
                    <curiseNum>1</curiseNum>
                    <sceneType>0</sceneType>
                    <sceneId>9</sceneId>
                    <curiseTime>0</curiseTime>
                </clockItem>
            </clockList>
        </sectionItem>
        ...
    </sectionList>
</SmartCuriseMould>

```

**GET /CGI/Smart/SmartCuriseMould/channels/1/CuriseType/3**

**Request XML: none**



**Response XML: <SmartCuriseMould>**

```
<SmartCuriseMould version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <curiseWeekday>100</curiseWeekday>
  <sectionList>
    <sectionItem>
      <weekDay>0</weekDay>
      <sectionIndex>0</sectionIndex>
      <startTime>02:00<startTime/>
      <endTime>09:59<endTime/>
      <cockList>
        <clockItem>
          <curiseNum>0</curiseNum>
          <sceneType>0</sceneType>
          <sceneId>3</sceneId>
          <curiseTime>60</curiseTime>
        </clockItem>
        <clockItem>
          <curiseNum>1</curiseNum>
          <sceneType>0</sceneType>
          <sceneId>4</sceneId>
          <curiseTime>80</curiseTime>
        </clockItem>
        <clockItem>
          <curiseNum>2</curiseNum>
          <sceneType>0</sceneType>
          <sceneId>5</sceneId>
          <curiseTime>90</curiseTime>
        </clockItem>
        ...
      </clockList>
    </sectionItem>
    <sectionItem>
      <weekDay>0</weekDay>
      <sectionIndex>1</sectionIndex>
      <startTime>12:00<startTime/>
      <endTime>16:59<endTime/>
      <cockList>
        <clockItem>
          <curiseNum>0</curiseNum>
          <sceneType>0</sceneType>
          <sceneId>1</sceneId>
          <curiseTime>120</curiseTime>
        </clockItem>
        <clockItem>
          <curiseNum>1</curiseNum>
          <sceneType>0</sceneType>
          <sceneId>6</sceneId>
          <curiseTime>500</curiseTime>
        </clockItem>
        <clockItem>
          <curiseNum>2</curiseNum>
          <sceneType>0</sceneType>
          <sceneId>8</sceneId>
          <curiseTime>2000</curiseTime>
        </clockItem>
        ...
      </cockList>
    </sectionItem>
  </sectionList>
</SmartCuriseMould>
```

```

        </clockList>
    </sectionItem>
    ...
</sectionList>
</SmartCuriseMould>

```

**PUT /CGI/Smart/ SmartCuriseMould /channels/1/CuriseType/1**

**Response XML: <ResponseStatus>**

**Request XML: <SmartCuriseMould>**

```

<SmartCuriseMould version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <curiseWeekday>100</curiseWeekday>
  <sectionList>
    <sectionItem>
      <weekDay>100</weekDay>
      <sectionIndex>0</sectionIndex>
      <startTime>00:00</startTime/>
      <endTime>23:59</endTime/>
      <clockList>
        <clockItem>
          <curiseNum>0</curiseNum>
          <sceneType>0</sceneType>
          <sceneId>1</sceneId>
          <curiseTime>50</curiseTime>
        </clockItem>
        <clockItem>
          <curiseNum>1</curiseNum>
          <sceneType>0</sceneType>
          <sceneId>5</sceneId>
          <curiseTime>600</curiseTime>
        </clockItem>
      </clockList>
    </sectionItem>
  </sectionList>
</SmartCuriseMould>

```

### 2.7.88/CGI/Smart/MaskArea/channels/<ID>/scene/<ID>/rule/<ID>/type/<ID>

/CGI/Smart/MaskArea/channels /<ID>/ scene/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire parameters of shielded area	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<MaskArea>	
<b>PUT</b>		
<b>Description</b>	Set parameters of shielded area	
<b>Query</b>	None	
<b>Inbound Data</b>	<MaskArea>	
<b>Success Return</b>	<ResponseStatus>	

**Explanations on protocol:**

This protocol is prepared for query and setting of shielded area, helping client or IE query and set the parameters of shielded parameters of device via CGI protocol.

**Explanations on key parameters:**

<channelID> Channel No.

<sceneID> means scene No., 1-32

<ruleID> means rule 0-16; 0: All parameters of rules are consistent; 1-16: Means special rule No.

<type> means scene type; 0-Common intelligent analysis; 1-Alert intelligent analysis

<enabled> Whether enable shielded area; true: Enable; false: Disable

<color> Line color of shielded area

<display> Whether display line; true: Display; false: Not display

<RegionList> means list of shielded area, 8 areas at most

<RegionCoordinatesList> means coordinate list of shielded area, 8 points in 1 area at most

<RegionCoordinates> means coordinates of shielded area

<positionX> means X coordinates of coordinate point

<positionY> means Y coordinates of coordinate point

**MaskArea XML Block**

```
<MaskArea version="2.0" xmlns="http://www.std-cgi.org/ver20/XMLSchema">
<enabled><!-- req, xs:boolean --></enabled>Valid: true: Enable; false: Disabled
<color><!-- req, xs:string "green"--></color>// Line color
<display ><!-- req, xs:boolean --></display>// Line display; true: Display; false: Not display
<normalizedScreenSize>
<normalizedScreenWidth><!-- req, xs:integer --></normalizedScreenWidth>
<normalizedScreenHeight><!-- req, xs:integer --></normalizedScreenHeight>
</normalizedScreenSize>
< RegionList ><!-- opt -->
    // List of shielded area
<RegionCoordinatesList><!-- opt -->                                // Coordinate
list of shielded area
<RegionCoordinates><!-- opt, -->                                // Coordinates of
shielded area
<positionX><!-- req, xs:integer;coordinate --></positionX>        // X coordinates
<positionY><!-- req, xs:integer;coordinate --></positionY>        // Y coordinates
</RegionCoordinates>
</RegionCoordinatesList>
</RegionList>                                                    // Leave shielded area
</MaskArea>
```

**Test cases**

GET /CGI/Smart/MaskArea/channels/<ID>/scene/<ID>

Request XML: none

Response XML: <MaskArea>

PUT /CGI/Smart/MaskArea/channels/<ID>/scene/<ID>

Response XML: <ResponseStatus>

Request XML: as below

```
<?xml version="1.0" encoding="UTF-8"?>
<MaskArea>
<enabled>true</enabled>
<color>red</color>
<display>>false</display>
<RegionList>
<RegionCoordinatesList>
<RegionCoordinates>
<positionX>2848</positionX>
<positionY>5037</positionY>
</RegionCoordinates>
```

```

<RegionCoordinates>
<positionX>7083</positionX>
<positionY>2388</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>8312</positionX>
<positionY>9037</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>1395</positionX>
<positionY>8166</positionY>
</RegionCoordinates>
</RegionCoordinatesList>
</RegionList>
</MaskArea>

```

### 2.7.89/CGI/Smart/ZoomRate/channels/<ID>/Scene/<ID>

<b>General Resource v2.0</b>	
<b>PUT</b>	
<b>Description</b>	Calibrate traction multiplying power
<b>Query</b>	None
<b>Inbound Data</b>	<ZoomRate>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b> This protocol is prepared for calibrating traction multiplying power.</p> <p><b>Explanations on key parameters:</b>  &lt;sceneType&gt; Scene type, intelligent analysis: 0; alert: 1;  &lt;boundary&gt; Boundary; 0-Reserved; 1-Near-end; 2-Far-end  &lt;deviceID&gt; Device No.: 0~1</p>	

#### ResetFaceModel XML Block

```

<ZoomRate version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <sceneType><!-- req, xs: integer --></sceneType>
  <boundary><!-- req, xs: integer --></boundary>
  <deviceID><!-- req, xs:integer--></deviceID>
</ZoomRate>

```

#### Test cases

**PUT /CGI/Smart/ZoomRate/channels/1/Scene/0**

**Request XML:** <ZoomRate>

**Response XML:** <ResponseStatus>

```

<ZoomRate version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <sceneType>1</sceneType>
  <boundary>0</boundary>
  <deviceID>0</deviceID>
</ZoomRate>

```

### 2.7.90/CGI/Smart/HumanDetect/<ID>/channels/<ID>/Scene/<ID>/Model/<ID>

<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire human detection parameters

<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<HumanDetect>
<b>PUT</b>	
<b>Description</b>	Set human detection parameters
<b>Query</b>	None
<b>Inbound Data</b>	<HumanDetect>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This protocol is prepared for query and setting of human detection functions. Model: Human detection mode, 0 nvr 1 ipc.  explanations on important parameters:  enabled: Human detection enabling  dispalyTarget: Whether display target frame (reserved)  minSizeEx: Min. human size  maxSizeEx: Max. human size (reserved)</p>	

#### HumanDetect XML Block

```
<HumanDetect version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<enabled><!-- req, xs:boolean --></enabled>
<dispalyTarget><!-- req, xs:boolean --></dispalyTarget>// Display target; true: Displayed; false:
Not displayed
<minSizeEx><!-- opt, xs:integer--></ minSizeEx> //1~10000 picture width ten-thousandth,
10000 means the entire screen width. Not handled if this field is 0.
<maxSizeEx><!-- opt, xs:integer--></ maxSizeEx>// 1~10000 picture width ten-thousandth,
10000 means the entire screen width. Not handled if this field is 0.
</HumanDetect>
```

#### Test cases

**GET /CGI/Smart/HumanDetect/1/channels/1/scenes/0/Model/1**

**Request XML:** none

**Response XML:** <HumanDetect>

**PUT /CGI/Smart/ HumanDetect /1/channels/1/scenes/0/Model/1**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<HumanDetect version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<enabled>true</enabled>
<dispalyTarget>>false</dispalyTarget>
<minSizeEx>423</ minSizeEx>
<maxSizeEx>1600</ maxSizeEx>
</HumanDetect>
```

#### 2.7.91 /CGI/Smart/Pept/<ID>/Channels/<ID>/Scene/<ID>

<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire oilfield monitoring parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<Pept>
<b>PUT</b>	
<b>Description</b>	Set oilfield monitoring parameters
<b>Query</b>	None
<b>Inbound Data</b>	<Pept>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

This protocol is prepared for setting and query of oilfield monitoring parameters, helping client or web query and set the oilfield control parameters via CGI protocol.

**Explanations on key parameters:**

<mode> Detection mode; intrusion: Defense area intrusion; residence: Abnormal lingering  
 <residenceTime> Detection alarm time; 0~60s; 15 as default  
 <sensitivity> Sensitivity: 0~100 (default: 80)  
 <TargetTypeList> Detection target type: 1-Pedestrian; 2-Passenger car; 3-SUV; 4-pickup truck; 5-Tanker; 6-Van; 7-Truck; 8-Forklift; 9-Excavator; 10-Engineering truck; 11-Cart; 12-Tricycle; 13-Motor bus; 14-Minibus; 32-Other types  
 <targetColor> Target color  
 <alarmAreaColor> Color of alarm area  
 <maxTargetSize> Max. size: 5-100; 15 as default  
 <minTargetSize> Min. size: 1-5; 3 as default  
 <displayRule > Display rule; true-Display, false-Not display  
 <displayStat > Display alarm count: true-Display; false: Not display  
 <displayTarget > Display target: true-Display; false-Not display  
 <regionCoordinatesList> means list of detection area coordinates  
 <regionCoordinates> means coordinates of detection area  
 <positionX> means X coordinates of detection area: ten-thousandth  
 <positionY> means Y coordinates of detection area: ten-thousandth

**Pept XML Block**

```
<Pept version="2.0" >
<enabled><!--req, xs:boolean--></enabled>
<mode>
<intrusion><!--req, xs:boolean--></intrusion>
<resident><!--req, xs:boolean--></resident>
</mode>
<residenceTime><!-- req, xs: integer --></residenceTime>
<maxTargetSize><!-- req, xs: integer --></maxTargetSize>
<minTargetSize><!-- req, xs: integer --></minTargetSize>
<sensitivity><!-- req, xs: integer --></sensitivity>
<targetColor><!--opt,xs:string"red,green,yellow,blue,purple,cyan,black,white"--></targetColor>
<alarmAreaColor><!--opt,xs:string"red,green,yellow,blue,purple,cyan,black,white"--></alarmAreaColor>
<displayRule><!--req, xs:boolean--></displayRule>
<displayStat><!--req, xs:boolean--></displayStat>
<displayTarget><!--req, xs:boolean--></displayTarget>
<TargetTypeList>
<TargetType><!-- req, xs: integer --></TargetType>
<TargetType><!-- req, xs: integer --></TargetType>
</TargetTypeList>
<RegionCoordinatesList>
<RegionCoordinates>
<positionX><!-- req, xs: integer --></positionX>
<positionY><!-- req, xs: integer --></positionY>
</RegionCoordinates>
</RegionCoordinatesList>
</Pept>
```

**Test cases**

**GET /CGI/Smart/Pept/<ID>/channels/<ID>/scene/<ID>**

**Request XML: none**

**Response XML:<Pept>**

**PUT /CGI/Smart/Pept/<ID>/channels/<ID>/scene/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<Pept>
```

```

<enabled>true</enabled>
<mode>
<intrusion>true</intrusion>
<resident>true</resident>
</mode>
<residenceTime>3</residenceTime>
<maxTargetSize>15</maxTargetSize>
<minTargetSize>3</minTargetSize>
<sensitivity>80</sensitivity>
<targetColor>green</targetColor>
<alarmAreaColor>red</alarmAreaColor>
<displayRule>true</displayRule>
<displayStat>>false</displayStat>
<displayTarget>true</displayTarget>
<TargetTypeList>
<TargetType>1</TargetType>
<TargetType>11</TargetType>
</TargetTypeList>
<RegionCoordinatesList>
<RegionCoordinates>
<positionX>90</positionX>
<positionY>90</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>90</positionX>
<positionY>90</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>90</positionX>
<positionY>90</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>90</positionX>
<positionY>90</positionY>
</RegionCoordinates>
</RegionCoordinatesList>
</Pept>

```

**2.7.92/CGI/Smart/SceneSnap/channels/<ID>/**

<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire scene snapshot parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<SceneSnap>
<b>PUT</b>	
<b>Description</b>	Set scene snapshot parameters
<b>Query</b>	None
<b>Inbound Data</b>	<SceneSnap>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

This protocol is prepared for query and setting of switched scene snapshot.

explanations on important parameters:

<SnapEnable> Enabling of switching scene enabling; true; Enable scene snapshot; false: Disable scene snapshot

<SnapType> Types of switching scene snapshot (reserved); all: All; in: Snapshot after entering scene; out: Snapshot before leaving scene

<SnapCount> Count of switching scene snapshot (reserved)

<SnapDelay> Delay of switching scene snapshot (reserved)

**SceneSnap XML Block**

```
<SceneSnap version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<SnapEnable><!-- req, xs:boolean --></SnapEnable>
<SnapType><!--opt,xs:string"all,in,out"--></SnapType>
<SnapCount><!-- opt, xs:integer--></SnapCount>
<SnapDelay><!-- opt, xs:integer--></SnapDelay>
</SceneSnap>
```

**Test cases**

**GET /CGI/Smart/SceneSnap/channels/1/**

**Request XML:** none

**Response XML:** <SceneSnap>

**PUT /CGI/Smart/SceneSnap/channels/1/**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<SceneSnap version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<SnapEnable>true</SnapEnable>
<SnapType>all</SnapType>
<SnapCount>1</SnapCount>
<SnapDelay>1</SnapDelay>
</SceneSnap>
```

**2.7.93/CGI/Smart/LiveBody/Channels/<ID>/Model/<ID>**

/CGI/Smart/LiveBody/Channels/<ID>/		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire living body detection enabling/disabling of face NVR	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<LiveBody >	
<b>PUT</b>		
<b>Description</b>	Set living body detection enabling/disabling of face NVR	
<b>Query</b>	None	
<b>Inbound Data</b>	<LiveBody >	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is prepared for query and setting of living body detection enabling/disabling of face NVR.		
Channels/<ID>: <ID> means channel No.		
Model/<ID>: <ID> means device type; 0 nvr 1 ipc.		
explanations on important parameters:		
< livingbodyEnable > Living body detection enabling/disabling; true: Enabled; false: Disabled		

**LiveBody XML Block**



```
<LiveBody version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
< livingbodyEnable ><!-- req, xs:Boolean"true,false"--></livingbodyEnable>// Whether enable
living body detection
</LiveBody>
```

**Test cases**

**GET /CGI/Smart/LiveBody/Channels/1/**

**Request XML:** none

**Response XML:** <LiveBody>

**PUT /CGI/Smart/LiveBody/Channels/1/**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<LiveBody version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<livingbodyEnable>true</livingbodyEnable>
</LiveBody>
```

**2.7.94 /CGI/Smart/FaceBasePic/FaceLib/<Key>/SessionId/<ID>/Export/<FileName>**

<b>/CGI/Smart/FaceBasePic/LibKey/&lt;ID&gt;/SessionId/&lt;ID&gt;/Export/&lt;FileName&gt;</b>		<b>General</b>
<b>Resource v2.0</b>		
<b>PUT</b>		
<b>Description</b>	Conditions for compression and export of face base map	
<b>Query</b>	<FaceBasePicList>	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is prepared for compression and export of face base map, helping client or IE export the face base map of device via CGI protocol.		

**Explanations on key parameters:**

FaceLib/<Key> Key value of face library

SessionId/<ID> Interaction ID of client and device, see attached table 1

<FileName> Package name of exported base map, with suffix of zip and length of 32 bits

facePicCnt Amount of exported face base map; export all base maps of this face library when value is 0

picKeys: Key value of face base map

**FaceBasePicList XML Block**

```
<FaceBasePicList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<facePicCnt><!-- req, xs: integer --></facePicCnt>
<picKeys><!--req,sx:string--></picKeys>
</FaceBasePicList>
```

**Test cases**

**PUT /CGI/Smart/FaceBasePic/FaceLib/2/SessionId/6668/Export/<FileName>**

**Request XML:** <FaceBasePicList> As follows

```
<FaceBasePicList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<facePicCnt>2</facePicCnt>
<picKeys>23,24,66</picKeys>
</FaceBasePicList>
```

**Response XML:** <ResponseStatus>

**2.7.95 /CGI/Smart/FaceBasePic/FaceLib/<Key>/SessionId/<ID>Import/<FileName>**

**/CGI/Smart/FaceBasePic**

<b>/FaceLib/&lt;Key&gt;/SessionId/&lt;ID&gt;/Import/&lt;FileName&gt;</b>		<b>General Resource v2.0</b>
<b>PUT</b>		
<b>Description</b>	Compression and import of face base map	
<b>Query</b>	None	
<b>Inbound Data</b>	File content	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b> Compression and import of face base map <b>Explanations of parameters:</b> <Key> key value of face library <SessionId> Interaction ID of client and device, see attached Table 1 <FileName> Package name of exported base map, with suffix of zip and length of 32 bits		

**Test cases**

**PUT /CGI/Smart/FaceBasePic/FaceLib/2/SessionId/6668/Import/<FileName>**

**Request XML:** none

**Response XML:** <ResponseStatus>

**2.7.96 /CGI/Smart/Import/FaceBasePic/FaceLib/<Key>/SessionId/<ID>/**

<b>/CGI/Smart/Import/FaceBasePic/FaceLib/&lt;Key&gt;/SessionId/&lt;ID&gt;/</b>		<b>General Resource v2.0</b>
<b>POST</b>		
<b>Description</b>	Compression and import of face base map	
<b>Query</b>	None	
<b>Inbound Data</b>	File content	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b> Import of face library <b>Explanations of parameters:</b> FaceLib/<Key> Key value of face library SessionId/<ID> Interaction ID of client and device, see attached table 1		

**Test cases**

**PUT /CGI/Smart/Import/FaceBasePic/FaceLib/123/SessionId/666/**

**Request XML:** none

**Response XML:** <ResponseStatus>

**2.7.97 /CGI/Smart/PeopleNumAlarm/<ID>/channels/<ID>/Scene/<ID>/Model/<ID>**

<b>/CGI/Smart/PeopleNumAlarm/&lt;ID&gt;/channels/&lt;ID&gt;/Scene/&lt;ID&gt;/Model/&lt;ID&gt;</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Acquire the parameters of person amount error alarm	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<PeopleNumAlarm>	
<b>PUT</b>		
<b>Description</b>	Acquire the parameters of person amount error alarm	
<b>Query</b>	None	
<b>Inbound Data</b>	<PeopleNumAlarm>	
<b>Success Return</b>	<ResponseStatus>	

**Explanations on protocol:**

This protocol is prepared for query and setting of human detection function. Model: Person amount error mode, 0 nvr 1 ipc.

explanations on important parameters:

enabled: Enabling of Person error alarm

<color>: Region color; "green" as default

<alarmcolor>: Alarm color, "red" as default

<displayRule>: Whether display rule; 0: Not display; 1: Display

<displatStat>: Whether display alarm count; 0: Not display; 1: Display

<displayTarget> Whether display target frame; 0: Not display; 1: Display

<miniSize> Min. width of target (head and shoulder) [1, 50], 8% as default

<maxSize> Max. width of target (head and shoulder) [1, 50], 25% as default

<sensitivity> Sensitivity [0, 100], 50 as default

<peopleNumber> People number, 0-8

<judgeMode> Judgment mode; greater: Higher than; less: Lower than; equal: Equal to; unequal: Unequal to

<levelTime> Allowed leave time [0, 1000], 10s as default

<regionList> means list of detection region, 1~8

<maskRgList> means list of shielded regions, 0~8

<RegionCoordinatesList>//detection region coordinate list

<RegionCoordinates><!-- req, -->//detection region coordinates

<positionX><!-- req, xs:integer;coordinate --></positionX>// X coordinates

<positionY><!-- req, xs:integer;coordinate --></positionY>// Y coordinates

</RegionCoordinates>

**PeopleNumAlarm XML Block**

```
<PeopleNumAlarm version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
```

```
<enabled><!-- req, xs:boolean --></enabled>
```

```
<color><!-- req, xs:string"green" --></color>
```

```
<alarmcolor><!-- req, xs:string"red" --></alarmcolor>
```

```
<displayRule><!-- opt, xs:integer --></displayRule>
```

```
<displatStat><!-- opt, xs:integer --></displatStat>
```

```
<displayTarget><!-- opt, xs:integer --></displayTarget>
```

```
<miniSize><!-- opt, xs:integer --></miniSize>
```

```
<maxSize><!-- opt, xs:integer --></maxSize>
```

```
<displayRule><!-- opt, xs:integer --></displayRule>
```

```
<peopleNumber opt = "0,1,2,3,4,5,6,7,8">
```

```
<!-- opt, xs:string "0,1,2,3,4,5,6,7,8"--></peopleNumber> // People number
```

```
<judgeMode opt = "greater,less,equal,unequal">
```

```
<!-- opt, xs:string "greater,less,equal,unequal"-->
```

```
</judgeMode>// Judgment mode
```

```
<levelTime><!-- opt, xs:integer --></levelTime>
```

```
<regionList size="8" >
```

```
<RegionCoordinatesList size="10" >
```

```
<RegionCoordinates>
```

```
<positionX><!-- req, xs:integer;coordinate --></positionX>
```

```
<positionY><!-- req, xs:integer;coordinate --></positionY>
```

```
</RegionCoordinates>
```

```
</RegionCoordinatesList>
```

```
</regionList>
```

```
<maskRgList size="8" >
```

```
<RegionCoordinatesList size="10" >
```

```
<RegionCoordinates>
```

```
<positionX><!-- req, xs:integer;coordinate --></positionX>
```

```
<positionY><!-- req, xs:integer;coordinate --></positionY>
```

```
</RegionCoordinates>
```

```
</RegionCoordinatesList>
```

```
</maskRgList>
```

</PeopleNumAlarm>

**Test cases**

**GET /CGI/Smart/PeopleNumAlarm/1/channels/1/scenes/0/Model/1**

**Request XML: none**

**Response XML: <PeopleNumAlarm>**

**PUT /CGI/Smart/PeopleNumAlarm/1/channels/1/scenes/0/Model/1**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<PeopleNumAlarm version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<enabled>true</enabled>
<color>green</color>
<alarmcolor>red</alarmcolor>
<displayRule>0</displayRule>
<displatStat>0</displatStat>
<displayTarget>0</displayTarget>
<miniSize>8</miniSize>
<maxSize>25</maxSize>
<displayRule>0</displayRule>
<peopleNumber opt = "0,1,2,3,4,5,6,7,8"> 1</peopleNumber> // People number
<judgeMode opt = "greater,less,equal,unequal">greater</judgeMode> // Judgment mode
<levelTime>10</levelTime>
<regionList size="8">
<RegionCoordinatesList size="10">
<RegionCoordinates>
<positionX>2656</positionX>
<positionY>1302</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>951</positionX>
<positionY>5468</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>752</positionX>
<positionY>8906</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>3806</positionX>
<positionY>9548</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>7357</positionX>
<positionY>9548</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>9375</positionX>
<positionY>8940</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>9375</positionX>
<positionY>5381</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>8480</positionX>
<positionY>2013</positionY>
</RegionCoordinates>
</RegionCoordinatesList>
</regionList>
```

```

<maskRgList size="8">
<RegionCoordinatesList size="10">
<RegionCoordinates>
<positionX>8480</positionX>
<positionY>2013</positionY>
</RegionCoordinates>
</RegionCoordinatesList>
</maskRgList>
</PeopleNumAlarm>

```

### 2.7.98 /CGI/Smart/Async/QueryReport/Start/SessionId/<ID>/Channels/<ID>

/CGI/Smart/Async/QueryReport/Start/Channels/<ID>		General Resource v2.0
<b>POST</b>		
<b>Description</b>	Request of asynchronous query report	
<b>Query</b>	None	
<b>Inbound Data</b>	<AsyncQueryReport>	
<b>Success Return</b>	<AsyncQueryReportResult>	
<p><b>Explanations on protocol:</b> This protocol is prepared for asynchronous query report</p> <p><b>Explanations on key parameters:</b>            SessionId/&lt;ID&gt;: Interaction ID of client and device, see attached Table 1            Channels/&lt;ID&gt;: &lt;ID&gt; means channel No.            iReportType// Query type: 0: Time heat map; 1: Age bracket; 2: Gender; 3: Person amount; 6: Nationality; 7: Glasses; 8: Mask; 12: Pedestrian - Gender; 13: Pedestrian - Amount; 14: Pedestrian - Motion direction; 15: Vehicle - Type; 16: Vehicle - Motion direction</p> <p>logContent// Max. length of query content is 128 bits            When iReportType=0, format is "%d", it means the target duration; unit: Second            When iReportType=1, format is "%d:%d:%d:%d", it means the juvenile, youth, middle-aged person, the aged; unit: Person            When iReportType=2, format is "%d:%d:%d", it means the male, female, unidentified person; unit: Person            When iReportType=3, format is "%d", it means the person amount; unit: Person            When iReportType=4, format is "%d", it means temperature            When iReportType=5, format is "%d", it means humidity            When iReportType=6, format is "%d:%d", it means [Han nationality, minority]; unit: Person            When iReportType=7, format is "%d:%d", it means [Wear glasses, not wear glasses]; unit: Person            When iReportType=8, format is "%d:%d", it means [Wear mask, not wear mask]; unit: Person            When iReportType=12, format is "%d:%d:%d", it means the male, female, unidentified person; unit: Person            When iReportType=13, format is "%d", it means person amount; unit: Person            When iReportType=14, format is "%d:%d:%d:%d:%d", it means unknown, up, down, left, right; unit: Person            When iReportType=15, format is "%d:%d:%d", it means [unknown, motor vehicle and non-motor vehicle]; unit: Vehicle            When iReportType=16, format is "%d:%d:%d:%d:%d", it means unknown, up, down, left, right; unit: Vehicle</p>		
<b>AsyncQueryReport XML Block</b>		

```

<asyncQueryReport version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <reportType ><!-- req, xs: integer -->
  </reportType >// Type; 0: Time heat map; 1: Age bracket; 2: Gender; 3: Person amount; 6:
  Nationality; 7: Glasses; 8: Mask
  <reportPre ><!-- req, xs: integer -->
  </reportPre >// Report type; 0: Daily report; 1: Weekly report; 2: Monthly report; 3: Yearly

```

```
report
  <timeSpan>
  <startTime>2017-07-18T00:00:00Z</startTime>
  <endTime> 2017-07-18T23:59:59Z</endTime>
</timeSpan>
</asyncQueryReport>
```

**AsyncQueryReportResult XML Block**

```
<asyncQueryReportResult version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <sessionId><!-- req, xs: long long --></sessionId> // Affair ID
  <retState><!-- req, xs: integer --></retState> // Return type; 0-Success; 1-Failure
</asyncQueryReportResult>
```

**Test cases**

POST /CGI/Smart/Async/QueryReport/Start/SessionId/65535/channels/1

**Request XML: as below**

```
<asyncQueryReport version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <reportType>0</reportType>
  <reportPre>1</reportPre>
  <timeSpan>
  <startTime>2017-07-18T00:00:00Z</startTime>
  <endTime> 2017-07-18T23:59:59Z</endTime>
  </timeSpan>
</asyncQueryReport >
```

**Response XML: as below**

```
<asyncQueryReportResult version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <sessionId>65535</sessionId>
  <retState>0</retState>
</asyncQueryReportResult>
```

**2.7.99 /CGI/Smart/Async/QueryReport/Result/SessionId/<ID>/channels/<ID>**

<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Result of asynchronous query report
<b>Query</b>	None
<b>Inbound Data</b>	<b>NONE</b>
<b>Success Return</b>	<b>&lt;AsyncReportResult&gt;</b>
<p><b>Explanations on protocol:</b>            This protocols is prepared for query of result of asynchronous query report</p> <p><b>Explanations on key parameters:</b>            ReportType// Result type: 0: Time heat map; 1: Age bracket; 2: Gender; 3: Person amount; 6: Nationality; 7: Glasses; 8: Mask; 12: Pedestrian - Gender; 13: Pedestrian - Amount; 14: Pedestrian - Motion direction; 15: Vehicle - Type; 16: Vehicle - Motion direction</p> <p>logContent// Max. length of result: 128 bits            When ReportType=0, format is "%d", it means the target duration; unit: Second            When ReportType=1, format is "%d:%d:%d:%d", it means the juvenile, youth, middle-aged person, the aged; unit: Person            When ReportType=2, format is "%d:%d:%d", it means the male, female, unidentified person; unit: Person            When ReportType=3, format is "%d", it means the person amount; unit: Person            When ReportType=4, format is "%d", it means temperature            When ReportType=5, format is "%d", it means humidity            When ReportType=6, format is "%d:%d", it means [Han nationality, minority]; unit: Person            When ReportType=7, format is "%d:%d", it means [Wear glasses, not wear glasses]; unit:</p>	

Person

When ReportType=8, format is "%d:%d", it means [Wear mask, not wear mask]; unit: Person

When ReportType=12, format is "%d:%d:%d", it means the male, female, unidentified person; unit: Person

When ReportType=13, format is "%d", it means person amount; unit: Person

When ReportType=14, format is "%d:%d:%d:%d:%d", it means unknown, up, down, left, right; unit: Person

When ReportType=15, format is "%d:%d:%d", it means [unknown, motor vehicle and non-motor vehicle]; unit: Vehicle

When ReportType=16, format is "%d:%d:%d:%d:%d", it means unknown, up, down, left, right; unit: Vehicle

#### **AsyncReportResultXML Block**

```
<asyncReportResult version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <reportType><!-- req, xs: integer -->
</reportType>//0: Time heat map; 1: Age bracket; 2: Gender; 3: Person amount; 6: Nationality;
7: Glasses; 8: Mask
  <showNum><!-- req, xs: integer --></showNum> // Max. item should not exceed 80
  <queryResultList> // List of query results
  <queryResult>
  <logContent><!-- req, xs:string--></ logContent> // Contents
  <channelNo><!-- req, xs: integer --></channelNo> // Channel No.
  <time>2013-05-18T10:31.26</time>
  </queryResult>
</queryResultList >
</asyncReportResult >
```

#### **Test cases**

**GET /ISAPI/Smart/Async/QueryReport/Result/SessionId/65535/channels/1**

**Response XML: <AsyncReportResult >**

```
<asyncReportResult version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <reportType>0</reportType>
  <showNum>7</showNum>
  <queryResultList>
  <queryResult>
<logContent>0
</logContent>
  <channelNo>240</channelNo>
  <time>2017-07-18T10:31.26</time>
  </queryResult>
  <queryResult>
<logContent>0</ logContent>
  <channelNo>240</channelNo>
  <time>2017-07-18T11:35.26</time>
  </queryResult>
  <queryResult>
<logContent>0</ logContent>
  <channelNo>240</channelNo>
  <time>2017-07-18T11:39.26</time>
  </queryResult>
  <queryResult>
<logContent>0</ logContent>
  <channelNo>240</channelNo>
  <time>2017-07-18T12:31.26</time>
  </queryResult>
  <queryResult>
<logContent>0</ logContent>
  <channelNo>240</channelNo>
  <time>2017-07-18T13:31.26</time>
```

```

    </queryResult>
    <queryResult>
<logContent>0</ logContent>
<channelNo>240</channelNo>
<time>2017-07-18T14:31.26</time>
    </queryResult>
    <queryResult>
<logContent>0</ logContent>
<channelNo>240</channelNo>
<time>2017-07-18T15:31.26</time>
    </queryResult>
< /queryResultList >
</asyncReportResult >

```

### 2.7.100 /CGI/Smart/Async/FaceCount/ChannelAlm/Start/SessionId/<ID>

/CGI/Smart/Async/FaceCount/ChannelAlm/Start/SessionId/<ID>	
<b>POST</b>	
Description	Request for alarm of asynchronous face statistics channel
<b>Query</b>	None
<b>Inbound Data</b>	<AsyncChannelAlmReq>
<b>Success Return</b>	<AsyncChannelAlmRsp>
<p><b>Explanations on protocol:</b> This protocol is prepared for request of statistics of asynchronous face statistics channel</p> <p><b>Explanations on key parameters:</b> Request: &lt;channelList&gt; &lt;channel&gt; &lt;eventType&gt; Event type; 0: All; 1: Face; 2: Comparison alarm; 3: Stranger alarm; 4: Frequency alarm; 5: Detention alarm  &lt;accuracy&gt; Accuracy; 0: Day; 1: Week; 2: Month; 3: Year &lt;beginTime&gt; Begin time format: (Y-M-D T Hour: Minute: Second Z), for example, 2018-07-10T12:00:00Z &lt;endTime&gt; End time format (Y-M-D T Hour: Minute: Second Z), for example, 2018-07-10T23:59:59Z</p> <p>Reply: &lt;sessionId&gt; Affair ID &lt;retState&gt; Return type – 0: Success; 1: Failure</p>	

#### AsyncChannelAlmReq XML Block

```

<?xml version="1.0" encoding="UTF-8"?>
<asyncChannelAlmReq>
<channelList>
<channel><!-- req, xs:integer --></channel>
// Repeat <channel>
</channelList>
<eventType><!-- req, xs: integer --></eventType>
<accuracy><!-- req, xs: integer --></accuracy>
<beginTime><!-- req, xs: datetime --></beginTime>
<endTime><!-- req, xs: datetime --></endTime>
</asyncChannelAlmReq>

```

#### ChnAlmRsp XML Block



```
<?xml version="1.0" encoding="UTF-8"?>
<asyncChannelAlmRsp>
  <sessionId><!-- req, xs: long long --></sessionId> // Affair ID
  <retState><!-- req, xs: integer --></retState> // Return type; 0-Success; 1-Failure
</asyncChanelAlmRsp>
```

**Test cases**

**POST /CGI/Smart/Async/FaceCount/Start/ChannelAlm/SessionId/65535**

**Request XML: <AsyncChannelAlmReq>**

```
<?xml version="1.0" encoding="UTF-8"?>
<asyncChannelAlmReq>
  <channelList>
  <channel>1</channel>
  ...
  <channel>5</channel>
  </channelList>
  <eventType>2</eventType>
  <accuracy>1</accuracy>
  <beginTime>2018-07-10T12:00:00Z</beginTime>
  <endTime>2018-07-10T13:00:00Z</endTime>
</asyncChannelAlmReq>
```

**Response XML: <AsyncChannelAlmRsp>**

```
<?xml version="1.0" encoding="UTF-8"?>
<asyncChannelAlmRsp >
  <sessionId>65535</sessionId>
  <retState>0</retState>
</asyncChannelAlmRsp>
```

**2.7.101 /CGI/Smart/Async/FaceCount/ChannelAlm/Result/SessionId/<ID>**

<b>/CGI/Smart/Async/FaceCount/ChannelAlm/Result/SessionId/&lt;ID&gt;</b>	
<b>GET</b>	
<b>Description</b>	Acquire the statistics result of alarm of asynchronous face statistics channel
<b>Query</b>	None
<b>Inbound Data</b>	<b>NONE</b>
<b>Success Return</b>	<b>&lt;AsyncChannelAlmResult&gt;</b>
<p><b>Explanations on protocol:</b> This protocol is prepared for acquiring the statistics result of channel alarm</p> <p><b>Explanations on key parameters:</b> Reply: &lt;channelAlmList&gt; &lt;channelAlm&gt; &lt;channel&gt; Channel &lt;almCnt&gt; Alarm count</p>	

**AsyncChannelAlmResult XML Block**

```
<?xml version="1.0" encoding="UTF-8"?>
<asyncChannelAlmResult>
  <channelAlmList>
  <channelAlm>
  <channel><!-- req, xs: integer --></channel>
  <almCnt><!-- req, xs: integer --></almCnt>
  </channelAlm>
  // Repeat channelAlm
</channelAlmList>
```

```
</asyncChanelAlmResult>
```

**Test cases**

**GET /CGI/Smart/Async/FaceCount/ChannelAlm/Result/SessionId/65535**

**Response XML: <AsyncChannelAlmResult>**

```
<?xml version="1.0" encoding="UTF-8"?>
<asyncChannelAlmResult>
<channelAlmList>
<channelAlm>
<channel>1</channel>
<almCnt>152</almCnt>
</channelAlm>
...
<channelAlm>
<channel>5</channel>
<almCnt>75</almCnt>
</channelAlm>
</channelAlmList>
</asyncChannelAlmResult>
```

**2.7.102 /CGI/Smart/Async/FaceCount/TargetAlm/Start/SessionId/<ID>**

<b>/CGI/Smart/FaceCount/TargetAlm/Start/SessionId/&lt;ID&gt;</b>	
<b>POST</b>	
<b>Description</b>	Request for alarm of asynchronous face statistics target
<b>Query</b>	None
<b>Inbound Data</b>	<b>&lt;AsyncTargetAlmReq&gt;</b>
<b>Success Return</b>	<b>&lt;AsyncTargetAlmRsp&gt;</b>
<b>Explanations on protocol:</b> Make request for alarm of asynchronous face statistics target	
<b>Explanations on key parameters:</b> Request: <sort> Sort type; 1: Positive; 2: Reverse <libKey> Library key, unique <accuracy> Accuracy; 0: Day; 1: Week; 2: Month; 3: Year <beginTime> Begin time <endTime> End time <page> Page, the first page is 0 <perPageCnt> Count per page Reply: <sessionId> Affair ID <retState> Return type – 0: Success; 1: Failure	

**TargetAlmReq XML Block**

```
<?xml version="1.0" encoding="UTF-8"?>
<targetAlmReq>
<sort><!-- req, xs: integer --></sort>
<libKeyList>
<libKey><!-- req, xs: long long --></libKey>
// Repeat <libKey>
</libKeyList>
<accuracy><!-- req, xs: integer --></accuracy>
<beginTime><!-- req, xs: datetime --></beginTime>
<endTime><!-- req, xs: datetime --></endTime>
<page><!-- req, xs: integer --></page>
<perPageCnt><!-- req, xs: integer --></perPageCnt>
</targetAlmReq>
```

**AsyncTargetAlmRsp XML Block**

```
<?xml version="1.0" encoding="UTF-8"?>
<asyncTargetAlmRsp>
  <sessionId><!-- req, xs: long long --></sessionId> // Affair ID
  <retState><!-- req, xs: integer --></retState> // Return type; 0-Success; 1-Failure
</asyncTargetAlmRsp>
```

**Test cases**

**POST /CGI/Smart/Async/FaceCount/TargetAlm/Start/SessionId/65535**

**Request XML: <AsyncTargetAlmReq>**

```
<?xml version="1.0" encoding="UTF-8"?>
<asyncTargetAlmReq>
  <sort>1</sort>
  <libKeyList>
  <libKey>1234567890</libKey>
  ....
  <libKey>9876543210</libKey>
  </libKeyList>
  <accuracy>1</accuracy>
  <beginTime>2018-07-10T12:00:00Z</beginTime>
  <endTime>2018-07-10T13:00:00Z</endTime>
  <page>0</page>
  <perPageCnt>10</perPageCnt>
</asyncTargetAlmReq>
```

**Response XML: <AsyncTargetAlmRsp>**

```
<?xml version="1.0" encoding="UTF-8"?>
<asyncTargetAlmRsp>
  <sessionId>65535</sessionId>
  <retState>0</retState>
</asyncTargetAlmRsp>
```

**2.7.103 /CGI/Smart/Async/FaceCount/TargetAlm/Result/SessionId/<ID>**

<b>/CGI/Smart/Async/FaceCount/TargetAlm/Result/SessionId/&lt;ID&gt;</b>	
<b>GET</b>	
<b>Description</b>	Asynchronous acquisition of alarm result of face statistics target
<b>Query</b>	None
<b>Inbound Data</b>	NONE
<b>Success Return</b>	<AsyncTargetAlmResult>
<p><b>Explanations on protocol:</b>          Realize asynchronous acquisition of alarm result of face statistics target</p> <p><b>Explanations on key parameters:</b>          Reply:          &lt;totalCnt&gt; Total count, calculate the total pages          &lt;countTargetAlmMsgList&gt;          &lt;countTargetAlmMsg&gt;          &lt;almCnt&gt; Total alarm count          &lt;libKey&gt; Key of face library          &lt;faceKey&gt; Key of face library          &lt;picFileName&gt; Base map path and name, 63 bits          &lt;name&gt; Name, 63 bits          &lt;sex&gt; Gender; 0: Unknown; 1: Male; 2: Female          &lt;nation&gt; Nationality; 0: Unknown; 10000: Minority          &lt;birthday&gt; Birthday: 1970-1-1 number of seconds          &lt;certType&gt; Certificate type; 0-Unknown; 1- Certificate of officer; 2-ID card          &lt;certNum&gt; Certificate No., 63 bits</p>	

<country> Country, as per national and local ISO 3166-1 code table (see figure)  
<address> Address, 64 bits at most  
<company> Company name, 64 bits at most

#### **AsyncTargetAlmResult XML Block**

```
<?xml version="1.0" encoding="UTF-8"?>
<asyncTargetAlmResult>
<totalCnt><!-- req, xs: integer --></totalCnt>
<countTargetAlmMsgList>
<countTargetAlmMsg>
<almCnt><!-- req, xs: integer --></almCnt>
<libKey><!-- req, xs: long long --></libKey>
<faceKey><!-- req, xs: long long --></faceKey>
<picFileName><!-- req, xs:string --></picFileName>
<name><!-- req, xs:string --></name>
<sex><!-- req, xs: integer --></sex>
<nation><!-- req, xs: integer --></nation>
<birthday><!-- req, xs: datetime --></birthday>
<certType><!-- req, xs: integer --></certType>
<certNum><!-- req, xs:string --></certNum>
<facePicQueryResult version="2.0">
<sessionId><!--req,sx:integer--></sessionId>
<totalCount><!--req,sx:integer--></totalCount>
<pageSize><!--req,sx:integer--></pageSize>
<matchList>
<matchElement>
<index><!--req,sx:integer--></index>
<libKey><!--req,sx: integer--></libKey>
<faceKey><!--req,sx: integer--></faceKey>
<fileType><!--req,sx:integer--></fileType>
<model><!--req,sx:integer--></model>
<name><!--req,sx:integer--></name>
<sex><!--req,sx:integer--></sex>
<timeSpanList>
<timeSpan>
<birthdayt><!-- req, xs: datetime --></birthday>
</timeSpan>
</timeSpanList>
<nation><!--req,sx:integer--></nation>
<province><!--req,sx:integer--></province>
<city><!--req,sx:integer--></city>
<certType><!--req,sx:integer--></certType>
<certNum><!--dep,sx: string--></certNum>
</matchElement>
</matchList>
<country><!-- req, xs: integer --></country>
<address ><!-- req, xs: string --></address>
<company ><!-- req, xs: string --></company>
</countTargetAlmMsg>
// Repeat countTargetAlmMsg
</countTargetAlmMsgList>
</asyncTargetAlmResult>
```

#### **Test cases**

**GET /CGI/Smart/Async/FaceCount/TargetAlm/Result/SessionId/65535**

**Response XML: <AsyncTargetAlmResult>**

```

<?xml version="1.0" encoding="UTF-8"?>
<asyncTargetAlmResult>
<totalCnt>5000</totalCnt>
<countTargetAlmMsgList>
<countTargetAlmMsg>
<almCnt>155</almCnt>
<libKey>1234567890</libKey>
<faceKey>111111111</faceKey>
<picFileName>/tmp/face/0.jpg</picFileName>
<name> Zhang San</name>
<sex>1</sex>
<nation>55</nation>
<birthday>2018-07-10T12:00:00Z</birthday>
<certType>2</certType>
<certNum>120105196407051154</certNum>
<country >0</country>
<address >huake</address>
<company >Tiandy</company>
</countTargetAlmMsg>
<countTargetAlmMsg>
...
</countTargetAlmMsg>
</countTargetAlmMsgList>
</asyncTargetAlmResult>

```

#### 2.7.104 /CGI/Smart/AsyncTaskControl/SessionId/<ID>

/CGI/Smart/AsyncTaskControl/SessionId/<ID>	
<b>PUT</b>	
<b>Description</b>	Request for state control of asynchronous task
<b>Query</b>	None
<b>Inbound Data</b>	<AsyncTaskCtlReq>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b> Realize state control of asynchronous task</p> <p><b>Explanations on key parameters:</b> Send: &lt;progressType&gt; 1: Export face base map; 2: Face retrieval – total query amount; 3: Asynchronous statistics of heat map; 4: Asynchronous statistics of target alarm; 5: Asynchronous statistics of channel alarm &lt;sessionCtlOpt&gt; 1: Start; 2: Stop; 3: Pause; 4: Recover</p>	

#### AsyncTaskCtlReq XML Block

```

<?xml version="1.0" encoding="UTF-8"?>
<asyncTaskCtlReq>
<progressType><!-- req, xs: integer --></progressType>
<sessionCtlOpt><!-- req, xs: integer --></sessionCtlOpt>
</asyncTaskCtlReq>

```

#### Test cases

**PUT /CGI/Smart/AsyncTaskControl/SessionId/65535**

**Send XML:** <AsyncTaskCtlReq>

```

<?xml version="1.0" encoding="UTF-8"?>
<asyncTaskCtlReq>
<progressType>3</progressType>
<sessionCtlOpt>2</sessionCtlOpt>
</asyncTaskCtlReq>

```

**Response XML:** <ResponseStatus>

**2.7.105/CGI/Smart/Prctduty/<ID>/Channels/<ID>/Scene/<ID>/Model/<ID>**

<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire single interrogation/unattended parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<Prctduty>
<b>PUT</b>	
<b>Description</b>	Set single interrogation/unattended parameters
<b>Query</b>	None
<b>Inbound Data</b>	<Prctduty>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol is prepared for query and setting of intelligent analysis on single interrogation/unattended parameters. Model mode is 0 nvr 1 ipc.	
<b>Explanations on key parameters:</b>	
<enabled> represents whether it is effective, true: start, false: not start	
<leaveTime> Allowed leave time; unit: Second; 0~3600 seconds; 10 s as default	
<sensitivity> Sensitivity: 0~100; default: 50	
<maxSize> Max. size: 8-100; 25 as default	
<minSize> Min. size: 1-50; 8 as default	
<validRgList> means detection region list, region number: 1~8	
<maskRgList> means list of shielded regions, 0~8	
<suspectRgList> means suspected region list; region number: 1	
<RegionCoordinatesList> means list of region coordinates; coordinate number: 3~10	
<RegionCoordinates> means region coordinates	
<positionX> means X coordinates of region: Ten-thousandth	
<positionY> means Y coordinates of region: Ten-thousandth	
<displayRule > Display rule; true-Display, false-Not display	
<displayStat > Display alarm count: true-Display; false: Not display	
<displayTarget > Display target: true-Display; false-Not display	

**Prctduty XML Block**

```

<Prctduty version="2.0" >
  <enabled><!-- req, xs:boolean --></enabled>
  <leaveTime><!-- req, xs:integer --></leaveTime>
  <sensitivity><!-- req, xs: integer --></sensitivity>
  <displayRule><!--req, xs:boolean--></displayRule>
  <displayStat><!--req, xs:boolean--></displayStat>
  <displayTarget><!--req, xs:boolean--></displayTarget>
  <minSize><!-- req, xs:integer --></minSize>
  <maxSize><!-- req, xs:integer --></maxSize>
  <color><!--opt,xs:string"red,green,yellow,blue,purple,cyan,black,white"--></color>
  <alarmColor><!--opt,xs:string"red,green,yellow,blue,purple,cyan,black,white"--></alarmColor>
  >
  <validRgList size="8">
  <RegionCoordinatesList size="10">
    <RegionCoordinates>
      <positionX><!-- req, xs: integer --></positionX>
      <positionY><!-- req, xs: integer --></positionY>
    </RegionCoordinates>
  </RegionCoordinatesList>
</validRgList>
  <maskRgList size="8">

```

```

<RegionCoordinatesList size="10">
  <RegionCoordinates>
    <positionX><!-- req, xs: integer --></positionX>
    <positionY><!-- req, xs: integer --></positionY>
  </RegionCoordinates>
</RegionCoordinatesList>
</maskRgList>
<suspectRgList size="1">
<RegionCoordinatesList size="10">
  <RegionCoordinates>
    <positionX><!-- req, xs: integer --></positionX>
    <positionY><!-- req, xs: integer --></positionY>
  </RegionCoordinates>
</RegionCoordinatesList>
</suspectRgList>
</Prctduty>

```

**Test cases**

**GET /CGI/Smart/Prctduty/<ID>/channels/<ID>/Scene/<ID>/Model/<ID>**

**Request XML: none**

**Response XML: <Prctduty>**

**PUT /CGI/Smart/Prctduty/<ID>/channels/<ID>/Scene/<ID>/Model/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<Prctduty version="2.0">
  <enabled>true</enabled>
  <leaveTime>10</leaveTime>
  <sensitivity>80</sensitivity>
  <displayRule>true</displayRule>
  <displayStat>true</displayStat>
  <displayTarget>true</displayTarget>
  <minSize>8</minSize>
  <maxSize>80</maxSize>
<color>green</color>
<alarmColor>red</alarmColor>
<validRgList size="8">
  <RegionCoordinatesList size="10">
    <RegionCoordinates>
      <positionX>100</positionX>
      <positionY>200</positionY>
    </RegionCoordinates>
  </RegionCoordinatesList>
</validRgList>
<maskRgList size="8">
  <RegionCoordinatesList size="10">
    <RegionCoordinates>
      <positionX>100</positionX>
      <positionY>200</positionY>
    </RegionCoordinates>
  </RegionCoordinatesList>
</maskRgList>
<suspectRgList size="1">
  <RegionCoordinatesList size="10">
    <RegionCoordinates>
      <positionX>100</positionX>
      <positionY>200</positionY>
    </RegionCoordinates>
  </RegionCoordinatesList>

```

```
</suspectRgList>
</Prctduty>
```

### 2.7.106/CGI/Smart/Sleep/<ID>/Channels/<ID>/Scene/<ID>/Model/<ID>

/CGI/Smart/Sleep/<ID>/Channels/<ID>/Scene/<ID>/Model/<ID>	
General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire parameters of sleep
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<Sleep>
<b>PUT</b>	
<b>Description</b>	Set parameters of sleep
<b>Query</b>	None
<b>Inbound Data</b>	<Sleep>
<b>Success Return</b>	<ResponseStatus>

#### Explanations on protocol:

This protocol is prepared for query and setting of intelligent analysis on sleep parameters. Model mode is 0 nvr 1 ipc.

#### Explanations on key parameters:

<enabled> represents whether it is effective, true: start, false: not start  
 <sleepTime> Allowed max. sleep time; unit: Second; 1~3600s; 30s as default  
 <sensitivity> Sensitivity: 0~100 (default: 50)  
 <maxSize> Max. size: 8-100; 25 as default  
 <minSize> Min. size: 1-50; 8 as default  
 <validRgList> means detection region list, region number: 1~8  
 <maskRgList> means list of shielded regions, 0~8  
 <RegionCoordinatesList> means list of region coordinates; coordinate number: 3~10  
 <RegionCoordinates> means region coordinates  
 <positionX> means X coordinates of region: Ten-thousandth  
 <positionY> means Y coordinates of region: Ten-thousandth  
 <displayRule > Display rule; true-Display, false-Not display  
 <displayStat > Display alarm count: true-Display; false: Not display  
 <displayTarget > Display target: true-Display; false-Not display

#### Sleep XML Block

```
<Sleep version="2.0" >
  <enabled><!-- req, xs:boolean --></enabled>
  <sleepTime><!-- req, xs:integer --></sleepTime>
  <sensitivity><!-- req, xs: integer --></sensitivity>
  <displayRule><!--req, xs:boolean--></displayRule>
  <displayStat><!--req, xs:boolean--></displayStat>
  <displayTarget><!--req, xs:boolean--></displayTarget>
  <minSize><!-- req, xs:integer --></minSize>
  <maxSize><!-- req, xs:integer --></maxSize>
  <color><!--opt,xs:string"red,green,yellow,blue,purple,cyan,black,white"--></color>
  <alarmColor><!--opt,xs:string"red,green,yellow,blue,purple,cyan,black,white"--></alarmColor>
  >
  <validRgList size="8">
    <RegionCoordinatesList size="10">
      <RegionCoordinates>
        <positionX><!-- req, xs: integer --></positionX>
        <positionY><!-- req, xs: integer --></positionY>
      </RegionCoordinates>
    </RegionCoordinatesList>
  </validRgList>
```



```

<maskRgList size="8">
  <RegionCoordinatesList size="10">
    <RegionCoordinates>
      <positionX><!-- req, xs: integer --></positionX>
      <positionY><!-- req, xs: integer --></positionY>
    </RegionCoordinates>
  </RegionCoordinatesList>
</maskRgList>
</Sleep>

```

**Test cases**

**GET /CGI/Smart/Sleep/<ID>/channels/<ID>/Scene/<ID>/Model/<ID>**

**Request XML: none**

**Response XML: <Sleep>**

**PUT /CGI/Smart/Sleep/<ID>/channels/<ID>/Scene/<ID>/Model/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<Sleep version="2.0">
  <enabled>true</enabled>
  <SleepTime>30</SleepTime>
  <sensitivity>80</sensitivity>
  <displayRule>true</displayRule>
  <displayStat>true</displayStat>
  <displayTarget>true</displayTarget>
  <minSize>8</minSize>
  <maxSize>80</maxSize>
  <color>green</color>
  <alarmColor>red</alarmColor>
  <validRgList size="8">
    <RegionCoordinatesList size="10">
      <RegionCoordinates>
        <positionX>100 </positionX>
        <positionY>200</positionY>
      </RegionCoordinates>
    </RegionCoordinatesList>
  </validRgList>
  <maskRgList size="8">
    <RegionCoordinatesList size="10">
      <RegionCoordinates>
        <positionX>100</positionX>
        <positionY>200</positionY>
      </RegionCoordinates>
    </RegionCoordinatesList>
  </maskRgList>
</Sleep>

```

**2.7.107/CGI/Smart/NewFight/<ID>/Channels/<ID>/Scene/<ID>/Model/<ID>**

<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire parameters of new fight
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<NewFight>
<b>PUT</b>	
<b>Description</b>	Set parameters of new fight
<b>Query</b>	None

<b>Inbound Data</b>	<b>&lt;NewFight&gt;</b>
<b>Success Return</b>	<b>&lt;ResponseStatus&gt;</b>
<p><b>Explanations on protocol:</b>  This protocol is prepared for query and setting of intelligent analysis on new fight. Model mode is 0 nvr 1 ipc.</p> <p><b>Explanations on key parameters:</b>  &lt;enabled&gt; represents whether it is effective, true: start, false: not start  &lt;timeMin&gt; Min. alarm interval; unit: Second; 0~1000s, 300s as default  &lt;sensitivity&gt; Sensitivity: 0~100 (default: 50)  &lt;maxSize&gt; Max. size: 8-100; 25 as default  &lt;minSize&gt; Min. size: 1-50; 8 as default  &lt;validRgList&gt; means detection region list, region number: 1~8  &lt;maskRgList&gt; means list of shielded regions, 0~8  &lt;RegionCoordinatesList&gt; means list of region coordinates; coordinate number: 3~10  &lt;RegionCoordinates&gt; means region coordinates  &lt;positionX&gt; means X coordinates of region: Ten-thousandth  &lt;positionY&gt; means Y coordinates of region: Ten-thousandth  &lt;displayRule &gt; Display rule; true-Display, false-Not display  &lt;displayStat &gt; Display alarm count: true-Display; false: Not display  &lt;displayTarget &gt; Display target: true-Display; false-Not display</p>	

**NewFight XML Block**

```

<NewFightversion="2.0" >
  <enabled><!-- req, xs:boolean --></enabled>
  <timeMin><!-- req, xs:integer --></timeMin>
  <sensitivity><!-- req, xs: integer --></sensitivity>
  <displayRule><!--req, xs:boolean--></displayRule>
  <displayStat><!--req, xs:boolean--></displayStat>
  <displayTarget><!--req, xs:boolean--></displayTarget>
  <minSize><!-- req, xs:integer --></minSize>
  <maxSize><!-- req, xs:integer --></maxSize>
  <color><!--opt,xs:string"red,green,yellow,blue,purple,cyan,black,white"--></color>
  <alarmColor><!--opt,xs:string"red,green,yellow,blue,purple,cyan,black,white"--></alarmColor>
  >
  <validRgList size="8">
    <RegionCoordinatesList size="10">
      <RegionCoordinates>
        <positionX><!-- req, xs: integer --></positionX>
        <positionY><!-- req, xs: integer --></positionY>
      </RegionCoordinates>
    </RegionCoordinatesList>
  </validRgList>
  <maskRgList size="8">
    <RegionCoordinatesList size="10">
      <RegionCoordinates>
        <positionX><!-- req, xs: integer --></positionX>
        <positionY><!-- req, xs: integer --></positionY>
      </RegionCoordinates>
    </RegionCoordinatesList>
  </maskRgList>
</NewFight>

```

**Test cases**

**GET /CGI/Smart/NewFight/<ID>/channels/<ID>/Scene/<ID>/Model/<ID>**

**Request XML: none**

**Response XML: <NewFight>**

**PUT /CGI/Smart/NewFight/<ID>/channels/<ID>/Scene/<ID>/Model/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<NewFight version="2.0">
  <enabled>true</enabled>
  <TimeMin>30</SleepTime>
  <sensitivity>80</sensitivity>
  <displayRule>true</displayRule>
  <displayStat>true</displayStat>
  <displayTarget>true</displayTarget>
  <minSize>8</minSize>
  <maxSize>80</maxSize>
<color>green</color>
<alarmColor>red</alarmColor>
  <validRgList size="8">
    <RegionCoordinatesList size="10">
      <RegionCoordinates>
        <positionX>100 </positionX>
        <positionY>200</positionY>
      </RegionCoordinates>
    </RegionCoordinatesList>
  </validRgList>
  <maskRgList size="8">
    <RegionCoordinatesList size="10">
      <RegionCoordinates>
        <positionX>100</positionX>
        <positionY>200</positionY>
      </RegionCoordinates>
    </RegionCoordinatesList>
  </maskRgList>
</NewFight>

```

### 2.7.108/CGI/Smart/GetUp/<ID>/Channels/<ID>/Scene/<ID>/Model/<ID>

General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire get up parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<GetUp>
<b>PUT</b>	
<b>Description</b>	Set getup parameters
<b>Query</b>	None
<b>Inbound Data</b>	<GetUp>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>            This protocol is prepared for query and setting of intelligent analysis on getup. Model mode is 0 nvr 1 ipc.</p> <p><b>Explanations on key parameters:</b>            &lt;enabled&gt; represents whether it is effective, true: start, false: not start            &lt;sensitivity&gt; Sensitivity: 0~100 (default: 50)            &lt;maxSize&gt; Max. size: 8-100; 25 as default            &lt;minSize&gt; Min. size: 1-50; 8 as default            &lt;regionList&gt; means list of detection region, 1~8            &lt;RegionCoordinatesList&gt; means list of region coordinates; coordinate number: 3~10            &lt;RegionCoordinates&gt; means region coordinates            &lt;LineList&gt; means list of detection line            &lt;LineCoordinatesList&gt; means coordinates of detection line            &lt;LineCoordinates&gt; means coordinates of detection line</p>	

<positionX> means X coordinates of detection area: ten-thousandth  
 <positionY> means Y coordinates of detection area: ten-thousandth  
 <displayRule > Display rule; true-Display, false-Not display  
 <displayStat > Display alarm count: true-Display; false: Not display  
 <displayTarget > Display target: true-Display; false-Not display

**GetUp XML Block**

```

<GetUpversion="2.0" >
  <enabled><!-- req, xs:boolean --></enabled>
  <sensitivity><!-- req, xs: integer --></sensitivity>
  <displayRule><!--req, xs:boolean--></displayRule>
  <displayStat><!--req, xs:boolean--></displayStat>
  <displayTarget><!--req, xs:boolean--></displayTarget>
  <minSize><!-- req, xs:integer --></minSize>
  <maxSize><!-- req, xs:integer --></maxSize>
  <color><!--opt,xs:string"red,green,yellow,blue,purple,cyan,black,white"--></color>
  <alarmColor><!--opt,xs:string"red,green,yellow,blue,purple,cyan,black,white"--></alarmColor>
  >
  <regionList size="1-8">
    <RegionCoordinatesList size="3-10">
      <RegionCoordinates>
        <positionX><!-- req, xs: integer --></positionX>
        <positionY><!-- req, xs: integer --></positionY>
      </RegionCoordinates>
    </RegionCoordinatesList>
  </regionList>
  <LineList>
    <LineCoordinatesList>
      <LineCoordinates>
        <positionX><!-- req, xs:integer;--></positionX>
        <positionY><!-- req, xs:integer; --></positionY>
      </LineCoordinates>
    </LineCoordinatesList>
  </LineList>
</GetUp>
  
```

**Test cases**

**GET /CGI/Smart/GetUp/<ID>/channels/<ID>/Scene/<ID>/Model/<ID>**

**Request XML: none**

**Response XML: <GetUp>**

**PUT /CGI/Smart/GetUp/<ID>/channels/<ID>/Scene/<ID>/Model/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<GetUp version="2.0">
  <enabled>>true</enabled>
  <sensitivity>80</sensitivity>
  <displayRule>>true</displayRule>
  <displayStat>>true</displayStat>
  <displayTarget>>true</displayTarget>
  <minSize>8</minSize>
  <maxSize>80</maxSize>
  <color>green</color>
  <alarmColor>red</alarmColor>
  <regionList size="8">
    <RegionCoordinatesList size="10">
      <RegionCoordinates>
        <positionX>100</positionX>
        <positionY>200</positionY>
      </RegionCoordinates>
    </RegionCoordinatesList>
  </regionList>
  
```

```

    </RegionCoordinatesList>
  </regionList>
</LineList>
  <LineList>
    <LineCoordinatesList>
      <LineCoordinates>
        <positionX>1800</positionX>
        <positionY>2800</positionY>
      </LineCoordinates>
      <LineCoordinates>
        <positionX>6800</positionX>
        <positionY>7800</positionY>
      </LineCoordinates>
    </LineCoordinatesList>
  </LineList>
</GetUp>

```

### 2.7.109/CGI/Smart/HeightLimit/<ID>/Channels/<ID>/Scene/<ID>/Model/<ID>

/CGI/Smart/HeightLimit/<ID>/Channels/<ID>/Scene/<ID>/Model/<ID>	
General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire height limit parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<HeightLimit>
<b>PUT</b>	
<b>Description</b>	Set height limit parameters
<b>Query</b>	None
<b>Inbound Data</b>	<HeightLimit>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol is prepared for query and setting of intelligent analysis on height limit. Model mode is 0 nvr 1 ipc.	
<b>Explanations on key parameters:</b>	
<enabled> represents whether it is effective, true: start, false: not start	
<limitTime> Max. limit time; unit: Second; 0~100s; 3s as default	
<sensitivity> Sensitivity: 0~100 (default: 50)	
<maxSize> Max. size: 8-100; 25 as default	
<minSize> Min. size: 1-50; 8 as default	
<regionList> means list of detection region, 1~8	
<RegionCoordinatesList> means list of region coordinates; coordinate number: 3~10	
<RegionCoordinates> means region coordinates	
<positionX> means X coordinates of detection area: ten-thousandth	
<positionY> means Y coordinates of detection area: ten-thousandth	
<displayRule > Display rule; true-Display, false-Not display	
<displayStat > Display alarm count: true-Display; false: Not display	
<displayTarget > Display target: true-Display; false-Not display	

#### HeightLimit XML Block

```

<HeightLimit version="2.0" >
  <enabled><!-- req, xs:boolean --></enabled>
  <limitTime><!-- req, xs:integer --></limitTime>
  <sensitivity><!-- req, xs: integer --></sensitivity>
  <displayRule><!--req, xs:boolean--></displayRule>
  <displayStat><!--req, xs:boolean--></displayStat>
  <displayTarget><!--req, xs:boolean--></displayTarget>
  <minSize><!-- req, xs:integer --></minSize>
  <maxSize><!-- req, xs:integer --></maxSize>

```

```

<color><!--opt,xs:string"red,green,yellow,blue,purple,cyan,black,white"--></color>
<alarmColor><!--opt,xs:string"red,green,yellow,blue,purple,cyan,black,white"--></alarmColor>
>
<regionList size="8">
  <RegionCoordinatesList size="10">
    <RegionCoordinates>
      <positionX><!-- req, xs: integer --></positionX>
      <positionY><!-- req, xs: integer --></positionY>
    </RegionCoordinates>
  </RegionCoordinatesList>
</regionList>
</HeightLimit>

```

**Test cases**

**GET /CGI/Smart/HeightLimit/<ID>/channels/<ID>/Scene/<ID>/Model/<ID>**

**Request XML: none**

**Response XML: <HeightLimit>**

**PUT /CGI/Smart/HeightLimit/<ID>/channels/<ID>/Scene/<ID>/Model/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<HeightLimitversion="2.0">
  <enabled>true</enabled>
  <limitTime>3</limitTime>
  <sensitivity>80</sensitivity>
  <displayRule>true</displayRule>
  <displayStat>true</displayStat>
  <displayTarget>true</displayTarget>
  <minSize>8</minSize>
  <maxSize>80</maxSize>
<color>green</color>
<alarmColor>red</alarmColor>
<regionList size="8">
  <RegionCoordinatesList size="10">
    <RegionCoordinates>
      <positionX>100</positionX>
      <positionY>200</positionY>
    </RegionCoordinates>
  </RegionCoordinatesList>
</regionList>
</HeightLimit>

```

**2.7.110/CGI/Smart/NewDuty/<ID>/Channels/<ID>/Scene/<ID>/Model/<ID>**

<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire leave parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<NewDuty>
<b>PUT</b>	
<b>Description</b>	Set leave parameters
<b>Query</b>	None
<b>Inbound Data</b>	<NewDuty>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

This protocol is prepared for query and setting of intelligent analysis on new leaves. Model mode is 0 nvr 1 ipc.

**Explanations on key parameters:**

<enabled> represents whether it is effective, true: start, false: not start  
 <leaveTime> Allowed leave time; unit: Second; 1~1000s; 10s as default  
 <dutyNum> Duty number, range: 1-2; 1 as default  
 <sensitivity> Sensitivity: 0~100 (default: 50)  
 <maxSize> Max. size: 8-100; 25 as default  
 <minSize> Min. size: 1-50; 8 as default  
 <regionList> means list of detection region, 1~8  
 <RegionCoordinatesList> means list of region coordinates; coordinate number: 3~10  
 <RegionCoordinates> means region coordinates  
 <positionX> means X coordinates of detection area: ten-thousandth  
 <positionY> means Y coordinates of detection area: ten-thousandth  
 <displayRule > Display rule; true-Display, false-Not display  
 <displayStat > Display alarm count: true-Display; false: Not display  
 <displayTarget > Display target: true-Display; false-Not display

**NewDuty XML Block**

```
<NewDuty version="2.0" >
  <enabled><!-- req, xs:boolean --></enabled>
  <leaveTime><!-- req, xs:integer --></leaveTime>
  <dutyNum><!-- req, xs:integer --></dutyNum>
  <sensitivity><!-- req, xs: integer --></sensitivity>
  <displayRule><!--req, xs:boolean--></displayRule>
  <displayStat><!--req, xs:boolean--></displayStat>
  <displayTarget><!--req, xs:boolean--></displayTarget>
  <minSize><!-- req, xs:integer --></minSize>
  <maxSize><!-- req, xs:integer --></maxSize>
  <color><!--opt,xs:string"red,green,yellow,blue,purple,cyan,black,white"--></color>
  <alarmColor><!--opt,xs:string"red,green,yellow,blue,purple,cyan,black,white"--></alarmColor>
  >
  <regionList size="8">
    <RegionCoordinatesList size="10">
      <RegionCoordinates>
        <positionX><!-- req, xs: integer --></positionX>
        <positionY><!-- req, xs: integer --></positionY>
      </RegionCoordinates>
    </RegionCoordinatesList>
  </regionList>
</NewDuty>
```

**Test cases**

**GET /CGI/Smart/NewDuty/<ID>/channels/<ID>/Scene/<ID>/Model/<ID>**

**Request XML: none**

**Response XML: <NewDuty>**

**PUT /CGI/Smart/NewDuty/<ID>/channels/<ID>/Scene/<ID>/Model/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<NewDuty version="2.0">
  <enabled>>true</enabled>
  <leaveTime>10</leaveTime>
  <dutyNum>1</dutyNum>
  <sensitivity>80</sensitivity>
  <displayRule>true</displayRule>
  <displayStat>true</displayStat>
  <displayTarget>true</displayTarget>
  <minSize>8</minSize>
```

```

    <maxSize>80</maxSize>
<color>green</color>
<alarmColor>red</alarmColor>
<regionList size="8">
  <RegionCoordinatesList size="10">
    <RegionCoordinates>
      <positionX>100</positionX>
      <positionY>200</positionY>
    </RegionCoordinates>
  </RegionCoordinatesList>
</regionList>
</NewDuty>

```

### 2.7.111/CGI/Smart/Stranded/<ID>/Channels/<ID>/Scene/<ID>/Model/<ID>

/CGI/Smart/Stranded/<ID>/Channels/<ID>/Scene/<ID>/Model/<ID>	
General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire detention parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<Stranded>
<b>PUT</b>	
<b>Description</b>	Set detention parameters
<b>Query</b>	None
<b>Inbound Data</b>	<Stranded>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol is prepared for query and setting of intelligent analysis on detention. Model mode is 0 nvr 1 ipc.	
<b>Explanations on key parameters:</b>	
<enabled> represents whether it is effective, true: start, false: not start	
<alarmTime> Allowed leave time; unit: Second; 0~100s; 3s as default	
<sensitivity> Sensitivity: 0~100 (default: 50)	
<maxSize> Max. size: 8-100; 25 as default	
<minSize> Min. size: 1-50; 8 as default	
<regionList> means list of detection region, 1~8	
<RegionCoordinatesList> means list of region coordinates; coordinate number: 3~10	
<RegionCoordinates> means region coordinates	
<positionX> means X coordinates of detection area: ten-thousandth	
<positionY> means Y coordinates of detection area: ten-thousandth	
<displayRule > Display rule; true-Display, false-Not display	
<displayStat > Display alarm count: true-Display; false: Not display	
<displayTarget > Display target: true-Display; false-Not display	

#### Stranded XML Block

```

<Stranded version="2.0" >
  <enabled><!-- req, xs:boolean --></enabled>
  <alarmTime><!-- req, xs:integer --></leaveTime>
  <sensitivity><!-- req, xs: integer --></sensitivity>
  <displayRule><!--req, xs:boolean--></displayRule>
  <displayStat><!--req, xs:boolean--></displayStat>
  <displayTarget><!--req, xs:boolean--></displayTarget>
  <minSize><!-- req, xs:integer --></minSize>
  <maxSize><!-- req, xs:integer --></maxSize>
  <color><!--opt,xs:string"red,green,yellow,blue,purple,cyan,black,white"--></color>
  <alarmColor><!--opt,xs:string"red,green,yellow,blue,purple,cyan,black,white"--></alarmColor>

```



```

>
<regionList size="8">
  <RegionCoordinatesList size="10">
    <RegionCoordinates>
      <positionX><!-- req, xs: integer --></positionX>
      <positionY><!-- req, xs: integer --></positionY>
    </RegionCoordinates>
  </RegionCoordinatesList>
</regionList>
</Stranded>

```

**Test cases**

**GET /CGI/Smart/Stranded/<ID>/channels/<ID>/Scene/<ID>/Model/<ID>**

**Request XML: none**

**Response XML: <Stranded>**

**PUT /CGI/Smart/Stranded/<ID>/channels/<ID>/Scene/<ID>/Model/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<Stranded version="2.0">
  <enabled>true</enabled>
  <alarmTime>10</leaveTime>
  <sensitivity>80</sensitivity>
  <displayRule>true</displayRule>
  <displayStat>true</displayStat>
  <displayTarget>true</displayTarget>
  <minSize>8</minSize>
  <maxSize>80</maxSize>
<color>green</color>
<alarmColor>red</alarmColor>
<regionList size="8">
  <RegionCoordinatesList size="10">
    <RegionCoordinates>
      <positionX>100</positionX>
      <positionY>200</positionY>
    </RegionCoordinates>
  </RegionCoordinatesList>
</regionList>
</Stranded>

```

**2.7.112/CGI/Smart/Alone/<ID>/Channels/<ID>/Scene/<ID>/Model/<ID>**

<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire parameters of alone
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<Alone>
<b>PUT</b>	
<b>Description</b>	Set parameters of alone
<b>Query</b>	None
<b>Inbound Data</b>	<Alone>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol is prepared for query and setting of intelligent analysis on alone. Model mode is 0 nvr 1 ipc.	
<b>Explanations on key parameters:</b>	

<enabled> represents whether it is effective, true: start, false: not start  
 <alarmTime> Alone time; unit: Second; 1~1000s; 30s as default  
 <sensitivity> Sensitivity: 0~100 (default: 50)  
 <maxSize> Max. size: 8-100; 25 as default  
 <minSize> Min. size: 1-50; 8 as default  
 <regionList> means list of detection region, 1~8  
 <RegionCoordinatesList> means list of region coordinates; coordinate number: 3~10  
 <RegionCoordinates> means region coordinates  
 <positionX> means X coordinates of detection area: ten-thousandth  
 <positionY> means Y coordinates of detection area: ten-thousandth  
 <displayRule > Display rule; true-Display, false-Not display  
 <displayStat > Display alarm count: true-Display; false: Not display  
 <displayTarget > Display target: true-Display; false-Not display

#### Alone XML Block

```

<Alone version="2.0" >
  <enabled><!-- req, xs:boolean --></enabled>
  <alarmTime><!-- req, xs:integer --></leaveTime>
  <sensitivity><!-- req, xs: integer --></sensitivity>
  <displayRule><!--req, xs:boolean--></displayRule>
  <displayStat><!--req, xs:boolean--></displayStat>
  <displayTarget><!--req, xs:boolean--></displayTarget>
  <minSize><!-- req, xs:integer --></minSize>
  <maxSize><!-- req, xs:integer --></maxSize>
  <color><!--opt,xs:string"red,green,yellow,blue,purple,cyan,black,white"--></color>
  <alarmColor><!--opt,xs:string"red,green,yellow,blue,purple,cyan,black,white"--></alarmColor>
  >
  <regionList size="8">
    <RegionCoordinatesList size="10">
      <RegionCoordinates>
        <positionX><!-- req, xs: integer --></positionX>
        <positionY><!-- req, xs: integer --></positionY>
      </RegionCoordinates>
    </RegionCoordinatesList>
  </regionList>
</Alone>
  
```

#### Test cases

**GET /CGI/Smart/Alone/<ID>/channels/<ID>/Scene/<ID>/Model/<ID>**

**Request XML: none**

**Response XML: <Alone>**

**PUT /CGI/Smart/Alone/<ID>/channels/<ID>/Scene/<ID>/Model/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<Alone version="2.0">
  <enabled>>true</enabled>
  <alarmTime>10</leaveTime>
  <sensitivity>80</sensitivity>
  <displayRule>true</displayRule>
  <displayStat>true</displayStat>
  <displayTarget>true</displayTarget>
  <minSize>8</minSize>
  <maxSize>80</maxSize>
  <color>green</color>
  <alarmColor>red</alarmColor>
  <regionList size="8">
    <RegionCoordinatesList size="10">
      <RegionCoordinates>
        <positionX>100</positionX>
      </RegionCoordinates>
    </RegionCoordinatesList>
  </regionList>
  </Alone>
  
```

```

    <positionY>200</positionY>
  </RegionCoordinates>
</RegionCoordinatesList>
</regionList>
</Alone>

```

### 2.7.113/CGI/Smart/Delivergoods/<ID>/Channels/<ID>/Scene/<ID>/Model/<ID>

/CGI/Smart/Delivergoods/<ID>/Channels/<ID>/Scene/<ID>/Model/<ID>  
**General Resource v2.0**

#### GET

<b>Description</b>	Acquire parameters of delivering goods
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<Delivergoods>

#### PUT

<b>Description</b>	Set parameters of delivering goods
<b>Query</b>	None
<b>Inbound Data</b>	<Delivergoods>
<b>Success Return</b>	<ResponseStatus>

#### Explanations on protocol:

This protocol is prepared for query and setting of intelligent analysis on delivering goods. Model mode is 0 nvr 1 ipc.

#### Explanations on key parameters:

<enabled> represents whether it is effective, true: start, false: not start  
 <sensitivity> Sensitivity: 0~5 (default: 2)  
 <maxSize> Max. size: 1-100; 30 as default  
 <minSize> Min. size: 0-100; 0 as default  
 <regionList> means list of detection region, 1~8  
 <RegionCoordinatesList> means coordinate list of detection area; coordinate number: 3~10  
 <RegionCoordinates> represents detection region coordinate  
 <positionX> means X coordinates of detection area: ten-thousandth  
 <positionY> means Y coordinates of detection area: ten-thousandth  
 <displayRule > Display rule; true-Display, false-Not display  
 <displayStat > Display alarm count: true-Display; false: Not display  
 <displayTarget > Display target: true-Display; false-Not display

#### Delivergoods XML Block

```

<Delivergoodsversion="2.0" >
  <enabled><!-- req, xs:boolean --></enabled>
  <sensitivity><!-- req, xs: integer --></sensitivity>
  <displayRule><!--req, xs:boolean--></displayRule>
  <displayStat><!--req, xs:boolean--></displayStat>
  <displayTarget><!--req, xs:boolean--></displayTarget>
  <minSize><!-- req, xs:integer --></minSize>
  <maxSize><!-- req, xs:integer --></maxSize>
  <color><!--opt,xs:string"red,green,yellow,blue,purple,cyan,black,white"--></color>
  <alarmColor><!--opt,xs:string"red,green,yellow,blue,purple,cyan,black,white"--></alarmColor>
  >
  <regionList size="8">
    <RegionCoordinatesList size="10">
      <RegionCoordinates>
        <positionX><!-- req, xs: integer --></positionX>
        <positionY><!-- req, xs: integer --></positionY>
      </RegionCoordinates>
    </RegionCoordinatesList>
  </regionList>

```

</Delivergoods>

**Test cases**

**GET /CGI/Smart/Delivergoods/<ID>/channels/<ID>/Scene/<ID>/Model/<ID>**

**Request XML: none**

**Response XML: <Delivergoods>**

**PUT /CGI/Smart/Delivergoods/<ID>/channels/<ID>/Scene/<ID>/Model/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<Delivergoodsversion="2.0">
  <enabled>true</enabled>
  <sensitivity>80</sensitivity>
  <displayRule>true</displayRule>
  <displayStat>true</displayStat>
  <displayTarget>true</displayTarget>
  <minSize>8</minSize>
  <maxSize>80</maxSize>
  <color>green</color>
  <alarmColor>red</alarmColor>
  <regionList size="8">
    <RegionCoordinatesList size="10">
      <RegionCoordinates>
        <positionX>100</positionX>
        <positionY>200</positionY>
      </RegionCoordinates>
    </RegionCoordinatesList>
  </regionList>
</Delivergoods>
```

**2.7.114/CGI/Smart/FaceMosaic/<ID>/Channels/<ID>/Scene/<ID>/Model/<ID>**

/CGI/Smart/FaceMosaic/<ID>/Channels/<ID>/Scene/<ID>/Model/<ID>	
General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire parameters of face mosaic algorithm
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<FaceMosaic>
<b>PUT</b>	
<b>Description</b>	Set parameters of face mosaic algorithm
<b>Query</b>	None
<b>Inbound Data</b>	<FaceMosaic>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol is prepared for query and setting of intelligent analysis on face mosaic algorithm parameters. Model is 0 nvr 1 ipc.	
<b>Explanations on key parameters:</b>	
<enabled> represents whether it is effective, true: start, false: not start	
<mosaicEnabled> means whether enable mosaic; true: Enabled; false: Disabled	
<picScal> means picture scaling proportion: 1-10	
<level> means operation level	
<mosaicLevel> means mosaic level: 0-100	
<sensitivity> Sensitivity: 0~5	
<maxSize> Max. size 0-100	
<minSize> Min. size: 0-100	
<validRgList> Detection region list; region number: 1	
<protectRgList> Coordinate list of protection region; region number: 1	

<RegionCoordinatesList> means list of region coordinates; coordinate number: 3~10  
<RegionCoordinates> means region coordinates  
<positionX> means X coordinates of detection area: ten-thousandth  
<positionY> means Y coordinates of detection area: ten-thousandth  
<displayRule > Display rule; true-Display, false-Not display

#### FaceMosaic XML Block

```
<FaceMosaic version="2.0" >
  <enabled><!-- req, xs:boolean --></enabled>
  <mosaicEnabled><!-- req, xs:boolean --></mosaicEnabled>
  <picScal><!-- req, xs: integer --></picScal>
  <level><!-- req, xs: integer --></level>
  <mosaicLevel><!-- req, xs: integer --></mosaicLevel>
  <sensitivity><!-- req, xs: integer --></sensitivity>
  <displayRule><!--req, xs:boolean--></displayRule>
  <minSize><!-- req, xs:integer --></minSize>
  <maxSize><!-- req, xs:integer --></maxSize>
  <color><!--opt,xs:string"red,green,yellow,blue,purple,cyan,black,white"--></color>
  <validRgList size="1">
  <RegionCoordinatesList size="10">
    <RegionCoordinates>
      <positionX><!-- req, xs: integer --></positionX>
      <positionY><!-- req, xs: integer --></positionY>
    </RegionCoordinates>
  </RegionCoordinatesList>
</validRgList>
  <protectRgList size="1">
  <RegionCoordinatesList size="10">
    <RegionCoordinates>
      <positionX><!-- req, xs: integer --></positionX>
      <positionY><!-- req, xs: integer --></positionY>
    </RegionCoordinates>
  </RegionCoordinatesList>
  </protectRgList>
</FaceMosaic>
```

#### Test cases

**GET /CGI/Smart/FaceMosaic/<ID>/channels/<ID>/Scene/<ID>/Model/<ID>**

**Request XML: none**

**Response XML: <FaceMosaic>**

**PUT /CGI/Smart/FaceMosaic/<ID>/channels/<ID>/Scene/<ID>/Model/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<FaceMosaic version="2.0">
  <enabled>>true</enabled>
  <mosaicEnabled>>true</mosaicEnabled>
  <picScal>0</picScal>
  <level>2</level>
  <mosaicLevel>0</mosaicLevel>
  <sensitivity>80</sensitivity>
  <displayRule>>true</displayRule>
  <minSize>8</minSize>
  <maxSize>80</maxSize>
  <color>green</color>
  <validRgList size="1">
  <RegionCoordinatesList size="10">
    <RegionCoordinates>
      <positionX>100 </positionX>
      <positionY>200</positionY>
```

```

    </RegionCoordinates>
  </RegionCoordinatesList>
</validRgList>
<protectRgList size="1">
  <RegionCoordinatesList size="10">
    <RegionCoordinates>
      <positionX>100</positionX>
      <positionY>200</positionY>
    </RegionCoordinates>
  </RegionCoordinatesList>
</protectRgList>
</FaceMosaic>

```

### 2.7.115/CGI/Smart/ColorTrack/<ID>/Channels/<ID>/Scene/<ID>/Model/<ID>

/CGI/Smart/ColorTrack/<ID>/Channels/<ID>/Scene/<ID>/Model/<ID>  
**General Resource v2.0**

#### GET

<b>Description</b>	Acquire parameters of color traction algorithm
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ColorTrack>

#### PUT

<b>Description</b>	Set parameters of color traction algorithm
<b>Query</b>	None
<b>Inbound Data</b>	<ColorTrack>
<b>Success Return</b>	<ResponseStatus>

#### Explanations on protocol:

This protocol is prepared for query and setting of intelligent analysis on color traction algorithm parameters. Model mode is 0 nvr 1 ipc.

#### Explanations on key parameters:

<enabled> represents whether it is effective, true: start, false: not start  
 <calibrationSize> means calibration frame size; default; 15; adjustment range: 10~25  
 <targetColor> means target color: 0: Others (confirm target by hue, saturation and lightness);  
 1: Red; 2: Green; 3: Yellow  
 <hue> means hue, this value is valid when targetColor=0;  
 <saturation> means saturation, this value is valid when targetColor=0;  
 <lightness> means lightness; this value is valid when targetColor=0;  
 <zoomRate> means zoom rate of traction  
 <searchTime> means search time of each preset bit; unit: Second; by default time if value is 0  
 <searchLoop> means auto search of loop; this value is valid if it is not 0; by default if value is 0  
 <sensitivity> Sensitivity: 0~100 (default: 80)  
 <maxSize> Max. size: 0-100; 15 as default  
 <minSize> Min. size: 0-100; 5 as default  
 <displayRule > Display rule; true-Display, false-Not display  
 <displayStat > Display alarm count: true-Display; false: Not display  
 <displayTarget > Display target: true-Display; false-Not display

#### ColorTrack XML Block

```

<ColorTrack version="2.0" >
  <enabled><!-- req, xs:boolean --></enabled>
  <calibrationSize><!-- req, xs: integer --></calibrationSize>
  <targetColor><!-- req, xs: integer --></targetColor>
  <hue><!-- req, xs: integer --></hue>
  <saturation><!-- req, xs: integer --></saturation>
  <lightness><!-- req, xs: integer --></lightness>

```

```

<zoomRate><!-- req, xs: integer --></zoomRate>
<searchTime><!-- req, xs: integer --></searchTime>
<searchLoop><!-- req, xs: integer --></searchLoop>
<sensitivity><!-- req, xs: integer --></sensitivity>
<displayRule><!--req, xs:boolean--></displayRule>
<displayStat><!--req, xs:boolean--></displayStat>
<displayTarget><!--req, xs:boolean--></displayTarget>
<minSize><!-- req, xs:integer --></minSize>
<maxSize><!-- req, xs:integer --></maxSize>
<color><!--opt,xs:string"red,green,yellow,blue,purple,cyan,black,white"--></color>
<alarmColor><!--opt,xs:string"red,green,yellow,blue,purple,cyan,black,white"--></alarmColor>
>
</ColorTrack>

```

**Test cases**

**GET /CGI/Smart/ColorTrack/<ID>/channels/<ID>/Scene/<ID>/Model/<ID>**

**Request XML: none**

**Response XML: <ColorTrack>**

**PUT /CGI/Smart/ColorTrack/<ID>/channels/<ID>/Scene/<ID>/Model/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<ColorTrack version="2.0">
  <enabled>true</enabled>
  <calibrationSize>15</calibrationSize>
  <targetColor>1</targetColor>
  <hue>1</hue>
  <saturation>1</saturation>
  <lightness>1</lightness>
  <zoomRate>1</zoomRate>
  <searchTime>1</searchTime>
  <searchLoop>1</searchLoop>
  <sensitivity>80</sensitivity>
  <displayRule>true</displayRule>
  <displayStat>true</displayStat>
  <displayTarget>true</displayTarget>
  <minSize>8</minSize>
  <maxSize>80</maxSize>
  <color>green</color>
  <alarmColor>red</alarmColor>
</ColorTrack>

```

**2.7.116 /CGI/Smart/AIResource/channels/<ID>/Timing**

<b>/CGI/Smart/AIResource/channels/&lt;ID&gt;/Timing</b>	
<b>GET</b>	
<b>Description</b>	Intelligent and timing switching management of resources
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<aiTiming>
<b>PUT</b>	
<b>Description</b>	Intelligent and timing switching management of resources
<b>Query</b>	None
<b>Inbound Data</b>	<aiTiming>
<b>Success Return</b>	<responseStatus>

**Explanations on protocol:**

Realize intelligent and timing switching management of resources

Introduction to key parameters:

<enabled> means whether intelligent and timing switching of resource is enabled; true: Enabled; false: Disabled

<aiName> means resource type: IVS –Intelligent monitoring; FaceDetect-Face snapshot; FaceRecognition-Face recognition; WaterMode-Water monitoring, WaterAlertStation- Water alert station; TrafficFlow-Traffic flow; ControlCommission-Intelligent supervision; PublicSecurity-Intelligent security; Education-Intelligent education; Discipline-Intelligent discipline

<dayOfWeek> means day of week

<TimeRange> means time range; time range number: 1~8; format: 19:35:00 (hour: minute: second; assignment 00)

**aiTiming XML Block**

```
<aiTiming>
<enabled><!-- rsp, xs:boolean; --></enabled>
<TimeBlockList>
<TimeBlock size="1-8">
  <dayOfWeek><!-- rsp, xs:integer; --></dayOfWeek>
  <TimeRange>
    <beginTime><!-- req, xs:time, ISO8601 time --></beginTime>
    <endTime><!-- req, xs:time, ISO8601 time --></endTime>
    <aiName><!-- req, xs:string --></aiName>
  </TimeRange>
  <TimeRange>
    <beginTime><!-- req, xs:time, ISO8601 time --></beginTime>
    <endTime><!-- req, xs:time, ISO8601 time --></endTime>
    <aiName><!-- req, xs:string --></aiName>
  </TimeRange>
</TimeBlock>
</TimeBlockList>
</aiTiming>
```

**Test cases**

**GET /CGI/Smart/AIResource/channels/0/Timing**

**Request XML:** none

**Response XML:** <aiTiming>

**PUT /CGI/Smart/AIResource/channels/0/Timing**

**Request XML:** <aiTiming>

**Response XML:** <responseStatus>

```
<?xml version="1.0" encoding="UTF-8"?>
<aiTiming>
<enabled>true</enabled>
<TimeBlockList>
<TimeBlock size="4">
<dayOfWeek>1</dayOfWeek>
<TimeRange>
<beginTime>00:00:00</beginTime>
<endTime>23:59:00</endTime>
<aiName>IVS</aiName>
</TimeRange>
<TimeRange>
<beginTime>00:00:00</beginTime>
<endTime>00:00:00</endTime>
<aiName>IVS</aiName>
</TimeRange>
<TimeRange>
<beginTime>00:00:00</beginTime>
```



```
<endTime>00:00:00</endTime>
<aiName>FaceDetect</aiName>
</TimeRange>
<TimeRange>
<beginTime>00:00:00</beginTime>
<endTime>00:00:00</endTime>
<aiName>FaceDetect</aiName>
</TimeRange>
</TimeBlock>
<TimeBlock size="4">
<dayOfWeek>2</dayOfWeek>
<TimeRange>
<beginTime>00:00:00</beginTime>
<endTime>23:59:00</endTime>
<aiName>FaceDetect</aiName>
</TimeRange>
<TimeRange>
<beginTime>00:00:00</beginTime>
<endTime>00:00:00</endTime>
<aiName>FaceDetect</aiName>
</TimeRange>
<TimeRange>
<beginTime>00:00:00</beginTime>
<endTime>00:00:00</endTime>
<aiName>FaceDetect</aiName>
</TimeRange>
<TimeRange>
<beginTime>00:00:00</beginTime>
<endTime>00:00:00</endTime>
<aiName>FaceDetect</aiName>
</TimeRange>
</TimeBlock>
<TimeBlock size="4">
<dayOfWeek>3</dayOfWeek>
<TimeRange>
<beginTime>00:00:00</beginTime>
<endTime>23:59:00</endTime>
<aiName>FaceDetect</aiName>
</TimeRange>
<TimeRange>
<beginTime>00:00:00</beginTime>
<endTime>00:00:00</endTime>
<aiName>FaceDetect</aiName>
</TimeRange>
<TimeRange>
<beginTime>00:00:00</beginTime>
<endTime>00:00:00</endTime>
<aiName>FaceDetect</aiName>
</TimeRange>
<TimeRange>
<beginTime>00:00:00</beginTime>
<endTime>00:00:00</endTime>
<aiName>FaceDetect</aiName>
</TimeRange>
</TimeBlock>
<TimeBlock size="4">
<dayOfWeek>4</dayOfWeek>
<TimeRange>
```



```

<aiName>FaceDetect</aiName>
</TimeRange>
<TimeRange>
<beginTime>00:00:00</beginTime>
<endTime>00:00:00</endTime>
<aiName>FaceDetect</aiName>
</TimeRange>
</TimeBlock>
<TimeBlock size="4">
<dayOfWeek>7</dayOfWeek>
<TimeRange>
<beginTime>00:00:00</beginTime>
<endTime>23:59:00</endTime>
<aiName>FaceRecognition</aiName>
</TimeRange>
<TimeRange>
<beginTime>00:00:00</beginTime>
<endTime>00:00:00</endTime>
<aiName>FaceRecognition</aiName>
</TimeRange>
<TimeRange>
<beginTime>00:00:00</beginTime>
<endTime>00:00:00</endTime>
<aiName>FaceRecognition</aiName>
</TimeRange>
<TimeRange>
<beginTime>00:00:00</beginTime>
<endTime>00:00:00</endTime>
<aiName>FaceRecognition</aiName>
</TimeRange>
</TimeBlock>
</TimeBlockList>
</aiTiming>

```

### 2.7.117/CGI/Smart/FacePicMap/Import/Progress/SessionId/<ID>/

/CGI/Smart/FacePicMap/	
<b>Import/Progress/SessionId/&lt;ID&gt;/</b>	<b>General Resource v2.0</b>
<b>GET</b>	
<b>Description</b>	Import progress of base map of face library
<b>Query</b>	<b>None</b>
<b>Inbound Data</b>	<b>None</b>
<b>Success Return</b>	<Progress>
<p><b>Explanations on protocol:</b>  Import progress of base map of face library</p> <p><b>Explanations of parameters:</b>  URL:  SessionId/&lt;ID&gt;: Interaction ID of client and device, see attached Table 1  Reply xml:  &lt;state&gt; State; 0-Unexecuted; 1-Executed in progress; 2-Execution success; 3-Execution failure  &lt;sum&gt; Total amount of picture  &lt;okcnt&gt; Amount of pictures with successful adding  &lt;errcnt&gt; Amount of pictures with failed adding</p>	

#### Progress XML Block

```
<?xml version="1.0" encoding="UTF-8"?>
<progressversion="1.0">
<state><!--req,sx:integer--></state>
<sum><!--req,sx:integer--></sum>
<okcnt><!--req,sx:integer--></okcnt>
<errcnt><!--req,sx:integer--></errcnt>
</progress>
```

**Test cases**

**GET /CGI/Smart/FacePicMap/Import/Progress/SessionId/66666/**

**Response XML: <Progress>**

```
<?xml version="1.0" encoding="UTF-8"?>
<progress version="1.0">
<state>1</state>
<sum>5000</sum>
<okcnt>1500</okcnt>
<errcnt>1000</errcnt>
</progress>
```

**2.7.118/CGI/Smart/AsyncReportData/channels/<ID>/export/<FileName>**

<b>General Resource v2.0</b>	
<b>POST</b>	
<b>Description</b>	Request for asynchronous export of report
<b>Query</b>	None
<b>Inbound Data</b>	<b>&lt;AsyncQueryReport&gt;</b>
<b>Success Return</b>	<b>&lt;AsyncQueryReportResult&gt;</b>
<b>Explanations on protocol:</b> This protocol is prepared for asynchronous export of report	
<b>Explanations on key parameters:</b> sessionId/<ID>: Interaction ID of client and device reportType: Query type: 0: Statistics of passenger flow; 1: Time heat map; 2: Spatial heat map; 3: Face - Age bracket; 4: Face - Gender; 5: Face - Person amount; 6: Face - Nationality; 7: Feature statistics: Glasses; 8: Feature statistics: Mask; 9: Target alarm statistics; 10: Channel alarm statistics - All types; 11: Face detection; 12: Comparison alarm; 13: Stranger alarm; 14: Frequency alarm; 15: Detention alarm; 16: Pedestrian - Gender; 17: Pedestrian - Motion direction; 18: Pedestrian - Person amount; 19: Vehicle - Vehicle type; 20; Vehicle - Motion direction	

**AsyncQueryReport XML Block**

```
<AsyncQueryReport version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<sessionId><!-- req, xs: long long --></sessionId> // Affair ID
<reportType><!-- req, xs: integer --></reportType> // Type
</AsyncQueryReport >
```

**AsyncQueryReportResult XML Block**

```
<AsyncQueryReportResult version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<retState><!-- req, xs: integer --></retState> // Return type - 0: Success; 1: Failure; 2: Data
timeout
</AsyncQueryReportResult>
```

**Test cases**

**POST/ISAPI/Smart/ReportData/channels/<ID>/export/<FileName>**

**Request XML: as below**

```
<AQueryReport version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<sessionId>65535</sessionId>
<reportType>0</reportType>
</AQueryReport>
```

**Response XML: as below**

```
<AsyncQueryReportResult version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <retState>0</retState>
</AsyncQueryReportResult>
```

### 2.7.119/CGI/Smart/AsyncReportData/Result/ export/<FileName>

<b>/CGI/Smart/AsyncReportData/Result/export/&lt;FileName&gt; General Resource v2.0</b>	
<b>POST</b>	
<b>Description</b>	Asynchronous export of report acquisition report
<b>Query</b>	None
<b>Inbound Data</b>	<b>None</b>
<b>Success Return</b>	<b>File content</b>
<b>Explanations on protocol:</b> This protocol is prepared for asynchronous export of report	

**Test cases**

/CGI/Smart/AsyncReportData/Result/export/chn\_all\_day\_allalarm\_20191017.xls

### 2.7.120/CGI/Smart/CuriseLock/channels/<ID>

<b>/CGI/Smart/CuriseLock/channels/&lt;ID&gt;</b>	
<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire the remaining time of cruise lock
<b>Query</b>	None
<b>Inbound Data</b>	<b>None</b>
<b>Success Return</b>	<b>&lt;LockInfo&gt;</b>
<b>PUT</b>	
<b>Description</b>	Set lock period of cruise
<b>Query</b>	None
<b>Inbound Data</b>	<b>&lt;LockInfo&gt;</b>
<b>Success Return</b>	<b>&lt;ResponseStatus&gt;</b>
<b>Explanations on protocol:</b> This protocol is prepared for helping client acquire or set the cruise lock period of intelligent analysis scene via CGI protocol.	
<b>Explanations on key parameters:</b> time: Lock period; 0-Unlocked; higher than 0: Lock period; unit: Second	

**LockInfo Block**

```
< LockInfo >
  < time ><!--req, xs:integer--></time >
</LockInfo >
```

**Test cases**

**GET /CGI/Smart/CuriseLock/channels/<ID>**

**Request XML: none**

**Response XML: < LockInfo >**

**PUT /CGI/Smart/CuriseLock/channels/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
< LockInfo >
  < time >600</scene>
</ LockInfo >
```

## 2.7.121/CGI/Smart/Import/GetImageFeature/SessionId/<ID>

/CGI/Smart/Import/GetImageFeature /SessionId/<ID>	
General Resource v2.0	
<b>PUT</b>	
<b>Description</b>	The feature value of the the extracted picture according to the picture
<b>Query</b>	<b>None</b>
<b>Inbound Data</b>	<b>userImage: "string" // Image data in JSON format</b>
<b>Success Return</b>	<b>&lt;ResponseStatus&gt;</b>
<b>Protocol description:</b> The feature value of the the extracted picture according to the picture	
<b>Parameter Description:</b> <sessionId> interaction ID between the client and the device, see Attachment 1	

## 2.7.122/CGI/Smart/Query/GetImageFeature/SessionId/<ID>

CGI/Smart/Query/GetImageFeature/SessionId/<ID>	
General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Query and analyze the face
<b>Query</b>	<b>None</b>
<b>Inbound Data</b>	<b>None</b>
<b>Success Return</b>	<b>Json format data</b>
<b>Protocol description:</b> Get the analyzed face	
<b>Parameter Description:</b> URL <sessionId> interaction ID between the client and the device, see Attachment 1 Reply to Json result: 1 = acquiring, 2 = acquisition success, 3 = acquisition failure, if the values are 1 and 3, the feature field is invalid feature: image feature value	

JsonResponse

```
{
  result: interger, // Return the result
  feature: "string" // Base64 encoding
}
```

## 2.7.123 /CGI/Smart/Feature/QuerySimilarity

<b>/CGI/Smart/Feature/QuerySimilarity</b> <b>General Resource v2.0</b>	
<b>POST</b>	
<b>Description</b>	Get similarity information by feature value
<b>Query</b>	<b>None</b>
<b>Inbound Data</b>	<b>FeatureQueryCondition</b>
<b>Success Return</b>	<b>FeatureQueryResult</b>
<b>Protocol description:</b> Obtained by feature value <b>Parameter Description:</b> Query Json: feature1: The feature value to be compared is 1, the original data is up to 2k, base64 encoding feature2: feature value 2 to be compared, original data up to 2k, base64 encoding Reply to Json: similarity: the similar level	

### FeatureQueryCondition

param:

```
{  
  Feature1: "string", // base64 encoding  
  Feature2: "string" // base64 encoding  
}
```

### FeatureQueryResult

response:

```
{  
  similarity: integer // Return the similarity  
}
```

## 2.7.124/CGI/Smart/PeopleCount/Channels/SessionId/<ID>

<b>/CGI/Smart/PeopleCount/Channels/ SessionId/&lt;ID&gt;</b>	
<b>POST</b>	
<b>Description</b>	Multi-channel passenger flow comparison
<b>Query</b>	None
<b>Inbound Data</b>	<b>&lt;peopleCountCmpReq&gt;</b>
<b>Success Return</b>	<b>&lt;peopleCountCmpRsp&gt;</b>

**Protocol description:**

This protocol is a function to realize multi-channel passenger flow comparison

**Key parameter description:**

<sessionId> transaction ID, see attached table 1 description of transaction ID

Request :

<channelList>

<channel>

<accuracy> Accuracy, 0 days, 1 weeks, 2 months, 3 years

<beginTime> Start time format: (year-month-day T hour: minute: second Z) such as

2018-07-10T12: 00: 00Z

<endTime> End time format: (year-month-day T hour: minute: second Z) such as

2018-07-10T23: 59: 59Z

Response :

<peopleCountList> // Statistics list

<peopleCount> // Statistic result

<channel> Data channel number

<inCnt> Number of people entering

<outCnt> Number of people leaving

<beginTime> Start time format: (year-month-day T hour: minute: second Z) such as

2018-07-10T12: 00: 00Z

**peopleCountCmpReq XML Block**

```
<?xml version="1.0" encoding="UTF-8"?>
<peopleCountCmpReq>
<channelList>
<channel><!-- req, xs:integer --></channel>
//Repeat <channel>
</channelList>
<accuracy><!-- req, xs: integer --></accuracy>
<beginTime><!-- req, xs: datetime --></beginTime>
<endTime><!-- req, xs: datetime --></endTime>
</peopleCountCmpReq>
```

**peopleCountCmpRsp XML Block**

```
<?xml version="1.0" encoding="UTF-8"?>
<peopleCountCmpRsp>
<peopleCountList>
<peopleCount>
<channel><!-- req, xs: integer --></channel>
<inCnt><!-- req, xs: integer --></inCnt>
<outCnt><!-- req, xs: integer --></outCnt>
<beginTime><!-- req, xs: datetime --></beginTime>
</peopleCount>
//Repeat peopleCount
```



```
</peopleCountList>
<peopleCountCmpRsp>
```

#### Test case

**POST /CGI/Smart/PeopleCount/Channels/ SessionId/65535**

**Request XML: <peopleCountCmpReq>**

```
<?xml version="1.0" encoding="UTF-8"?>
<peopleCountCmpReq>
<channelList>
<channel>1</channel>
...
<channel>5</channel>
</channelList>
<accuracy>1</accuracy>
<beginTime>2018-07-10T12:00:00Z</beginTime>
</peopleCountCmpReq>
```

**Response XML: <peopleCountCmpRsp>**

```
<?xml version="1.0" encoding="UTF-8"?>
<peopleCountCmpRsp>
<peopleCountList>
<peopleCount>
<channel>3</channel>
<inCnt>30</inCnt>
<outCnt>15</outCnt>
<beginTime>2018-07-10T12:00:00Z</beginTime>
</peopleCount>
.....
<peopleCount>
<channel>6</channel>
<inCnt>66</inCnt>
<outCnt>77</outCnt>
<beginTime>2018-07-10T12:00:00Z</beginTime>
</peopleCount>
//Repeat peopleCoun
</peopleCountList>
<peopleCountCmpRsp>
```

## 2.7.125/CGI/Smart/Smoke/<ID>/Channels/<ID>/Scene/<ID>/Model/<ID>

/CGI/Smart/Smoke/<ID>/Channels/<ID>/Scene/<ID>/Model/<ID>	
General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Get smoking parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<Smoke>
<b>PUT</b>	
<b>Description</b>	Set smoking parameters
<b>Query</b>	None
<b>Inbound Data</b>	<Smoke>
<b>Success Return</b>	<ResponseStatus>
<p><b>Protocol description:</b></p> <p>This protocol is to realize the setting and query of intelligent analysis of smoking parameter . Model mode is 0 nvr 1 ipc.</p> <p><b>Key parameter description:</b></p> <p>&lt;enabled&gt; represents whether it is valid, true: enabled, false: not enabled</p> <p>&lt;sensitivity&gt; Sensitivity: 0 ~ 100 (default: 50)</p> <p>&lt;maxSize&gt; Maximum size 8-100 default 25</p> <p>&lt;minSize&gt; minimum size 1-50 default 5</p> <p>&lt;validRgList&gt; represents the detection area list, the number of areas is 1 ~ 8</p> <p>&lt;RegionCoordinatesList&gt; represents the list of regional coordinates, the number of coordinates is 3 ~ 10</p> <p>&lt;RegionCoordinates&gt; represents regional coordinates</p> <p>&lt;positionX&gt; represents the horizontal coordinate of the area: ten thousandth</p> <p>&lt;positionY&gt; represents the vertical coordinate of the area: ten thousandth</p> <p>&lt;displayRule&gt; Display rules: true-display, false-do not display</p> <p>&lt;displayStat&gt; Display alarm numbers: true-display, false-not display</p> <p>&lt;displayTarget&gt; display target: true-display, false-not display</p>	

### Smoke XML Block

```
<Smoke version="2.0" >
  <enabled><!-- req, xs:boolean --></enabled>
  <sensitivity><!-- req, xs: integer --></sensitivity>
  <displayRule><!--req, xs:boolean--></displayRule>
  <displayStat><!--req, xs:boolean--></displayStat>
  <displayTarget><!--req, xs:boolean--></displayTarget>
  <minSize><!-- req, xs:integer --></minSize>
```

```

    <maxSize><!-- req, xs:integer --></maxSize>
<color><!--opt,xs:string"red,green,yellow,blue,purple,cyan,black,white"--></color>
<alarmColor><!--opt,xs:string"red,green,yellow,blue,purple,cyan,black,white"--></alarmColor
>
    <validRgList size="8">
    <RegionCoordinatesListsize="10">
        <RegionCoordinates>
            <positionX><!-- req, xs: integer --></positionX>
            <positionY><!-- req, xs: integer --></positionY>
        </RegionCoordinates>
    </RegionCoordinatesList>
</validRgList>
</Smoke>

```

**Test case**

**GET /CGI/Smart/Smoke/<ID>/channels/<ID>/Scene/<ID>/Model/<ID>**

**Request XML: None**

**Response XML: <Smoke>**

**PUT /CGI/Smart/Smoke/<ID>/channels/<ID>/Scene/<ID>/Model/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as follows**

```

<Smoke version="2.0">
    <enabled>true</enabled>
    <sensitivity>80</sensitivity>
    <displayRule>true</displayRule>
    <displayStat>true</displayStat>
    <displayTarget>true</displayTarget>
    <minSize>8</minSize>
    <maxSize>80</maxSize>
<color>green</color>
<alarmColor>red</alarmColor>
    <validRgList size="8">
    <RegionCoordinatesListsize="10">
        <RegionCoordinates>
            <positionX>100</positionX>
            <positionY>200</positionY>
        </RegionCoordinates>
    </RegionCoordinatesList>
</validRgList>
</Smoke>

```

## 2.7.126/CGI/Smart/Telephone/<ID>/Channels/<ID>/Scene/<ID>/Model/<ID>

/CGI/Smart/Telephone/<ID>/Channels/<ID>/Scene/<ID>/Model/<ID> General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Get call parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<Telephone>
<b>PUT</b>	
<b>Description</b>	Set call parameters
<b>Query</b>	None
<b>Inbound Data</b>	<Telephone>
<b>Success Return</b>	<ResponseStatus>
<p><b>Protocol description:</b></p> <p>This protocol is to realize the setting and query of the intelligent analysis and call parameter . Model mode is 0 nvr 1 ipc.</p> <p><b>Key parameter description:</b></p> <p>&lt;enabled&gt; represents whether it is valid, true: enabled, false: not enabled</p> <p>&lt;sensitivity&gt; Sensitivity: 0 ~ 100 (default: 50)</p> <p>&lt;maxSize&gt; Maximum size 8-100 default 25</p> <p>&lt;minSize&gt; minimum size 1-50 default 5</p> <p>&lt;validRgList&gt; represents the detection area list, the number of areas is 1 ~ 8</p> <p>&lt;RegionCoordinatesList&gt; represents the list of regional coordinates, the number of coordinates is 3 ~ 10</p> <p>&lt;RegionCoordinates&gt; represents regional coordinates</p> <p>&lt;positionX&gt; represents the horizontal coordinate of the area: ten thousandth</p> <p>&lt;positionY&gt; represents the vertical coordinate of the area: ten thousandth</p> <p>&lt;displayRule&gt; Display rules: true-display, false-do not display</p> <p>&lt;displayStat&gt; Display alarm numbers: true-display, false-not display</p> <p>&lt;displayTarget&gt; display target: true-display, false-not display</p>	

### Telephone XML Block

```

<Telephone version="2.0" >
  <enabled><!-- req, xs:boolean --></enabled>
  <sensitivity><!-- req, xs:integer --></sensitivity>
  <displayRule><!--req, xs:boolean--></displayRule>
  <displayStat><!--req, xs:boolean--></displayStat>
  <displayTarget><!--req, xs:boolean--></displayTarget>
  <minSize><!-- req, xs:integer --></minSize>

```

```

    <maxSize><!-- req, xs:integer --></maxSize>
<color><!--opt,xs:string"red,green,yellow,blue,purple,cyan,black,white"--></color>
<alarmColor><!--opt,xs:string"red,green,yellow,blue,purple,cyan,black,white"--></alarmColor
>
    <validRgList size="8">
    <RegionCoordinatesListsize="10">
        <RegionCoordinates>
            <positionX><!-- req, xs: integer --></positionX>
            <positionY><!-- req, xs: integer --></positionY>
        </RegionCoordinates>
    </RegionCoordinatesList>
</validRgList>
</Telephone>

```

**Test case**

**GET /CGI/Smart/Telephone/<ID>/channels/<ID>/Scene/<ID>/Model/<ID>**

**Request XML: None**

**Response XML: <Telephone>**

**PUT /CGI/Smart/Telephone/<ID>/channels/<ID>/Scene/<ID>/Model/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as follows**

```

<Telephone version="2.0">
    <enabled>true</enabled>
    <sensitivity>80</sensitivity>
    <displayRule>true</displayRule>
    <displayStat>true</displayStat>
    <displayTarget>true</displayTarget>
    <minSize>8</minSize>
    <maxSize>80</maxSize>
<color>green</color>
<alarmColor>red</alarmColor>
    <validRgList size="8">
    <RegionCoordinatesListsize="10">
        <RegionCoordinates>
            <positionX>100</positionX>
            <positionY>200</positionY>
        </RegionCoordinates>
    </RegionCoordinatesList>
</validRgList>
</Telephone>

```

## 2.7.127/CGI/Smart/TempDetect/<ID>/channels/<ID>/Scene/<ID>/Model/<ID>

/CGI/Smart/TempDetect/<ID>/channels/<ID>/Scene/<ID>/Model/<ID> General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Get temperature detection parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<TempDetect>
<b>PUT</b>	
<b>Description</b>	Set temperature detection parameters
<b>Query</b>	None
<b>Inbound Data</b>	<TempDetect>
<b>Success Return</b>	<ResponseStatus>
<p><b>Protocol description:</b></p> <p>This protocol is to realize the setting and query of the intelligent analysis of temperature detection parameter . Model mode is 0 nvr 1 ipc.</p> <p><b>Key parameter description:</b></p> <p>&lt;enabled&gt; represents whether it is valid, true: enabled, false: not enabled</p> <p>&lt;temDiff&gt; represents the ambient temperature difference alarm.</p> <p>&lt;temHigh&gt; represents the environmental high temperature alarm.</p> <p>&lt;bodyHigh&gt; represents the body high temperature alarm.</p> <p>&lt;waitTime&gt; Waiting time for finding the alarm, unit: second</p> <p>&lt;threshold&gt; represents the temperature threshold.</p> <p>&lt;displayTemScaleEnable&gt; Display the cross mark of the highest temperature and the lowest temperature: true-display, false-not display</p> <p>&lt;temHighScaleColor&gt; represents the color of the highest temperature cross mark</p> <p>&lt;temLowScaleColor&gt; represents the color of the lowest temperature cross mark</p> <p>&lt;temLoseEnable&gt; Whether the abnormal temperature alarm is enabled: true-enabled, false-disabled</p>	

### TempDetect XML Block

```

<TemDetect version="2.0">
<waitTime><!-- req, xs: integer --></waitTime>
<temDiff>
<enabled><!-- req, xs:boolean --></enabled>
<threshold><!-- req, xs: integer --></threshold>
</temDiff>
<temHigh>
<enabled><!-- req, xs:boolean --></enabled>
<threshold><!-- req, xs: integer --></threshold>

```

```
</temHigh>
<bodyHigh>
<enabled><!-- req, xs:boolean --></enabled>
<threshold><!-- req, xs: integer --></threshold>
    <temLoseEnable><!-- req, xs:boolean --></temLoseEnable>
</bodyHigh>
< displayTemScaleEnable>true</displayTemScaleEnable>
<temHighScaleColor><!--opt,xs:string"red,green,yellow,blue,purple,cyan,black,white"--></tem
HighScaleColor>
<temLowScaleColor><!--opt,xs:string"red,green,yellow,blue,purple,cyan,black,white"--></tem
LowScaleColor>
</TemDetect>
```

#### Test case

**GET** /CGI/Smart/TempDetect/<ID>/channels/<ID>/Scene/<ID>/Model/<ID>

**Request XML:** None

**Response XML:** <TempDetect>

**PUT** /CGI/Smart/TempDetect/<ID>/channels/<ID>/Scene/<ID>/Model/<ID>

**Response XML:** <ResponseStatus>

**Request XML:** as follows

```
<TemDetect version="2.0">
<enabled>true</enabled>
<waitTime>10</waitTime>
<temDiff>
<enabled>true</enabled>
<threshold>100</threshold>
</temDiff>
<temHigh>
<enabled>true</enabled>
<threshold>100</threshold>
</temHigh>
<bodyHigh>
<enabled>true</enabled>
<threshold>100</threshold>
    <temLoseEnable>>false</temLoseEnable>
</bodyHigh>
<displayTemScaleEnable>true</displayTemScaleEnable>
<temHighScaleColor>red</temHighScaleColor>
<temLowScaleColor>blue</temLowScaleColor>
</TemDetect>
```

## 2.7.128/CGI/Smart/ScanArea/channels/<ID>/Scene/<ID>

<b>General Resource v2.0</b>	
<b>PUT</b>	
<b>Description</b>	Set intelligent analysis scan area boundary
<b>Query</b>	None
<b>Inbound Data</b>	<ScanArea>
<b>Success Return</b>	<ResponseStatus>
<p><b>Protocol description:</b></p> <p>This agreement is to realize the setting and calling of intelligent analysis of the scan area boundary.</p> <p>Important parameter description:</p> <p>&lt;borderType&gt;: Operation area type, upper, lower, left, and right borders.</p> <p>&lt;cmdType&gt;: operation type, setting, calling</p>	

### ScanArea XML Block

```
<ScanArea version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <borderType><!--req:String leftborder, rightborder, upborder, downborder
--></borderType>
  <cmdType><!--req:String set, call--></cmdType>
</ScanArea>
```

### Test case

**PUT /CGI/Smart/ScanArea/channels/1/scene/0**

**Response XML:** <ResponseStatus>

**Request XML:** <ScanArea>

```
<ScanArea version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <borderType>leftborder</borderType>
  <cmdType>call</cmdType>
</ScanArea>
```

## 2.7.129/CGI/Smart/ScanPara/channels/<ID>/Scene/<ID>

<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Get intelligent analysis scan parameters
<b>Query</b>	None
<b>Inbound Data</b>	None



<b>Success Return</b>	<b>&lt;ScanPara&gt;</b>
<b>PUT</b>	
<b>Description</b>	Set scan parameters for intelligent analysis
<b>Query</b>	None
<b>Inbound Data</b>	<b>&lt;ScanPara&gt;</b>
<b>Success Return</b>	<b>&lt;ResponseStatus&gt;</b>
<p><b>Protocol description:</b></p> <p>This protocol is to realize the setting and acquisition of intelligent analysis scanning parameters.</p> <p>Important parameter description:</p> <p>&lt;mode&gt;: Scanning mode. Manule manual, auto automatic</p> <p>&lt;waitTime&gt;: stay time, unit: second</p> <p>&lt;panStep&gt;: horizontal step, unit: degree</p> <p>&lt;tiltStep&gt;: vertical step, unit: degree</p>	

#### ScanPara XML Block

```
<ScanPara version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <mode><!--req:String manule, auto --></mode>
  <waitTime><!--req, xs:integer--></waitTime>
  <panStep><!--req, xs:integer--></panStep>
  <tiltStep><!--req, xs:integer--></tiltStep>
</ScanPara>
```

#### Test case

**GET /CGI/Smart/ScanPara/channels/1/scene/0**

**Request XML: None**

**Response XML: <ScanPara>**

**PUT /CGI/Smart/ScanPara/channels/1/scene/0**

**Response XML: <ResponseStatus>**

**Request XML: <ScanPara>**

```
<ScanPara version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <mode>manule</mode>
  <waitTime>5</waitTime>
  <panStep>7</panStep>
  <tiltStep>5</tileStep>
</ScanPara>
```

**2.7.130/CGI/Smart/Fireworks/<ID>/Channels/<ID>/Scene/<ID>/Model/<ID>**

```
/CGI/Smart/Fireworks/<ID>/Channels/<ID>/Scene/<ID>/Model/<ID>
```

<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Obtain pyrotechnic detection parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<Fireworks>
<b>PUT</b>	
<b>Description</b>	Set fireworks detection parameters
<b>Query</b>	None
<b>Inbound Data</b>	<Fireworks>
<b>Success Return</b>	<ResponseStatus>
<p><b>Protocol description:</b></p> <p>This protocol is to realize the setting and query fo the intelligent analysis of pyrotechnic detection parameter . Model mode is 0 nvr 1 ipc.</p> <p><b>Key parameter description:</b></p> <p>&lt;enabled&gt; represents whether it is valid, true: enabled, false: not enabled</p> <p>&lt;fireSensitivity&gt; Fire point sensitivity: 0 ~ 100 (default: 50)</p> <p>&lt;smogSensitivity&gt; Smoke sensitivity: 0 ~ 100 (default: 50)</p> <p>&lt;mode&gt; Detection mode: fire fire point detection, smog smoke detection, fireOrSmog fire point or smoke, fireAndSmog fire point and smoke</p> <p>&lt;waitTime&gt; Waiting time for discovery of alarm, range 0-600, unit: seconds (default: 0)</p> <p>&lt;displayRule&gt; Display rules: true-display, false-do not display</p> <p>&lt;displayStat&gt; Display alarm numbers: true-display, false-not display</p> <p>&lt;displayTarget&gt; display target: true-display, false-not display</p>	

### Fireworks XML Block

```

<Fireworks version="2.0">
<enabled><!-- req, xs:boolean --></enabled>
<fireSensitivity><!-- req, xs: integer --></fireSensitivity>
<smogSensitivity><!-- req, xs: integer --></smogSensitivity>
<waitTime><!-- req, xs: integer --></waitTime>
<displayRule><!--req, xs:boolean--></displayRule>
<displayStat><!--req, xs:boolean--></displayStat>
<displayTarget><!--req, xs:boolean--></displayTarget>
<color><!--opt,xs:string"red,green,yellow,blue,purple,cyan,black,white"--></color>
  <alarmColor><!--opt,xs:string"red,green,yellow,blue,purple,cyan,black,white"--></alarmCol
or>
<mode><!--opt,xs:string"fire,smog,fireOrSmog,fireAndSmog"--></mode>
</Fireworks>

```

### Test case

**GET** /CGI/Smart/Fireworks/<ID>/channels/<ID>/Scene/<ID>/Model/<ID>

**Request XML: None**

**Response XML: <Fireworks>**

**PUT /CGI/Smart/Fireworks/<ID>/channels/<ID>/Scene/<ID>/Model/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as follows**

```
<Fireworks version="2.0">
<enabled>true</enabled>
<fireSensitivity>80</fireSensitivity>
<smogSensitivity>80</smogSensitivity>
<waitTime>5</waitTime>
<displayRule>true</displayRule>
<displayStat>true</displayStat>
<displayTarget>true</displayTarget>
<color>green</color>
<alarmColor>red</alarmColor>
<mode>fireAndSmog</mode>
</Fireworks>
```

### 2.7.131/CGI/Smart/ThreeDimenMaskArea/Channels/<ID>/Type/<ID>

/CGI/Smart/ThreeDimenMaskArea/Channels/<ID>/Type/<ID>	
General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Obtain intelligent analysis parameters of 3D mask area
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ThreeDimenMaskArea>
<b>PUT</b>	
<b>Description</b>	Set the parameters of the intelligent analysis 3D mask area
<b>Query</b>	None
<b>Inbound Data</b>	<ThreeDimenMaskArea>
<b>Success Return</b>	<ResponseStatus>
<b>Protocol description:</b> This protocol is to realize the acquisition and setting of the parameters of the intelligent analysis 3D mask area, and to achieve the acquisition and setting of the parameters of the intelligent analysis 3D shielding area of the device by the client or IE through the CGI protocol. Type mode is 0 fire point, 1 smoke, 2 temperature detection.	
<b>Key parameter description:</b> <enabled> means that the 3D mask area is enabled, true is enabled, false is not enabled. <threeDimenMaskAreaRegionList> represents the 3D mask area information list	

<threeDimenMaskAreaRegion> represents 3D mask area information  
<regionCoordinateList> represents the coordinate list of the 3D masked area, containing the coordinates of each point, the percentage of ten thousandth, all points 0,0: delete  
<id> represents the serial number of the 3D masking area  
<regionId> represents the 3D masked region number

#### **ThreeDimenMaskArea XML Block**

```
<?xml version="1.0" encoding="UTF-8"?>
<ThreeDimenMaskArea>
<enabled><!--req,xs:boolean--></enabled>
<threeDimenMaskAreaRegionList>
<threeDimenMaskAreaRegion>
<id><!--req,xs:integer--></id>
<regionId><!--req,xs:integer--></regionId>
<regionCoordinatesList>
<regionCoordinates>
<positionX><!--req,xs:integer--></positionX>
<positionY><!--req,xs:integer--></positionY>
</regionCoordinates>
<regionCoordinates>
<positionX><!--req,xs:integer--></positionX>
<positionY><!--req,xs:integer--></positionY>
</regionCoordinates>
</regionCoordinatesList>
</threeDimenMaskAreaRegion>
</threeDimenMaskAreaRegionList>
</ThreeDimenMaskArea>
```

#### **Test case**

**GET /CGI/Smart/ThreeDimenMaskArea/Channels/<ID>/Type/<ID>/**

**Request XML: None**

**Response XML: <ThreeDimenMaskArea>**

**PUT/CGI/Smart/ThreeDimenMaskArea/Channels/<ID>/Type/<ID>/**

**Response XML: <ResponseStatus>**

**Request XML: as follows**

```
<?xml version="1.0" encoding="UTF-8"?>
<ThreeDimenMaskArea>
<enabled>>true</enabled>
<threeDimenMaskAreaRegionList>
<threeDimenMaskAreaRegion>
<id>1</id>
<regionId>1</regionId>
```

```
<regionCoordinatesList>
<regionCoordinates>
<positionX>3445</positionX>
<positionY>4958</positionY>
</regionCoordinates>
<regionCoordinates>
<positionX>3070</positionX>
<positionY>7791</positionY>
</regionCoordinates>
<regionCoordinates>
<positionX>4695</positionX>
<positionY>7923</positionY>
</regionCoordinates>
<regionCoordinates>
<positionX>5968</positionX>
<positionY>6756</positionY>
</regionCoordinates>
</regionCoordinatesList>
</threeDimenMaskAreaRegion>
<threeDimenMaskAreaRegion>
<id>2</id>
<regionId>2</regionId>
<regionCoordinatesList>
<regionCoordinates>
<positionX>4710</positionX>
<positionY>3340</positionY>
</regionCoordinates>
<regionCoordinates>
<positionX>5335</positionX>
<positionY>7909</positionY>
</regionCoordinates>
<regionCoordinates>
<positionX>4187</positionX>
<positionY>8250</positionY>
</regionCoordinates>
<regionCoordinates>
<positionX>1535</positionX>
<positionY>8041</positionY>
</regionCoordinates>
<regionCoordinates>
<positionX>710</positionX>
<positionY>6576</positionY>
</regionCoordinates>
</regionCoordinatesList>
```

```

</threeDimenMaskAreaRegion>
</threeDimenMaskAreaRegionList>
</ThreeDimenMaskArea>

```

## 2.8/CGI/Event

### 2.8.1/CGI/Event/notification/alertState

/CGI/Event/notification/alertState		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire alarm state	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<AlertStateList>	
<p><b>Explanations on protocol:</b>  This protocol is prepared for query of alarm state, helping client or IE query the device alarm state via CGI protocol, including channel/alarm time/alarm type/alarm time ID/alarm state.</p> <p><b>Explanations on key parameters:</b>  &lt;channelID&gt; means channel  &lt;dateTime&gt; means alarm time  &lt;eventType&gt; means alarm type  &lt;eventID&gt; means alarm time ID, for example: Alarm is given out if alarm input is 1; this value is 1  &lt;eventState&gt; means alarm state; state is active by now  &lt;eventType&gt; Event type: faceDetect: Frontend face detection; ipcComPare: Frontend comparison; ipcStranger: Frontend stranger; nvrDetect: Backend face detection; nvrComPare: Backend comparison; nvrStranger: Backend stranger; nvrFrequency: Backend frequency; nvrHold: Backend delay; plateShade: Plate shading; shm: Seagate disk health state detection; ftpException-FTP: Server error; temhum: Temperature &amp; humidity alarm; PeptIntrusion oilfield monitoring – Defense alarm intrusion alarm; PeptResident oilfield monitoring - Abnormal lingering alarm; peopleNumAlarm: Person number error alarm; PrctdutySingle: Single interrogation; PrctdutyNone: Unattended; Sleep: Sleep; NewFight: New fight; GetUp: Getup; HeightLimit: Height limit; NewDuty: New duty; Stranded: Stranded; Alone: Alone; Delivergoods: Deliver goods; loitering: Loitering; AttendedBaggage: Attended baggage; unattendedBaggage: Unattended baggage、 voltageUp: voltage upper limit alarm, voltageLow: voltage lower limit alarm  faceMask: face mask, faceNoMask: no face mask, Smoke: smoking, Telephone: phone call, BodyHighTemp: human high temperature alarm, fireworks pyrotechnic detection, temDetectDiff temperature detection-temperature difference alarm, temDetectHigh temperature detection-high temperature alarm</p>		

#### AlertStateListXML Block

```

<AlertStateList version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<AlertState>
<channelID><!-- req, xs: integer --></channelID>
<dateTime><!--opt, xs:string--></dateTime>
<eventType>"inputs, outputs,VMD,videoLoss, tamperdetection,
,linedetection,doublelinedetection,fielddetection,regionEntrance,regionExiting,loitering.group
,rapidMove,parking,unattendedBaggage,attendedBaggage, alert,heatMap,faceDetect,
platLicenseRecog, audioDetection, videoDetection, group, onDutyDetection, demographics,
illegalPark,parkGuard, diskFull, diskError, noDisk, noMirrorHDD, arrayError, spareExpction,

```

```

nicBroken, ipConflict, illAccess, recordingFailure, smartDetection, diskOverFlow, macConflict,
psePowerOverLoad, diskTemperatureError,alert, periAlert, tripAlert, illegalPark, parkGuard,
safetyHelmet ipcComPare, ipcStranger, nvrDetect, nvrComPare, nvrStranger, nvrFrequerncy,
nvrHold,shm,ftpException,PeptIntrusion,PeptResiden,peopleNumALarm,
PrctdutySingle,PrctdutyNon,Sleep,NewFight,GetUp,HeightLimit,NewDuty,Stranded,Alone,Del
ivergoods ,faceMask,faceNoMask,Smoke,Telephone,BodyHighTemp,fireworks,temDetectDiff,t
emDetectHigh"</eventType>
< eventID ><!--opt, xs:string; id --></ eventID >
<eventState><!--opt, xs:string--></eventState>
</ AlertState >
</AlertStateList >

```

**Test cases**

**GET/CGI/Event/notification/alertState**

**Request XML:** none

**Response XML:** <AlertStateList>

```

<?xml version="1.0" encoding="UTF-8"?>
<AlertStateList>
<AlertState>
<channelID>1</channelID>
<dateTime>Mon, 26 Dec 2016 14:32:36 GMT</dateTime>
<eventType>VMD</eventType>
<eventID>0</eventID>
<eventState>active</eventState>
</AlertState>
<AlertState>
<channelID>1</channelID>
<dateTime>Mon, 26 Dec 2016 14:32:36 GMT</dateTime>
<eventType>tamperdetection</eventType>
<eventID>0</eventID>
<eventState>active</eventState>
</AlertState>
</AlertStateList>

```

**2.8.2/CGI/Event/ClearAllInfo**

<b>/CGI/Event/ClearAllInfo</b>		<b>General Resource v2.0</b>
<b>PUT</b>		
<b>Description</b>	Clear all parameters of alarm information	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is prepared for clearing all alarm information, helping client or IE clear all alarm information of device via CGI protocol.		

**Test cases**

**PUT/CGI/Event/ClearAllInfo**

**Response XML:** <ResponseStatus>

**Request XML:** None

**2.8.3/CGI/Event/channels/<ID>/Clear/type/<ID>**

<b>/CGI/Event /channels/&lt;ID&gt;/Clear/type/&lt;ID&gt;</b>		<b>General Resource v2.0</b>
<b>PUT</b>		

<b>Description</b>	Clear alarm
<b>Query</b>	None
<b>Inbound Data</b>	<b>None</b>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for clearing alarm by type, helping client or IE clear the remote alarm via CGI protocol. Type introduction: 0: Video loss; 1: Port alarm; 2: Motion detection; 3: Video shielding; 4: Intelligent analysis; 5: Audio loss; 6: Temperature & humidity alarm; 7: Local port alarm (for decoder); 10: Upper limit alarm of analog quantity; 11: Lower limit alarm of analog quantity; 13: Lower limit alarm of temperature; 14: Upper limit alarm of humidity; 15: Lower limit alarm of humidity 100, error; 255, clear all information (including error)	

**Test cases**

**PUT/CGI/Event /channels/0/Clear/type/255**

**Response XML:** <ResponseStatus>

**Request XML:** None

**2.8.4 /CGI/Event/PlayAudio**

<b>/CGI/Event/PlayAudio</b>		<b>General Resource v2.0</b>
<b>PUT</b>		
<b>Description</b>	Send notice to frontend to play the voice of designated number	
<b>Query</b>	None	
<b>Inbound Data</b>	<PlayAudioInfo>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b> This protocol is prepared for clearing all alarm information, helping client or IE clear all alarm information of device via CGI protocol. channelID: Character string type; all: All channels; figure means certain channel; protocol needs multiple adjustment to play multiple channels instead of all channels type: 0: Alert sound sampleNo: 0-100 action: -2: Stop; -1: Infinite loop; >0 Detailed loop times		

**PlayAudioInfo XML Block**

<pre> &lt;PlayAudioInfo version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema"&gt;   &lt;channelID&gt;&lt;!--req, xs:string; id --&gt;&lt;/channelID&gt;   &lt;type&gt;&lt;!-- req, xs: integer --&gt;&lt;/type&gt;   &lt;sampleNo&gt;&lt;!-- req, xs: integer --&gt;&lt;/sampleNo&gt;   &lt;action&gt;&lt;!-- req, xs: integer --&gt;&lt;/action&gt; &lt;/PlayAudioInfo&gt; </pre>
---

**Test cases**

**PUT/CGI/Event/PlayAudio**

**Response XML:** <ResponseStatus>

**Request XML:** <PlayAudioInfo>

<pre> &lt;PlayAudioInfo version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema"&gt;   &lt;channelID&gt;all&lt;/channelID&gt;   &lt;type&gt;0&lt;/type&gt;   &lt;sampleNo&gt;1&lt;/sampleNo&gt;   &lt;action&gt;1&lt;/action&gt; &lt;/PlayAudioInfo&gt; </pre>
--



### 2.8.5 /CGI/Event/shmAlertState/details

<b>/CGI/Event/shmAlertState/details</b>	
<b>GET</b>	
<b>Description</b>	Acquire details of shm error
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<shmDetails>
<p><b>Explanations on protocol:</b> Acquire details of shm error</p> <p><b>Explanations on key parameters:</b> &lt;shmType&gt; shm error; 0: High temperature; 1: Excessive shaking of disk; 2: Excessive shake of drive; 3: Disk connection error 4: Host reset; 5: Disk error</p>	

#### FaceLibParas XML Block

```
<?xml version="1.0" encoding="UTF-8"?>
<shmDetails>
<shmInfo>
<shmType><!-- dep, xs: integer --></shmType>
</shmInfo>
//...Repeat <shmInfo> Structure
</shmDetails>
```

#### Test cases

**GET /CGI/Event/shmAlertState/details**

**Request XML:** none

**Response XML:** <shmDetails>

```
<?xml version="1.0" encoding="UTF-8"?>
<shmDetails>
<shmInfo>
<shmType>0</shmType>
</shmInfo>
<shmInfo>
<shmType>1</shmType>
</shmInfo>
</shmDetails>
```

## 2.9/CGI/FileUpload

### 2.9.1/CGI/FileUpload/ImportLocalData

<b>/CGI/FileUpload/ImportLocalData</b>	<b>General Resource v2.0</b>
<b>POST</b>	
<b>Description</b>	Local import
<b>Query</b>	None
<b>Inbound Data</b>	File content
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b> This protocol is prepared for calling this interface by uploading files via webpage. Upon receiving the file, the server will return it to webpage via HTTP, analyze webpage, call the CGI setting parameters and display them on interface.</p>	

### 2.9.2/CGI/FileUpload/updateFirmware

<b>/CGI/FileUpload/updateFirmware</b>		<b>General Resource v2.0</b>
<b>POST</b>		
<b>Description</b>	Device upgrade	
<b>Query</b>	None	
<b>Inbound Data</b>	File content	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b> <updateId> Transaction ID, distinguish between different transactions <status> 0: can be upgraded, 1: upgrade is prohibited, 4: the chip model is wrong, 5: the major version number is wrong, 6: the minor version number is wrong, 13: non-world upgrade package, 21: conflict, is being upgraded		

### 2.9.3/CGI/FileUpload/configData/import

<b>/CGI/FileUpload/configData/import</b>		<b>General Resource v2.0</b>
<b>POST</b>		
<b>Description</b>	Parameter import	
<b>Query</b>	None	
<b>Inbound Data</b>	File content	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b> This protocol is prepared for importing device parameters, helping client or IE import parameters of device via CGI protocol.		

### 2.9.4/CGI/FileUpload/Video/inputs/channels/<ID>/LogoUpload

<b>/CGI/FileUpload/Video/inputs/channels/&lt;ID&gt;/LogoUpload</b>		<b>General Resource v2.0</b>
<b>POST</b>		
<b>Description</b>	LOGO upload	
<b>Query</b>	None	
<b>Inbound Data</b>	LOGO file	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b> This protocol is prepared for uploading device LOGO, helping client or IE upload device LOGO via CGI protocol.		

### 2.9.5/CGI/FileUpload/CommConfigData/channels/<ID>/type/<ID>/import

<b>/CGI/FileUpload/CommconfigData/channels/&lt;ID&gt;/type/&lt;ID&gt;/import</b>		<b>General Resource v2.0</b>
<b>POST</b>		
<b>Description</b>	Import common parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<ResponseStatus>	

**Explanations on protocol:**

This protocol is prepared for importing common parameters, helping client or IE import the designated parameters of device via CGI protocol.

**Explanations on protocol:**

This protocol is prepared for importing common parameters.

**Explanations on key parameters:**

channels/<ID> Channel

type/<ID> means file type: 1: Channel parameter; 2: Black and white license plate; 3: Bayonet parameters; 4: Stall whitelist, 5: face map, 6: https certificate, manual control of traffic host, 8, traffic host black license plate management, 9, traffic host white license plate, 10, traffic host vehicle information, 11, traffic host configuration file

**Test cases**

/CGI/System/CommConfigData/channels/0/type/1/import/<FileName>

/CGI/System/CommConfigData/channels/1/type/2/import/<FileName>

**2.9.6 /CGI/FileUpload/updateFirmware/channels/<ID>**

/CGI/FileUpload/updateFirmware/channels/<ID> General Resource v2.0	
<b>POST</b>	
<b>Description</b>	Upgrade certain frontend accessed to certain channel
<b>Query</b>	None
<b>Inbound Data</b>	File content
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol is prepared for helping client or webpage upgrade the frontends accessed to devices via CGI protocol.	
Query and reuse upgrade progress /CGI/UpdateProgress/<ID> Protocol.	

**2.10/CGI/UploadCheck****2.10.1/CGI/UploadCheck**

/CGI/UploadCheck General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Make request for file uploading
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol is prepared for make request for file uploading, helping client or IE make request for file uploading via CGI protocol. Send this protocol before file uploading for calibration.	

**2.11/CGI/UpdateProgress****2.11.1/CGI/UpdateProgress/<ID>**

/CGI/UpdateProgress/ID General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Query upgrade progress
<b>Query</b>	None

<b>Inbound Data</b>	None
<b>Success Return</b>	<UpdateProgress>
<p><b>Explanations on protocol:</b> This protocol is prepared for query of device upgrade progress, helping client or IE query the device upgrade progress via CGI protocol.</p> <p><b>Explanations on key parameters:</b> &lt;status&gt; means device upgrade status; meaning of number; 0: System upgrade in progress; 1: System upgrade completes; 2: System upgrade error;3: Upgrade package transmission success, 4: chip model error, 5: major version number error, 6: sub-version number error, 7: check and error, 8: save temporary package error, 9: update data error, 10: minor version number Error, 11: incomplete box, 12: package size exceeds requirements, 13: non-world upgrade package, 14: media level exits busy, 15: media level exits timeout, 20: model mismatch (information in ProductModules file does not match) , 21: conflict, upgrading &lt;updateType&gt; upgrade method 0: file replacement mode restart 2000: file replacement mode does not automatically restart 2004: partition upgrade</p>	

#### UpdateProgressXML Block

```
<UpdateProgress version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<updateId>!--req, xs:integer; id --></updateId>
<status>!--req, xs:integer; id --></status>
<progress>!--req, xs:integer; id --></progress >
<updateType>!--req, xs:integer; id --></updateType>
</UpdateProgress >
```

#### Test cases

##### GET/CGI/UpdateProgress/ID

**Request XML:** none

**Response XML:** <UpdateProgress>

```
<?xml version="1.0" encoding="UTF-8"?>
<UpdateProgress>
<updateId>0</updateId>
<status>0</status>
<progress>90</progress>
</UpdateProgress>
```

## 2.12/CGI/PTZCtrl

### 2.12.1/CGI/PTZCtrl/channels/<ID>/manuallaser

/CGI/PTZCtrl/channels/<ID>/manuallaser		General Resource v2.0
<b>PUT</b>		
<b>Description</b>	Enable laser manually	
<b>Query</b>	None	
<b>Inbound Data</b>	<LaserData>	
<b>Success Return</b>	<ResponseStatus>	
<b>GET</b>		
<b>Description</b>	Acquire status of enabled laser	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<LaserData>	
<p><b>Explanations on protocol:</b> This protocol is prepared for enabling laser manually and remotely and acquiring the enabling/disabling status of current laser</p>		

#### LaserData XML Block

```
<LaserData version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<LaserEnable><!-- req, xs:intger --></LaserEnable> // Whether enable laser 0/1
</LaserData>
```

**Test cases**

**PUT/CGI/PTZCtrl/channels/<ID>/manuallaser**

**Request XML: <LaserData>**

```
<LaserData version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<LaserEnable>1</LaserEnable> // Whether enable laser 0/1
</LaserData>
```

**Response XML: <ResponseStatus>**

**2.12.2/CGI/PTZCtrl/channels/<ID>/manualwhitelight**

**/CGI/PTZCtrl/channels/<ID>/manualwhitelight General Resource v2.0**

**PUT**

<b>Description</b>	Enable white light manually
<b>Query</b>	None
<b>Inbound Data</b>	<WhiteLightData>
<b>Success Return</b>	<ResponseStatus>

**GET**

<b>Description</b>	Acquire status of enabled white light
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<WhiteLightData>

**Explanations on protocol:**

This protocol is prepared for enabling white light remotely and manually and acquiring the enabling/disabling status of current white light.

**WhiteLightData XML Block**

```
<WhiteLightData version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<WhiteLightEnable><!-- req, xs:intger --></WhiteLightEnable> // Whether enable white light
0/1
</WhiteLightData>
```

**Test cases**

**GET /CGI/PTZCtrl/channels/1/manualwhitelight**

**Request XML: none**

**Response XML: <WhiteLightData>**

**PUT /CGI/PTZCtrl/channels/<ID>/manualwhitelight**

**Request XML: <WhiteLightData>**

```
<WhiteLightData version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<WhiteLightEnable>1</WhiteLightEnable>
</WhiteLightData>
```

**Response XML: <ResponseStatus>**

**2.12.3/CGI/PTZCtrl/channels/<ID>/position3D**

**/CGI/PTZCtrl/channels/<ID>/position3D General Resource v2.0**

**PUT**

<b>Description</b>	3D locating control
<b>Query</b>	None
<b>Inbound Data</b>	<position3D>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

This protocol is prepared for realizing 3D locating function.

**position3DXML Block**

```
<Position3D version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<Resolution><!--opt--> // Resolution
<screenX><!--req, xs:integer --></screenX >
<screenY><!--req, xs:integer --></screenY>
</Resolution>
<StartPoint><!-- 0-255 --> // Start point
<positionX><!-- req, xs:integer --></positionX>
<positionY><!-- req, xs:integer --></positionY>
</StartPoint>
<EndPoint> // End point
<positionX><!-- req, xs:integer --></positionX>
<positionY><!-- req, xs:integer --></positionY>
</EndPoint>
</Position3D>
```

**Test cases****PUT /CGI/PTZCtrl/channels/0/Position3D****Request XML: <Position3D>**

```
<Position3D version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<Resolution><!--opt--> // Resolution
<screenX>1280</screenX >
<screenY>720</screenY>
</Resolution>
<StartPoint><!-- 0-255 --> // Start point, ten-thousandth
<positionX>4000</positionX>
<positionY>4000</positionY>
</StartPoint>
<EndPoint> // End point
<positionX>5000</positionX>
<positionY>5000</positionY>
</EndPoint>
</Position3D>
```

**Response XML: <ResponseStatus>****2.12.4/CGI/PTZCtrl/channels/<ID>/presets**

/CGI/PTZCtrl/channels/<ID>/presets	General Resource v2.0
<b>GET</b>	
<b>Description</b>	Acquire list of preset bit
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<PTZPresetList>

**PTZPresetList XML Block**

```
<PTZPreset version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<enabled>
<!-- req, xs:boolean -->
</enabled>
<id>
<!-- req, xs:string;id -->
</id>
<presetName>
<!-- req, xs:string -->
</presetName>
</PTZPreset>
```

Test cases

GET /CGI/PTZCtrl/channels/1/presets

Request XML: none

Response XML: <PTZPresetList>

Request XML: as below

```
<?xml version="1.0" encoding="UTF-8"?>
<PTZPresetList>
<PTZPreset>
<enabled>true</enabled>
<id>65</id>
<presetName>65</presetName>
<presetMode>0</presetMode>
</PTZPreset>
<PTZPreset>
<enabled>true</enabled>
<id>66</id>
<presetName>66</presetName>
<presetMode>0</presetMode>
</PTZPreset>
<PTZPreset>
<enabled>true</enabled>
<id>67</id>
<presetName>67</presetName>
<presetMode>0</presetMode>
</PTZPreset>
</PTZPresetList>
```

2.12.5 /CGI/PTZCtrl/channels/<ID>/presets/<ID>

/CGI/PTZCtrl/channels/<ID>/presets/<ID>	General Resource v2.0
<b>PUT</b>	
<b>Description</b>	Set preset bit
<b>Query</b>	None
<b>Inbound Data</b>	<PTZPreset>
<b>Success Return</b>	<ResponseStatus>
<b>DELETE</b>	
<b>Description</b>	Delete preset bit
<b>Query</b>	None
<b>Inbound Data</b>	<PTZPreset>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This protocol is prepared for setting and deleting preset bit function, helping IE set preset bit, sending preset bit to device via http protocol and setting preset bit of device; helping IE delete preset bit, sending preset bit to device via http protocol, deleting preset bit of device.</p> <p><b>Explanations on key parameters:</b>  &lt;id&gt; means preset bit No., range: 1-256  &lt;presetName&gt; means preset bit name (assignment presetName1..., CGI is not analyzed temporarily)</p>	

**PTZPreset XML Block**

```
<PTZPreset version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<enabled>
<!-- req, xs:boolean -->
</enabled>
<id>
<!-- req, xs:string;id -->
```

```

</id>
<presetName>
<!-- req, xs:string -->
</presetName>
</PTZPreset>

```

Test cases

PUT /CGI/PTZCtrl/channels/1/presets/1  
 Response XML: <ResponseStatus>  
 Request XML: as below

```

<PTZPreset version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<enabled>1</enabled>
<id>8</id>
<presetName>1 </presetName>
</PTZPreset>

```

DELETE /CGI/PTZCtrl/channels/1/presets/1  
 Response XML: <ResponseStatus>  
 Request XML: none

### 2.12.6 /CGI/PTZCtrl/channels/<ID>/presets/<ID>/goto

/CGI/PTZCtrl/channels/<ID>/presets/<ID>/goto	General Resource v2.0
<b>PUT</b>	
<b>Description</b>	Call preset bit
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for calling preset bit.	
<b>Explanations on key parameters:</b> presets/<ID> ID value; 99: Auto cruise start; 0: Auto cruise stop; other values means the number of corresponding preset bit	

#### presets XML Block

```

PUT case: (only PUT)
/CGI/PTZCtrl/channels/1/presets/1/goto
/CGI/PTZCtrl/channels/1/presets/99/goto
/CGI/PTZCtrl/channels/1/presets/0/goto

```

Test cases

PUT /CGI/PTZCtrl/channels/1/presets/1/goto  
 Response XML: <ResponseStatus>  
 Request XML: none

### 2.12.7 /CGI/PTZCtrl/channels/<ID>/patrols/<ID>

/CGI/PTZCtrl/channels/<ID>/patrols/<ID>	General Resource v2.0
<b>GET</b>	
<b>Description</b>	Acquire auto cruise parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<PTZPatrol>
<b>PUT</b>	
<b>Description</b>	Set auto cruise
<b>Query</b>	None
<b>Inbound Data</b>	<PTZPatrol>
<b>Success Return</b>	<ResponseStatus>



<b>DELETE</b>	
<b>Description</b>	Delete auto cruise
<b>Query</b>	None
<b>Inbound Data</b>	<PTZPatrol>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for acquiring, setting and deleting the auto cruise parameters.	
<b>Explanations on key parameters:</b> <id> means ID No.; no ID is set for shared memory is fully set. <patrolName> means the shared memory name; no name is set in the shared memory	

**PTZPatrol XML Block**

```

<PTZPatrol version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<id>
<!-- req, xs:string;id --> // No ID is set for shared memory is fully set.
</id>
<patrolName>
<!-- req, xs:string --> // No name is set in the shared memory
</patrolName>
<PatrolSequenceList>
<!-- req, at least one entry -->
<PatrolSequence>
<!-- req -->
<presetID>
<!-- req, xs:string;id --> //m_iPointId
</presetID>
<seqSpeed>
<!-- req, xs:string;id --> //m_iSpeed
</seqSpeed>
<delay>
<!-- req, xs:integer, seconds --> //m_iDelay
</delay>
</PatrolSequence>
</PatrolSequenceList>
</PTZPatrol>

```

Test cases

GET /CGI/PTZCtrl/channels/<ID>/patrols/<ID>

Request XML: none

Response XML: <PTZPatrol>

PUT /CGI/PTZCtrl/channels/<ID>/patrols/<ID>

Response XML: <ResponseStatus>

Request XML: as below

```

<PTZPatrol>
<enabled>ture</enabled>
<id>1</id>
<patrolName>1</patrolName>
<PatrolSequenceList>
<PatrolSequence>
<presetID>1</presetID>
<seqSpeed>0</seqSpeed>
<delay>5</delay>
</PatrolSequence>
<PatrolSequence>
<presetID>2</presetID>
<seqSpeed>0</seqSpeed>
<delay>5</delay>
</PatrolSequence>
</PatrolSequenceList>
</PTZPatrol>

```

```

<presetID>3</presetID>
<seqSpeed>0</seqSpeed>
<delay>5</delay>
</PatrolSequence>
</PatrolSequenceList>
</PTZPatrol>

```

DELETE /CGI/PTZCtrl/channels/<ID>/patrols/<ID>  
Request XML: none  
Response XML: <ResponseStatus>

### 2.12.8 /CGI/PTZCtrl/channels/<ID>/patterns/<ID>/recordstart

/CGI/PTZCtrl/channels/<ID>/patterns/<ID>/recordstart	General Resource v2.0
<b>PUT</b>	
<b>Description</b>	Start pattern scanning and recording
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for starting mode and path recording via CGI and shared memory protocol. <b>Explanations on key parameters:</b> None	

#### patterns XML Block

None  
Test cases  
PUT /CGI/PTZCtrl/channels/<ID>/patterns/<ID>/recordstart  
Request XML: none  
Response XML: <ResponseStatus>

### 2.12.9 /CGI/PTZCtrl/channels/<ID>/patterns/<ID>/recordstop

/CGI/PTZCtrl/channels/<ID>/patterns/<ID>/recordstop	General Resource v2.0
<b>PUT</b>	
<b>Description</b>	Stop pattern scanning and recording
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for stopping mode and path recording via CGI and shared memory protocol. <b>Explanations on key parameters:</b> None	

#### patterns XML Block

None  
Test cases  
PUT /CGI/PTZCtrl/channels/<ID>/patterns/<ID>/recordstop  
Request XML: none  
Response XML: <ResponseStatus>

### 2.12.10 /CGI/PTZCtrl/channels/<ID>/autoPan

/CGI/PTZCtrl/channels/<ID>/autoPan	General Resource v2.0
<b>PUT</b>	

<b>Description</b>	Auto scanning
<b>Query</b>	None
<b>Inbound Data</b>	<autoPanData>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for starting/stopping auto scanning function via CGI and shared memory protocol.	
<b>Explanations on key parameters:</b> <autoPan> means auto scanning speed	

#### **autoPanData XML Block**

```
<autoPanData version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<autoPan>
<!-- req, xs:integer, 0..100 -->
</autoPan> //m_iScanSpeed
</autoPanData>
```

#### Test cases

PUT /CGI/PTZCtrl/channels/<ID>/autoPan

Response XML: <ResponseStatus>

Request XML: as below

```
<autoPanData version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<autoPan>60</autoPan>
</autoPanData>
```

### 2.12.11/CGI/PTZCtrl/channels/<ID>/parkaction

/CGI/PTZCtrl/channels/<ID>/parkaction	General Resource v2.0
<b>GET</b>	
<b>Description</b>	Acquire parameters of standby action
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	</ParkAction>
<b>PUT</b>	
<b>Description</b>	Set parameters of standby action
<b>Query</b>	None
<b>Inbound Data</b>	</ParkAction>
<b>Success Return</b>	<ResponseStatus>

#### **Explanations on protocol:**

This protocol is prepared for enabling/disabling/setting guard function via CGI and shared memory protocol.

Note: As a protocol for frontend item, this protocol is not supported by backend kernel, but it will return 400 for the same path is used by both CGI code and protocol.

#### **Explanations on key parameters:**

<enabled> means enabling

<Parktime> means execution waiting time

<ActionType> means action type

#### **</ParkAction> XML Block**

```
<ParkAction version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<enabled><!-- req, xs:boolean --></enabled> //m_blEnable
<Parktime><!-- req, xs:integer, seconds --></Parktime> //m_iWaitTimeSec
<Action>
<ActionType>
<!-- req, xs:string, "atuoscan ,patrol,pattern, preset" --> //m_iActionType
</ActionType>
```

```
<ActionNum><!-- opt xs:integer, 0..255--></ActionNum>//m_iActionTypeId
</Action>
</ParkAction>
```

Test cases

GET /CGI/PTZCtrl/channels/<ID>/parkaction

Request XML: none

Response XML: <ParkAction>

PUT /CGI/PTZCtrl/channels/<ID>/parkaction

Response XML: <ResponseStatus>

Request XML: as below

```
<?xml version="1.0" encoding="UTF-8"?>
<ParkAction>
<enabled>true</enabled>
<Parktime>30</Parktime>
<Action>
<ActionType>autoscan</ActionType>
<ActionNum>1</ActionNum>
</Action>
</ParkAction>
```

## 2.12.12/CGI/PTZCtrl/channels/<ID>/continuous

/CGI/PTZCtrl/channels/<ID>/continuous	General Resource v2.0
<b>PUT</b>	
<b>Description</b>	PTZ control
<b>Query</b>	None
<b>Inbound Data</b>	< PTZData >
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b> This protocol is prepared for realizing rotation control, zoom setting and rotating ball camera.</p> <p><b>Explanations on key parameters:</b> &lt;pan&gt; means horizontal movement Range -100 100; 0 means stop; speed increases along with the increasing values. &lt;tilt&gt; means longitudinal movement; value range-100 100; 0 means stop, speed increases along with the increasing values.</p>	

### PTZData XML Block

```
<PTZData version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<pan><!-- opt, xs:integer, -100..100 --></pan> // Horizontal movement; value range-100 100; 0
means stop, speed increases along with the increasing values.
<tilt><!-- opt, xs:integer, -100..100 --></tilt> // Longitudinal movement; value range-100 100;
0 means stop, speed increases along with the increasing values.
<zoom><!-- opt, xs:integer, -100,100--></zoom> // Zoom 100: Zoom increase -100: Zoom
decrease
</PTZData>
```

Test cases

PUT /CGI/PTZCtrl/channels/<ID>/continuous

Response XML: <ResponseStatus>

Request XML: as below

```
<PTZData version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<pan>100</pan>
<tilt> 100 </tilt>
<zoom> 100 </zoom>
</PTZData>
```

### 2.12.13/CGI/PTZCtrl/channels/<ID>/timetasks

/CGI/PTZCtrl/channels/<ID>/timetasks	General Resource v2.0
<b>GET</b>	
<b>Description</b>	Acquire the timing call of preset bit parameters.
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	< TimeTaskList >
<b>PUT</b>	
<b>Description</b>	Set timing call of preset bit parameters
<b>Query</b>	None
<b>Inbound Data</b>	< TimeTaskList >
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This protocol is prepared for sending the timing call of preset bit control commands via CGI and shared memory protocol.</p> <p><b>Explanations on key parameters:</b>  &lt;enabled&gt; means enabling/disabling  &lt;Parktime&gt; means detention time  &lt;beginTime&gt; means begin time  &lt;endTime&gt; represents end time  &lt;TaskType&gt; means task type  &lt;TaskNum&gt; means preset bit No.  &lt;TaskNum&gt; represents the preset point number, a list of actions that run during the time period</p>	

#### TimeTaskList XML Block

```

<TimeTaskList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <enabled><!-- opt, xs:boolean --></enabled> // Enabling/disabling
  <Parktime><!-- opt, xs:integer, seconds --></Parktime> // Detention time
  <TimeTaskBlock /><!-- opt -->
</TimeTaskList>
<TimeTaskBlock version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <dayOfWeek><!-- req, xs:integer, ISO8601 weekday number, 1=Monday, ... --></dayOfWeek>
// Week
  <enabled><!-- req, xs:boolean --></enabled> // Enabling (day)
  <TimeTaskRange>
    <TaskID><!-- req, xs:integer;id --></TaskID> // Task id
    <beginTime><!-- req, xs:time, ISO8601 time --></beginTime> // Begin time
    <endTime><!-- req, xs:time, ISO8601 time --></endTime> // End time
    <Task>
      <TaskType><!-- req, xs:strings, "disable, atuoscan, framescan, randomscan,
panoramascan, scan.patrol,pattern.preset,tiltscan,periodreboot,periodadjust,auxoutput"
--></TaskType> // Task type, send scan during
scanning
      <TaskNum><!-- dep, xs:integer, 0.8--></TaskNum> // Preset bit No.
      <TaskNum> <!--Req, xs: string--> </ TaskNum> // Preset point number list, separated by
      " "
    </Task>
  </TimeTaskRange>
</TimeTaskBlock>

```

#### Test cases

GET /CGI/PTZCtrl/channels/<ID>/timetasks

Request XML: none

Response XML: <TimeTaskList>

PUT /CGI/PTZCtrl/channels/<ID>/timetasks

Response XML: <ResponseStatus>

Request XML: as below

```
<?xml version="1.0" encoding="UTF-8"?>
<TimeTaskList>
<TimeTaskBlock>
<dayOfWeek>1</dayOfWeek>
<enabled>>false</enabled>
<TimeTaskRange>
<TaskID>0</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>patrol</TaskType>
<TaskNum>1,2</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>1</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>2</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>3</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>4</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>5</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
```

```
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>6</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>7</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
</TimeTaskBlock>
<TimeTaskBlock>
<dayOfWeek>2</dayOfWeek>
<enabled>>false</enabled>
<TimeTaskRange>
<TaskID>0</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>1</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>2</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>3</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
```

```
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>4</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>5</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>6</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>7</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
</TimeTaskBlock>
<TimeTaskBlock>
<dayOfWeek>3</dayOfWeek>
<enabled>true</enabled>
<TimeTaskRange>
<TaskID>0</TaskID>
<beginTime>0:0</beginTime>
<endTime>10:0</endTime>
<Task>
<TaskType>preset</TaskType>
<TaskNum>1</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>1</TaskID>
<beginTime>10:1</beginTime>
<endTime>10:57</endTime>
<Task>
<TaskType>preset</TaskType>
```



```
<TaskNum>2</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>2</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>3</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>4</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>5</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>6</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>7</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
</TimeTaskBlock>
```

```
<TimeTaskBlock>
<dayOfWeek>4</dayOfWeek>
<enabled>>false</enabled>
<TimeTaskRange>
<TaskID>0</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>1</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>2</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>3</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>4</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>5</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
```

```
<TaskID>6</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>7</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
</TimeTaskBlock>
<TimeTaskBlock>
<dayOfWeek>5</dayOfWeek>
<enabled>>false</enabled>
<TimeTaskRange>
<TaskID>0</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>1</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>2</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>3</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
```

```
<TaskID>4</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>5</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>6</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>7</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
</TimeTaskBlock>
<TimeTaskBlock>
<dayOfWeek>6</dayOfWeek>
<enabled>>false</enabled>
<TimeTaskRange>
<TaskID>0</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>1</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
```

```
<TaskID>2</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>3</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>4</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>5</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>6</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>7</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
</TimeTaskBlock>
<TimeTaskBlock>
<dayOfWeek>7</dayOfWeek>
<enabled>>false</enabled>
<TimeTaskRange>
```

```
<TaskID>0</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>1</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>2</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>3</TaskID>
<beginTime>0:0</beginTime>
<endTime>0:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>4</TaskID>
<beginTime>-2068726384:1286656</beginTime>
<endTime>-2068726592:0</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>-2068726592</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>5</TaskID>
<beginTime>-2068726384:8</beginTime>
<endTime>7725:-65521</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>6</TaskID>
<beginTime>1350016:1361952</beginTime>
<endTime>159920128:35938304</endTime>
<Task>
```

```

<TaskType>preset</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
<TimeTaskRange>
<TaskID>7</TaskID>
<beginTime>0:174</beginTime>
<endTime>0:2090764</endTime>
<Task>
<TaskType>disable</TaskType>
<TaskNum>0</TaskNum>
</Task>
</TimeTaskRange>
</TimeTaskBlock>
</TimeTaskList>

```

**2.12.14/CGI/PTZCtrl/channels/<ID>/manualtrace**

<b>/CGI/PTZCtrl/channels/&lt;ID&gt;/manualtrace</b>		<b>General Resource v2.0</b>
<b>PUT</b>		
<b>Description</b>	Set manual traction parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is prepared for setting manual traction. Note: Manual traction will be disabled, unless intelligent analysis is enabled and linkage traction is ticked, or intelligent analysis is disabled.		

**Test cases**

**PUT /CGI/PTZCtrl/channels/<ID>/manualtrace**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```

<?xml version="1.0" encoding="UTF-8"?>
<TraceData>
<TraceEnable>1</TraceEnable>
<LaserX>256</LaserX>
<LaserY>10</LaserY>
</TraceData>

```

**2.12.15/CGI/PTZCtrl/channels/<ID>/manualltalk**

<b>/CGI/PTZCtrl/channels/&lt;ID&gt;/manualltalk</b>		<b>General Resource v2.0</b>
<b>PUT</b>		
<b>Description</b>	Set manual call parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is prepared for setting manual call.		

**Test cases**

**PUT /CGI/PTZCtrl/channels/<ID>/manualltalk**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```

<TalkData version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<TalkEnable>1 </TalkEnable>
<AudioType>0</AudioType>
<AudioNo>0</AudioNo>
</TalkData>

```

### 2.12.16/CGI/PTZCtrl/channels/<ID>/patrols/<ID>/start

/CGI/PTZCtrl/channels/<ID>/patrols/<ID>/start	<b>General Resource v2.0</b>
<b>PUT</b>	
<b>Description</b>	Call auto cruise
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for calling auto cruise function via CGI and shared memory protocol.	
<b>Explanations on key parameters:</b> None	

#### patrols XML Block

None

Test cases

PUT/CGI/PTZCtrl/channels/<ID>/patrols/<ID>/start

Response XML: <ResponseStatus>

Request XML: none

### 2.12.17/CGI/PTZCtrl/channels/<ID>/patrols/<ID>/stop

<b>PUT</b>	
<b>Description</b>	Set auto cruise stop
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for stopping auto cruise via CGI and shared memory protocol.	
<b>Explanations on key parameters:</b> None	

#### patrols XML Block

None

Test cases

PUT /CGI/PTZCtrl/channels/<ID>/patrols/<ID>/stop

Response XML: <ResponseStatus>

Request XML: none

### 2.12.18/CGI/PTZCtrl/channels/<ID>/patterns/<ID>/start

/CGI/PTZCtrl/channels/<ID>/patterns/<ID>/start	<b>General Resource v2.0</b>
<b>PUT</b>	
<b>Description</b>	Call mode path
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ResponseStatus>



**Explanations on protocol:**

This protocol is prepared for calling mode path operation via CGI and shared memory protocol.

**Explanations on key parameters:**

None

**patterns XML Block**

None

Test cases

PUT /CGI/PTZCtrl/channels/<ID>/patterns/<ID>/start

Request XML: none

Response XML: <ResponseStatus>

**2.12.19/CGI/PTZCtrl/channels/<ID>/patterns/<ID>/stop**

/CGI/PTZCtrl/channels/<ID>/patterns/<ID>/stop	General Resource v2.0
<b>PUT</b>	
<b>Description</b>	Stop pattern scanning
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol is prepared for stopping mode path operation via CGI and shared memory protocol.	
<b>Explanations on key parameters:</b>	
None	

**patterns XML Block**

None

Test cases

PUT /CGI/PTZCtrl/channels/<ID>/patterns/<ID>/stop

Request XML: none

Response XML: <ResponseStatus>

**2.12.20 /CGI/PTZCtrl/channels/<ID>/PTZInfo**

/CGI/PTZCtrl/channels/<ID>/PTZInfo	General Resource v2.0
<b>GET</b>	
<b>Description</b>	Acquire information of calibration coordinates
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<PTZInfo>
<b>PUT</b>	
<b>Description</b>	Set information of calibration coordinates
<b>Query</b>	None
<b>Inbound Data</b>	<PTZInfo>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol is prepared for acquiring functions of PTZ coordinate information.	
<b>Explanations on key parameters:</b>	
<pan> X coordinates, range: 0~36000, corresponding to 0-360 °, be accurate to 0.01.	
<tilt> Y coordinates, range: 1000~19000, corresponding to -90-90 °, be accurate to 0.01.	
<zoom> Zoom, range: 0~100000, corresponding to 0-1000 times, be accurate to 0.01	

**PTZInfo XML Block**

```

<PTZInfo version="2.0">
<pan><!-- req, xs:integer --></pan>
<tilt><!-- req, xs:integer --></tilt>
<zoom><!-- req, xs:integer --></zoom>
</PTZInfo>

```

Test cases

PUT /CGI/PTZCtrl/channels/<ID>/PTZInfo

Response XML: <ResponseStatus>

Request XML: as below

```

<PTZInfo version="2.0">
<pan>12000</pan>
<tilt>12100</tilt>
<zoom>12200</zoom>
</PTZInfo >

```

### 2.12.21 /CGI/PTZCtrl/channels/<ID>/CalibrateInfo/Scene/<ID>

/CGI/PTZCtrl/channels/<ID>/CalibrateInfo/Scene/<ID>	General Resource v2.0
<b>GET</b>	
<b>Description</b>	Acquire information of calibration coordinates
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<CalibrateInfo>
<b>PUT</b>	
<b>Description</b>	Set information of calibration coordinates
<b>Query</b>	None
<b>Inbound Data</b>	<CalibrateInfo>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol is prepared for acquiring and setting function of calibration coordinate information.	
<b>Explanations on key parameters:</b>	
<calibrateList> means calibrated list; calibration number: 0~6	
<ItemId> means calibration item ID; range: 1~6	
<enabled> represents whether it is effective, true: start, false: not start	
<posX> means X coordinates of calibration points; range: 0~10000	
<posY> means Y coordinates of calibration points; range: 0~10000	
<pan> X coordinates, range: 0~36000, corresponding to 0-360°, be accurate to 0.01.	
<tilt> Y coordinates, range: 1000~19000, corresponding to -90-90°, be accurate to 0.01.	
<zoom> Zoom, range: 0~100000, corresponding to 0-1000 times, be accurate to 0.01	

#### CalibrateInfo XML Block

```

<calibrateInfo version="2.0">
<calibrateList size="0-6">
<calibrates>
    <ItemId><!-- req, xs:integer --></ItemId>
    <enabled><!-- req, xs:boolean --></enabled>
<posX><!-- req, xs:integer --></posX>
<posY><!-- req, xs:integer --></posY>
<pan><!-- req, xs:integer --></pan>
<tilt><!-- req, xs:integer --></tilt>
<zoom><!-- req, xs:integer --></zoom>
</calibrates>
</calibrateList>
</calibrateInfo>

```

Test cases

PUT /CGI/PTZCtrl/channels/<ID>/CalibrateInfo/Scene/<ID>

Response XML: <ResponseStatus>

Request XML: as below

```
<calibrateInfo version="2.0">
<calibrateList size="2">
<calibrates>
  <ItemId>1</ItemId>
  <enabled>>true</enabled>
<posX>6000</posX>
<posY>6000</posY>
<pan>10000</pan>
<tilt>11000</tilt>
<zoom>12000</zoom>
</calibrates>
<calibrates>
  <ItemId>2</ItemId>
  <enabled>>true</enabled>
<posX>6200</posX>
<posY>6200</posY>
<pan>12000</pan>
<tilt>12100</tilt>
<zoom>12200</zoom>
</calibrates>
</calibrateList>
</calibrateInfo>
```

## 2.13/CGI/Device

### 2.13.1/CGI/Device/AllCapabilities/<type>

/CGI/Device/AllCapabilities/<type>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire capability set of device curing information	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<[xx]Cap>	
<b>Explanations on protocol:</b>		
This protocol is prepared for acquiring capability set of device curing information by means of: :<type> Send certain type of <[xx]Cap>, returned content is also <[xx]Cap> Type is any of AllCapabilities AudioVideoCap, DigitalChannelCap, EventCap, NetWorkCap, PTZCap, StorageCap, SystemCap, VCACap, UserGroupPermission AllCapabilities and UserGroupPermission are realized.		

#### [xx]Cap XML Block

```
<[xx]Cap>
<xxEnable><!-- req, xs:Boolean --></xxEnable>
...
</[xx]Cap>
```

Test cases

GET/CGI/Device/AllCapabilities/AudioVideoCap

Request XML: none

Response XML: <AudioVideoCap>

```

<?xml version="1.0" encoding="UTF-8" ?>
<AudioVideoCap>
  <VideoCap>
    <Enable>true</Enable>
    <Stream>
      <Enable> true </Enable>
    </Stream>
    <ROI>
      <Enable> true </Enable>
    </ROI>
    <Image>
      <Enable> true </Enable>
    </Image>
    <ImageSchedule>
      <Enable> true </Enable>
    </ImageSchedule>
    <DaynightSchedule>
      <Enable> true </Enable>
    </DaynightSchedule>
    <DayNight>
      <Enable> true </Enable>
      <InfraredLampPower> true </InfraredLampPower>
    </DayNight>
    <Snapshot>
      <Enable> true </Enable>
      <PicCodecType> true</PicCodecType>
      <AlarmSnapshot>false</AlarmSnapshot>
      <SnapshotIntervalMode> true</SnapshotIntervalMode>
      <SnapshotSchduleMode>false</SnapshotSchduleMode>
    </Snapshot>
    <OSD>
      <Enable> true </Enable>
    </OSD>
    <Logo>
      <Enable> true </Enable>
    </Logo>
    <VideoMask><!-- Video mask -->
      <Enable> true </Enable>
    </VideoMask>
    <PrivacyMask><!-- Privacy mask -->
      <Enable> true </Enable>
    </PrivacyMask>
  </VideoCap>
  <AudioCap>
    <Enable> true </Enable>
  </AudioCap>
</AudioVideoCap>

```

### 2.13.2/CGI/Device/DevControl/channels/<ID>/type/<ID>

/CGI/Device/ DevControl/channels/<ID>/type/<ID> General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire status of manually controlled device
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<DevControl>

<b>PUT</b>	
<b>Description</b>	Control device manually
<b>Query</b>	None
<b>Inbound Data</b>	<DevControl>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for controlling manual devices. type means different device types; 1: PIR; 2: Temperature; 3: Door magnetic; 4: Smoke; 5: Emergency button; 6: White light; 7: Infrared light;8: Warning lights Device supports white light presently Explanations on key parameters: <Enable > Means enabling; 0: Disabled; 1: Enabled	
<b>DevControl XML Block</b> <DevControl version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema"> <Enable><!-- req, xs:intger --></Enable> //0: Disabled; 1: Enabled </ DevControl >	

#### Test cases

**GET /CGI/Device/DevControl/channels/<ID>/type/<ID>**

**Request XML:** none

**Response XML:** < DevControl >

**PUT /CGI/Device/DevControl/channels/<ID>/type/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
< DevControl version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
< Enable >1</ Enable > // Whether enable 0/1
</ DevControl >
```

## 2.14/CGI/ITS

### 2.14.1 type explanations

Type of snapshot illegal actions in lane <trafficWarnType>	Bayonet: Bayonet, retrograde: Retrogradation, redlightrunning: Red light running, telephone: Making and receiving calls, notdirected: Undirected driving, vehicle: Vehicle occupies bicycle lane, turnaround: Illegal turnaround, lanechange: Illegal lane change, safetybelt: Fail to belt up, forbiddenmarking: Violation of marking line, reversing: Reversing, overspeed: Overspeed, speciallane: Enter special lane, Illegalparking: Illegal parking, prohibitionsign: Violation of prohibition signs; leftturn: Prohibit left turn; rightturn: Prohibit right turn; yellowline: Press yellow line; straight: Prohibit straight driving; waitarearedlight: Run a red light at turn waiting area; againstpark: Violating parking; comitypedestrain: Fail to give way to pedestrian; comitystraight: Left turn vehicle fails to give way to straight driving vehicles; overtakeInzebracrossing: Overspeed at zebra crossing; inserttrafficjam: illegal insertion; greenlightparking: Parking during green light; abnormalplate: Abnormal plate; prohibitiondangerouscar: Prohibit dangerous chemicals; specialoverspeed: Video snapshot overspeed enabling under mixed trigger; linesnapped: Snap line (line snap snapshot), throughban: Crossing of prohibited area; driveintojamcross: Crossing of jammed area; mismatchedplate: Mismatch of plate; noalternatepass: No alternate pass; nokeepsafedos: Fail to keep safe distance
Device model <deviceType>	0, // Unknown device 1, // 704 red light signal detector 2, // 324 vehicle detector 3, // CSR radar

4,	// ANDORAY radar
5,	//550 LED
6,	// Radar controller
7,	//XG01 LED
8,	//svac protocol extension
9,	//BK docking vehicle detector
10,	// Hikvision vehicle detector
11,	// Hikvision red light signal detector
12,	// Huichang radar
13,	// Beijing GTRANSI (applied at site)
14,	// HangZhou Spooly (applied at site)
15,	// HangZhou Eboy (applied at site)
16,	//STJ1 Fixed-angle radar

**2.14.2/CGI/ITS/LaneRun/BasicChannelPara/channels/<ID>/scenes/<ID>/lanes/<ID>**

<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire basic parameters of lane (single lane)
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<BasicChannelPara>
<b>PUT</b>	
<b>Description</b>	Set basic parameters of lane (single lane)
<b>Query</b>	None
<b>Inbound Data</b>	<BasicChannelPara>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol is prepared for setting basic parameters of lane	
scenes/<ID> Means scene No.; 1-16	
lanes/<ID> Means lane No.; 1-6	
<channelName> Means channel name, with length not above 63 bits	
<customNum> Means customized number, with length not above 63 bits	
<driveAspect> Means driving direction, with length not above 63 bits	
<channelType> Means lane type; 0-Left turn lane; 1-Right turn lane; 2-Straight lane; 3-Left turn straight lane; 4-Right turn straight lane; 5-Non-motor lane – reserved; 6-Left/right turn lane; 7- Left turn lane and turn waiting lane; 8-Straight + Left turn + Right turn lane.	
<channelUpdown> Means up/down lane; 0-Up; 1-Down	
<shotDirect> Means snapshot direction; 1-Snapshot vehicle head; 2-Snapshot vehicle tail (applies to crossing of bayonet, red light, retrograding and overspeed)	
<borderEnable> Means left/right border; 0: Disabled; 1: Left border enabling; 2: Right border enabling; 3: Left/right border enabling	
<channelUse> Means lane application; 0-Common lane; 1-Non-motor lane; 2-Bus lane; 3-Passenger car lane; 4-Emergency lane; 5-One-way lane; 6-Truck-prohibited lane; 7-Dangerous chemical vehicle lane	
<linkCamchannelID> Lane No., range: 1-6	
<flashLampType> Control flash lamp; 0: Linkage flash; 1: Alternative flash;	
<idNum> Means IO name; range: 1-8	
<enableIO> Whether enable IO; true: Enabled; false: Disabled	
<outEquipType> Type of peripheral device, with length not above 63 bits; 0-Unknown device; 1- 704 red light signal detector; 2- 324 vehicle detector; 3- CSR radar; 4- ANDORAY radar; 5. 550 LED; 6- Radar controller; 7- XG01 LED; 8-svac protocol suspension; 9-BK docking	

vehicle detector; 10- Hikvision vehicle detector; 11- Hikvision red light signal detector; 12- Huichang radar; 13- Beijing GTRANSI; 14- HangZhou Spooly; 15- HangZhou Eboy; 16- STJ1 Fixed-angle radar; 17-Weighing instrument  
 <radarNum> Means radar No.  
 <cameraComNum> Means camera port No. COM1 -1 COM2 – 2 The rest should be analogized in the same way

**BasicChannelPara XML Block**

```
<?xml version="2.0" encoding="UTF-8"?>
<BasicChannelPara version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<basicChannelParaInfo>
<basicChannelParaData>
<channelName><!-- req, xs:string--></channelName>
<customNum><!-- req, xs:string--></customNum>
<driveAspect><!-- req, xs:string--></driveAspect>
<channelType><!-- req, xs:integer--></channelType><!--Lane type -->
<channelUpdown><!-- req, xs:integer--></channelUpdown><!-- Up/down lane -->
<shotDirect><!-- req, xs:integer--></shotDirect>
<borderEnable><!-- req, xs:integer--></borderEnable>
<channelUse><!-- req, xs:integer--></channelUse><!--Lane application -->
<linkCamchannelID><!-- req, xs:integer--></linkCamchannelID><!-- Link lane No. -->
<flashLampType><!-- req, xs:integer--></flashLampType><!-- Control mode of flash lamp -->
<flashEnableList>
<idDataInfo>
<idNum><!-- req, xs:integer--></idNum>
<enableIO><!-- req, xs:boolean --></enableIO>
</idDataInfo>
</flashEnableList>
<outEquipType><!-- req, xs:string--></outEquipType><!-- Type of peripheral device -->
<radarNum><!-- req, xs:string--></radarNum><!-- Radar No. -->
<cameraComNum><!-- req, xs:integer--></cameraComNum><!-- Camera port No. -->
</basicChannelParaData>
</basicChannelParaInfo>
</BasicChannelPara>
```

**Test cases**

**GET /CGI/ITS/LaneRun/BasicChannelPara/channels/1/scenes/1/lanes/1**  
**Request XML: none**  
**Response XML: <BasicChannelPara>**  
**PUT /CGI/ITS/LaneRun/BasicChannelPara/channels/1/scenes/1/lanes/1**  
**Response XML: <ResponseStatus>**  
**Request XML: as below**

```
<?xml version="2.0" encoding="UTF-8"?>
<BasicChannelPara version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<basicChannelParaInfo>
<basicChannelParaData>
<channelName> Lane 1</channelName>
<customNum>3</customNum>
<driveAspect> From east to west </driveAspect>
<channelType>8</channelType>
<channelUpdown>1</channelUpdown>
<shotDirect>0</shotDirect>
<borderEnable>1</borderEnable>
<channelUse>6</channelUse>
<linkCamchannelID>4</linkCamchannelID>
<flashLampType>0</flashLampType>
<flashEnableList>
<idDataInfo>
<idNum>1</idNum>
```

```

<enableIO>true</enableIO>
</idDataInfo>
<idDataInfo>
<idNum>2</idNum>
<enableIO>true</enableIO>
</idDataInfo>
<idDataInfo>
<idNum>3</idNum>
<enableIO>true</enableIO>
</idDataInfo>
<idDataInfo>
<idNum>4</idNum>
<enableIO>true</enableIO>
</idDataInfo>
<idDataInfo>
<idNum>5</idNum>
<enableIO>true</enableIO>
</idDataInfo>
<idDataInfo>
<idNum>6</idNum>
<enableIO>true</enableIO>
</idDataInfo>
<idDataInfo>
<idNum>7</idNum>
<enableIO>true</enableIO>
</idDataInfo>
<idDataInfo>
<idNum>8</idNum>
<enableIO>true</enableIO>
</idDataInfo>
</flashEnableList>
<outEquipType>CSR_AD</outEquipType>
<radarNum>3</radarNum>
<cameraComNum>1</cameraComNum>
</basicChannelParaData>
</basicChannelParaInfo>
</BasicChannelPara>

```

### 2.14.3/CGI/ITS/LaneRun/BasicChannelPara/channels/<ID>/scenes/<ID>/lanes

/CGI/ITS/LaneRun/BasicChannelPara/channels/<ID>/scenes/<ID>/lanes General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire basic parameters of lane (all lanes)
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<BasicChannelParaList>
<b>PUT</b>	
<b>Description</b>	Set basic parameters of lane (all lanes)
<b>Query</b>	None
<b>Inbound Data</b>	<BasicChannelParaList>
<b>Success Return</b>	<ResponseStatus>



**Explanations on protocol:**

This protocol is prepared for setting basic parameters of lane

<channelNO> Means lane No.; information of all lanes can be sent, range: 1-6

<channelName> Means channel name, with length not above 63 bits

<customNum> Means customized number, with length not above 63 bits

<driveAspect> Means driving direction, with length not above 63 bits

<channelType> Means lane type; 0-Left turn lane; 1-Right turn lane; 2-Straight lane; 3-Left turn straight lane; 4-Right turn straight lane; 5-Non-motor lane – reserved; 6-Left/right turn lane; 7- Left turn lane and turn waiting lane; 8-Straight + Left turn + Right turn lane.

<shotDirect> Means snapshot direction; 1-Snapshot vehicle head; 2-Snapshot vehicle tail (applies to crossing of bayonet, red light, retrograding and overspeed)

<channelUpdown> Means up/down lane; 0-Up; 1-Down

<borderEnable> Means left/right border; 0: Disabled; 1: Left border enabling; 2: Right border enabling; 3: Left/right border enabling

<channelUse> Means lane application; 0-Common lane; 1-Non-motor lane; 2-Bus lane; 3-Passenger car lane; 4-Emergency lane; 5-One-way lane; 6-Truck-prohibited lane; 7-Dangerous chemical vehicle lane

<linkCamchannelID> Lane No., range: 1-6

<flashLampType> Control flash lamp; 0: Linkage flash; 1: Alternative flash;

<idNum> Means IO name; range: 1-8

<enableIO> Whether enable IO; true: Enabled; false: Disabled

<outEquipType> Means type of peripheral device, with length not above 63 characters

<radarNum> Means radar No.

<cameraComNum> Means camera port No. COM1 -1 COM2 – 2 The rest should be analogized in the same way

**BasicChannelPara XML Block**

```
<?xml version="2.0" encoding="UTF-8"?>
<BasicChannelParaList version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<basicChannelParaData>
<channelNO><!-- opt, xs:integer--></channelNO>
<channelName><!-- req, xs:string--></channelName>
<customNum><!-- req, xs:string--></customNum>
<driveAspect><!-- req, xs:string--></driveAspect>
<channelType><!-- req, xs:integer--></channelType><!--Lane type -->
<channelUpdown><!-- req, xs:integer--></channelUpdown><!-- Up/down lane -->
<shotDirect><!-- req, xs:integer--></shotDirect>
<borderEnable><!-- req, xs:integer--></borderEnable>
<channelUse><!-- req, xs:integer--></channelUse><!--Lane application -->
<linkCamchannelID><!-- req, xs:integer--></linkCamchannelID><!-- Link lane No. -->
<flashLampType><!-- req, xs:integer--></flashLampType><!-- Control mode of flash lamp -->
<flashEnableList>
<idDataInfo>
<idNum><!-- req, xs:integer--></idNum>
<enableIO><!-- req, xs:boolean --></enableIO>
</idDataInfo>
</flashEnableList>
<outEquipType><!-- req, xs:string--></outEquipType><!-- Type of peripheral device -->
<radarNum><!-- req, xs:string--></radarNum><!-- Radar No. -->
<cameraComNum><!-- req, xs:integer--></cameraComNum><!-- Camera port No. -->
</basicChannelParaData>
</BasicChannelParaList>
```

**Test cases**

**GET** /CGI/ITS/LaneRun/BasicChannelPara/channels/1/scenes/1/lanes

**Request XML:** none

**Response XML:** <BasicChannelParaList>

**PUT** /CGI/ITS/LaneRun/BasicChannelPara/channels/1/scenes/1/lanes

**Response XML:** <ResponseStatus>

**Request XML: as below**

```
<?xml version="2.0" encoding="UTF-8"?>
<BasicChannelParaList version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<basicChannelParaData>
<channelNO>1</channelNO>
<channelName> Lane 1</channelName>
<customNum>3</customNum>
<driveAspect> From east to west </driveAspect>
<channelType>8</channelType>
<channelUpdown>1</channelUpdown>
<shotDirect>0</shotDirect>
<borderEnable>1</borderEnable>
<channelUse>6</channelUse>
<linkCamchannelID>4</linkCamchannelID>
<flashLampType>0</flashLampType>
<flashEnableList>
<idDataInfo>
<idNum>1</idNum>
<enableIO>true</enableIO>
</idDataInfo>
<idDataInfo>
<idNum>2</idNum>
<enableIO>true</enableIO>
</idDataInfo>
<idDataInfo>
<idNum>3</idNum>
<enableIO>true</enableIO>
</idDataInfo>
<idDataInfo>
<idNum>4</idNum>
<enableIO>true</enableIO>
</idDataInfo>
<idDataInfo>
<idNum>5</idNum>
<enableIO>true</enableIO>
</idDataInfo>
<idDataInfo>
<idNum>6</idNum>
<enableIO>true</enableIO>
</idDataInfo>
<idDataInfo>
<idNum>7</idNum>
<enableIO>true</enableIO>
</idDataInfo>
<idDataInfo>
<idNum>8</idNum>
<enableIO>true</enableIO>
</idDataInfo>
</flashEnableList>
<outEquipType>CSR_AD</outEquipType>
<radarNum>3</radarNum>
<cameraComNum>1</cameraComNum>
</basicChannelParaData>
</BasicChannelParaList>
```

#### 2.14.4/CGI/ITS/LaneRun/LimitSpeedSet/channels/<ID>/scenes/<ID>/lanes/<ID>

<b>/CGI/ITS/LaneRun/LimitSpeedSet/channels/&lt;ID&gt;/scenes/&lt;ID&gt;/lanes/&lt;ID&gt;</b>	
<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire speed limit of lane (single lane)
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<LimitSpeedSetInfo>
<b>PUT</b>	
<b>Description</b>	Set speed limit of lane (single lane)
<b>Query</b>	None
<b>Inbound Data</b>	<LimitSpeedSetInfo>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This protocol is prepared for query and setting of lane speed limit, helping client or IE query and set the lane speed limit parameters of device via CGI protocol.</p> <p><b>Explanations on key parameters:</b>  channels/&lt;ID&gt; Means channel No.  scenes/&lt;ID&gt; Means scene No. (1~32)  lanes/&lt;ID&gt; Means lane No.; 1-6  &lt;speedAmendPara&gt; Means speed correction value; unit: km/h  &lt;smallCarSpeedLowerLimit&gt; Means lower limit of small car speed; unit: km/h  &lt;smallCarSpeedUpperLimit&gt; Means upper limit of small car speed; unit: km/h  &lt;smallCarLowerTetherPercent&gt; Means percentage of law enforcement to low-speed small cars, 0%-100%  &lt;smallCarUpperTetherPercent&gt; Means percentage of law enforcement to high-speed small cars, 0%-100%  &lt;smallCarAbnormOverSpeed&gt; Means abnormal overspeed of small car; unit: km/h  &lt;smallCarAbnormUnderSpeed&gt; Means abnormal underspeed of small car; unit: km/h  &lt;bigCarSpeedLowerLimit&gt; Means lower limit of big car; unit: km/h  &lt;bigCarSpeedUpperLimit&gt; Means upper limit of big car; unit: km/h  &lt;bigCarLowerTetherPercent&gt; Means percentage of law enforcement to low-speed big cars, 0%-100%  &lt;bigCarUpperTetherPercent&gt; Means percentage of law enforcement to high-speed big cars, 0%-100%  &lt;bigCarAbnormOverSpeed&gt; Means abnormal overspeed of big car; unit: km/h  &lt;bigCarAbnormUnderSpeed&gt; Means abnormal underspeed of big car; unit: km/h</p>	
<b>LimitSpeedSetInfo XML Block</b>	
<pre>&lt;?xml version="2.0" encoding="UTF-8"?&gt; &lt;LimitSpeedSetInfo version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema"&gt; &lt;channelNO&gt;&lt;!-- opt, xs:integer --&gt;&lt;/channelNO&gt; &lt;speedAmendPara&gt;&lt;!-- req, xs:integer, km/h --&gt;&lt;/speedAmendPara&gt; &lt;smallCarSpeedLowerLimit&gt;&lt;!-- req, xs:integer, km/h --&gt;&lt;/smallCarSpeedLowerLimit&gt; &lt;smallCarSpeedUpperLimit&gt;&lt;!-- req, xs:integer, km/h --&gt;&lt;/smallCarSpeedUpperLimit&gt; &lt;smallCarLowerTetherPercent&gt;&lt;!-- req, xs:string--&gt;&lt;/smallCarLowerTetherPercent&gt; &lt;smallCarUpperTetherPercent&gt;&lt;!-- req, xs:string--&gt;&lt;/smallCarUpperTetherPercent&gt; &lt;smallCarAbnormOverSpeed&gt;&lt;!-- req, xs:integer, km/h --&gt;&lt;/smallCarAbnormOverSpeed&gt; &lt;smallCarAbnormUnderSpeed&gt;&lt;!-- req, xs:integer, km/h --&gt;&lt;/smallCarAbnormUnderSpeed&gt; &lt;bigCarSpeedLowerLimit&gt;&lt;!-- req, xs:integer, km/h --&gt;&lt;/bigCarSpeedLowerLimit&gt; &lt;bigCarSpeedUpperLimit&gt;&lt;!-- req, xs:integer, km/h --&gt;&lt;/bigCarSpeedUpperLimit&gt; &lt;bigCarLowerTetherPercent&gt;&lt;!-- req, xs:string--&gt;&lt;/bigCarLowerTetherPercent&gt; &lt;bigCarUpperTetherPercent&gt;&lt;!-- req, xs:string--&gt;&lt;/bigCarUpperTetherPercent&gt; &lt;bigCarAbnormOverSpeed&gt;&lt;!-- req, xs:integer, km/h --&gt;&lt;/bigCarAbnormOverSpeed&gt; &lt;bigCarAbnormUnderSpeed&gt;&lt;!-- req, xs:integer, km/h --&gt;&lt;/bigCarAbnormUnderSpeed&gt; &lt;/LimitSpeedSetInfo&gt;</pre>	
<b>Test cases</b>	

**GET /CGI/ITS/LaneRun/LimitSpeedSet/channels/1/scenes/1/lanes/1**

**Request XML: none**

**Response XML: <LimitSpeedSetInfo>**

**PUT /CGI/ITS/LaneRun/LimitSpeedSet/channels/1/scenes/1/lanes/1**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<?xml version="2.0" encoding="UTF-8"?>
<LimitSpeedSetInfo version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<speedAmendPara>100</speedAmendPara>
<smallCarSpeedLowerLimit>1</smallCarSpeedLowerLimit>
<smallCarSpeedUpperLimit>100</smallCarSpeedUpperLimit>
<smallCarLowerTetherPercent>10</smallCarLowerTetherPercent>
<smallCarUpperTetherPercent>50</smallCarUpperTetherPercent>
<smallCarAbnormOverSpeed>1</smallCarAbnormOverSpeed>
<smallCarAbnormUnderSpeed>100</smallCarAbnormUnderSpeed>
<bigCarSpeedLowerLimit>1</bigCarSpeedLowerLimit>
<bigCarSpeedUpperLimit>100</bigCarSpeedUpperLimit>
<bigCarLowerTetherPercent>10</bigCarLowerTetherPercent>
<bigCarUpperTetherPercent>50</bigCarUpperTetherPercent>
<bigCarAbnormOverSpeed>1</bigCarAbnormOverSpeed>
<bigCarAbnormUnderSpeed>100</bigCarAbnormUnderSpeed>
</LimitSpeedSetInfo>
```

#### **2.14.5/CGI/ITS/LaneRun/LimitSpeedSet/channels/<ID>/scenes/<ID>/lanes**

<b>/CGI/ITS/LaneRun/LimitSpeedSet/channels/&lt;ID&gt;/scenes/&lt;ID&gt;/lanes</b>	
<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire speed limit of lane (all lanes)
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<LimitSpeedSetList>
<b>PUT</b>	
<b>Description</b>	Set speed limit of lane (all lanes)
<b>Query</b>	None
<b>Inbound Data</b>	<LimitSpeedSetList>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol is prepared for query and setting of lane speed limit, helping client or IE query and set the lane speed limit parameters of device via CGI protocol.	
<b>Explanations on key parameters:</b>	
channels/<ID> Means channel No.	
scenes/<ID> Means scene No. (1~32)	
<channelNO> Means lane No.; information of all lanes can be sent, range: 1-6	
<speedAmendPara> Means speed correction value; unit: km/h	
<smallCarSpeedLowerLimit> Means lower limit of small car speed; unit: km/h	
<smallCarSpeedUpperLimit> Means upper limit of small car speed; unit: km/h	
<smallCarLowerTetherPercent> Means percentage of law enforcement to low-speed small cars, 0%-100%	
<smallCarUpperTetherPercent> Means percentage of law enforcement to high-speed small cars, 0%-100%	
<smallCarAbnormOverSpeed> Means abnormal overspeed of small car; unit: km/h	
<smallCarAbnormUnderSpeed> Means abnormal underspeed of small car; unit: km/h	
<bigCarSpeedLowerLimit> Means lower limit of big car; unit: km/h	
<bigCarSpeedUpperLimit> Means upper limit of big car; unit: km/h	
<bigCarLowerTetherPercent> Means percentage of law enforcement to low-speed big cars, 0%-100%	

<bigCarUpperTetherPercent> Means percentage of law enforcement to high-speed big cars, 0%-100%  
<bigCarAbnormOverSpeed> Means abnormal overspeed of big car; unit: km/h  
<bigCarAbnormUnderSpeed> Means abnormal underspeed of big car; unit: km/h

#### LimitSpeedSetList XML Block

```
<?xml version="2.0" encoding="UTF-8"?>
<LimitSpeedSetList version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<limitSpeedSetData>
<channelNO><!-- opt, xs:integer --></channelNO>
<speedAmendPara><!-- req, xs:integer, km/h --></speedAmendPara>
<smallCarSpeedLowerLimit><!-- req, xs:integer, km/h --></smallCarSpeedLowerLimit>
<smallCarSpeedUpperLimit><!-- req, xs:integer, km/h --></smallCarSpeedUpperLimit>
<smallCarLowerTetherPercent><!-- req, xs:string--></smallCarLowerTetherPercent>
<smallCarUpperTetherPercent><!-- req, xs:string--></smallCarUpperTetherPercent>
<smallCarAbnormOverSpeed><!-- req, xs:integer, km/h --></smallCarAbnormOverSpeed>
<smallCarAbnormUnderSpeed><!-- req, xs:integer, km/h --></smallCarAbnormUnderSpeed>
<bigCarSpeedLowerLimit><!-- req, xs:integer, km/h --></bigCarSpeedLowerLimit>
<bigCarSpeedUpperLimit><!-- req, xs:integer, km/h --></bigCarSpeedUpperLimit>
<bigCarLowerTetherPercent><!-- req, xs:string--></bigCarLowerTetherPercent>
<bigCarUpperTetherPercent><!-- req, xs:string--></bigCarUpperTetherPercent>
<bigCarAbnormOverSpeed><!-- req, xs:integer, km/h --></bigCarAbnormOverSpeed>
<bigCarAbnormUnderSpeed><!-- req, xs:integer, km/h --></bigCarAbnormUnderSpeed>
</limitSpeedSetData>
</LimitSpeedSetList>
```

#### Test cases

**GET /CGI/ITS/LaneRun/LimitSpeedSet/channels/1/scenes/1/lanes**

**Request XML:** none

**Response XML:** <LimitSpeedSetList>

**PUT /CGI/ITS/LaneRun/LimitSpeedSet/channels/1/scenes/1/lanes**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="2.0" encoding="UTF-8"?>
<LimitSpeedSetList version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<limitSpeedSetData>
<channelNO>1</channelNO>
<speedAmendPara>100</speedAmendPara>
<smallCarSpeedLowerLimit>1</smallCarSpeedLowerLimit>
<smallCarSpeedUpperLimit>100</smallCarSpeedUpperLimit>
<smallCarLowerTetherPercent>10</smallCarLowerTetherPercent>
<smallCarUpperTetherPercent>50</smallCarUpperTetherPercent>
<smallCarAbnormOverSpeed>1</smallCarAbnormOverSpeed>
<smallCarAbnormUnderSpeed>100</smallCarAbnormUnderSpeed>
<bigCarSpeedLowerLimit>1</bigCarSpeedLowerLimit>
<bigCarSpeedUpperLimit>100</bigCarSpeedUpperLimit>
<bigCarLowerTetherPercent>10</bigCarLowerTetherPercent>
<bigCarUpperTetherPercent>50</bigCarUpperTetherPercent>
<bigCarAbnormOverSpeed>1</bigCarAbnormOverSpeed>
<bigCarAbnormUnderSpeed>100</bigCarAbnormUnderSpeed>
</limitSpeedSetData>
</LimitSpeedSetList>
```

**2.14.6/CGI/ITS/LaneRun/ManageChannelPara/scenes/<ID>**

<b>/CGI/ITS/LaneRun/ManageChannelPara/scenes/&lt;ID&gt; General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire traffic setting and lane parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ManageChannelPara>
<b>PUT</b>	
<b>Description</b>	Set traffic setting and lane parameters
<b>Query</b>	None
<b>Inbound Data</b>	<ManageChannelPara>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol is prepared for setting basic parameters of lane	
<channelName> Means intersection name, with length not above 93 characters	
<channelNum> Means intersection No., with length not above 63 characters	
<channelSum> Means total channel number; range: 1-6	
<channelProperty> Means road property; 1. Highway; 2. City expressway; 3. Other roads; default as 3. Other roads	
<runSpeed> Means run speed; range: 0-200; unit: km/h	

**ManageChannelPara XML Block**

```
<?xml version="2.0" encoding="UTF-8"?>
<ManageChannelPara version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<manageChannelParaInfo>
<channelNum><!-- req, xs:string--></channelNum>
<channelName><!-- req, xs:string--></channelName>
<channelSum><!-- req, xs:integer--></channelSum>
<channelProperty opt=""><!-- opt, xs:string,"1,2,3"--></channelProperty>
<runSpeed><!-- req, xs:integer--></runSpeed>
</manageChannelParaInfo>
</ManageChannelPara>
```

**Test cases**

**GET /CGI/ITS/LaneRun/ManageChannelPara/scenes/<ID>**

**Request XML: none**

**Response XML: <ManageChannelPara>**

**PUT /CGI/ITS/LaneRun/ManageChannelPara/scenes/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<?xml version="2.0" encoding="UTF-8"?>
<ManageChannelPara version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<manageChannelParaInfo>
<channelNum>0001</channelNum>
<channelName> intersection name </channelName>
<channelSum>2</channelSum>
<runSpeed>30</runSpeed>
</manageChannelParaInfo>
</ManageChannelPara>
```

**2.14.7/CGI/ITS/ShotPara/SnapPicPlus/channels/<ID>/scenes/<ID>**

<b>/CGI/ITS/ShotPara/SnapPicPlus/channels/&lt;ID&gt;/scenes/&lt;ID&gt;</b>	<b>General Resource v2.0</b>
<b>GET</b>	

<b>Description</b>	Acquire synthesis parameter of capture parameter picture.
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<SnapPicPlusInfo>
<b>PUT</b>	
<b>Description</b>	Set synthesis parameter of capture parameter picture
<b>Query</b>	None
<b>Inbound Data</b>	<SnapPicPlusInfo>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

This protocol is prepared for getting and setting of synthesis parameter of capture parameter picture.

<plusEnable>-- means whether synthesis is enabled. True: Enabled; false: Disabled

<picPlusPercent>--means picture synthesis ratio. For ratio of original picture after synthesis, 100 means original ratio and 25 means scaling 1/4 (scope: 0-100)

<featureArea>-- means close-up block diagram range as the denominator value. For example, 4 means matting map range is 1/4 of original picture and 16 means 1/16.

<picNum>-- means number of picture synthesis. 1 - synthesis of one picture; 2 - synthesis of two pictures; 3- synthesis of three pictures; 4- synthesis of four pictures

<plusType>--means corresponding synthesis type. Non-synthesis 1000 synthesis mode of one picture: 0-transverse original picture plus close-up synthesis. 1-longitudinal original picture plus close-up synthesis. 2-transverse close-up plus original picture synthesis. 3. Longitudinal close-up plus original synthesis.

synthesis of two pictures: 0-vertical synthesis mode; 1-horizontal synthesis mode; 2-horizontal arrangement of two pictures plus close-up; 3-vertical arrangement of two pictures plus close-up.

synthesis of three pictures: 0-stagger arrangement, one at upper part and two at lower part; 1-stagger arrangement, two at upper part and one at lower part; 2-two at left part and one at right part; 3-one at left part and two at right part; 4-vertical arrangement; 5-horizontal arrangement; 6-four-quarter arrangement -close-up at left lower; 10-four-quarter arrangement -close-up at right upper; 11-four-quarter arrangement -close-up at left upper.

synthesis of four pictures: 0-vertical synthesis; 1-horizonall synthesis; 2-four-quarter synthesis.

<featureOriginNO> -- means original picture close-up: 0 excellent picture selection; 1-the first picture; 2-the second picture; 3-the third picture

**SnapPicPlusInfo XML Block**

```
<?xml version="1.0" encoding="UTF-8"?>
<SnapPicPlusInfo version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<!--synthesis enabled or not-->
<plusEnable><!-- req, xs:boolean --></plusEnable>
<!--picture synthesis ratio-->
<picPlusPercent><!-- req, xs:integer--></picPlusPercent>
<!--close-up block diagram range -->
<featureArea><!-- dep, xs:integer--></featureArea>
<snapPicList>
<snapPicData>
<!--number of synthesis pictures-->
<picNum><!-- req, xs:integer--></picNum>
<!--synthesis type-->
<plusType><!-- req, xs:integer--></plusType>
<!--close-up picture->
<featureOriginNO><!-- opt, xs:integer--><featureOriginNO>
</snapPicData>
```

```
</snapPicList>
</SnapPicPlusInfo>
```

**Test cases**

**GET /CGI/ITS/ShotPara/SnapPicPlus/channels/<ID>/scenes/<ID>**

**Request XML: none**

**Response XML: <SnapPicPlusInfo>**

**PUT /CGI/ITS/ShotPara/SnapPicPlus/channels/<ID>/scenes/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<?xml version="2.0" encoding="UTF-8"?>
<SnapPicPlusInfo version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<plusEnable>true</plusEnable>
<picPlusPercent>25</picPlusPercent>
<featureArea>4</featureArea>
<snapPicList>
<snapPicData>
<picNum>1</picNum>
<plusType>0</plusType>
<featureOriginNO>0</featureOriginNO>
</snapPicData>
<snapPicData>
<picNum>2</picNum>
<plusType>1</plusType>
</snapPicData>
</snapPicList>
</SnapPicPlusInfo>
```

**2.14.8/CGI/ITS/ImagePara/FillinLight/channels/<ID>/scenes/<ID>**

<b>/CGI/ITS/ImagePara/FillinLight/channels/&lt;ID&gt;/scenes/&lt;ID&gt;</b>	
<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire fill light status
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<FillinlightInfo>
<b>PUT</b>	
<b>Description</b>	Set fill light status
<b>Query</b>	None
<b>Inbound Data</b>	<FillinlightInfo>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This proposal is prepared for setting of fill light. Page includes flash lamp enabling and strobe lamp enabling. Are the above two lamps controlled automatically?	
<manual>--means time bucket, range: 1-8	
<flashLampEnable>--means flash lamp enabling, true: enabled; false: disabled	
<strobLampEnable>--means strobe lamp enabling, true: enabled; false: disabled	
< flashStrobLampEnable >--means strobe lamp enabling, true: enabled; false: disabled	
<autoFlashLampEnable>--means automatic control of flash lamp, true: enabled; false: disabled	
<autoStrobLampEnable>--means automatic control of strobe lamp, true: enabled; false:	



disabled  
 < autoFlashStrobLampEnable >--means automatic control of flash strobe, true: enabled;  
 false: disabled

**FillinlightInfo XML Block**

```
<?xml version="2.0" encoding="UTF-8"?>
<FillinlightInfo version="2.0"xmlns="http://www.isapi.com/ver20/XMLSchema">
<fillinLightList>
<fillinLightData>
<!--time bucket-->
<manual><!-- req, xs:integer--></manual>
<!--flash lamp enabling-->
<flashLampEnable><!-- req, xs:boolean --></flashLampEnable>
<!--automatic control of flash lamp is dependent on flash lamp enabling -->
<autoFlashLampEnable><!-- dep, xs:boolean --></autoFlashLampEnable>
<!--strobe lamp enabling-->
<strobLampEnable><!-- req, xs:boolean --></strobLampEnable>
<!--automatic control of strobe lamp is dependent on flash lamp enabling -->
<autoStrobLampEnable><!-- dep, xs:boolean --></autoStrobLampEnable>
<!--strobe lamp enabling-->
<flashStrobLampEnable><!-- req, xs:boolean --> / flashStrobLampEnable >
<!-- automatic control of flash strobe is dependent on flash strobe enabling -->
<autoFlashStrobLampEnable ><!-- dep, xs:boolean --> / autoFlashStrobLampEnable >
</fillinLightData>
</fillinLightList>
</FillinlightInfo>
```

**Test cases**

**GET** /CGI/ITS/ImagePara/FillinLight/channels/<ID>/scenes/<ID>

**Request XML:** none

**Response XML:** <FillinlightInfo>

**PUT** /CGI/ITS/ImagePara/FillinLight/channels/<ID>/scenes/<ID>

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<FillinlightInfo version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<fillinLightList>
<fillinLightData>
<manual>1</manual>
<flashLampenable>true</flashLampenable>
<autoFlashlampEnable>false</autoFlashlampEnable>
<strobLampenable>true</strobLampenable>
<autoStroblampEnable>false</autoStroblampEnable>
</fillinLightData>
</fillinLightList>
</FillinlightInfo>
```

**2.14.9/CGI/ITS/SystemRun/TabSystem**

/CGI/ITS/SystemRun/TabSystem/		General Resource v2.0
<b>GET</b>		
<b>Description</b>	System switching	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<TabSystemInfo>	
<b>PUT</b>		
<b>Description</b>	System switching	
<b>Query</b>	None	
<b>Inbound Data</b>	None	

<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This proposal is prepared for system type switching. <type> value: 0-bayonet; 1-electronic police	

**TabSystemInfo XML Block**

```
<?xml version="2.0" encoding="UTF-8"?>
<TabSystemInfo version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<type><!-- req, xs:integer --></type>
</TabSystemInfo>
```

**Test cases**  
**GET /CGI/ITS/SystemRun/TabSystem**  
**Request XML:** none  
**Response XML:** <TabSystemInfo>  
**PUT /CGI/ITS/SystemRun/TabSystem**  
**Response XML:** <ResponseStatus>  
**Request XML:** as below

```
<?xml version="2.0" encoding="UTF-8"?>
<TabSystemInfo version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<type>0</type>
</TabSystemInfo>
```

**2.14.10/CGI/ITS/ImagePara/AddLightPara/channels/<ID>/template/<ID>/type/<ID>**

<b>General Resource v2.0</b>	
------------------------------	--

<b>GET</b>	
<b>Description</b>	Acquire fill light status of snapshot plate number
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<AddLightParaInfo>
<b>PUT</b>	
<b>Description</b>	Set fill light status of snapshot plate number
<b>Query</b>	None
<b>Inbound Data</b>	<AddLightParaInfo>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**  
This proposal is prepared for parameter setting and acquirement of plate number fill light.  
type means different image parameter types; 0-Monitoring image; 1-Snapshot image; 2-Analysis image  
<lightEnable>--means fill light enabling, true: enabled; false: disabled; default: true  
<obeyLight>--means front-lighting benchmark, range: 0-100; default: 50  
<backlighting>--means backlight benchmark, range: 0-100; default: 50  
<delicacyLimit>--means delicacy, range: 0-100; default: 50

**AddLightParaInfo XML Block**

```
<?xml version="1.0" encoding="UTF-8"?>
<AddLightParaInfo version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<!-- fill light enabling -->
<lightEnable><!-- req, xs:boolean --></lightEnable>
<!-- front lighting benchmark -->
<obeyLight><!-- req, xs:integer --></obeyLight>
<!-- backlight benchmark -->
<backlighting><!-- dep, xs:integer --></backlighting>
<!-- delicacy -->
```

```
<delicacyLimit><!-- req, xs:integer --></delicacyLimit>
</AddLightParaInfo>
```

**Test cases**

**GET /CGI/ITS/ImagePara/AddLightPara/channels/<ID>/template/<ID>/type/<ID>**

**Request XML:** none

**Response XML:** <AddLightParaInfo>

**PUT /CGI/ITS/ImagePara/AddLightPara/channels/<ID>/template/<ID>/type/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<AddLightParaInfo version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<lightEnable>true</lightEnable>
<obeyLight>50</obeyLight>
<backlighting>50</backlighting>
<delicacyLimit>50</delicacyLimit>
</AddLightParaInfo>
```

**2.14.11/CGI/ITS/ImagePara/channels/<ID>/JPEGQuality/template/<ID>/type/<ID>**

/CGI/ITS/ImagePara/channels/<ID>/JPEGQuality/template/<ID>/type/<ID> General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire quality of JPEG picture
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<JPEGQuality>
<b>PUT</b>	
<b>Description</b>	Set quality of JPEG picture
<b>Query</b>	None
<b>Inbound Data</b>	<JPEGQuality>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This proposal is prepared for acquirement presetting of JPEG picture.	
<b>Explanations on key parameters:</b> template means template No.: 0-7-template No.; 255-temporary template; 0x7ff--all templates type means different image parameter types; 0-Monitoring image; 1-Snapshot image; 2-Analysis image <characterJPEG> means quality of JPEG picture, range: 10-100 ; default: 85 <pictureUpperLimit> means upper limit of picture size, range: 200-8192; default: 2048	

**JPEGQuality XML Block**

```
<JPEGQuality version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<characterJPEG><!--opt, xs:integer --></characterJPEG>
<pictureUpperLimit><!--opt, xs:integer --></pictureUpperLimit>
</JPEGQuality>
```

**Test cases**

**GET /CGI/ITS/ImagePara/channels/<ID>/JPEGQuality/templates/<ID>/type/<ID>**

**Request XML:** none

**Response XML:** <JPEGQuality>

**PUT/CGI/ITS/ImagePara/channels/<ID>/JPEGQuality/templates/<ID>/type/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<JPEGQuality version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<characterJPEG>60</characterJPEG>
<pictureUpperLimit>6000</pictureUpperLimit>
</JPEGQuality>
```

**2.14.12/CGI/ITS/LaneRun/RadarParameter/channels/<ID>/Scene/<ID>/lanes/<ID>**

<b>/CGI/ITS/LaneRun/TriggerParameter/channels/&lt;ID&gt;/Scene/&lt;ID&gt;/lanes/&lt;ID&gt;</b>	
<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire lane radar parameter
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<RadarParameter>
<b>PUT</b>	
<b>Description</b>	Set lane radar parameter
<b>Query</b>	None
<b>Inbound Data</b>	<RadarParameter>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for setting and enquiry function of lane radar parameter and setting and enquiry of client or IE for equipment lane radar parameter through CGI protocol, including speed matching time and minimum time slice parameter.	
<b>Explanations on key parameters:</b> <speedMatchingTime> means speed matching time, unit: ms, range: 0-5,000 <loopMinTime> means minimum time slice, unit: ms, range: 0-5,000; default: 50 <radarMinSpeed> means minimum triggering speed, unit: m/h, range: 10~240 <radarMaxSpeed> means maximum triggering speed, unit: m/h, range: 10~240	

**RadarParameter XML Block**

```
<RadarParameter version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<speedMatchingTime ><!-- req, xs:integer, milliseconds --></speedMatchingTime >
<loopMinTime><!-- req, xs:integer, milliseconds --></loopMinTime>
<radarMinSpeed<!-- req, xs:integer, km/h --></radarMinSpeed>
<radarMaxSpeed><!-- req, xs:integer, km/h --></radarMaxSpeed>
</RadarParameter>
```

**Test cases**

**GET /CGI/ITS/ LaneRun/RadarParameter/channels/<ID>/Scene/<ID>/lanes/<ID>**

**Request XML: none**

**Respond XML: <RadarParameter>**

**PUT /CGI/ITS/ LaneRun/ RadarParameter/channels/<ID>/Scene/<ID>/lanes/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<RadarParameter version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<speedMatchingTime>1200</speedMatchingTime>
<loopMinTime>50</loopMinTime>
<radarMinSpeed>10</radarMinSpeed>
<radarMaxSpeed>200</radarMaxSpeed>
</RadarParameter>
```

**2.14.13/CGI/ITS/LaneRun/RadarParameter/channels/<ID>/Scene/<ID>/lanes**

<b>/CGI/ITS/LaneRun/TriggerParameter/channels/&lt;ID&gt;/Scene/&lt;ID&gt;/lanes</b>	
<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire lane radar parameter in batch

<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<RadarParameterList>
<b>PUT</b>	
<b>Description</b>	Set lane radar parameter in batch
<b>Query</b>	None
<b>Inbound Data</b>	<RadarParameterList>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

This protocol is prepared for batch setting and enquiry function of lane radar parameter and batch setting and enquiry of client or IE for equipment lane radar parameter through CGI protocol, including speed matching time and minimum time slice parameter.

**Explanations on key parameters:**

<laneID> means lane No.; five lanes (No. 1-5) are supported.

<speedMatchingTime> means speed matching time, unit: ms, range: 0-5,000

<loopMinTime> means minimum time slice, unit: ms, range: 0-5,000; default: 50

<radarMinSpeed> means minimum triggering speed, unit: m/h, range: 10~240

<radarMaxSpeed> means maximum triggering speed, unit: m/h, range: 10~240

**RadarParameterList XML Block**

```
<RadarParameterList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<radarParameter>
<laneID><!-- req, xs:integer --></laneID>
<speedMatchingTime ><!-- req, xs:integer, milliseconds --></speedMatchingTime >
<loopMinTime><!-- req, xs:integer, milliseconds --></loopMinTime>
<radarMinSpeed<!-- req, xs:integer, km/h --></radarMinSpeed>
<radarMaxSpeed><!-- req, xs:integer, km/h --></radarMaxSpeed>
</radarParameter>
</RadarParameterList>
```

**Test cases**

**GET /CGI/ITS/LaneRun/RadarParameter/channels/<ID>/Scene/<ID>/lanes**

**Request XML: none**

**Response XML: <RadarParameterList>**

**PUT /CGI/ITS/LaneRun/RadarParameter/channels/<ID>/Scene/<ID>/lanes**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<RadarParameterList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<radarParameter>
<laneID>1</laneID>
<speedMatchingTime>1200</speedMatchingTime>
<loopMinTime>50</loopMinTime>
<radarMinSpeed>10</radarMinSpeed>
<radarMaxSpeed>200</radarMaxSpeed>
</radarParameter>
</RadarParameterList>
```

**2.14.14/CGI/ITS/LaneRun/VehicleInspection/channels/<ID>/Scene/<ID>/lanes/<ID>**

<b>/CGI/ITS/LaneRun/VehicleInspection/channels/&lt;ID&gt;/Scene/&lt;ID&gt;/lanes/&lt;ID&gt;</b>	
<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire parameter of lane vehicle check device.
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<VehicleInspection>
<b>PUT</b>	
<b>Description</b>	Set parameter of lane vehicle check device.

<b>Query</b>	None
<b>Inbound Data</b>	<VehicleInspection>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

This protocol is prepared for setting and enquiry function of lane check device and setting and enquiry of client or IE for equipment vehicle check device parameter through CGI protocol, including speed matching time and minimum time slice parameter, including loop mode and loop No. parameters.

**Explanations on key parameters:**

<loopMode> means loop work mode. singleLoop: Single loop; doubleLoop: Two loops; threeLoop: Three loops; default: doubleLoop

<firstLoopNo> means No. of the first loop (1-12)

<secondLoopNo> means No. of the second loop (1-12)

<thirdLoopNo> means No. of the third loop (1-13)

< loopMaxTime> Maximum time slice, unit: ms, range: 10~10,000; default: 2,000

<loopDistance> means loop distance. Unit: m (divided by 100 in case of analysis, converted into float type with 3 decimals retained), range: 0.5~6.0, default 3.0

**VehicleInspection XML Block**

```
<VehicleInspection version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<loopMode opt=""><!--opt, xs:string,"singleLoop, doubleLoop, threeLoop" --></loopMode>
<firstLoopNo><!-- dep, xs:integer--></firstLoopNo>
<secondLoopNo><!-- dep, xs:integer--></secondLoopNo>
<thirdLoopNo><!-- dep, xs:integer--></thirdLoopNo>
< loopMaxTime ><!-- req, xs:integer, milliseconds --></loopMaxTime >
<loopDistance><!-- req, xs:integer, meter --></loopDistance>
</VehicleInspection>
```

**Test cases**

**GET /CGI/ITS/LaneRun/VehicleInspection/channels/1/Scene/1/lanes/1**

**Request XML: none**

**Response XML: <VehicleInspection>**

**PUT /CGI/ITS/LaneRun/VehicleInspection/channels/1/Scene/1/lanes/1**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<VehicleInspection version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<loopMode>singleLoop</loopMode>
<firstLoopNo>4</firstLoopNo>
<secondLoopNo>12</secondLoopNo>
<thirdLoopNo>6</thirdLoopNo>
<loopMaxTime >2000</loopMaxTime>
<loopDistance>3.0</loopDistance>
</VehicleInspection>
```

**2.14.15/CGI/ITS/LaneRun/VehicleInspection/channels/<ID>/Scene/<ID>/lanes**

<b>/CGI/ITS/LaneRun/VehicleInspection/channels/&lt;ID&gt;/Scene/&lt;ID&gt;/lanes</b>	
<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire paramete of lane vehicle check device
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<VehicleInspectionList>
<b>PUT</b>	
<b>Description</b>	Set parameter of lane vehicle check device
<b>Query</b>	None
<b>Inbound Data</b>	<VehicleInspectionList>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

This protocol is prepared for batch setting and enquiry function of lane vehicle check parameter and batch setting and enquiry of client or IE for equipment vehicle check device parameter through CGI protocol, including loop mode and loop No. parameters.

**Explanations on key parameters:**

<laneID> means lane No. Five lanes (No. 1-5) are supported.

<loopMode> means loop work mode. singleLoop: Single loop; doubleLoop: Two loops; threeLoop: Three loops; default: doubleLoop

<firstLoopNo> means No. of the first loop (1-12)

<secondLoopNo> means No. of the second loop (1-12)

<thirdLoopNo> means No. of the third loop (1-13)

< loopMaxTime > Maximum time slice, unit: ms, range: 10~10,000; default: 2,000

<loopDistance> means loop distance. Unit: m (divided by 100 in case of analysis, converted into float type with 3 decimals retained), range: 0.5~6.0, default 3.0

**VehicleInspectionList XML Block**

```
<VehicleInspectionList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<vehicleInspection>
<laneID><!-- req, xs:integer--></laneID>
<loopMode opt=""><!--opt, xs:string,"singleLoop, doubleLoop, threeLoop" --></loopMode>
<firstLoopNo><!-- dep, xs:integer--></firstLoopNo>
<secondLoopNo><!-- dep, xs:integer--></secondLoopNo>
<thirdLoopNo><!-- dep, xs:integer--></thirdLoopNo>
< loopMaxTime ><!-- req, xs:integer, milliseconds --></loopMaxTime >
<loopDistance><!-- req, xs:integer, meter --></loopDistance>
</vehicleInspection>
</VehicleInspectionList>
```

**Test cases**

**GET /CGI/ITS/LaneRun/VehicleInspection/channels/1/Scene/1/lanes**

**Request XML:** none

**Response XML:** <VehicleInspectionList>

**PUT /CGI/ITS/LaneRun/VehicleInspection/channels/1/Scene/1/lanes**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<VehicleInspectionList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<vehicleInspection>
<laneID>1</laneID>
<loopMode>singleLoop</loopMode>
<firstLoopNo>4</firstLoopNo>
<secondLoopNo>12</secondLoopNo>
<thirdLoopNo>6</thirdLoopNo>
< loopMaxTime >2000</ loopMaxTime >
<loopDistance>3.0</loopDistance>
</vehicleInspection>
</VehicleInspectionList>
```

**2.14.16/CGI/ITS/LaneRun/VideoDetection/channels/<ID>/Scene/<ID>/lanes/<ID>**

<b>/CGI/ITS/LaneRun/VideoDetection/channels/&lt;ID&gt;/Scene/&lt;ID&gt;/lanes/&lt;ID&gt;</b>	
<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire lane video trigger parameter.
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<VideoDetection>
<b>PUT</b>	
<b>Description</b>	Set lane video trigger parameter.

<b>Query</b>	None
<b>Inbound Data</b>	<VideoDetection>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

This protocol is prepared for setting and enquiry function of lane video trigger parameter and setting and enquiry of client or IE for equipment lane video trigger parameter through CGI protocol, including parameters of parking time judgment and parking prohibition time.

**Explanations on key parameters:**

<checkParkTime> means parking judgment time, unit: s, range: 1-120, default: 1  
 <iIllegalParkTime> means parking prohibition time, unit: s, range: 1-120, default: 5  
 <carLineRatio> means car line pressing sensitivity, unit: pixel, range: 1-100, default: 100; it is required to convert webpage into permillage type.  
 <cartLineRatio> means truck line pressing sensitivity, unit: pixel, range: 1-100, default: 100; it is required to convert webpage into permillage type.  
 <redLightSnap> means snapshot mode of running the red light. Snapshot as per direction (default): capByDirection; snapshot as per lane: capByLane; snapshot as per direction + lane: capByAll  
 <compelRedlight> means compulsory red light or not. False: Non-compulsory red light; true: Compulsory red light, default: False  
 <trailCapPlace> means second-line snapshot enabled or not. True-Enabled; false-disabled.

**VideoDetection XML Block**

```
<VideoDetection version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<videoDetection><!-- opt-->
<checkParkTime><!-- req, xs:integer, seconds --></checkParkTime>
<iIllegalParkTime><!-- req, xs:integer, seconds --></iIllegalParkTime>
<carLineRatio><!-- req, xs:integer, pixel --></carLineRatio>
<cartLineRatio><!-- req, xs:integer, pixel --></cartLineRatio>
<redLightSnap opt="">
<!--opt, xs:string,"capByDirection, capByLane, capByAll" -->
</redLightSnap>
<compelRedlight><!-- opt, xs:boolean "true, false" --></compelRedlight>
<trailCapPlace><!-- opt, xs:boolean "true, false" --></trailCapPlace>
</VideoDetection>
```

**Test cases**

**GET /CGI/ITS/LaneRun/VideoDetection/channels/1/Scene/1/lanes/1**

**Request XML: none**

**Response XML: <VideoDetection>**

**PUT /CGI/ITS/LaneRun/VideoDetection/channels/1/Scene/1/lanes/1**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<VideoDetection version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<checkParkTime>1</checkParkTime>
<iIllegalParkTime>5</iIllegalParkTime>
<carLineRatio>100</carLineRatio>
<cartLineRatio>50</cartLineRatio>
<redLightSnap>capByDirection</redLightSnap>
<compelRedlight>true</compelRedlight>
<trailCapPlace>true</trailCapPlace>
</VideoDetection>
```

**2.14.17/CGI/ITS/LaneRun/VideoDetection/channels/<ID>/Scene/<ID>/lanes**

<b>/CGI/ITS/LaneRun/VideoDetection/channels/&lt;ID&gt;/Scene/&lt;ID&gt;/lanes</b>	
<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire lane video trigger parameter in batch



<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<VideoDetectionList>
<b>PUT</b>	
<b>Description</b>	Set lane video trigger parameter in batch
<b>Query</b>	None
<b>Inbound Data</b>	<VideoDetectionList>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

This protocol is prepared for batch setting and enquiry function of lane video trigger parameter and batch setting and enquiry of client or IE for equipment lane video trigger parameter through CGI protocol, including parameters of parking time judgment and parking prohibition time.

**Explanations on key parameters:**

<laneID> means lane No. Five lanes (No. 1-5) are supported.

<checkParkTime> means parking judgment time, unit: s, range: 1-120, default: 1

<iIllegalParkTime> means parking prohibition time, unit: s, range: 1-120, default: 5

<carLineRatio> means car line pressing sensitivity, unit: pixel, range: 1-100, default: 100; it is required to convert webpage into permillage type.

<cartLineRatio> means truck line pressing sensitivity, unit: pixel, range: 1-100, default: 100; it is required to convert webpage into permillage type.

<redLightSnap> means snapshot mode of running the red light. Snapshot as per direction (default): capByDirection; snapshot as per lane: capByLane; snapshot as per direction + lane: capByAll

<compelRedlight> means compulsory red light or not. False: Non-compulsory red light; true: Compulsory red light, default: False

<trailCapPlace> means second-line snapshot enabled or not. True-Enabled; false-disabled.

**VideoDetectionList XML Block**

```
<VideoDetectionList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<videoDetection>
<laneID><!-- req, xs:integer --></laneID>
<checkParkTime><!-- dep, xs:integer, seconds --></checkParkTime>
<iIllegalParkTime><!-- dep, xs:integer, seconds --></iIllegalParkTime>
<carLineRatio><!-- dep, xs:integer, pixel --></carLineRatio>
<cartLineRatio><!-- dep, xs:integer, pixel --></cartLineRatio>
<redLightSnap opt="">
<!-- dep ,opt, xs:string, "capByDirection, capByLane, capByAll" -->
</redLightSnap>
<compelRedlight><!-- dep ,opt, xs:boolean "true, false" --></compelRedlight>
<trailCapPlace><!-- dep ,opt, xs:boolean "true, false" --></trailCapPlace>
</videoDetection>
</VideoDetectionList>
```

**Test cases**

**GET /CGI/ITS/LaneRun/VideoDetection/channels/1/Scene/1/lanes**

**Request XML: none**

**Respond XML: <VideoDetectionList>**

**PUT /CGI/ITS/LaneRun/VideoDetection/channels/1/Scene/1/lanes**

**Respond XML: <ResponseStatusList>**

**Request XML: as below**

```
<VideoDetectionList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<videoDetection>
<laneID>1</laneID>
<checkParkTime>1</checkParkTime>
<iIllegalParkTime>5</iIllegalParkTime>
<carLineRatio>100<carLineRatio>
<cartLineRatio>50<cartLineRatio>
<redLightSnap>capByDirection<redLightSnap>
```

```

<compelRedlight>true</compelRedlight>
<trailCapPlace>true</trailCapPlace>
</videoDetection>
</VideoDetectionList>

```

**2.14.18/CGI/ITS/LaneRun/ChnlCarCapType/channels/<ID>/Scene/<ID>/lanes/<ID>**

<b>/CGI/ITS/LaneRun/ChnlCarCapType/channels/&lt;ID&gt;/Scene/&lt;ID&gt;/lanes&lt;ID&gt;</b>	
<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire advanced parameter bound with vehicle type and snapshot type
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<CarCapTypeList>
<b>PUT</b>	
<b>Description</b>	Set advanced parameter bound with vehicle type and snapshot type
<b>Query</b>	None
<b>Inbound Data</b>	<CarCapTypeList>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**  
This protocol is prepared for setting and enquiry of advanced parameter bound with vehicle type and snapshot type and batch setting and enquiry of client or IE for corresponding illegal snapshot of every kind of vehicle through CGI protocol.

**Explanations on key parameters:**  
Scene/<ID> means scenario No. (1-32)  
lanes/<ID> means lane No. (1-5), five lanes are supported.  
<carType> means vehicle type. unknownCar-- car type unknown, coach--coach (change bus and motor coach into coach), car-car (change sedan car into car), truck --truck, including truck and pickup truck , van-minibus, bigTruck--heavy medium-sized truck (change big truck into heavy medium-sized truck), minivan-light mini truck (change minivan into light mini truck), motorcycle--motorbike (change non-motor vehicle into motorbike), pedestrian-- pedestrian, suv—SUV, midsizeBus--medium bus, trailer--trailer, dangerousCar--vehicle of hazardous chemicals  
< trafficWarnType > see 2.14.0 Type description.  
<capTypeEnable> means illegal type enabled. true-enabled, false-disabled

**CarCapTypeList XML Block**

```

<CarCapTypeList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<carCapType>
<carType opt=""><!-- opt, xs:string,"unknownCar,..."--></carType>
<capTypeList><!--dep,-->
<capType>
<trafficWarnType ><!--req, xs:integer--></trafficWarnType >
<capTypeEnable><!-- req, xs:boolean --></capTypeEnable>
</capType>
</capTypeList>
</carCapType>
</CarCapTypeList>

```

**Test cases**

**GET /CGI/ITS/LaneRun/ChnlCarCapType/channels/1/Scene/1/lanes/1**

**Request XML: none**

**Respond XML:<CarCapTypeList>**

**PUT /CGI/ITS/LaneRun/ChnlCarCapType/channels/1/Scene/1/lanes/1**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<?xml version="1.0" encoding="UTF-8"?>
<CarCapTypeList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<carCapType>
<carType>coach</carType>
<capTypeList>
<capType>
<trafficWarnType>Bayonet</trafficWarnType>
<capTypeEnable>true</capTypeEnable>
</capType>
</capTypeList>
</carCapType>
</CarCapTypeList>

```

**2.14.19/CGI/ITS/LaneRun/ChnlCapSet/channels/<ID>/Scene/<ID>/lanes/<ID>**

<b>/CGI/ITS/LaneRun/ChnlCapSet/channels/&lt;ID&gt;/Scene/&lt;ID&gt;/lanes/&lt;ID&gt; General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire advanced configuration of time bucket bound with snapshot type
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ChnlCapSetList>
<b>PUT</b>	
<b>Description</b>	Set advanced configuration of time bucket bound with snapshot type
<b>Query</b>	None
<b>Inbound Data</b>	<ChnlCapSetList>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for setting and enquiry of advanced configuration time bucket bound with snapshot type and setting and enquiry of client or IE for lane illegal snapshot type under every time bucket through CGI protocol.	
<b>Explanations on key parameters:</b> Scene/<ID> means scenario No. (1-32) Lanes/<ID> means lane No. Six (No. 1-6) lanes are supported. <scheduleID> means time bucket ID. Eight time buckets are supported. <beginTime> means starting time. Format example: 19:35:00 (values of hour, minute and second are 00.) <endTime> means end time. Format example: 19:35:00 (values of hour, minute and second are 00.) < trafficWarnType > see 2.14.0 Type description. <carTypeEnable> means illegal snapshot type enabled or not, true-enabled, false-disabled	

**ChnlCapSetList XML Block**

```

<ChnlCapSetList="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<chnlCapSetItem>
<scheduleID><!-- req, xs:integer; id --></scheduleID>
<beginTime><!-- dep, xs:time, ISO8601 time --></beginTime>
<endTime><!-- dep, xs:time, ISO8601 time --></endTime>
<capTypeList><!-- dep -->
<trafficWarnType><!-- req, xs:string --></trafficWarnType>
<carTypeEnable><!-- req, xs:boolean --></carTypeEnable>
</capTypeList>
</chnlCapSetItem>
</ChnlCapSetList>

```

**Test cases**

**GET /CGI/ITS/LaneRun/ChnlCapSet/channels/<ID>/Scene/<ID>/lanes/1**

**Request XML: none**

**Respond XML: <ChnlCapSetList>**

**PUT /CGI/ITS/LaneRun/ChnlCapSet/channels/<ID>/Scene/<ID>/lanes/1**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<?xml version="1.0" encoding="UTF-8"?>
<ChnlCapSetList>
<chnlCapSetItem>
<scheduleID>1</scheduleID>
<beginTime>00:00:00</beginTime>
<endTime>19:35:00</endTime>
<capTypeList>
<trafficWarnType>Bayonet</trafficWarnType>
<carTypeEnable>true</carTypeEnable>
</capTypeList>
</chnlCapSetItem>
</ChnlCapSetList>
```

**2.14.20/CGI/ITS/LaneRun/ChnlCarCapType/channels/<ID>/Scene/<ID>/lanes**

<b>/CGI/ITS/LaneRun/ChnlCarCapType/channels/&lt;ID&gt;/Scene/&lt;ID&gt;/lanes</b>	
<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire advanced parameter bound with vehicle type and snapshot type in batch
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<CarCapTypeList>
<b>PUT</b>	
<b>Description</b>	Set advanced parameter bound with vehicle type and snapshot type in batch
<b>Query</b>	None
<b>Inbound Data</b>	<CarCapTypeList>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This protocol is prepared for setting and enquiry of advanced parameter bound with vehicle type and snapshot type and batch setting and enquiry of client or IE for corresponding illegal snapshot of every kind of vehicle through CGI protocol.</p> <p><b>Explanations on key parameters:</b>  &lt;laneID&gt; means lane No. (1~5)  &lt;carType&gt; means vehicle type. unknownCar-- car type unknown, coach--coach (change bus and motor coach into coach), car-car (change sedan car into car), truck --truck, including truck and pickup truck , van-minibus, bigTruck--heavy medium-sized truck (change big truck into heavy medium-sized truck), minivan-light mini truck (change minivan into light mini truck), motorcycle--motorbike (change non-motor vehicle into motorbike), pedestrian-- pedestrian, suv—SUV, midsizeBus--medium bus, trailer--trailer, dangerousCar--vehicle of hazardous chemicals  &lt; trafficWarnType &gt; see 2.14.0 Type description.  &lt;capTypeEnable&gt; means illegal type enabled. true-enabled, false-disabled</p>	

**CarCapTypeList XML Block**

```
<CarCapTypeList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<laneCarCapType>
<laneID><!--req, xs:integer--></laneID>
<laneCarCapList>
<carCapType>
<carType opt=""><!-- opt, xs:string,"unknownCar,..."--></carType>
```

```

<capTypeList><!--dep,-->
<capType>
<trafficWarnType><!-- req, xs:string --></trafficWarnType>
<capTypeEnable><!-- req, xs:boolean --></capTypeEnable>
</capType>
</capTypeList>
</carCapType>
</laneCarCapList>
</laneCarCapType>
</CarCapTypeList>

```

**Test cases**

**GET /CGI/ITS/LaneRun/ChnlCarCapType/channels/1/Scene/1/lanes**

**Request XML:** none

**Respond XML:**<CarCapTypeList>

**PUT /CGI/ITS/LaneRun/ChnlCarCapType/channels/1/Scene/1/lanes**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```

<?xml version="1.0" encoding="UTF-8"?>
<CarCapTypeList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<laneCarCapType>
<laneID>1</laneID>
<laneCarCapList>
<carCapType>
<carType>coach</carType>
<capTypeList>
<capType>
<trafficWarnType>Bayonet</trafficWarnType>
<capTypeEnable>true</capTypeEnable>
</capType>
</capTypeList>
</carCapType>
</laneCarCapList>
</laneCarCapType>
</CarCapTypeList>

```

**2.14.21/CGI/ITS/LaneRun/ChnlCapSet/channels/<ID>/Scene/<ID>/lanes**

<b>/CGI/ITS/LaneRun/ChnlCapSet/channels/&lt;ID&gt;/Scene/&lt;ID&gt;/lanes General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire advanced configuration of time bucket bound with lane snapshot type in batch
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ChnlCapSetList>
<b>PUT</b>	
<b>Description</b>	Set advanced configuration of time bucket bound with lane snapshot type in batch
<b>Query</b>	None
<b>Inbound Data</b>	<ChnlCapSetList>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

This protocol is prepared for batch setting and enquiry of advanced configuration of time bucket bound with lane snapshot type and batch setting and enquiry of client or IE for lane illegal snapshot type under every time bucket through CGI protocol

**Explanations on key parameters:**

<laneID> means lane No. (1-6)

<scheduleID> means time bucket ID. Eight time buckets are supported.

<beginTime> means starting time. Format example: 19:35:00 (values of hour, minute and second are 00.)

<endTime> means end time. Format example: 19:35:00 (values of hour, minute and second are 00.)

< trafficWarnType > see 2.14.0 Type description.

<carTypeEnable> means illegal snapshot type enabled or not, true-enabled, false-disabled

**ChnlCapSetList XML Block**

```
<ChnlCapSetList="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<chnlCapSetItem>
<laneID><!-- opt, xs:integer; id --></laneID>
<laneCapSetList>
<laneCapSetItem>
<scheduleID><!-- req, xs:integer; id --></scheduleID>
<beginTime><!-- dep, xs:time, ISO8601 time --></beginTime>
<endTime><!-- dep, xs:time, ISO8601 time --></endTime>
<capTypeList><!-- dep -->
<trafficWarnType><!-- req, xs:string --></trafficWarnType>
<carTypeEnable><!-- req, xs:boolean --></carTypeEnable>
</capTypeList>
</laneCapSetItem>
</laneCapSetList>
</chnlCapSetItem>
</ChnlCapSetList>
```

**Test cases**

**GET /CGI/ITS/LaneRun/ChnlCapSet/channels/<ID>/Scene/<ID>/lanes**

**Request XML: none**

**Respond XML: <ChnlCapSetList>**

**PUT /CGI/ITS/LaneRun/ChnlCapSet/channels/<ID>/Scene/<ID>/lanes**

**Respond XML: <ChnlCapSetList>**

**Request XML: as below**

```
<?xml version="1.0" encoding="UTF-8"?>
<ChnlCapSetList>
<chnlCapSetItem>
<laneID>1</laneID>
<laneCapSetList>
<laneCapSetItem>
<scheduleID>1</scheduleID>
<beginTime>00:00:00</beginTime>
<endTime>19:35:00</endTime>
<capTypeList>
<trafficWarnType>Bayonet</trafficWarnType>
<carTypeEnable>true</carTypeEnable>
</capTypeList>
</laneCapSetItem>
</laneCapSetList>
</chnlCapSetItem>
</ChnlCapSetList>
```

2.14.22/CGI/ITS/LaneRun/DelaySnap/channels/<ID>/Scene/<ID>/lanes/<ID>

/CGI/ITS/LaneRun/DelaySnap/channels/<ID>/Scene/<ID> General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire delay snapshot parameter
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<DelaySnap>
<b>PUT</b>	
<b>Description</b>	Set delay snapshot parameter
<b>Query</b>	None
<b>Inbound Data</b>	<DelaySnap>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>            This protocol is prepared for enquiry and setting of delay snapshot parameter and enquiry and setting of client or IE for delay snapshot parameter through CGI protocol, including channel No./scenario/delay mode/snapshot distance.</p> <p><b>Explanations on key parameters:</b>            &lt;delayMode&gt; means delay mode, distance means delay distance and time means delay time.            apIntervallID&gt; means No. of delay snapshot picture (1-5)            &lt;snapInterval&gt; means interval of delay snapshot                When it means delay snapshot time, unit is ms and range is 0-2,000.            &lt;snapPositionID&gt; means position ID of snapshot picture, five picture positions (1-5) are supported            &lt;snapPosition&gt;            It means the first snapshot position when vehicle runs over loop. notsnap-no snapshot, firstLoopEnter-entry of the first loop; secondLoopEnter: entry of the second loop; secondLoopLeave-departure of the second loop; delay-delay.            It means the second snapshot position when vehicle runs over loop. firstLoopLeave: departure of the first coil; secondLoopEnter: entry of the second loop; secondLoopLeave-departure of the second loop; delay-delay            It means the third snapshot position when vehicle runs over loop. secondLoopEnter: entry of the second loop; secondLoopLeave-departure of the second loop; delay-delay            It means the fourth snapshot position when vehicle runs over loop. secondLoopLeave-departure of the second loop; delay-delay            It means the fifth snapshot position when vehicle runs over loop. delay-delay            &lt;recognizePlace&gt; Means recognition strategy. 0--recognize the first picture; 1--recognize the second picture; 2--recognize the first picture and then recognize the second picture, and the one with higher confidence coefficient shall apply. 3--recognize the second picture. If failure to recognize result, recognize the first picture; 4--recognize the first picture; if failure to recognize result, recognize the second picture. 5--recognize the third picture.            &lt;loopDelayTime&gt; means loop delay time, unit: ms</p>	

**DelaySnap XML Block**

```

<DelaySnap version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<delayMode><!--opt, xs:string, " distance,time" --></delayMode>
<snapIntervalList><!-- dep-->
<snapIntervalItem>
<snapIntervalID><!-- opt, xs:integer,--></snapIntervalID>
<snapInterval><!-- opt, xs:integer, meter--></snapInterval>
</snapIntervalItem>
</snapIntervalList>
<snapPositionList><!-- dep-->
<snapPositionItem>
<snapPositionID><!-- req, xs:integer--></snapPositionID>
<snapPosition><!--dep,opt,xs:string,"firstLoopEnter,firstLoopLeave,secondLoopEnter,second
  
```

```

LoopLeave,delay" --></snapPosition>
</snapPositionItem>
</snapPositionList>
<recognizePlace><!-- req, xs:string--></recognizePlace>
<loopDelayTime><!-- req, xs:integer, milliseconds--></loopDelayTime>
</DelaySnap>

```

**Test cases**

**GET /CGI/ITS/LaneRun/DelaySnap/channels/1/Scene/1/lanes/1**

**Request XML: none**

**Response XML: <DelaySnap>**

**PUT /CGI/ITS/LaneRun/DelaySnap/channels/1/Scene/1/lanes/1**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<?xml version="1.0" encoding="UTF-8"?>
<DelaySnap>
<delayMode>0</delayMode>
<snapIntervalList>
<snapIntervalItem>
<snapIntervalNO>1</snapIntervalNO>
<snapInterval>10</snapInterval>
</snapIntervalItem>
</snapIntervalList>
<snapPositionList>
<snapPositionItem>
<snapPositionID>1</snapPositionID>
<snapPosition>firstLoopEnter</snapPosition>
</snapPositionItem>
</snapPositionList>
<recognizePlace>0</recognizePlace>
<loopDelayTime>100</loopDelayTime>
</DelaySnap>

```

**14.23/CGI/ITS/LaneRun/DelaySnap/channels/<ID>/Scene/<ID>/lanes**

<b>/CGI/ITS/LaneRun/DelaySnap/channels/&lt;ID&gt;/Scene/&lt;ID&gt;/lanes General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire delay snapshot parameter in batch
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<DelaySnapList>
<b>PUT</b>	
<b>Description</b>	Set delay snapshot parameter in batch
<b>Query</b>	None
<b>Inbound Data</b>	<DelaySnapList>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol is prepared for batching enquiry and setting of delay snapshot and batch enquiry and setting of client or IE for delay snapshot parameter through CGI protocol, including channel No./scenario/delay mode/snapshot distance.	
<b>Explanations on key parameters:</b>	
<laneID> means lane No. Five lanes (No. 1-5) are supported.	
<delayMode> means delay mode, distance means delay distance and time means delay time.	
apIntervallID> means No. of delay snapshot picture (1-5)	
<snapInterval> means interval of delay snapshot	
When it means delay snapshot time, unit is ms and range is 0-2,000.	
<snapPositionID> means position ID of snapshot picture, five picture positions (1-5) are supported	



<snapPosition>  
 It means the first snapshot position when vehicle runs over loop. notsnap-no snapshot, firstLoopEnter-entry of the first loop; secondLoopEnter: entry of the second loop; secondLoopLeave-departure of the second loop; delay-delay.  
 It means the second snapshot position when vehicle runs over loop. firstLoopLeave: departure of the first coil; secondLoopEnter: entry of the second loop; secondLoopLeave-departure of the second loop; delay-delay  
 It means the third snapshot position when vehicle runs over loop. secondLoopEnter: entry of the second loop; secondLoopLeave-departure of the second loop; delay-delay  
 It means the fourth snapshot position when vehicle runs over loop. secondLoopLeave-departure of the second loop; delay-delay  
 It means the fifth snapshot position when vehicle runs over loop. delay-delay  
 <recognizePlace> Means recognition strategy. 0--recognize the first picture; 1--recognize the second picture; 2--recognize the first picture and then recognize the second picture, and the one with higher confidence coefficient shall apply. 3--recognize the second picture. If failure to recognize result, recognize the first picture; 4--recognize the first picture; if failure to recognize result, recognize the second picture. 5--recognize the third picture.  
 <loopDelayTime> means loop delay time, unit: ms

### DelaySnapList XML Block

```
<DelaySnapList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <delaySnap>
    <laneID><!-- req, xs:integer--></laneID>
    <delayMode><!-- dep,opt, xs:string," distance,time" --></delayMode>
    <snapIntervalList><!-- dep-->
    <snapIntervalItem>
    <snapIntervalID><!-- dep ,opt, xs:integer,--></snapIntervalID>
    <snapInterval><!-- dep, opt, xs:integer, meter--></snapInterval>
    </snapIntervalItem>
    </snapIntervalList>
    <snapPositionList><!-- dep-->
    <snapPositionItem>
    <snapPositionID><!-- dep, xs:integer--></snapPositionID>
    <snapPosition><!-- dep,opt,xs:string,"firstLoopEnter,firstLoopLeave,secondLoopEnter,second
    LoopLeave,delay" --></snapPosition>
    </snapPositionItem>
    </snapPositionList>
    <recognizePlace><!-- dep, xs:string--></recognizePlace>
    <loopDelayTime><!-- dep, xs:integer, milliseconds--></loopDelayTime>
  </delaySnap>
</DelaySnapList>
```

### Test cases

**GET /CGI/ITS/LaneRun/DelaySnap/channels/1/Scene/1/lanes**

**Request XML: none**

**Response XML: <DelaySnapList>**

**PUT /CGI/ITS/LaneRun/DelaySnap/channels/1/Scene/1/lanes**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<?xml version="1.0" encoding="UTF-8"?>
<DelaySnapList>
<delaySnap>
<laneID>1</laneID>
<delayMode>0</delayMode>
<snapIntervalList>
<snapIntervalItem>
<snapIntervalNO>1</snapIntervalNO>
```

```

<snapInterval>10</snapInterval>
<snapIntervalItem>
</snapIntervalList>
<snapPositionList>
<snapPositionItem>
<snapPositionID>1</snapPositionID>
<snapPosition>firstLoopEnter</snapPosition>
</snapPositionItem>
</snapPositionList>
<recognizePlace>0</recognizePlace>
<loopDelayTime>100</loopDelayTime>
</delaySnap>
<DelaySnapList>

```

#### 2.14.24/CGI/ITS/DataRun/PicRevInfo

/CGI/ITS/DataRun/PicRevInfo	General Resource v2.0
<b>GET</b>	
<b>Description</b>	Acquire picture receiving information
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<PicRevInfoList>
<b>PUT</b>	
<b>Description</b>	Set picture receiving information
<b>Query</b>	None
<b>Inbound Data</b>	<PicRevInfoList>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This protocol is prepared for the query and setting of photo stream receiving information, and equipment photo stream receiving information at client or IE via CGI protocol.</p> <p><b>Explanations on key parameters:</b>  &lt;ip&gt; means the client IP of receiving photo stream, character string format-- supports IPv6 address  &lt;picStreamEnable&gt; means the enabling status of photo stream channel, true-enabled; false-disabled.  &lt;revDataEnable&gt; means whether the photo stream data is being received; true- receiving, false-not receiving  &lt;revSocket&gt; means socket No. of client of the receiving photo stream; the interface is concealed and is not displayed.</p>	

#### PicRevInfoList XML Block

```

<PicRevInfoList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<picRevInfo>
<ip><!-- req, xs:string --></ip>
<picStreamEnable><!-- req, xs:boolean --></picStreamEnable>
<revDataEnable><!-- req, xs:boolean --></revDataEnable>
<revSocket><!-- opt, xs:interger --></revSocket>
</picRevInfo>
</PicRevInfoList>

```

#### GET /CGI/ITS/DataRun/PicRevInfo

**Request XML:** none

**Response XML:** < PicRevInfoList>

#### PUT /CGI/ITS/DataRun/PicRevInfo

**Response XML:** <ResponseStatus>

**Request XML:** as below

```

<?xml version="1.0" encoding="UTF-8"?>
<PicRevInfoList>
<picRevInfo>
<ip>10.30.41.59</ip>
<picStreamEnable>true</picStreamEnable>
<revDataEnable>true</revDataEnable>
<revSocket>1000</revSocket>
<picRevInfo>
</PicRevInfoList>

```

#### 2.14.25/CGI/ITS/DataRun/TrafficFlowByCar

/CGI/ITS/DataRun/TrafficFlowByCar General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire the statistical information of vehicle traffic (statistics made based on the vehicle type)
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<TraFlowByCarList>
<p><b>Explanations on protocol:</b>  This protocol is prepared for the query of vehicle traffic statistics and the statistical information of vehicle traffic at client or IE via CGI protocol.</p> <p><b>Explanations on key parameters:</b>  &lt;laneID&gt; means lane number. 5 lanes (1~5) are supported at present.  &lt;laneName&gt; means lane name.  &lt;carType&gt; means vehicle type. unknownCar-- Unknown car, coach-- Coach (bus and passenger bus are changed into passenger bus), car--Car (car is changed into passenger car), truck--Truck, including big and small ones, van--Van, bigTruck-- Medium-sized heavy truck (big truck is changed into heavy medium-sized truck), van--Light truck (small truck is changed into minor truck), motorcycle-- Motorcycle (non-motor vehicle is changed into motorcycle), pedestrian-- Pedestrian, suv—SUV, midsizeBus-- Medium-sized bus, trailer-- Trailer, dangerousCar-- Hazardous chemical truck.  &lt;beginTime&gt; means begin time  &lt;endTime&gt; represents end time  &lt;vehicleFlow&gt; means vehicle traffic, unit: Vehicle/time interval  &lt;carQueueLength&gt; means vehicle queuing length</p>	

#### TraFlowByCarList XML Block

```

<TraFlowByCarListversion="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<trafficFlowByCar>
<laneID><!-- req, xs:integer --></laneID>
<laneName><!-- dep, xs:string --></laneName>
<carType opt=""><!-- opt, xs:string,"unknownCar,..."--></carType>
<beginTime><!-- dep, xs:dateTime --></beginTime>
<endTime><!-- dep, xs:dateTime --></endTime>
<vehicleFlow><!-- dep, xs:integer --></vehicleFlow>
<carQueueLength><!-- dep, xs:integer --></ carQueueLength >
</trafficFlowByCar>
</TraFlowByCarList>

```

#### Test cases

**GET /CGI/ITS/DataRun/TrafficFlowByCar**

**Request XML:** none

**Response XML:** <TraFlowByCarList>

**Response XML:** as below

```

<?xml version="1.0" encoding="UTF-8"?>
<TraFlowByCarList>
<trafficFlowByCar>
<laneID>1</laneID>
<laneName>111</laneName>
<carType>coach</carType>
<beginTime>2017-07-07T01:04:47Z</beginTime>
<endTime>2017-07-07T09:04:47Z</endTime>
<headWay>2</headWay>
<carQueueLength>200</carQueueLength>
</trafficFlowByCar>
</TraFlowByCarList>

```

#### 2.14.26/CGI/ITS/DataRun/TrafficFlow

/CGI/ITS/DataRun/TrafficFlow General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire the statistical information of vehicle traffic
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<TrafficFlowList>
<p><b>Explanations on protocol:</b>  This protocol is prepared for the query of vehicle traffic statistics and the statistical information of vehicle traffic at client or IE via CGI protocol.</p> <p><b>Explanations on key parameters:</b>  &lt;laneID&gt; means lane number. 5 lanes (1~5) are supported at present.  &lt;laneName&gt; means lane name.  &lt;beginTime&gt; means begin time  &lt;endTime&gt; represents end time  &lt;vehicleFlow&gt; means vehicle traffic, unit: Vehicle/time interval  &lt;holdRate&gt; means time occupancy (%). True value needs converting by dividing 100 for webpage.  &lt;averageSpeed&gt; means average speed (in km/h). True value needs converting by dividing 100 for webpage.  &lt;headWay&gt; means time headway (in s/vehicle). True value needs converting by dividing 100 for webpage.  &lt;vehicleType&gt; means vehicle type. It is displayed when ticking “when statistics are made based on vehicle type” on webpage. 32 varieties supported at maximum. 30 varieties supported at present. 0 Unknown vehicle; 1 Two-compartment vehicle; 2 Car; 3 Speedster; 4 Small car; 5 Minicar; 6. MPV; 7 SUV; 8 Large bus; 9 Medium-sized bus; 10 Van; 11. Mini van; 12 Large truck; 13 Medium-sized truck; 14 Oil tank truck; 15 Crane; 16 Slag car; 17 Small truck; 18 Pick-up 19 Mini pick-up; 20 Two-wheeled vehicle; 21 Three-wheeled vehicle; 22 Pedestrian; 23 License plate deviation; 24 License plate detection; 25 Headstock; 26 Tailstock; 27 Car lamp; 28 SUV/ MPV; 29 Trailer; 1030 Small car, 1031, large car 1032, medium car 1033, super large car  &lt;vehicleNum&gt; means the number of vehicles. It is displayed when ticking “when statistics are made based on vehicle type” on webpage.  &lt;carQueueLength&gt; means vehicle queuing length  &lt;headDistance&gt; means head distance: Distance between the front and back vehicles, in mm  &lt;roomRate&gt; means space occupancy (%). True value needs converting by dividing 100 for webpage.  &lt;runState&gt; means running state: 0- Unknown; 1-Driving stop; 2-Slow driving; 3- No vehicle; 4-Smooth  &lt;sceneID&gt; represents the scene number: 0-15</p>	

TrafficFlowList XML Block

```

<TrafficFlowList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<trafficFlow>
<laneID><!-- req, xs:integer --></laneID>
<laneName><!-- dep, xs:string --></laneName>
<beginTime><!-- dep, xs:dateTime --></beginTime>
<endTime><!-- dep, xs:dateTime --></endTime>
<vehicleFlow><!-- dep, xs:integer --></vehicleFlow>
<holdRate><!-- dep, xs:integer --></holdRate>
<averageSpeed><!-- dep, xs:integer,km/h --></averageSpeed>
<headWay><!-- dep, xs:integer --></headWay>
<vehicleTypeList><!-- dep,opt -->
<vehicleTypeItem>
<vehicleType><!-- dep, xs:integer --><vehicleType>
<vehicleNum><!-- dep, xs:integer --><vehicleNum>
</vehicleTypeItem>
</vehicleTypeList>
<carQueueLength><!-- dep, xs:integer --></ carQueueLength >
<hardDistance><!-- dep, xs:integer --></hardDistance>
<roomRate><!-- dep, xs:integer --></roomRate>
<runState><!-- dep, xs:integer --></runState>
<sceneID><!-- req, xs:integer --></sceneID>
</trafficFlow>
</TrafficFlowList>

```

**Test cases**

**GET /CGI/ITS/DataRun/TrafficFlow**

**Request XML: none**

**Response XML: <TrafficFlowList>**

**The answer is as below:**

```

<?xml version="1.0" encoding="UTF-8"?>
<TrafficFlowList>
<trafficflow>
<laneID>1</laneID>
<laneName>111</laneName>
<beginTime>2017-07-07T01:04:47Z</beginTime>
<endTime>2017-07-07T09:04:47Z</endTime>
<vehicleFlow>2</vehicleFlow>
<holdRate>80</holdRate>
<averageSpeed>70</averageSpeed>
<headWay>2</headWay>
<vehicleTypeList>
<vehicleTypeItem>
<vehicleType>1<vehicleType>
<vehicleNum>2<vehicleNum>
</vehicleTypeItem>
</vehicleTypeList>
<carQueueLength>200</ carQueueLength >
<hardDistance>5</hardDistance>
<roomRate>3000</roomRate >
<runState>0</runState>
<sceneID>1</sceneID>
</trafficflow>
</TrafficFlowList>

```

**2.14.27/CGI/ITS/ShotPara/RecoDetectingPara/channels/<ID>**

**/CGI/ITS/ShotPara/RecoDetectingPara/channels/<ID> General Resource v2.0**

<b>GET</b>	
<b>Description</b>	Acquire identification and detection parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<RecoDetectingPara>
<b>PUT</b>	
<b>Description</b>	Set identification and detection parameters
<b>Query</b>	None
<b>Inbound Data</b>	<RecoDetectingPara>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

This protocol is prepared for the acquiring and setting of detection setting parameters in identification parameters and the device identification and detection setting parameters at client or IE via CGI protocol.

**Explanations on key parameters:**

<type> means function type: powersync--Power synchronization function, manualmode-- Enable manual mode, CRCcheck--CRC check function, videospeed-- Video speed measurement function, redlightgain--Red light gain enabling, ftp--ftp,imagesynthesis-- Image synthesis function, maindriverfacedetect-- Main driver face detection function, carLogorec-- Car logo recognition enabling, safetybelt-- Safety belt recognition enabling, carplatedetect-- Vehicle type recognition enabling, secpilotdetect-- Copilot face recognition function, pictureoutput-- Picture output switch, licenseplateoutput-- License plate photo output enabling, maindriverfaceoutput-- Pilot face recognition photo output enabling, secpilotdetecoutput-- Copilot face photo output enabling, quickshot-- Quick shot enabling, closeshot-- Continuous close shot capturing, listeningphone-- Phone receiving and calling recognition enabling, sunvisor- Sun shield recognition enabling, comitypeople- No pedestrian comity enabling, leftcomitystraight- Enabling of no avoidance for left turn and going straight, branddetect- Vehicle brand and model recognition function, agriculdetect- Agricultural vehicle recognition, electromobiledetect- Electromobile recognition, highangledetect - Large-angle license plate recognition, yellowlabelcar- Yellow label car detection, abnormallicenseplate- Abnormal license plate detection, nomotordetect- Non-motor vehicle and pedestrian detection, pendant- Pendant detection, tissuebox- Tissue box detection, annualinspectionlabel- Annual label detection, highbeam- High beam detection, outtopwindow- Sunroof people standing detection, latheparabolic- Detection of things throwing through car window, dangerouscardetect- Hazardous chemical recognition, checkcarhead- head stock and tailstock detection, motorvehicle- Motor vehicle detection, nonmotorvehicle- Non-motor vehicle detection, pedestriandetect- Pedestrian detection, parkevent parking event, recessiveevent retrograde event, variableroadevent change lane event, snakelikeevent serpentine event, trafficJamevent congestion event

<enabled> means if the corresponding function has been enabled; true- started; false- closed.

**RecoDetectingPara XML Block**

```
<RecoDetectingPara version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<carFeatureList>
<carFeature>
<type><!-- opt, xs:string--></type>
<enabled><!-- opt, xs:boolean --></enabled>
</carFeature>
</carFeatureList>
<behaviorFeatureList>
<radarEventList>
<radarEvent>
<type><!-- opt, xs:string--></type>
<enabled><!-- opt, xs:boolean --></enabled>
```

```

</radarEvent>
<radarEvent>
<type><!-- opt, xs:string--></type>
<enabled><!-- opt, xs:boolean --></enabled>
</radarEvent>
</radarEventList>
</RecoDetectingPara>

```

**Test cases**

**GET/CGI/ITS/ShotPara/RecoDetectingPara/channels/1**

**Request XML:** none

**Response XML:** <RecoDetectingPara>

**PUT/CGI/ITS/ShotPara/RecoDetectingPara/channels/1**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```

<?xml version="2.0" encoding="UTF-8"?>
<RecoDetectingPara>
<carFeatureList>
<carFeature>
<type>agriculdetect</type>
<enabled>true</enabled>
</carFeature>
<carFeature>
<type>yellowlabelcar</type>
<enabled>true</enabled>
</carFeature>
</carFeatureList>
<behaviorFeatureList>
<behaviorFeature>
<type>abnormallicenseplate</type>
<enabled>true</enabled>
</behaviorFeature>
<behaviorFeature>
<type>nomotordetect</type>
<enabled>true</enabled>
</behaviorFeature>
</behaviorFeatureList>
<radarEventList>
<radarEvent>
<type>parkevent</type>
<enabled>true</enabled>
</radarEvent>
<radarEvent>
<type>recessiveevent</type>
<enabled>true</enabled>
</radarEvent>
</radarEventList>
</RecoDetectingPara>

```

**2.14.28/CGI/ITS/ShotPara/BasicSetting/channels/<ID>**

/CGI/ITS/ShotPara/BasicSetting/channels/<ID> General Resource v2.0

GET

<b>Description</b>	Acquire basic setting parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<BasicSetting>
<b>PUT</b>	
<b>Description</b>	Set basic setting parameters
<b>Query</b>	None
<b>Inbound Data</b>	<BasicSetting>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This protocol is prepared for the acquiring and setting of the basic settings in recognition parameters and query and setting of basic setting parameters at client or IE via CGI protocol, including the first Chinese character, the first letter, Chinese characters to be retrieved, unbelievable first Chinese character, confidence of recognition algorithm, license plate size, analysis frames, reliability threshold value, etc.</p> <p><b>Explanations on key parameters:</b>  &lt;firstCharacters&gt; means first Chinese character.  &lt;firstAlphabet&gt; means first letter.  &lt;waitRetrieveCharacters&gt; means Chinese characters to be retrieved (a total of 8 characters can be input at most)  &lt;unbelieveFirstCharacters&gt; means unbelievable first Chinese character (a total of 8 characters can be input at most)  &lt;recognitionAlgorithmConfid&gt; means confidence of recognition algorithm (value range: 0-28).  &lt;licenseSize&gt; means license plate size; 0- Retained; 1- Small license plate; 2- Large license plate; 3- Micro license plate; small license plate is defaulted.  &lt;analyzeFrameNum&gt; means analysis frames (value range: 0-25; defaulted value: 8).  &lt;reliabilityThreshold&gt; means reliability threshold value (value range: 0-10; defaulted value: 7).</p>	

#### **BasicSetting XML Block**

```

<BasicSetting version="2.0"xmlns="http://www.isapi.com/ver20/XMLSchema">
<firstCharacters><!-- req, xs:string --></firstCharacters>
<firstAlphabet><!-- req, xs:string --></firstAlphabet>
<waitRetrieveCharactersList>
<waitRetrieveCharactersData>
<waitRetrieveCharacters><!-- req, xs:string --></waitRetrieveCharacters>
</waitRetrieveCharactersData>
</waitRetrieveCharactersList>
<unbelieveCharactersList>
<unbelieveCharactersData>
<unbelieveFirstCharacters><!-- req, xs:string --></unbelieveFirstCharacters>
</unbelieveCharactersData>
</unbelieveCharactersList>
<recognitionAlgorithmConfid><!-- req, xs:integer --></recognitionAlgorithmConfid>
<licenseSize><!-- req, xs:integer --></licenseSize>
<analyzeFrameNum><!-- req, xs:integer --></analyzeFrameNum>
<reliabilityThreshold><!-- req, xs:integer --></reliabilityThreshold>
</BasicSetting>

```

#### **Test cases**

**GET /CGI/ITS/ShotPara/BasicSetting/channels/1**

**Request XML:** none

**Response XML:** <BasicSetting>

**PUT /CGI/ITS/ShotPara/BasicSetting/channels/1**

**Response XML:** <ResponseStatus>

**Request XML:** as below



```

<?xml version="2.0" encoding="UTF-8"?>
<BasicSetting>
<firstCharacters>Tianjin </firstCharacters>
<firstAlphabet>A</firstAlphabet>
<waitRetrieveCharactersList>
<waitRetrieveCharactersData>
<waitRetrieveCharacters>Hebei</waitRetrieveCharacters>
</waitRetrieveCharactersData>
<waitRetrieveCharactersData>
<waitRetrieveCharacters>Beijing</waitRetrieveCharacters>
</waitRetrieveCharactersData>
</waitRetrieveCharactersList>
<unbelieveCharactersList>
<unbelieveCharactersData>
<unbelieveFirstCharacters>Guangdong</unbelieveFirstCharacters>
</unbelieveCharactersData>
<unbelieveCharactersData>
<unbelieveFirstCharacters>Shanghai</unbelieveFirstCharacters>
</unbelieveCharactersData>
</unbelieveCharactersList>
<recognitionAlgorithmConfid>20</recognitionAlgorithmConfid>
<licenseSize>1</licenseSize>
<analyzeFrameNum>8</analyzeFrameNum>
<reliabilityThreshold>7</reliabilityThreshold>
</BasicSetting>

```

#### 2.14.29/CGI/ITS/ShotPara/LicenseSetting/channels/<ID>

/CGI/ITS/ShotPara/LicenseSetting/channels/<ID> General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire license plate setting parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<LicenseSetting>
<b>PUT</b>	
<b>Description</b>	Set license plate setting parameters
<b>Query</b>	None
<b>Inbound Data</b>	<LicenseSetting>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This protocol is prepared for the acquiring and setting of the license plate setting parameters in recognition parameters and query and setting of detection region parameters at client or IE via CGI protocol, including the first Chinese character, the first letter, the second letter or number, vehicle brand, etc.</p> <p><b>Explanations on key parameters:</b>  &lt;optimId&gt; means the serial number of license plate optimization (value range: 0-15)  &lt;enabled&gt; means if the corresponding function has been enabled; true- started; false- closed.  &lt;firstCharacters&gt; means the first Chinese character.  &lt;firstLetter&gt; means the first letter  &lt;secondLetter&gt; means the second letter or number.  &lt;logoType&gt; means vehicle logo type.  &lt;licenseRuleEnable&gt; means the value of license plate rule; 0- Chinese character; 1- Letter; 2- Number; 3- Letter or number.</p>	

### LicenseSetting XML Block

```
<LicenseSetting version="2.0"xmlns="http://www.isapi.com/ver20/XMLSchema">
<LicenseSettingList>
<LicenseSettingData>
<optimId><!-- req, xs:string --></optimId>
<enabled><!-- req, xs:boolean --></enabled>
<firstCharacters><!-- req, xs:string --></firstCharacters>
<firstLetter><!-- req, xs:string --></firstLetter>
<secondLetter><!-- req, xs:string --></secondLetter>
<logoType><!-- req, xs:string --></logoType>
</LicenseSettingData>
</LicenseSettingList>
<LicenseRuleList>
<LicenseRuleData>
<licenseRuleEnable><!-- opt, xs:integer--></licenseRuleEnable>
</LicenseRuleData>
</LicenseRuleList>
</LicenseSetting>
```

#### Test cases

**GET /CGI/ITS/ShotPara/LicenseSetting/channels/1**

**Request XML:** none

**Response XML:** <LicenseSetting>

**PUT /CGI/ITS/ShotPara/LicenseSetting/channels/1**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="2.0" encoding="UTF-8"?>
<LicenseSetting>
<LicenseSettingList>
<LicenseSettingData>
<optimId>2</optimId>
<enabled>true</enabled>
<firstCharacters>Beijing</firstCharacters>
<firstLetter>A</firstLetter>
<secondLetter>C</secondLetter>
<logoType>25</logoType>
</LicenseSettingData>
<LicenseSettingData>
<optimId>4</optimId>
<enabled>true</enabled>
<firstCharacters>Tianjin </firstCharacters>
<firstLetter>A</firstLetter>
<secondLetter>C</secondLetter>
<logoType>25</logoType>
</LicenseSettingData>
</LicenseSettingList>
<LicenseRuleList>
<LicenseRuleData>
<licenseRuleEnable>0</licenseRuleEnable>
</LicenseRuleData>
<LicenseRuleData>
<licenseRuleEnable>1</licenseRuleEnable>
</LicenseRuleData>
</LicenseRuleList>
</LicenseSetting>
```

### 2.14.30/CGI/ITS/ExFixture/SightLightSync/channels/<ID>

/CGI/ITS/ExFixture/SightLightSync/channels/<ID> General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire signal lamp synchronization parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<SightLightSync>
<b>PUT</b>	
<b>Description</b>	Set signal lamp synchronization parameters
<b>Query</b>	None
<b>Inbound Data</b>	<SightLightSync>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>            This protocol is prepared for the acquiring and setting of signal lamp synchronization parameters of signal lamp and query and setting of signal lamp synchronization parameters at client or IE via CGI protocol, including the detection mode, corrected value of red light running time, red light gain enabling, red light gain grade, signal lamp synchronization enabling, phase position, signal frequency, etc.</p> <p><b>Explanations on key parameters:</b>            &lt;detectMode&gt; means detection mode; 0- Outer trigger; 1- Video detection; 2- Automatic switch.            &lt;lightTimeAcceptDiff&gt; means the corrected value of red light running time (value range: 0-3 s).            &lt;lightDetectTimeOut&gt; means the time of connection loss overtime detection time of signal light (value range: 1-30 s).            &lt;lightPhase&gt; means phase position (value range: 0-360); defaulted value: 0.            &lt;redLightEnhanceEnabled&gt; means gain enabling of red light; enabling is defaulted.            &lt;redLightEnhanceLevel&gt; means gain grade of red light (value range: 0-10).            &lt;sightSyncEnabled&gt; means synchronization enabling of red light; enabling is defaulted.            &lt;signalFrequency&gt; means signal frequency; defaulted value: 50.</p>	

#### SightLightSync XML Block

```
<SightLightSync version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<detectMode><!-- req, xs:integer --></detectMode>
<lightTimeAcceptDiff><!-- req, xs:integer --></lightTimeAcceptDiff>
<lightDetectTimeOut><!-- req, xs:integer --></lightDetectTimeOut >
<lightPhase><!-- req, xs:integer --></lightPhase>
<redLightEnhanceEnabled><!-- req, xs:boolean --></redLightEnhanceEnabled>
<redLightEnhanceLevel><!--dep, depends on <redLightEnhanceEnabled>,
xs:string --></redLightEnhanceLevel>
<sightSyncEnabled><!-- req, xs:boolean --></sightSyncEnabled>
<signalFrequency><!--dep, depends on <sightSyncEnabled>, xs:string --></signalFrequency>
</SightLightSync>
```

#### Test cases

**GET /CGI/ITS/ExFixture/SightLightSync/channels/1**

**Request XML:** none

**Response XML:** <SightLightSync>

**PUT /CGI/ITS/ExFixture/SightLightSync/channels/1**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="2.0" encoding="UTF-8"?>
<SightLightSync>
<detectMode>0</detectMode>
<lightTimeAcceptDiff>2</lightTimeAcceptDiff>
<lightDetectTimeOut>20</lightDetectTimeOut>
<lightPhase>120</lightPhase>
<redLightEnhanceEnabled>true</redLightEnhanceEnabled>
<redLightEnhanceLevel>5</redLightEnhanceLevel>
<sightSyncEnabled>true</sightSyncEnabled>
<signalFrequency>50</signalFrequency>
</SightLightSync>
```

**2.14.31/CGI/ITS/DayToNightThreshold/channels/<ID>**

<b>/CGI/ITS/DayToNightThreshold/channels/&lt;ID&gt;General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire the threshold value parameters of daytime and night
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<b>&lt;DayToNightThreshold&gt;</b>
<b>PUT</b>	
<b>Description</b>	Set the threshold value parameters of daytime and night
<b>Query</b>	None
<b>Inbound Data</b>	<b>&lt;DayToNightThreshold&gt;</b>
<b>Success Return</b>	<b>&lt;ResponseStatus&gt;</b>

**Explanations on protocol:**

This protocol is prepared for the query and setting of daytime and night threshold value and daytime and night threshold value parameters at client or IE via CGI protocol.

**Explanations on key parameters:**

<colorToGrayDay> means daytime threshold value. If the relative brightness is higher than the value, switch to daytime (0-100).

<colorToGrayNight> means night threshold value. If the relative brightness is lower than the value, switch to night (0-100) (the daytime brightness is higher than night brightness).

**SyncSignalOutputListXML Block**

```
<DayToNightThreshold version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<colorToGrayDay><!-- req, xs:integer --></colorToGrayDay>
<colorToGrayNight><!-- req, xs:integer --></colorToGrayNight>
</DayToNightThreshold>
```

**Test cases**

**GET /CGI/ITS/DayToNightThreshold/channels/<ID>**

**Request XML:** none

**Response XML:** **<DayToNightThreshold>**

**PUT /CGI/ITS/DayToNightThreshold/channels/<ID>**

**Response XML:** **<ResponseStatus>**

**Request XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<DayToNightThreshold>
<colorToGrayDay>90</colorToGrayDay>
<colorToGrayNight>80</colorToGrayNight>
</DayToNightThreshold>
```

## 2.14.32/CGI/ITS/ExFixture/DevStatus/channels/<ID>

<b>/CGI/ITS/ExFixture/DevStatus/channels/&lt;ID&gt; General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire device state information.
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<DevStatus>

### Explanations on protocol:

This protocol is prepared for the query of device state at client or IE via CGI protocol.

### Explanations on key parameters:

<vehicleStatus> means the state of vehicle detector; online- Online; outline- Offline; fault- Fault.

<cameraTem> means camera temperature (value range: -100-100) (the precision is 0.1 after the software is valued, deducted with 1,000 and then divided by 10) -50.5°C (-50.5×10 + 1000 = 495). Send 495 online.

<redCheckStatus> means the state of red light signal monitor; online- Online; outline- Offline; fault- Fault.

<pictureBrightness> means image brightness (0-255)

<signalSyncStatus> means power synchronization state; true- Synchronized; fault- Not synchronized.

<redLightID> means red light number. 1~16 are supported at present.

<redLightStatus> means the state of red light; 0—Green light; 1—Red light; 2—Yellow light; 3—Unknown

<redLightID> means loop number. 1~10 are supported at present.

<loopStatus> means loop state; online- Online; outline- Offline; fault- Fault.

### DevStatus XML Block

```
<DevStatus version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<vehicleStatus><!--req,xs:string-- ></vehicleStatus>
<cameraTem><!--req,xs:string-- ></cameraTem>
<redCheckStatus><!--req,xs:string-- ></redCheckStatus>
<pictureBrightness><!--req,xs:string-- ></pictureBrightness>
<signalSyncStatus><!--req,xs:boolean -- ></signalSyncStatus>
<redLightList><!--opt-- >
<redLight>
<redLightID><!-- req, xs:integer; id --></redLightID>
<redLightStatus><!--dep,xs:integer-- ></redLightStatus>
</redLight>
</redLightList>
<loopList><!--opt-- >
<loop>
<loopID><!-- req, xs:integer; id --></loopID>
<loopStatus><!--dep,xs:string-- ></loopStatus>
</loop>
</loopList>
</DevStatus>
```

### Test cases

**GET /CGI/ITS/DevStatus/channels/1**

**Request XML: none**

**Response XML: <DevStatus>**

**Response XML: as below**

```
<?xml version="1.0" encoding="UTF-8"?>
<DevStatus>
<vehicleStatus>online</vehicleStatus>
<cameraTem>495</cameraTem>
<redCheckStatus>online</redCheckStatus>
<pictureBrightness>100</pictureBrightness>
```

```

<signalSyncStatus>true</signalSyncStatus>
<redLightList>
<redLight>
<redLightID>1</redLightID>
<redLightStatus>1</redLightStatus>
</redLight>
</redLightList>
<loopList>
<loop>
<loopID>1</loopID>
<loopStatus>online</loopStatus>
</loop>
</loopList>
</DevStatus>

```

### 2.14.33/CGI/ITS/ExFixture/LoopTrigStatus/channels/<ID>

/CGI/ITS/ExFixture/LoopTrigStatus/channels/<ID> General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire coil trigger information
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<LoopTrigStatusList>
<p><b>Explanations on protocol:</b> This protocol is prepared for the query of loop trigger information at at client or IE via CGI protocol.</p> <p><b>Explanations on key parameters:</b> &lt;IOID&gt; means IO number. 1~10 are supported at present. &lt;trigTime&gt; means loop trigger time. &lt;trigState&gt; means loop trigger state; 0-- Empty; 1-- Enter; 2--Leave</p>	

#### LoopTrigStatusList XML Block

```

<LoopTrigStatusList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<loopTrigStatusItem>
<IOID><!-- dep, xs:integer; id --></IOID>
<trigTime><!-- dep, xs:dateTime></trigTime>
<trigState><!-- dep,sx:integer-- ></trigState>
</loopTrigStatusItem>
</LoopTrigStatusList>

```

#### Test cases

**GET /CGI/ITS/ExFixture/LoopTrigStatus/channels/1**

**Request XML: none**

**Response XML: <LoopTrigStatusList>**

**Response XML: as below**

```

<?xml version="1.0" encoding="UTF-8"?>
<LoopTrigStatusList>
<loopTrigStatusItem>
<IOID>1</IOID>
<trigTime>2017-07-07T01:04:47Z</trigTime>
<trigState>1</trigState>
</loopTrigStatusItem>
</LoopTrigStatusList>

```

### 2.14.34/CGI/ITS/ExFixture/LoopTrigStatus/channels/<ID>/lanes

/CGI/ITS/ExFixture/LoopTrigStatus/channels/<ID>/lanes General Resource v2.0	
<b>GET</b>	

<b>Description</b>	Acquire coil trigger information in batch
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<LoopTrigStatusList>
<p><b>Explanations on protocol:</b> This protocol is prepared for the query of loop trigger information in batch at client or IE via CGI protocol.</p> <p><b>Explanations on key parameters:</b> &lt;laneID&gt; means lane No. (1~5) &lt;loopID&gt; means loop number. 1~10 are supported at present (0~10). &lt;IOID&gt; means IO number. 1~10 are supported at present. &lt;trigTime&gt; means loop trigger time. &lt;trigState&gt; means loop trigger state; 0-- Empty; 1-- Enter; 2--Leave</p>	

**LoopTrigStatusList XML Block**

```
<LoopTrigStatusList version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<loopTrigStatusItem>
<laneID><!-- req, xs:integer; id --></laneID>
<laneLoopList><!-- dep -->
<laneLoopItem>
<loopID><!-- dep, xs:integer; id --></loopID>
<IOID><!-- dep, xs:integer; id --></IOID>
<trigTime><!-- dep, xs:dateTime --></trigTime>
<trigState><!-- dep, xs:integer --></trigState>
</laneLoopItem>
</laneLoopList>
</loopTrigStatusItem>
</LoopTrigStatusList>
```

**Test cases**

**GET /CGI/ITS/ExFixture/LoopTrigStatus/channels/1/lanes**

**Request XML:** none

**Response XML:** <LoopTrigStatusList>

**Response XML:** as below

```
<?xml version="1.0" encoding="UTF-8"?>
<LoopTrigStatusList>
<loopTrigStatusItem>
<laneID>1</laneID>
<laneLoopList><!-- dep -->
<laneLoopItem>
<loopID>1</loopID>
<IOID>1</IOID>
<trigTime>2017-07-07T01:04:47Z</trigTime>
<trigState>1</trigState>
</laneLoopItem>
</laneLoopList>
</loopTrigStatusItem>
</LoopTrigStatusList>
```

**2.14.35/CGI/ITS/SystemRun/DeviceInfo/channels/<ID>**

<b>/CGI/ITS/SystemRun/DeviceInfo/channels/&lt;ID&gt;</b>		<b>General Resource</b>
<b>v2.0</b>		
<b>GET</b>		
<b>Description</b>	Acquire device parameters.	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<DeviceInfo>	
<b>PUT</b>		

<b>Description</b>	Set device parameters.
<b>Query</b>	None
<b>Inbound Data</b>	<DeviceInfo>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

This protocol is prepared for the query and setting of device information at client or IE via CGI protocol, including device number, device type number, authority code, etc.

**Explanations on key parameters:**

<deviceID> means device number, the length of which should be no longer than 63 characters.

<deviceTypeID> means device type number (1 or 2).

<deviceCode> means authority code, the length of which should be no longer than 63 characters.

<securityCodePos> means start bit of anti-counterfeiting code (value range: 0-64).

<securityCodeLen> means length of anti-counterfeiting code (value range: 0-64).

<waterMarkEnabled> means whether water mark is enabled; false: Disabled; true: Enabled.

<virtualAlarmEnable> means whether virtual alarm is enabled; false: Disabled; true: Enabled.

<virtualAlarmThreshold> means flexibility of virtual alarm (range: 0~100); defaulted value: 50.

**DeviceInfo XML Block**

```
<DeviceInfo version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<deviceID><!-- req, xs:string --><deviceID>
<deviceTypeID><!-- req, xs:string --></deviceTypeID>
<deviceCode><!-- req, xs:string --><deviceCode>
<securityCodePos><!-- req, xs:integer --></securityCodePos>
<securityCodeLen><!-- req, xs:integer --></securityCodeLen>
<waterMarkEnabled><!-- req, xs:boolean --></waterMarkEnabled>
<virtualAlarmEnable><!-- req, xs:boolean --></virtualAlarmEnable>
<virtualAlarmThreshold><!-- dep, xs:integer --></virtualAlarmThreshold>
</DeviceInfo>
```

**Test cases**

**GET /CGI/ITS/SystemRun/DeviceInfo/channels/1**

**Request XML: none**

**Response XML: <DeviceInfo>**

**PUT /CGI/ITS/SystemRun/DeviceInfo/channels/1**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<?xml version="1.0" encoding="UTF-8"?>
<DeviceInfo>
<deviceID>10000</deviceID>
<deviceTypeID>1</deviceTypeID>
<deviceCode> 00001</deviceCode>
<securityCodePos>64</securityCodePos>
<securityCodeLen>64</securityCodeLen>
<waterMarkEnabled>true</waterMarkEnabled>
<virtualAlarmEnable>true</virtualAlarmEnable>
<virtualAlarmThreshold>10</virtualAlarmThreshold>
</DeviceInfo>
```

**2.14.36/CGI/ITS/SystemRun/FilterPlate/channels/<ID>/Scene/<ID>**

<b>CGI/ITS/SystemRun/FilterPlate/channels/&lt;ID&gt;/Scene/&lt;ID&gt; General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire screening license plate parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<FilterPlate>
<b>PUT</b>	
<b>Description</b>	Set screening license plate parameters



<b>Query</b>	None
<b>Inbound Data</b>	<FilterPlate>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

This protocol is prepared for the query and setting of screening license plate parameters at client or IE via CGI protocol, including treatment type of screening license plate, statistics interval, number and interval of analog triggers, etc.

**Explanations on key parameters:**

<noLicenceEnabled> means whether the screened vehicle with no license plate is enabled; true- Enabled; false- Disabled.

<repLicenceEnabled> means whether the screening repetitive vehicle is enabled; true- Enabled; false- Disabled.

<statisticsTime> means interval of statistical time, unit: s; range: 1~300

<analogTriggerCount> means number of analog triggers; 1~5 are supported at present.

<analogTriggerInterval> means interval of analog triggers, unit: ms; range: 200~2,000

<repPositionEnabled> represents whether the filtering repeat area is enabled, true-enabled, false-disabled

<repPositionSensitivity> represents the sensitivity of filtering repetitive areas, 0-low, 1-medium, 2-high, default 1-medium

**FilterPlate XML Block**

```
<FilterPlate version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<noLicenceEnabled><!-- req, xs:boolean --><noLicenceEnabled>
<repLicenceEnabled><!-- req, xs:boolean --></repLicenceEnabled>
<statisticsTime><!-- dep, xs:integer,seconds --></statisticsTime>
<analogTriggerCount opt="1,2,3,4,5"><!-- opt, xs:integer --></analogTriggerCount>
<analogTriggerInterval><!-- req, xs:integer, milliseconds --></analogTriggerInterval>
<repPositionEnabled><!-- req, xs:boolean --></repPositionEnabled>
<repPositionSensitivity><!-- req, xs:integer --></repPositionSensitivity>
</FilterPlate>
```

**Test cases**

**GET /CGI/ITS/SystemRun/FilterPlate/channels/1/Scene/1**

**Request XML: none**

**Response XML: <FilterPlateList>**

**PUT /CGI/ITS/SystemRun/FilterPlate/channels/1/Scene/1**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<?xml version="1.0" encoding="UTF-8"?>
<FilterPlate>
<noLicenceEnabled>true</noLicenceEnabled>
<repLicenceEnabled>true</repLicenceEnabled>
<statisticsTime>60</statisticsTime>
<analogTriggerCount>5</analogTriggerCount>
<analogTriggerInterval>1000</analogTriggerInterval>
<repPositionEnabled>true</repPositionEnabled>
<repPositionSensitivity>1</repPositionSensitivity>
</FilterPlate>
```

**2.14.37/CGI/ITS/SystemRun/SnapshotDetection/channels/<ID>/Scene/<ID>**

<b>CGI/ITS/SystemRun/SnapshotDetection/channels/&lt;ID&gt;/Scene/&lt;ID&gt;</b>	
<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire snapshot detection parameters
<b>Query</b>	None
<b>Inbound Data</b>	None

<b>Success Return</b>	<SnapshotDetection>
<b>PUT</b>	
<b>Description</b>	Set snapshot detection parameters
<b>Query</b>	None
<b>Inbound Data</b>	<SnapshotDetection>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This protocol is prepared for the query and setting of snapshot detection parameters and the query and setting of device snapshot detection parameters at client or IE via CGI protocol, including whether front and back snapshots are used, snapshot mode, mode switch interval, bayonet and number of illegal snapshots, etc.</p> <p><b>Explanations on key parameters:</b>  &lt;enabled&gt; means whether the front and back snapshots are enabled; true- started; false- closed.  &lt;relationCameraIP&gt; means the IP of related cameras.  &lt;verticalSnapEnabled&gt; means whether vertical snapshot is enabled; true- started; false- closed.  &lt;peopleRedSnapEnable&gt; means whether pedestrian's runs the red light is enabled; 0: Not supported; 1: Supported and closed; 2: Supported and started.  &lt;snapMode&gt; means snapshot mode; 0- Video detection; 1-External trigger; 2-Automatic; 3- Trace tracking (video trigger mode); 4- Hybrid trigger mode; 5- License plate trigger mode (second beats).  &lt;switchTime&gt; means the switch time between video and external trigger mode, unit: min  &lt;bayonetCount&gt; means the number of bayonet snapshots, range: 1~8: means number of snapshots;  9: Special use, means exporting one superior one; Note: 9 was used before illegally. For any special use in the future, an application should be made in advance and backward extension cannot be simply made.  &lt; trafficWarnType &gt; see 2.14.0 Type description.  &lt;snapCount&gt; means the number of illegal snapshots, range: 1~8: means number of snapshots;  9: Special use, means exporting one superior one; Note: 9 was used before illegally. For any special use in the future, an application should be made in advance and backward extension cannot be simply made.  &lt;snapPictureEnable&gt; means whether export of snapshot photo is enabled; True: Enabled; false: Disabled.  &lt;licensePlateEnable&gt; means whether export of license plate photo is enabled; True: Enabled; false: Disabled.  &lt;facePlateEnable&gt; means whether export of face photo is enabled; True: Enabled; false: Disabled.</p>	

**SnapshotDetection XML Block**

```

<SnapshotDetectionversion="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<enabled><!--req, xs:boolean></enabled>
<relationCameraIP><!--dep, xs:string --></relationCameraIP>
< verticalSnapEnabled ><!--req, xs:boolean></ verticalSnapEnabled >
< peopleRedSnapEnable ><!-- opt, xs:integer></ peopleRedSnapEnable >
<snapMode opt="0,1,2,3.."><!--opt, xs:integer--></snapMode>
<switchTime><!--dep, xs:integer--></switchTime>
<bayonetCount opt="1,2,3,9"><!--opt, xs:integer--></bayonetCount>
<illegalSnapCountList><!-- req, -->
<illegalSnapCountItem>
<trafficWarnType><!--req, xs:string --></trafficWarnType>
<snapCount opt="1,2,3,9"><!--opt, xs:integer--></snapCount>
</illegalSnapCountItem>
</illegalSnapCountList>
<snapPictureEnable><!--req, xs:boolean></snapPictureEnable>
<licensePlateEnable><!--req, xs:boolean></licensePlateEnable>
<facePlateEnable><!--req, xs:boolean></facePlateEnable>
</SnapshotDetection>

```

**Test cases**

**GET /CGI/ITS/SystemRun/SnapshotDetection/channels/1/Scene/1**

**Request XML: none**

**Response XML: <SnapshotDetection>**

**PUT /CGI/ITS/SystemRun/SnapshotDetection/channels/1/Scene/1**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<?xml version="1.0" encoding="UTF-8"?>
<SnapshotDetection>
<enabled>true</enabled>
<relationCameraIP>10.30.41.60</relationCameraIP>
<verticalSnapEnabled >false</verticalSnapEnabled>
<peopleRedSnapEnable>0</peopleRedSnapEnable>
<snapMode>2</snapMode>
<switchTime>10</switchTime>
<bayonetCount >1</bayonetCount>
<illegalSnapCountList>
<illegalSnapCountItem>
<trafficWarnType>abnormallicenseplate</trafficWarnType>
<snapCount>3</snapCount>
</illegalSnapCountItem>
</illegalSnapCountList>
<snapPictureEnable>true</snapPictureEnable>
<licensePlateEnable> true</licensePlateEnable>
<facePlateEnable>true</facePlateEnable>
</SnapshotDetection>
```

**2.14.38/CGI/ITS/ShotPara/PictureOverlay/channels/<ID>/Type/<type>/Mode/<mode>**

<b>/CGI/ITS/ShotPara/PictureOverlay/channels/&lt;ID&gt;/Type/&lt;type&gt;/Mode/&lt;mode&gt;</b>	
<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire photo overlay parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<PictureOverlay>
<b>PUT</b>	
<b>Description</b>	Set overlay parameters
<b>Query</b>	None
<b>Inbound Data</b>	<PictureOverlay>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol is prepared for the query and setting of photo overlay parameters and device photo overlay parameters at client or IE via CGI protocol, including font size and color, overlay position, etc.	
<b>Explanations on key parameters:</b>	
Type/<type> means data type; 0- Bayonet; 1- Illegal; 2- Intelligent snapshot	
Mode/<mode> means photo pattern; 0-Single photo; 1- Camera composition	
<composePictureType> means whether photo composition is enabled; true: Enabled; false: Disabled. It is applicable to camera composition.	
<singlePictureType> means the original pattern maintained for single photo; true: Enabled; false: Disabled. It is applicable to camera composition.	
<fontSize> means the font size of overlay information; 0: Self-adaptation, 1:16*16, 2:24*24, 3: 32*32, 4: 48*48, 5:64*64, 6:96*96	
<osdColor> means font color; the low 24 of the 32 bits are used to represent color rgb and digital mode bgr.	
<overlayPosition> means overlay position; 0- Overlay inside photo; 1- Overlay in the black frame under photo; 2- Overlay in black frame on photo.	

<digitNum> means zeroizing of overlay number.  
 <autoLine> means whether automatic sorting is made; 1- Automatic; 0- Non-automatic.  
 <charEnhance> means whether shade is enabled; 1- Enabled; 0- Disabled  
 <yearFormatSymbol> means the format character after year with its length no longer than 7 bits.  
 <monthFormatSymbol> means the format character after month with its length no longer than 7 bits.  
 <dayFormatSymbol> means the format character after day with its length no longer than 7 bits.  
 <hourFormatSymbol> means the format character after hour with its length no longer than 7 bits.  
 <miniteFormatSymbol> means the format character after minute with its length no longer than 7 bits.  
 <secondFormatSymbol> means format character behind second, with length not above 7 bits  
 <millisecond1> means format character behind ms 1, with length not above 7 bits  
 <millisecond2> means format character behind ms 2, with length not above 7 bits  
 <plusType> means type of overlay information; see 2.14.78 for details  
 <plusEnable> Whether display overlay contents; true-Display; false-Not display  
 <plusPosNo> means number of character overlay position, sorted in turns from zero  
 <plusInfo> means characters of overlay contents  
 <enterString> means line feed character  
 <beginSpaceNum> means number of spaces after line feed  
 <positionX> means X coordinates  
 <positionY> means Y coordinates  
 <plusPicType> means type of overlay picture; 0-Small picture of plate; 1-Face picture of driver; 2-Face picture of co-driver; 3-Small picture of face (mode when pedestrian runs a red light)  
 <plusPicEnable> Whether enable overlay picture  
 <facePicZoomArea> means zoom ratio of face picture; range: 0-500; 100 means no change  
 <picIndex> Number of picture in composite picture; 1-Overlaid on the first picture; 2- Overlaid on the second picture (applies to composite mode).  
 <facePicSize> Cutout size; 1-Small; 2-Intermediate; 3-Large  
 <faceTargetFrame> Whether overlay target frame of small face picture; true: Enabled; false: Disabled  
 <backgroundPicShowSmallPic> Whether display position of small face picture on background picture; true: Enabled; false: Disabled  
 <mergeSecurityCodeEnable> Whether in the synthesis mode, whether the horizontal four-synthesis overlaps the security code in the middle of three or four, true: enabled, false: not enabled  
 <illegalParkVehicleFrame> Whether to overlap the illegal parking vehicle frame, true: enabled, false: not enabled  
 <eventPosition> Whether to overlap the event occurrence position, true: enabled false: not enabled

#### **PictureOverlay XML Block**

```

<PictureOverlay xmlns="http://www.isapi.org/ver20/XMLSchema">
  <composePictureType><!-- opt, xs:boolean --></composePictureType>
  <singlePictureType><!-- opt, xs:boolean --></composePictureType>
  <fontSize><!-- req, sx:integer --></fontSize>
  <osdColor><!-- req, sx:integer --></osdColor>
  <overlayPosition><!-- req, sx:integer --></overlayPosition>
  <digitNum><!-- dep, sx:integer --></digitNum>
  <autoLine><!-- dep, sx:integer --></autoLine>
  <charEnhance><!-- dep, sx:integer --></charEnhance>
  <yearFormatSymbol><!-- req, xs: string --></yearFormatSymbol>
  <monthFormatSymbol><!-- req, xs: string --></monthFormatSymbol>
  <dayFormatSymbol><!-- req, xs: string --></dayFormatSymbol>
  <hourFormatSymbol><!-- req, xs: string --></hourFormatSymbol>
  <miniteFormatSymbol><!-- req, xs: string --></miniteFormatSymbol>
  <secondFormatSymbol><!-- req, xs: string --></secondFormatSymbol>
  
```

```

<millisecond1><!-- req, xs: string --></millisecond1>
<millisecond2><!-- req, xs: string --></millisecond2>
<backgroundPicShowSmallPic><!-- req, xs:boolean --></backgroundPicShowSmallPic>
<mergeSecurityCodeEnable><!--req,xs:boolean--></mergeSecurityCodeEnable>
< illegalParkVehicleFrame><!-- req, xs:boolean --></ illegalParkVehicleFrame>
<picturePlusTypeList>
<picturePlusTypeData>
<plusType><!-- req, xs:integer--></plusType>
<plusEnable><!-- req, xs:boolean --></plusEnable>
<plusPosNo><!-- req, xs:integer--></plusPosNo>
<plusInfo><!-- req, xs:string--></plusInfo>
<enterString><!-- req, xs:string--></enterString>
<beginSpaceNum><!-- req, xs:string--></beginSpaceNum>
<positionX><!-- req, xs:integer;coordinate --></positionX>
<positionY><!-- req, xs:integer;coordinate --></positionY>
</picturePlusTypeData>
</picturePlusTypeList>
<topSettingList>
<topSettingInfo>
<plusPicType><!-- req, xs:integer --></plusPicType>
<plusPicEnable><!-- req, xs:boolean --></plusPicEnable>
<facePicZoomArea><!-- opt, xs:integer --></facePicZoomArea>
<positionX><!-- req, xs:integer;coordinate --></positionX>
<positionY><!-- req, xs:integer;coordinate --></positionY>
< picIndex><!-- opt, xs:integer --></ picIndex>
<facePicSize><!-- req, xs:integer --></ facePicSize>
<faceTargetFrame><!-- opt xs:integer --></ faceTargetFrame>
</topSettingInfo>
</topSettingList>
</PictureOverlay>

```

**Test cases**

**GET /CGI/ITS/ShotPara/PictureOverlay/channels/1/Type/1/Mode/1**

**Request XML: none**

**Response XML: <PictureOverlay>**

**PUT /CGI/ITS/ShotPara/PictureOverlay/channels/1/Type/1/Mode/1**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<?xml version="1.0" encoding="UTF-8"?>
<PictureOverlay>
<composePictureType>true</composePictureType>
<singlePictureType>false</singlePictureType>
<fontSize>2</fontSize>
<osdColor>0</osdColor>
<overlayPosition>0</overlayPosition>
<digitNum>1</digitNum>
<autoLine>1</autoLine>
<CharEnhance>1</CharEnhance>
<yearFormatSymbol>-</yearFormatSymbol>
<monthFormatSymbol>-</monthFormatSymbol>
<dayFormatSymbol>/</dayFormatSymbol>
<hourFormatSymbol>/</hourFormatSymbol>
<miniteFormatSymbol>/</miniteFormatSymbol>
<secondFormatSymbol>/</secondFormatSymbo>
<millisecond1>/</millisecond1>
<millisecond2>/</millisecond2>
<backgroundPicShowSmallPic> true </backgroundPicShowSmallPic>
<mergeSecurityCodeEnable>true</mergeSecurityCodeEnable>

```

```

< illegalParkVehicleFrame>true</ illegalParkVehicleFrame>
<picturePlusTypeList>
<plusType>0</plusType>
<plusEnable>true</plusEnable>
<plusPosNo>0</plusPosNo>
<plusInfo> Time </plusInfo>
<enterString>128</enterString>
<beginSpaceNum>0</beginSpaceNum>
<positionX>1571</positionX>
<positionY>2072</positionY>
</picturePlusTypeList>
<topSettingList>
<topSettingInfo>
<plusPicType>0</plusPicType>
<plusPicEnable>true</plusPicEnable>
<facePicZoomArea>25</facePicZoomArea>
<positionX>525</positionX>
<positionY>727</positionY>
</topSettingInfo>
<topSettingInfo>
<plusPicType>2</plusPicType>
<plusPicEnable>true</plusPicEnable>
<facePicZoomArea>25</facePicZoomArea>
<positionX>525</positionX>
<positionY>727</positionY>
<picIndex>1</picIndex>
<facePicSize>3</facePicSize>
<faceTargetFrame>true</faceTargetFrame>
</topSettingInfo>
</topSettingList>
</PictureOverlay>

```

#### 2.14.39/CGI/ITS/LaneRun/ReferenceLines/channels/<ID>/scene/<ID>/lanes/<ID>/type/<ID>

/CGI/ITS/LaneRun/ReferenceLines/channels/<ID>/scene/<ID>/lanes/<ID>/type/<ID> General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire lane line parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ReferenceLines>
<b>PUT</b>	
<b>Description</b>	Set lane line parameters
<b>Query</b>	None
<b>Inbound Data</b>	<ReferenceLines>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for query and setting of lane parameters, helping client or IE query and set the lane parameters via CGI protocol, including lane number/lane No./lane enabling/lane type/lane coordinates/speed measurement and calibration distance.	
<b>Explanations on key parameters:</b> <lineNum> means lane number <type> means whether it is recommended value; 0: No; 1: Yes <lineId> means lane No.; range: 1-14 <enabled> means lane enabling; true: Enabled; false: Disabled <lineType> means lane type, including: 1-Left lane; 2-Right lane; 3-Yellow line;	

4-Retrogradation line; 5-Left turn judgment line; 6-Right turn judgment line; 7-Park line; 8-Speed measurement line 1; 9-Speed measurement line 2; 10-Snapshot line 1; 11-Snapshot line 2; 12-Park line of turn waiting area; 13-Straight driving judgment line; 14-U-turn line 1; 15-U-turn judgment line (U-turn line 2); 16-U-turn line 3; 17-Third snapshot line of illegal behaviors

<RegionCoordinatesList> means coordinate list of lane

<RegionCoordinates> means lane coordinates

<sup>1</sup><testSpeedEnabled> means speed measurement enabling; true: Enabled; false: Disabled

<distance> means calibration distance of speed measurement; unit: mm; range: 500-10000; use modified field if lane type is 8 and 9

### ReferenceLines XML Block

```
<ReferenceLines version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<lineNum><!-- req, xs:integer --></lineNum>
<referenceLineList>
<lineItem>
<lineId><!-- req, xs:integer--></lineId>
<enabled><!-- req, xs:boolean --></enabled>
<lineType><!-- req, xs:integer--></lineType>
<RegionCoordinatesList>
<RegionCoordinates><!-- req, -->
<positionX><!-- req, xs:integer;coordinate --></positionX>
<positionY><!-- req, xs:integer;coordinate --></positionY>
</RegionCoordinates>
</RegionCoordinatesList>
<testSpeedEnabled><!--dep, depends on <lineType>, xs: boolean --></testSpeedEnabled>
<distance><<!--dep, depends on <lineType>, xs:integer --></distance>
</lineItem>
</referenceLineList>
</ReferenceLines>
```

### Test cases

**GET /CGI/ITS/LaneRun/ReferenceLines/channels/<ID>/scene/<ID>/lanes/<ID>/type/<ID>**

**Request XML:** none

**Response XML:** <ReferenceLines>

**PUT /CGI/ITS/LaneRun/ReferenceLines/channels/<ID>/scene/<ID>/lanes/<ID>/type/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="2.0" encoding="UTF-8"?>
<ReferenceLines>
<lineNum>2</lineNum>
<referenceLineList>
<lineItem>
<lineId>13</lineId>
<enabled>true</enabled>
<lineType>16</lineType>
<RegionCoordinatesList>
<RegionCoordinates>
<positionX>1377</positionX>
<positionY>103</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>805</positionX>
<positionY>103</positionY>
</RegionCoordinates>
</RegionCoordinatesList>
<testSpeedEnabled>true</testSpeedEnabled>
```

```

<distance>50</distance>
</lineItem>
<lineItem>
<lineId>14</lineId>
<enabled>true</enabled>
<lineType>14</lineType>
<RegionCoordinatesList>
<RegionCoordinates>
<positionX>1325</positionX>
<positionY>836</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>799</positionX>
<positionY>2007</positionY>
</RegionCoordinates>
</RegionCoordinatesList>
<testSpeedEnabled>true</testSpeedEnabled>
<distance>50</distance>
</lineItem>
</referenceLineList>
</ReferenceLines>

```

#### 2.14.40/CGI/ITS/LaneRun/ReferenceLines/channels/<ID>/scene/<ID>/lanes/type/<ID>

/CGI/ITS/LaneRun/ReferenceLines/channels/<ID>/scene/<ID>/lanes/type/<ID> General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire lane line parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ReferenceLines>
<b>PUT</b>	
<b>Description</b>	Set lane line parameters
<b>Query</b>	None
<b>Inbound Data</b>	<ReferenceLines>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This protocol is prepared for query and setting of lane parameters, helping client or IE query and set the lane parameters via CGI protocol, including lane No./lane quantity/lane line No./lane enabling/lane type/lane coordinates/calibration distance of speed measurement.</p> <p><b>Explanations on key parameters:</b>  &lt;lanes&gt; means lane No.; range: 1-6; 1 as default  &lt;lineNum&gt; means lane number  &lt;type&gt; means whether it is recommended value; 0: No; 1: Yes  &lt;lineId&gt; means lane No.; range: 1-14  &lt;enabled&gt; means lane enabling; true: Enabled; false: Disabled  &lt;lineType&gt; means lane type, including: 1-Left lane; 2-Right lane; 3-Yellow line; 4-Retrogradation line; 5-Left turn judgment line; 6-Right turn judgment line; 7-Park line; 8-Speed measurement line 1; 9-Speed measurement line 2; 10-Snapshot line 1; 11-Snapshot line 2; 12-Park line of turn waiting area; 13-Straight driving judgment line; 14-U-turn line 1; 15-U-turn judgment line (U-turn line 2); 16-U-turn line 3; 17-Third snapshot line of illegal behaviors  &lt;RegionCoordinatesList&gt; means coordinate list of lane</p>	



<RegionCoordinates> means lane coordinates  
^2<testSpeedEnabled> means speed measurement enabling; true: Enabled; false: Disabled  
<distance> means calibration distance of speed measurement; unit: mm; range: 500-10000;  
default: 3500; use modified field if lane type is 8 and 9

### ReferenceLines XML Block

```
<ReferenceLines version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<laneList>
<laneitem>
<lanes><!-- req, xs:integer --></lanes>
<lineNum><!-- req, xs:integer --></lineNum>
<referenceLineList>
<lineItem>
<lineId><!-- req, xs:integer--></lineId>
<enabled><!-- req, xs:boolean --></enabled>
<lineType><!-- req, xs:integer--></lineType>
<RegionCoordinatesList>
<RegionCoordinates><!-- req, -->
<positionX><!-- req, xs:integer;coordinate --></positionX>
<positionY><!-- req, xs:integer;coordinate --></positionY>
</RegionCoordinates>
</RegionCoordinatesList>
<testSpeedEnabled><!--dep, depends on <lineType>, xs: boolean --></testSpeedEnabled>
<distance><<!--dep, depends on <lineType>, xs:integer --></distance>
</lineItem>
</referenceLineList>
</laneitem>
</laneList>
</ReferenceLines>
```

### Test cases

**GET /CGI/ITS/LaneRun/ReferenceLines/channels/<ID>/scene/<ID>/lanes/type/<ID>**

**Request XML:** none

**Response XML:** <ReferenceLines>

**PUT /CGI/ITS/LaneRun/ReferenceLines/channels/<ID>/scene/<ID>/lanes/type/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="2.0" encoding="UTF-8"?>
<ReferenceLines>
<laneList>
<laneitem>
<lanes>1</lanes>
<lineNum>2</lineNum>
<referenceLineList>
<lineItem>
<lineId>13</lineId>
<enabled>true</enabled>
<lineType>16</lineType>
<RegionCoordinatesList>
<RegionCoordinates>
<positionX>1377</positionX>
<positionY>103</positionY>
</RegionCoordinates>
```

```

<RegionCoordinates>
<positionX>805</positionX>
<positionY>103</positionY>
</RegionCoordinates>
</RegionCoordinatesList>
<testSpeedEnabled>true</testSpeedEnabled>
<distance>50</distance>
</lineItem>
<lineItem>
<lineId>14</lineId>
<enabled>true</enabled>
<lineType>14</lineType>
<RegionCoordinatesList>
<RegionCoordinates>
<positionX>1325</positionX>
<positionY>836</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>799</positionX>
<positionY>2007</positionY>
</RegionCoordinates>
</RegionCoordinatesList>
</lineItem>
</referenceLineList>
<testSpeedEnabled>true</testSpeedEnabled>
<distance>50</distance>
</laneitem>
</laneList>
</ReferenceLines>

```

#### 2.14.41/CGI/ITS/LaneRun/DetectArea/channels/<ID>/scene/<ID>/type/<ID>

/CGI/ITS/LaneRun/DetectArea/channels/<ID>/scene/<ID>/type/<ID> General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire parameters of detection region
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<DetectArea>
<b>PUT</b>	
<b>Description</b>	Set parameters of detection region
<b>Query</b>	None
<b>Inbound Data</b>	<DetectArea>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b>	
This protocol is prepared for query and setting of parameters of detection region, helping client or IE query and set the parameters of detection region via CGI protocol, including region No./area enabling/coordinate number in detection region/coordinates of detection region.	
<b>Explanations on key parameters:</b>	
<regionId> means region No.; 1-Detection region; 2-Straight driving region; 3-Zebra crossing region; 4-Traction region	
<type> means whether it is recommended value; 0: No; 1: Yes	
<enabled> means region enabling; true: Enabled; false: Disabled	
<coordinatesNum> means coordinate number in detection region; range: 4-15	
<RegionCoordinatesList> represents detection region coordinate list	
<RegionCoordinates> means coordinate of detection region; range: 0-10000; unit:	

Ten-thousandth

### DetectArea XML Block

```
<DetectArea version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<detectAreaItemList>
<detectAreaItem>
<regionId><!-- req, xs:integer --></regionId>
<enabled><!-- req, xs:boolean --></enabled>
<coordinatesNum><!-- req, xs:integer --></coordinatesNum>
<RegionCoordinatesList>
<RegionCoordinates><!-- req, -->
<positionX><!-- req, xs:integer;coordinate --></positionX>
<positionY><!-- req, xs:integer;coordinate --></positionY>
</RegionCoordinates>
</RegionCoordinatesList>
</detectAreaItem>
</detectAreaItemList>
</DetectArea>
```

### Test cases

**GET /CGI/ITS/LaneRun/DetectArea/channels/1/scene/1/type/1**

**Request XML:** none

**Response XML:** <DetectArea>

**PUT /CGI/ITS/LaneRun/DetectArea/channels/1/scene/1/type/1**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="2.0" encoding="UTF-8"?>
<DetectArea>
<detectAreaItemList>
<detectAreaItem>
<regionId>0</regionId>
<enabled>true</enabled>
<coordinatesNum>6</coordinatesNum>
<RegionCoordinatesList>
<RegionCoordinates>
<positionX>207</positionX>
<positionY>1206</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>3229</positionX>
<positionY>1206</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>3314</positionX>
<positionY>1605</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>3391</positionX>
<positionY>2007</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>0</positionX>
<positionY>2007</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>103</positionX>
<positionY>1605</positionY>
</RegionCoordinates>
</RegionCoordinatesList>
```

```

</detectAreaItem>
</detectAreaItemList>
</DetectArea>

```

**2.14.42/CGI/ITS/ImagePara/channels/<ID>/ICR/template/<ID>**

/CGI/ITS/ImagePara/channels/<ID>/ICR/template/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire ICR parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<ICR>	
<b>PUT</b>		
<b>Description</b>	Set ICR parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	<ICR>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b> This protocol is prepared for query and setting of ICR parameters, helping client or IE query and set the ICR parameters via CGI protocol, including enabling value/auto control enabling.		
<b>Explanations on key parameters:</b> <enabled> means polarizer enabling; true: Enabled; false: Disabled; <autoControlEnable> means whether enable auto control, depending on the enabling of polarizer; true: Enabled; false: Disabled		

**ICR XML Block**

```

<ICR version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<enabled><!-- req, xs:boolean --></enabled>
<autoControlEnable><!--dep, depends on <enabled>, xs:boolean --></autoControlEnable>
</ICR>

```

**Test cases**

**GET /CGI/ITS/ImagePara/channels/<ID>/ICR/template/<ID>**

**Request XML: none**

**Response XML: <ICR>**

**PUT /CGI/ITS/ImagePara/channels/<ID>/ICR/template/<ID>**

**Response XML: <ICR>**

**Request XML: as below**

```

<?xml version="2.0" encoding="UTF-8"?>
<ICR>
<enabled>true</enabled>
<autoControlEnable>true</autoControlEnable>
</ICR>

```

**2.14.43/CGI/ITS/LaneRun/ChnlReco/channels/<ID>/scenes/<ID>/lanes/<ID>/type/<ID>**

/CGI/ITS/LaneRun/ChnlReco/channels/<ID>/scenes/<ID>/lanes/<ID>/type/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire parameters of lane recognition region	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<ChnlReco>	
<b>PUT</b>		
<b>Description</b>	Set parameters of lane recognition region	

<b>Query</b>	None
<b>Inbound Data</b>	<ChnlReco>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b> This protocol is prepared for query and setting of parameters of lane recognition region, helping client or IE query and set the parameters in lane recognition region.</p> <p><b>Explanations on key parameters:</b>          &lt;type&gt; means whether it is recommended value; 0: No; 1: Yes          &lt;positionX&gt; means coordinates of lane recognition region; range: Ten-thousandth 0-10000          &lt;positionY&gt; means coordinates of lane recognition region; range: Ten-thousandth 0-10000</p>	

**ChnlReco XML Block**

```
<ChnlReco version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<chnlRecoItemList>
<chnlRecoItem>
<RegionCoordinatesList>
<RegionCoordinates>
<positionX><!--req,xs:integer--></positionX>
<positionY><!--req,xs:integer--></positionY>
</RegionCoordinates>
</RegionCoordinatesList>
</chnlRecoItem>
</chnlRecoItemList>
</ChnlReco>
```

**Test cases**

**GET /CGI/ITS/LaneRun/ChnlReco/channels/1/scenes/1/lanes/1/type/1**

**Request XML:** none

**Response XML:** <ChnlReco>

**PUT /CGI/ITS/LaneRun/ChnlReco/channels/1/scenes/1/lanes/1/type/1**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<ChnlReco version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<chnlRecoItemList>
<chnlRecoItem>
<RegionCoordinatesList>
<RegionCoordinates>
<positionX>8</positionX>
<positionY>100</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>51</positionX>
<positionY>57</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>0</positionX>
<positionY>0</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>100</positionX>
<positionY>100</positionY>
</RegionCoordinates>
</RegionCoordinatesList>
</chnlRecoItem>
</chnlRecoItemList>
</ChnlReco>
```

2.14.44/CGI/ITS/LaneRun/ChnlReco/channels/<ID>/scene/<ID>/lanes/type/<ID>

General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire parameters of lane recognition region
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ChnlReco>
<b>PUT</b>	
<b>Description</b>	Set parameters of lane recognition region
<b>Query</b>	None
<b>Inbound Data</b>	<ChnlReco>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>                      This protocol is prepared for query and setting of parameters in lane recognition region, helping client or IE query and set the parameters of lane recognition region via CGI protocol, including lane No./X coordinates at upper left corner of recognition region /X coordinates at lower left corners of recognition region/X coordinates at upper right corner of recognition region/X coordinates at lower right corner of recognition region.</p> <p><b>Explanations on key parameters:</b>                      &lt;type&gt; means whether it is recommended value; 0: No; 1: Yes                      &lt;lanes&gt; means lane No.; range: 1-6; 1 as default                      &lt;positionX&gt; means coordinates of lane recognition region; range: 0-10000; unit: Ten-thousandth                      &lt;positionY&gt; means coordinates of lane recognition region; range: 0-10000; unit: Ten-thousandth</p>	

**ChnlReco XML Block**

```
<ChnlReco version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<laneList>
<laneitem>
<lanes><!-- req, xs:integer --></lanes>
<RegionCoordinatesList>
<RegionCoordinates>
<positionX><!--req,xs:integer--></positionX>
<positionY><!--req,xs:integer--></positionY>
</RegionCoordinates>
</RegionCoordinatesList>
</laneitem>
</laneList>
</ChnlReco>
```

**Test cases**

**GET /CGI/ITS/LaneRun/ChnlReco/channels/1/scene/1/lanes/type/1**

**Request XML: None**

**Response XML: <ChnlReco>**

**PUT/CGI/ITS/LaneRun/ChnlReco/channels/1/scene/<ID>/lanes/type/1**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<ChnlReco version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<laneList>
<laneitem>
<lanes>1</lanes>
<RegionCoordinatesList>
<RegionCoordinates>
<positionX>8</positionX>
<positionY>100</positionY>
</RegionCoordinates>
<RegionCoordinates>
```

```

<positionX>51</positionX>
<positionY>57</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>0</positionX>
<positionY>0</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>100</positionX>
<positionY>100</positionY>
</RegionCoordinates>
</RegionCoordinatesList>
</laneitem>
</laneList>
</ChnlReco>

```

#### 2.14.45/CGI/ITS/LaneRun/IllegalPark/<ID>/channels/<ID>/scene/<ID>/lanes/<ID>/type/<ID>

/CGI/ITS/LaneRun/IllegalPark/<ID>/channels/<ID>/scene/<ID>/lanes/<ID>/type/<ID> General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire illegal parking parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<IllegalPark>
<b>PUT</b>	
<b>Description</b>	Set illegal parking parameters
<b>Query</b>	None
<b>Inbound Data</b>	<IllegalPark>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>            This protocol is prepared for query and setting of illegal parking, helping client or IE query and set the illegal parking parameters via CGI protocol, including region No./detection time of illegal parking/enabling time frame/coordinates of illegal parking region/parking judgment time/sensitivity level/region name/region enabling/rule ID/whether this event is valid/region coordinate/region point coordinate/snapshot enabling/park warning enabling/park warning time.</p> <p><b>Explanations on key parameters:</b>            &lt;type&gt; means whether it is recommended value; 0: No; 1: Yes            &lt;illegalParkTime&gt; means detection time of illegal parking; unit: Second            &lt;RegionCoordinatesList&gt; means coordinate list            &lt;RegionCoordinates&gt; means coordinate of illegal parking region; ten-thousandth            &lt;checkParkTime&gt; means parking judgment time; min. value: 1            &lt;sensitivity&gt; means sensitivity level; 0: Low; 1: Intermediate; 2: High            &lt;areaName&gt; means region name; 31 characters            &lt;areaEnable&gt; means region enabling; true-Enabled; false-Disabled            &lt;ruleId&gt; means rule ID 0-10            &lt;pointCounts&gt; means region coordinate, fixed value: 4            &lt;capEnable&gt; means snapshot enabling; true-Enabled; false-Disabled            &lt;parkWarningEnable&gt; means park warning enabling; true-Enabled; false-Disabled            &lt;parkWarningTime&gt; means park warning time; unit: Second; range: 0-300</p>	

#### IllegalPark XML Block

```

<IllegalPark version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<IllegalParkRegion>
<illegalParkTime><!-- req, xs: integer --></illegalParkTime>
<checkParkTime><!-- req, xs:integer --></checkParkTime>
<sensitivity><!-- req, xs: integer --></sensitivity>
<areaName><!-- req, xs:string--></areaName>
<areaEnable><!-- req, xs:Boolean"true,false"--></areaEnable>
<ruleId><!-- req, xs: integer --></ruleId>
<pointCounts><!-- req, xs:integer --></pointCounts>
<capEnable><!-- req, xs:Boolean"true,false" --></capEnable>
<parkWarningEnable><!--req,xs:Boolean"true,false"--></parkWarningEnable>
<parkWarningTime><!-- req, xs:integer"0-300" --></parkWarningTime>
< RegionCoordinatesList >
< RegionCoordinates ><!-- req, -->
<positionX><!-- req, xs:integer;coordinate --></positionX>
<positionY><!-- req, xs:integer;coordinate --></positionY>
</RegionCoordinates >
</RegionCoordinatesList >
</IllegalParkRegion>
</IllegalPark>

```

**Test cases**

**GET /CGI/ITS/LaneRun/IllegalPark/1/channels/1/scene/1/lanes/1/type/1**

**Request XML: none**

**Response XML: <IllegalPark>**

**PUT /CGI/ITS/LaneRun/IllegalPark/1/channels/1/scene/1/lanes/1/type/1**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<IllegalPark version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<IllegalPark>
<IllegalParkRegion>
<illegalParkTime>5000</illegalParkTime>
<checkParkTime>1000</checkParkTime>
<sensitivity>0</sensitivity>
<areaName></areaName>
<areaEnable>>false</areaEnable>
<ruleId>0</ruleId>
<pointCounts>0</pointCounts>
<capEnable>>false</capEnable>
<parkWarningEnable>>false</parkWarningEnable>
<parkWarningTime>0</parkWarningTime>
<RegionCoordinatesList>
<RegionCoordinates>
<positionX>3333</positionX>
<positionY>3333</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>6667</positionX>
<positionY>3333</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>6875</positionX>
<positionY>5000</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>3125</positionX>
<positionY>5000</positionY>
</RegionCoordinates>

```





```

<SignalLightInfo version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <SignalLightInfoList>
    <lightInfo>
      <redLightId><!-- req, xs:integer --></redLightId>
      <enabled><!-- req, xs:boolean --></enabled>
      <enhanceUseType><!-- req, xs:integer --></enhanceUseType>
      <lightType><!-- req, xs:integer--></lightType>
      <lanesType><!-- req, xs:integer --></lanesType>
      <detectType><!-- req, xs:integer --></detectType>
      <redLightAreaCoordinatesList>
        <coordinates><!-- req, -->
        <positionX><!-- req, xs:integer;coordinate --></positionX>
        <positionY><!-- req, xs:integer;coordinate --></positionY>
        </coordinates>
      </redLightAreaCoordinatesList>
      <calibrationAreaCoordinatesList>
        <coordinates><!-- req, -->
        <positionX><!-- req, xs:integer;coordinate --></positionX>
        <positionY><!-- req, xs:integer;coordinate --></positionY>
        </coordinates>
      </calibrationAreaCoordinatesList>
      <fixedAreaCoordinatesList>
        <coordinates><!-- req, -->
        <positionX><!-- req, xs:integer;coordinate --></positionX>
        <positionY><!-- req, xs:integer;coordinate --></positionY>
        </coordinates>
      </fixedAreaCoordinatesList>
      <redLightTimeInterval><!-- req, xs:integer --></redLightTimeInterval>
      <yellowLightTimeInterval><!-- req, xs:integer --></yellowLightTimeInterval>
      <lightEnhanceLevel><!-- req, xs:integer --></lightEnhanceLevel>
      <exposureTimeLevel><!-- req, xs:integer --></exposureTimeLevel>
      <redSaturationLevel><!-- req, xs:integer --></redSaturationLevel>
      <swayRange><!-- req, xs:integer --></swayRange>
      <lightDetectLevel><!-- req, xs:integer --></lightDetectLevel>
      <overExposureAdjustLevel><!-- req, xs:integer --></overExposureAdjustLevel>
      <halationControlLevel><!-- req, xs:integer --></halationControlLevel>
      <lightPositionRules><!-- req, xs:integer --></lightPositionRules>
      <smoothEnable><!-- req, xs:boolean --></smoothEnable>
    </lightInfo>
  </SignalLightInfoList>
</SignalLightInfo>

```

**Test cases**

**GET /CGI/ITS/ExFixture/SignalLightInfo/channels/1**

**Request XML:** none

**Response XML:** <SignalLightInfo>

**PUT /CGI/ITS/ExFixture/SignalLightInfo/channels/1**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```

<?xml version="2.0" encoding="UTF-8"?>
<SignalLightInfo>
  <SignalLightInfoList>
    <lightInfo>
      <redLightId>1</redLightId>
      <enabled>ture</enabled>
      <enhanceUseType>2</enhanceUseType>
      <lightType>1</lightType>
      <lanesType>1</lanesType>
    </lightInfo>
  </SignalLightInfoList>
</SignalLightInfo>

```

```

<detectType>0</detectType>
<calibrationAreaCoordinatesList>
<coordinates>
<positionX>1898</positionX>
<positionY>172</positionY>
</coordinates>
<coordinates>
<positionX>2523</positionX>
<positionY>373</positionY>
</coordinates>
</calibrationAreaCoordinatesList>
<calibrationAreaCoordinatesList>
<coordinates>
<positionX>1898</positionX>
<positionY>172</positionY>
</coordinates>
<coordinates>
<positionX>2523</positionX>
<positionY>373</positionY>
</coordinates>
</calibrationAreaCoordinatesList>
<fixedAreaCoordinatesList>
<coordinates>
<positionX>0</positionX>
<positionY>0</positionY>
</coordinates>
<coordinates>
<positionX>0</positionX>
<positionY>0</positionY>
</coordinates>
</fixedAreaCoordinatesList>
<redLightTimeInterval>60</redLightTimeInterval>
<yellowLightTimeInterval>3000</yellowLightTimeInterval>
<lightEnhanceLevel>50</lightEnhanceLevel>
<exposureTimeLevel>50</exposureTimeLevel>
<redSaturationLevel>50</redSaturationLevel>
<swayRange>50</swayRange>
<lightDetectLevel>50</lightDetectLevel>
<overExposureAdjustLevel>50</overExposureAdjustLevel>
<halationControlLevel>50</halationControlLevel>
<lightPositionRules>50</lightPositionRules>
<smoothEnable>true</smoothEnable>
</lightInfo>
</SignalLightInfoList>
</SignalLightInfo>

```

#### 2.14.47/CGI/ITS/ExFixture/UartDeviceParam/channels/<ID>/ComNo/<ID>

/CGI/ITS/ExFixture/UartDeviceParam/channels/<ID>/ComNo/<ID> Resource v2.0		General
<b>GET</b>		
<b>Description</b>	Acquire peripheral parameters of serial port	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<UartDeviceParamInfo>	
<b>PUT</b>		

<b>Description</b>	Set peripheral parameters of serial port
<b>Query</b>	None
<b>Inbound Data</b>	<UartDeviceParamInfo>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This protocol is prepared for query and setting of peripheral device parameters of traffic serial port  &lt;deviceType&gt;--See 2.14.0 for details  1-T704/T708,2-T324/328V20/324ES,3-CSR_IK16,4-CSR68ND,5-T550L/T550G,6-CSR_AD,7-LED-EB01,8-SMARTCOM,10-LVD_600X,13-LED-GK-JCY01,14-LED-GK-ZX01,15-LED-GK-EB01,16-STJ1  &lt;paramNum&gt;-- means device parameter No. Meaning of different device model No. varies  When deviceType=16: 0-Device status; 1-Working mode; 2-Installation height; 3-Trigger distance; 4-Sensitivity; 5-Speed accuracy correction  When deviceType=4: 0-Radar control No  When deviceType = 3: 0-device status, 1-angle correction, 2-sensitivity, 3-speed lower limit;  &lt;paramInfo&gt;-- means parameter range of paramNum  When deviceType=16:  When paramNum =0, reserved  When paramNum =1, 0: Continuous mode; 1: Vehicle head trigger; 2: Vehicle tail trigger; 3: Double trigger mode  When paramNum =2, 0-255 corresponds to 0-25.5, min. unit is 0.1m; 60 (6m) as default  When paramNum =3, 0-50 corresponds to 0-50m, min. unit is 1m; 24 (24m) as default  When paramNum =4, 0-255 corresponds to 0-25.5; min. unit is 0.1; 4 (0.4) as default;  When paramNum =5, 0-100 corresponds to -50 to 50 (considered as -50 if it is valued by software; if -25 is acquired via 25-50, 10 is 60-10); 48 (-2) as default  When deviceType=4: 0-All; 1-5; 0 as default (all)  When deviceType = 3:  When paramNum = 0, reserved;  When paramNum = 1, 0-70 corresponds to 0-70 degrees, the default is 0;  When paramNum = 2, 11-200 pairs, 11-200, default 20;  When paramNum = 3, 1-150 corresponds to 1-150km / h, the default is 5;  &lt;version&gt; Means version No. of peripheral software.  &lt;productNumber&gt; means product No. + main version No.</p>	

#### UartDeviceParamInfo XML Block

```

<?xml version="1.0" encoding="UTF-8"?>
<UartDeviceParamInfo version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<!--Device model-->
<deviceType><!-- req, xs: integer --></deviceType>
<paramList>
<paramData>
<paramNum><!-- req, xs: integer --></paramNum>
<paramInfo><!-- req, xs: integer --></paramInfo>
</paramData>
</paramList>
<version><!-- req, xs:string --></version>
< productNumber ><!-- req, xs:string --></ productNumber >
</ UartDeviceParamInfo >

```

#### Test cases

**GET /CGI/ITS/ExFixture/UartDeviceParam/channels/1/ComNo/1**

**Request XML: none**

**Response XML: <UartDeviceParamInfo>**

**PUT /CGI/ITS/ExFixture/UartDeviceParam/channels/1/ComNo/1**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<?xml version="2.0" encoding="UTF-8"?>
<UartDeviceParamInfo version="2.0"xmlns="http://www.isapi.com/ver20/XMLSchema">
<deviceType>16</deviceType>
<paramList>
<paramData>
<paramNum>0</paramNum>
<paramInfo>1</paramInfo>
<paramNum>1</paramNum>
<paramInfo>0</paramInfo>
<paramNum>2</paramNum>
<paramInfo>1</paramInfo>
<paramNum>3</paramNum>
<paramInfo>60</paramInfo>
<paramNum>4</paramNum>
<paramInfo>240</paramInfo>
<paramNum>5</paramNum>
<paramInfo>4</paramInfo>
<paramNum>6</paramNum>
<paramInfo>48</paramInfo>
</paramData>
</paramList>
<version>5.0.3</version>
<productNumber>1234567890123456789012345</productNumber>
</UartDeviceParamInfo>
```

**2.14.48/CGI/ITS/CommonCmd/channels/<ID>/Type/<ID>/ComNo/<ID>**

<b>/CGI/ITS/ExFixture/ UartDeviceReset /channels/&lt;ID&gt;/Type/&lt;ID&gt;/ComNo/&lt;ID&gt;</b>	
<b>General Resource v2.0</b>	
<b>PUT</b>	
<b>Description</b>	Recover default of peripheral device of serial port
<b>Query</b>	None
<b>Inbound Data</b>	<b>None</b>
<b>Success Return</b>	<b>&lt;ResponseStatus&gt;</b>
<b>Explanations on protocol:</b> This protocol is prepared for realizing common commands of traffic Type 1 recover default of peripheral device of serial port; 1 as default ComNo serial port No., starts from 1	

Test cases  
PUT  
/CGI/ITS/CommonCmd/channels/1/Type/1/ComNo/1  
Request XML : none  
Response

**e XML: <ResponseStatus>**

**2.14.49/CGI/ITS/ExFixture/RadarSpeedEnable/channels/<ID>/ComNo/<ID>**

<b>/CGI/ITS/ExFixture/RadarSpeedEnable/channels/&lt;ID&gt;/ComNo/&lt;ID&gt;</b>	
<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire enabling status of radar speed
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<b>&lt;RadarSpeedEnableInfo&gt;</b>
<b>Explanations on protocol:</b> This protocol is prepared for acquiring the enabling status of radar speed <enable>-- means enabling; 0: Disabled; 1: Enabled	

### RadarSpeedEnableInfo XML Block

```
<?xml version="1.0" encoding="UTF-8"?>
<RadarSpeedEnableInfo version="2.0"xmlns="http://www.isapi.com/ver20/XMLSchema">
<enable><!-- req, xs: integer --></enable>
</RadarSpeedEnableInfo>
```

#### Test cases

**GET** /CGI/ITS/ExFixture/RadarSpeedEnable/channels/<ID>/ComNo/<ID>

**Request XML:** none

**Response XML:** <RadarSpeedEnableInfo>

**PUT** /CGI/ITS/ExFixture/RadarSpeedEnable/channels/<ID>/ComNo/<ID>

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="2.0" encoding="UTF-8"?>
<RadarSpeedEnableInfo version="2.0"xmlns="http://www.isapi.com/ver20/XMLSchema">
<enable>0</enable>
</RadarSpeedEnableInfo>
```

### 2.14.50/CGI/ITS/ExFixture/RadarSpeed/channels/<ID>/ComNo/<ID>

/CGI/ITS/ExFixture/RadarSpeed/channels/<ID>/ComNo/<ID>		General Resource
v2.0		
GET		
Description	Acquire radar speed	
Query	None	
Inbound Data	None	
Success Return	<RadarSpeedInfo>	
<b>Explanations on protocol:</b> This protocol is prepared for acquiring radar speed <speed>-- means radar speed		

### RadarSpeedInfo XML Block

```
<?xml version="1.0" encoding="UTF-8"?>
<RadarSpeedInfo version="2.0"xmlns="http://www.isapi.com/ver20/XMLSchema">
<speed><!-- req, xs: integer --></speed>
</RadarSpeedInfo>
```

#### Test cases

**GET** /CGI/ITS/ExFixture/RadarSpeed/channels/<ID>/ComNo/<ID>

**Request XML:** none

**Response XML:** <RadarSpeedInfo>

**Response XML:** as below

```
<?xml version="2.0" encoding="UTF-8"?>
<RadarSpeedInfo version="2.0"xmlns="http://www.isapi.com/ver20/XMLSchema">
<speed>100</speed>
</RadarSpeedInfo>
```

### 2.14.51/CGI/ITS/SystemRun/ItsAlarmLink/channels/<ID>/scene/<ID>

/CGI/ITS/SystemRun/<ID>/channels/<ID>/scene/<ID>	
General Resource v2.0	
GET	
Description	Acquire linkage parameters of traffic alarm
Query	None
Inbound Data	None
Success Return	<ItsAlarmPara>
PUT	

<b>Description</b>	Set linkage parameters of traffic alarm
<b>Query</b>	None
<b>Inbound Data</b>	<ItsAlarmPara>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This protocol is prepared for query and setting of linkage parameters of traffic alarm, helping client or IE query and set the linkage parameters of traffic alarm of device via CGI protocol, including linkage type/linkage output port No.</p> <p><b>Explanations on key parameters:</b>  &lt;id&gt; means input port: IO-1; Port 1; Port 2  &lt; trafficWarnType &gt; see 2.14.0 Type description.</p>	

**EventTriggerXML Block**

```
<?xml version="2.0" encoding="UTF-8"?>
<ItsAlarmPara version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<itsAlarmPortList>
<itsAlarmPortPara>
<id><!-- req, xs:integer;id --></id>
<itsAlarmList>
<itsAlarmPortData>
<trafficWarnType><!-- req, xs:string --></trafficWarnType>
<enabled><!--req,xs:Boolean--></enabled>
</itsAlarmPortData>
</itsAlarmList>
</itsAlarmPortPara>
</itsAlarmPortList>
</ItsAlarmPara>
```

**Test cases**

**GET /CGI/ITS/SystemRun/ItsAlarmLink/channels/1/scene/1**

**Request XML: none**

**Response XML: <ItsAlarmPara>**

**PUT /CGI/ITS/SystemRun/ItsAlarmLink/channels/1/scene/1**

**Response XML: <ItsAlarmPara>**

**Request XML: as below**

```
<?xml version="2.0" encoding="UTF-8"?>
<ItsAlarmPara version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<itsAlarmPortList>
<itsAlarmPortPara>
<id>1</id>
<itsAlarmList>
<itsAlarmPortData>
<trafficWarnType>bayonet</trafficWarnType>
<enabled>>true</enabled>
</itsAlarmPortData>
<itsAlarmPortData>
<trafficWarnType>redlightrunning</trafficWarnType>
<enabled>>true</enabled>
</itsAlarmPortData>
<itsAlarmPortData>
<trafficWarnType>retrograde</trafficWarnType>
<enabled>>false</enabled>
</itsAlarmPortData>
<itsAlarmPortData>
<trafficWarnType>overspeed</trafficWarnType>
<enabled>>false</enabled>
</itsAlarmPortData>
<itsAlarmPortData>
<trafficWarnType>leftturn</trafficWarnType>
```

<enabled>>false</enabled>  
</itsAlarmPortData>  
<itsAlarmPortData>  
<trafficWarnType>rightturn</trafficWarnType>  
<enabled>>false</enabled>  
</itsAlarmPortData>  
<itsAlarmPortData>  
<trafficWarnType>yellowline</trafficWarnType>  
<enabled>>false</enabled>  
</itsAlarmPortData>  
<itsAlarmPortData>  
<trafficWarnType>vehicle</trafficWarnType>  
<enabled>>false</enabled>  
</itsAlarmPortData>  
<itsAlarmPortData>  
<trafficWarnType>notdirected</trafficWarnType>  
<enabled>>false</enabled>  
</itsAlarmPortData>  
<itsAlarmPortData>  
<trafficWarnType>straight</trafficWarnType>  
<enabled>>false</enabled>  
</itsAlarmPortData>  
<itsAlarmPortData>  
<trafficWarnType>speciallane</trafficWarnType>  
<enabled>>false</enabled>  
</itsAlarmPortData>  
<itsAlarmPortData>  
<trafficWarnType>forbiddenmarking</trafficWarnType>  
<enabled>>false</enabled>  
</itsAlarmPortData>  
<itsAlarmPortData>  
<trafficWarnType>waitarearedlight</trafficWarnType>  
<enabled>>false</enabled>  
</itsAlarmPortData>  
<itsAlarmPortData>  
<trafficWarnType>Illegalparking</trafficWarnType>  
<enabled>>false</enabled>  
</itsAlarmPortData>  
<itsAlarmPortData>  
<trafficWarnType>specialoverspeed</trafficWarnType>  
<enabled>>false</enabled>  
</itsAlarmPortData>  
<itsAlarmPortData>  
<trafficWarnType>reversing</trafficWarnType>  
<enabled>>false</enabled>  
</itsAlarmPortData>  
<itsAlarmPortData>  
<trafficWarnType>turnaround</trafficWarnType>  
<enabled>>false</enabled>  
</itsAlarmPortData>  
<itsAlarmPortData>  
<trafficWarnType>lanechange</trafficWarnType>  
<enabled>>false</enabled>  
</itsAlarmPortData>  
<itsAlarmPortData>  
<trafficWarnType>prohibitionsign</trafficWarnType>  
<enabled>>false</enabled>  
</itsAlarmPortData>



```
<itsAlarmPortData>
<trafficWarnType>safetybelt</trafficWarnType>
<enabled>>false</enabled>
</itsAlarmPortData>
<itsAlarmPortData>
<trafficWarnType>telephone</trafficWarnType>
<enabled>>false</enabled>
</itsAlarmPortData>
<itsAlarmPortData>
<trafficWarnType>comitypedestrain</trafficWarnType>
<enabled>>false</enabled>
</itsAlarmPortData>
<itsAlarmPortData>
<trafficWarnType>comitystraight</trafficWarnType>
<enabled>>true</enabled>
</itsAlarmPortData>
<itsAlarmPortData>
<trafficWarnType>overtakeInzebracrossing</trafficWarnType>
<enabled>>false</enabled>
</itsAlarmPortData>
<itsAlarmPortData>
<trafficWarnType>inserttrafficjam</trafficWarnType>
<enabled>>false</enabled>
</itsAlarmPortData>
<itsAlarmPortData>
<trafficWarnType>abnormalplate</trafficWarnType>
<enabled>>false</enabled>
</itsAlarmPortData>
<itsAlarmPortData>
<trafficWarnType>greenlightparking</trafficWarnType>
<enabled>>false</enabled>
</itsAlarmPortData>
<itsAlarmPortData>
<trafficWarnType>prohibitiondangerouscar</trafficWarnType>
<enabled>>false</enabled>
</itsAlarmPortData>
<itsAlarmPortData>
<trafficWarnType>mismatchedplate</trafficWarnType>
<enabled>>false</enabled>
</itsAlarmPortData>
<itsAlarmPortData>
<trafficWarnType>driveintojamcross</trafficWarnType>
<enabled>>false</enabled>
</itsAlarmPortData>
<itsAlarmPortData>
<trafficWarnType>noalternatepass</trafficWarnType>
<enabled>>false</enabled>
</itsAlarmPortData>
<itsAlarmPortData>
<trafficWarnType>nokeepsafedos</trafficWarnType>
<enabled>>false</enabled>
</itsAlarmPortData>
</itsAlarmList>
</itsAlarmPortPara>
</itsAlarmPortList>
</ItsAlarmPara>
```

**2.14.52/CGI/ITS/Channels/<ID>/SnapShot/Type/<ID>**

<b>/CGI/ITS/Channels/&lt;ID&gt;/SnapShot/Type/&lt;ID&gt;</b>		<b>General Resource v2.0</b>
<b>PUT</b>		
<b>Description</b>	Set manual snapshot to traffic frontend device	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is prepared for setting manual snapshot of traffic frontend device, helping client or IE set manual snapshot and simulating trigger of traffic device via CGI protocol. Type: 0-Simulating trigger; 1-Snapshot picture; 2-Picture of enhance debugging of manual snapshot red lamp; 3-Intelligent snapshot		

**Test cases**

**PUT/CGI/ITS/Channels/<ID>/SnapShot/Type/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** None

**2.14.53/CGI/ITS/ExFixture/RaddrState/channels/<ID>/ComNo/<ID>**

<b>/CGI/ITS/ExFixture/RadarState/channels/&lt;ID&gt;/ComNo/&lt;ID&gt;</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Acquire parameters of radar status	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<UartDeviceParamInfo>	
<b>PUT</b>		
<b>Description</b>	Set parameters of radar status	
<b>Query</b>	None	
<b>Inbound Data</b>	<UartDeviceParamInfo>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b>		
This protocol is prepared for query and setting of peripheral device parameters of traffic serial port <deviceType>--See 2.14.0 for details <paramInfo>0: Set status; 1: Speed measurement status, maintain speed measurement status as default, it is not allowed to quit interface under the setting status;		

**UartDeviceParamInfo XML Block**

```
<?xml version="1.0" encoding="UTF-8"?>
<RaddrState version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<!--Device model-->
<deviceType><!-- req, xs: integer --></deviceType>
<paramData>
<paramInfo><!-- req, xs: integer --></paramInfo>
</paramData>
</ RaddrState>
```

**Test cases**

**GET /CGI/ITS/ExFixture/UartDeviceParam/channels/<ID>/ComNo/<ID>**

**Request XML:** none

**Response XML:** <UartDeviceParamInfo>

**PUT /CGI/ITS/ExFixture/UartDeviceParam/channels/<ID>/ComNo/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="2.0" encoding="UTF-8"?>
<UartDeviceParamInfo version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<deviceType>16</deviceType>
<paramData>
<paramInfo>0</paramInfo>
</paramData>
</UartDeviceParamInfo>
```

#### 2.14.54/CGI/ITS/ExFixture/LoopTrigStatusClear/channels/<ID>/IO

<b>/CGI/ITS/ExFixture/LoopTrigStatusClear/channels/&lt;ID&gt;/IO    General Resource v2.0</b>	
<b>PUT</b>	
<b>Description</b>	Set default value of coil trigger information as clear status
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for clearing the default value of coil trigger information, helping client or IE query the clearing status of coil trigger information via CGI protocol.	

**Test cases**

**PUT /CGI/ITS/ExFixture/LoopTrigStatusClear/channels/<ID>/IO**

**Response XML:** <ResponseStatus>

**Request XML:** None

#### 2.14.55/CGI/ITS/ExFixture/LoopTrigStatusClear/channels/<ID>/IO/<ID>

<b>/CGI/ITS/ExFixture/LoopTrigStatusClear/channels/&lt;ID&gt;/IO/&lt;ID&gt;    General Resource v2.0</b>	
<b>PUT</b>	
<b>Description</b>	Set default value of single coil trigger information as clear status
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for clearing the default value of coil trigger information, helping client or IE query the clear status of coil trigger information via CGI protocol.	

**Test cases**

**PUT /CGI/ITS/ExFixture/LoopTrigStatusClear/channels/<ID>/IO/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** None

#### 2.14.56/CGI/ITS/Capabilities/Channels/<ID>

<b>/CGI/ITS/Capabilities/Channels/&lt;ID&gt;    General Resource v2.0</b>	
<b>POST</b>	
<b>Description</b>	Acquire traffic capability set
<b>Query</b>	None

<b>Inbound Data</b>	<b>&lt;CapDiscription&gt;</b>
<b>Success Return</b>	<b>&lt;CapillegalList&gt;</b>
<p><b>Explanations on protocol:</b>  This protocol is prepared for acquiring the traffic capability set.</p> <p><b>Explanations on key parameters:</b>  &lt;mainType&gt; Type of capability set acquired: illegalSnapSet: Snapshot of illegal behavior; testSet: Detection setting; illegalAlarmlink: Illegal alarm link; illegalSnapNum: Snapshot number of illegal behaviors; carType: Car type; picCheck: Picture checkillegalAlarmlinkAudio: illegal alarm linkage audio, pictureSynthesiType: Supported picture synthesis type, pictureOverlayInfo: Picture overlap information, securityCodeLink: Whether to support overlapping security code in the middle of three or four synthesized pictures, peopleRedFace: Pedestrian under red light mode face image, itsJTZJDevNum: number of bayonet devices supported by traffic host, itsJTZJPortMap : Traffic host supports port mapping</p> <p>&lt;subType&gt;  Snapshot of illegal behaviors: bayonet: Bayonet; redlightrunning: Red light running; retrograde: Retrograde; overspeed: Overspeed; leftturn: Prohibit left turn; rightturn: Prohibit right turn; yellowline: Press yellow line; notdirected: Undirected driving, linesnapped: snap line; waitarearedlight: Run a red light at turn waiting area; Illegalparking: Illegal parking; specialoverspeed: Video snapshot overspeed enabling under mixed trigger; reversing: Reversing; turnaround: Illegal turnaround; lanechange: Illegal lane change; safetybelt: Fail to belt up; telephone: Making and receiving calls; comitypedestrain: Fail to give way to pedestrian; comitystraight: Left turn vehicle fails to give way to straight driving vehicles; overtakeInzebracrossing: Overspeed at zebra crossing; inserttrafficjam: illegal insertion; abnormalplate: Abnormal plate; greenlightparking: Parking during green light; prohibitiondangerouscar: Prohibit dangerous chemicals; driveintojamcross: Crossing of jammed area.</p> <p>Alarm linkage of illegal behaviors: bayonet: Bayonet; redlightrunning: Red light running; retrograde: Retrogradation; overspeed: Overspeed; vehicle: Vehicle occupies bicycle lane; notdirected: Undirected driving; speciallane: Enter special lane; forbiddenmarking: Violation of marking line; Illegalparking: Illegal parking; reversing: Reversing; turnaround: Illegal turnaround; lanechange: Illegal lane change; prohibitionsign: Violation of prohibition signs; safetybelt: Fail to belt up; telephone: Making and receiving calls; comitypedestrain: Fail to give way to pedestrian; comitystraight: Left turn vehicle fails to give way to straight driving vehicles; overtakeInzebracrossing: Overspeed at zebra crossing; inserttrafficjam: illegal insertion; greenlightparking: Parking during green light; abnormalplate: Abnormal plate; greenlightparking: Parking during green light; prohibitiondangerouscar: Prohibit dangerous chemicals</p> <p>Vehicle type: The same with alarm linkage of illegal behaviors  Picture search: The same with alarm linkage of illegal behaviors  Detection setting:  Vehicle: branddetect: Recognition of vehicle sub-brand and vehicle; carplatedetect: Model recognition; agriculdetect: Recognition of agricultural vehicle; electromobiledetect: Recognition of electronic vehicle; maindriverfacedetect: Detection of main driver face; secpilotdetect: Detection of co-driver face; highangledetect: Detection of large-angle plate; abnormalplatedetect: Detection of abnormal plate; dangerouscardetect: Recognition of cars carrying dangerous products; motorvehicle: Detection of motor vehicle; nonmotorvehicle: Detection of non-motor vehicle; pedestriandetect: Detection of pedestrians</p> <p>Behavior: safetybelt: Detection of safety belt (linked with driver face detection); listeningphone: Detection of answering and making of call (linked with driver face detection); sunvisor: Recognition of sun shield; pendant: Pendant detection; tissuebox: Tissuebox detection; annualinspectionlabel: Detection of annual inspection label; highbeam: Detection of high beam; comitypedestrain: Fail to give way to pedestrian; leftcomitystraight: Detection of left turn without giving way to straight driving; nomotordetect:Detection of non-motor vehicle and pedestrian; outtopwindow: Detection of standing on top window; checkcarhead: Detection of vehicle head/tail.</p>	

Event: parkevent parking event, recessiveevent retrograde event, variableroadevent lane change event, snakelikeevent serpentine event, trafficJamevent congestion event

Snapshot of illegal behaviors: redlightrunning: Red light running; retrograde: Retrograde; overspeed: Overspeed; vehicle: Vehicle occupies bicycle lane; notdirected: Undirected driving; speciallane: Enter special lane; forbiddenmarking: Violation of marking line; Illegalparking: Illegal parking; reversing: Reversing; turnaround: Illegal turnaround; lanechange: Illegal lane change; prohibitionsign: Violation of prohibition signs; safetybelt: Fail to belt up; telephone: Making and receiving calls; comitypedestrain: Fail to give way to pedestrian; comitystraight: Left turn vehicle fails to give way to straight driving vehicles; overtakeInzebracrossing: Overspeed at zebra crossing; inserttrafficjam: illegal insertion; abnormalplate: Abnormal plate; prohibitiondangerouscar: Prohibit dangerous chemicals

Illegal alarm linkage audio: illegalAlarm: illegal alarm, loopPlayAudio: loop playback, soundExpelling: sound expelling

Supported synthesis types for picture synthesis: oneSynthesis: one synthesis, twoSynthesis: two synthesis, threeSynthesis: three synthesis, fourSynthesis: four synthesis, fiveSynthesis: five synthesis

Picture overlapping information: time: time, crossingName: intersection name, laneName: lane name, laneDirection: lane direction, speed: speed, speedLimit: speed limit, speedPercent: overspeed ratio, plate: license plate, deviceNo: device number, redLightTime: red light Time, plateColor: license plate color, carColor: body color, crossingID: intersection number, illegalType: illegal type, roadUpDown: lane up and down, securityCode: security code, brandType: car type, laneNO: lane number, redOverTime: red light end time , SafetyBelt: seat belt, redAfterTime: after red light, officeID: agency code, carType: vehicle type, userDefine1: custom 1, userDefine2: custom 2, illegalCode: illegal code, platePic: license plate thumbnail, mainFace: main driver Face, copilotFace: co-pilot face, carPosition: vehicle position, listeningPhone: pick up call, mainSunvisor: main driving sun visor, copilotSunvisor: co-pilot sun visor, dangerousCar: dangerous chemical vehicle, yellowCar: yellow label car, pendant: hanging Pendant, tissueBox: tissue box, annualInspectionLabel: annual inspection standard, highbeam: high beam light, outerWindow: sunroof stand person, abnomrmalPlate: abnormal license plate, throwoutofWindow: throw something out through window , driverSex: driver gender, headortall: front and rear, wayProperty: road attributes, holdChild: holding a child in the front row, illegalParkTime: total length of parking violation, radarEventPos: location of radar event, eventType: radar event type

#### CapDiscription XML Block

```
<?xml version="2.0" encoding="UTF-8"?>
<CapDiscription>
  <mainType><!--req,xs:string,"illegalSnapSet,testSet ,illegalAlarmlink ,illegalSnapNum ,alarmLinkByCar,illegalAlarmlinkAudio,pictureSynthesiType,pictureOverlayInfo,securityCodeLink, peopleRedFace,itsJTZJDevNum,itsJTZJPortMap" -->
</mainType>
</CapDiscription>
```

#### CapillegalListXML Block

```
<?xml version="2.0" encoding="UTF-8"?>
<CapillegalList>
<CapTypeItem>
  <mainType>
    <!--req,xs:string,"illegalSnapSet,testSet,illegalAlarmlink,illegalSnapNum,alarmLinkByCar, illegalAlarmlinkAudio, pictureSynthesiType, pictureOverlayInfo , securityCodeLink, peopleRedFace,itsJTZJDevNum,itsJTZJPortMap" -->
  </mainType>
  <support><!-- req, xs:bool,"true,false" --></support>
  <subTypeList>
    <subTypeItem>
```

```

    <subType><!--req,xs:string></subType>
    <support><!-- req, xs: boolean --></support>
  </subTypeItem>
</subTypeItem>
  <subType><!--req,xs:string></subType>
  <support><!-- req, xs: boolean --></support>
</subTypeItem>
</subTypeList>
</CapTypeItem>
</CapIllegalList>

```

**Test cases**

**POST/CGI/ITS/channels/1/capabilities**

**Request XML:** <CapDiscription>

**Response XML:** <CapIllegalList>

**CapDiscriptionXML as follows:**

```

<?xml version="2.0" encoding="UTF-8"?>
<CapDiscription>
  <mainType>illegalSnapSet</mainType>
</CapDiscription>

```

**CapIllegalList XML As follows:**

```

<?xml version="2.0" encoding="UTF-8"?>
<CapIllegalList>
<CapTypeItem>
  <mainType>illegalSnapSet</mainType>
  <support>true</support>
  <subTypeList>
    <subTypeItem>
      <subType>bayonet </subType>
      <support>true</support>
    </subTypeItem>
    <subTypeItem>
      <subType>leftturn </subType>
      <support>true</support>
    </subTypeItem>
  </subTypeList>
</CapTypeItem>
  <CapTypeItem>
    <mainType>illegalAlarmlinkAudio</mainType>
    <support>true</support>
    <subTypeList>
      <subTypeItem>
        <subType>illegalAlarm</subType>
        <support>true </support>
      </subTypeItem>
      <subTypeItem>
        <subType>loopPlayAudio</subType>
        <support>true </support>
      </subTypeItem>
      <subTypeItem>
        <subType>soundExpelling</subType>
        <support>true </support>
      </subTypeItem>
    </subTypeList>
  </CapTypeItem>

```

```
</subTypeList>
</CapTypeItem>
<CapTypeItem>
  <mainType>pictureSynthesiType</mainType>
  <support>true</support>
  <subTypeList>
    <subTypeItem>
      <subType>oneSynthesis</subType>
      <support>true </support>
    </subTypeItem>
    <subTypeItem>
      <subType>twoSynthesis</subType>
      <support>true </support>
    </subTypeItem>
    <subTypeItem>
      <subType>threeSynthesis</subType>
      <support>true </support>
    </subTypeItem>
  </subTypeList>
</CapTypeItem>
<CapTypeItem>
  <mainType>pictureOverlayInfo</mainType>
  <support>true</support>
  <subTypeList>
    <subTypeItem>
      <subType>time</subType>
      <support>true </support>
    </subTypeItem>
    <subTypeItem>
      <subType>crossingName</subType>
      <support>true </support>
    </subTypeItem>
    <subTypeItem>
      <subType>laneName</subType>
      <support>true </support>
    </subTypeItem>
  </subTypeList>
</CapTypeItem>
<CapTypeItem>
  <mainType>securityCodeLink</mainType>
  <support>true</support>
</CapTypeItem>
<CapTypeItem>
  <mainType>peopleRedFace</mainType>
```

```

    <support>true</support>
</CapTypeItem>
<CapTypeItem >
    <mainType>itsJTZJDevNum</mainType>
<support>true</support>
    <devnum>20</devnum>
</CapTypeItem>
<CapTypeItem >
    <mainType>itsJTZJPortMap</mainType>
<support>true</support>
</CapTypeItem>
</CapIllegalList>

```

#### 2.14.57/CGI/ITS/LaneRun/IllegalPark/<ID>/channels/<ID>/scene/<ID>/lanes/type/<ID>

/CGI/ITS/LaneRun/IllegalPark/<ID>/channels/<ID>/scene/<ID>/lanes/type/<ID> General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire parameter of illegal parking at multiple lanes
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<IllegalPark>
<b>PUT</b>	
<b>Description</b>	Set parameter of illegal parking at multiple lanes
<b>Query</b>	None
<b>Inbound Data</b>	<IllegalPark>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>            This protocol is prepared for query and setting of illegal parking at multiple lanes, helping client or IE query and set the parameters of illegal parking via CGI protocol, including region No./detection time of illegal parking/enabling time frame/coordinates of illegal parking region/parking judgment time/sensitivity level/region name/region enabling/rule ID/whether this event is valid/region coordinate/region point coordinate/snapshot enabling/park warning enabling/park warning time.</p> <p><b>Explanations on key parameters:</b>            &lt;type&gt; means whether it is recommended value; 0: No; 1: Yes            &lt;illegalParkTime&gt; means detection time of illegal parking; unit: Second            &lt;RegionCoordinatesList&gt; means coordinate list            &lt;RegionCoordinates&gt; means coordinates of illegal parking region; range: 0-10000; unit: Ten-thousandth            &lt;checkParkTime&gt; means park judgment time; min. value 1; unit: Second            &lt;sensitivity&gt; means sensitivity level; 0: Low; 1: Intermediate; 2: High            &lt;areaName&gt; means region name; 31 characters            &lt;areaEnable&gt; means region enabling; true: Enabled; false: Disabled            &lt;ruleId&gt; means rule ID            &lt;pointCounts&gt; means region coordinate, fixed value: 4            &lt;capEnable&gt; means snapshot enabling; true: Enabled; false: Disabled            &lt;parkWarningEnable&gt; means park warning enabling; true: Enabled; false: Disabled            &lt;parkWarningTime&gt; means park warning time; unit: Second; range: 0-300</p>	

#### IllegalPark XML Block



```

<IllegalPark version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<laneList>
<laneitem>
<lanes><!-- req, xs:integer --></lanes>
<IllegalParkRegion>
<illegalParkTime><!-- req, xs: integer --></illegalParkTime>
<checkParkTime><!-- req, xs:integer --></checkParkTime>
<sensitivity><!-- req, xs: integer --></sensitivity>
<areaName><!-- req, xs:string--></areaName>
<areaEnable><!-- req, xs:Boolean"true,false"--></areaEnable>
<ruleId><!-- req, xs: integer --></ruleId>
<pointCounts><!-- req, xs:integer --></pointCounts>
<capEnable><!-- req, xs:Boolean"true,false" --></capEnable>
<parkWarningEnable><!--req,xs:Boolean"true,false"--></parkWarningEnable>
<parkWarningTime><!-- req, xs:integer"0-300" --></parkWarningTime>
< RegionCoordinatesList >
< RegionCoordinates ><!-- req, -->
<positionX><!-- req, xs:integer;coordinate --></positionX>
<positionY><!-- req, xs:integer;coordinate --></positionY>
</RegionCoordinates >
</RegionCoordinatesList >
</IllegalParkRegion>
</laneitem>
</laneList>
</IllegalPark>

```

**Test cases**

**GET /CGI/ITS/LaneRun/IllegalPark/1/channels/1/scene/1/lanes/type/1**

**Request XML: none**

**Response XML: <IllegalPark>**

**PUT /CGI/ITS/LaneRun/IllegalPark/1/channels/1/scene/1/lanes/type/1**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```

<IllegalPark version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<laneList>
<laneitem>
<lanes>1</lanes>
<IllegalParkRegion>
<illegalParkTime>1000</illegalParkTime>
<checkParkTime>1000</checkParkTime>
<sensitivity>0</sensitivity>
<areaName>NULL</areaName>
<areaEnable>>false</areaEnable>
<ruleId>1</ruleId>
<pointCounts>4</pointCounts>
<capEnable>>false</capEnable>
<parkWarningEnable>>false</parkWarningEnable>
<parkWarningTime>100</parkWarningTime>
<RegionCoordinatesList>
<RegionCoordinates>
<positionX>1021</positionX>
<positionY>780</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>1526</positionX>
<positionY>780</positionY>
</RegionCoordinates>
<RegionCoordinates>

```

```

<positionX>1021</positionX>
<positionY>1500</positionY>
</RegionCoordinates>
<RegionCoordinates>
<positionX>1526</positionX>
<positionY>1500</positionY>
</RegionCoordinates>
</RegionCoordinatesList>
</IllegalParkRegion>
</laneitem>
</laneList>
</IllegalPark>

```

#### 2.14.58 /CGI/ITS/SimTrigger/RoadWay/channel/<ID>

/CGI/ITS/SimTrigger/RoadWay/channel/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire simulating trigger lane	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<RoadWay>	
<b>PUT</b>		
<b>Description</b>	Set simulating trigger lane	
<b>Query</b>	None	
<b>Inbound Data</b>	<RoadWay>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b> This protocol is prepared for selecting simulating trigger lane.		
<b>Explanations on key parameters:</b> <roadNum > means lane No., starts from 1 <enable > means enabling/disabling; true-Enabled; false-Disabled		

#### RoadWay XML Block

```

<RoadWay version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<roadList>
<roadPara>
<roadNum><!-- req, xs: integer --></roadNum>
<enable><!-- req, xs:Boolean"true,false" --></enable>
</roadPara>
</roadList>
</RoadWay >

```

#### Test cases

**GET /CGI/ITS/SimTrigger/RoadWay/channel/1**

**Request XML:** none

**Response XML:** <RoadWay>

**PUT /CGI/ITS/SimTrigger/RoadWay/channel/1**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```

<?xml version="1.0" encoding="UTF-8"?>
<RoadWay>
<roadList>
<roadPara>
<roadNum>1</roadNum>
<enable>true</enable>
</roadPara>
</roadPara>

```

```

<roadNum>2</roadNum>
<enable>>false</enable>
</roadPara>
</roadList>
</RoadWay>

```

#### 2.14.59 /CGI/ITS/CameraParam/Channels/<ID>

/CGI/ITS/CameraParam/Channels/<ID>	
<b>GET</b>	
<b>Description</b>	Acquire parameters of bayonet device
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ItsCameraParam>
<b>POST</b>	
<b>Description</b>	Set parameters of bayonet device
<b>Query</b>	None
<b>Inbound Data</b>	<ItsCameraParam>
<b>Success Return</b>	<ItsCameraOrder>
<p><b>Explanations on protocol:</b>  This protocol is prepared for acquiring and setting interface parameters of bayonet device.</p> <p><b>Explanations on key parameters:</b>  &lt;action&gt; Operation; 0: Add; 1: Edit; 2: Delete (ignored if get); corresponding device numbers, names and ID are free form changes; once changed, other parameters should be edited before operation  &lt;chnId&gt; Channel No.  &lt;chnName&gt; Channel Name  &lt;ipAddr&gt;ip address  &lt;itsEnable&gt; Whether enable bayont  &lt;orderId&gt; Table No., send 0 before adding, or send acquired values in other cases  &lt;cameraNo&gt; Camera No.  &lt;cameraId&gt; Camera ID, applies in editing interface  &lt;cameraName&gt; Camera name  &lt;sigPicEnable&gt; Whether link single picture  &lt;recordEnable&gt; Whether link recording  &lt;outPutEnable&gt; Whether link output  &lt;outPutList&gt; Port linkage list  &lt;outPut&gt;  &lt;id&gt; Port No.  &lt;idEnable&gt; Port enabling</p>	

#### ItsDevParam XML Block

```

<?xml version="1.0" encoding="UTF-8"?>
<ItsCameraParam>
<action><!-- dep, xs: integer --></action>
<chnId><!-- req, xs: integer --></chnId>
<chnName><!-- req, xs:string --></chnName>
<ipAddr><!-- req, xs:string --></ipAddr>
<itsEnable><!-- req, xs:Boolean"true,false" --></itsEnable>
<orderId><!-- dep, xs: integer --></orderId>
<cameraNo><!-- dep, xs:string --></cameraNo>
<cameraId><!-- dep, xs:string --></cameraId>
<cameraName><!-- dep, xs:string --></cameraName>
<sigPicEnable><!-- req, xs:Boolean"true,false" --></sigPicEnable>
<recordEnable><!-- req, xs:Boolean"true,false" --></recordEnable>
<outPutEnable><!-- req, xs:Boolean"true,false" --></outPutEnable>
<outPutList>

```

```

<outPut>
<id><!-- req, xs: integer --></id>
<idEnable><!-- req, xs: Boolean--></idEnable>
</outPut>
// Repeat 32 outPut
</outPutList>
</ItsCameraParam>

```

**ItsCameraOrder XML Block**

```

<?xml version="1.0" encoding="UTF-8"?>
<ItsCameraOrder>
<orderId><!-- dep, xs: integer --></orderId> // Return number (not negative) when adding;
return 0 when editing and deleting; fails if returning other values
</ItsCameraOrder>

```

**Test cases**

**GET /CGI/ITS/CameraParam/Channels/1**

**Request XML: none**

**Response XML: <ItsCameraParam>**

**POST /CGI/ITS/CameraParam/Channels/1**

**Request XML: <ItsCameraParam>**

**Response XML: <ItsCameraOrder>**

```

<?xml version="1.0" encoding="UTF-8"?>
<ItsCameraParam>
<action>0</action>
<chnId>1</chnId>
<chnName>Channel 14221</chnName>
<ipAddr>192.168.17.88</ipAddr>
<itsEnable>true</itsEnable>
<orderId>0</orderId>
<cameraNo>nvr1</cameraNo>
<cameraId>1</cameraId>
<cameraName>nvr1</cameraName>
<sigPicEnable>true</sigPicEnable>
<recordEnable>true</recordEnable>
<outPutEnable>true</outPutEnable>
<outPutList>
<outPut>
<id>0</id>
<idEnable>true</idEnable>
</outPut>
<outPut>
<id>1</id>
<idEnable>>false</idEnable>
</outPut>
...
</outPutList>
</ItsCameraParam>

```

```

<?xml version="1.0" encoding="UTF-8"?>
<ItsCameraOrder>
<orderId>3</orderId>
</ItsCameraOrder>

```

**2.14.60 /CGI/ITS/CameraParam/Channels**

<b>/CGI/ITS/CameraParam/Channels</b>	
<b>GET</b>	
<b>Description</b>	Acquire parameters of bayonet device in batch

<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ItsCameraParamList>
<p><b>Explanations on protocol:</b> This protocol is prepared for acquiring the interface parameters of bayonet device in batch.</p> <p><b>Explanations on key parameters:</b>  &lt;chnId&gt; Channel No.  &lt;chnName&gt; Channel Name  &lt;ipAddr&gt;ip address  &lt;itsEnable&gt; Whether enable bayont  &lt;orderId&gt; Table No.  &lt;cameraNo&gt; Device No.  &lt;cameraId&gt; Device ID, reserved  &lt;cameraName&gt; Device name  &lt;sigPicEnable&gt; Whether link single picture  &lt;recordEnable&gt; Whether link recording  &lt;outPutEnable&gt; Whether link output  &lt;outPutList&gt; Port linkage list  &lt;outPut&gt;  &lt;id&gt; Port No.  &lt;idEnable&gt; Port enabling</p>	

**ItsCamreaParamList XML Block**

```
<?xml version="1.0" encoding="UTF-8"?>
<ItsCameraParamList>
<ItsCameraParam> // Parameter structure, see protocol in item above
<chnId><!-- req, xs: integer --></chnId>
<chnName><!-- req, xs:string --></chnName>
<ipAddr><!-- req, xs:string --></ipAddr>
<itsEnable><!-- req, xs:Boolean"true,false" --></itsEnable>
<orderId><!-- req, xs: integer --></orderId>
<cameraNo><!-- dep, xs:string --></cameraNo>
<cameraId><!-- dep, xs:string --></cameraId>
<cameraName><!-- dep, xs:string --></cameraName>
<sigPicEnable><!-- req, xs:Boolean"true,false" --></sigPicEnable>
<recordEnable><!-- req, xs:Boolean"true,false" --></recordEnable>
<outPutEnable><!-- req, xs:Boolean"true,false" --></outPutEnable>
<outPutList>
<outPut>
<id><!-- req, xs: integer --></id>
<idEnable><!-- req, xs: Boolean--></idEnable>
</outPut>
// Repeat 32 outPut
</outPutList>
</ItsCameraParam>
//...Repeat <ItsCameraParam> Structure
</ItsCameraParamList>
```

**Test cases**

**GET /CGI/ITS/CameraParam/Channels**

**Request XML: none**

**Response XML: <ItsCameraParamList>**

```
<?xml version="1.0" encoding="UTF-8"?>
<ItsCameraParamList>
<ItsCameraParam>
<chnId>1</chnId>
<chnName>Channel 14221</chnName>
<ipAddr>192.168.17.88</ipAddr>
<itsEnable>true</itsEnable>
```

```

<orderId>1</orderId>
<cameraNo>nvr1</cameraNo>
<cameraId>1</cameraId>
<cameraName>nvr1</cameraName>
<sigPicEnable>true</sigPicEnable>
<recordEnable>true</recordEnable>
<outPutEnable>true</outPutEnable>
<outPutList>
<outPut>
<id>0</id>
<idEnable>true</idEnable>
</outPut>
<outPut>
<id>1</id>
<idEnable>>false</idEnable>
</outPut>
...
</outPutList>
</ItsCameraParam>
<ItsCameraParam>
<chnId>2</chnId>
...
</ItsCameraParam>
</ItsCameraParamList>

```

#### 2.14.61 /CGI/ITS/LaneRun/Manage/Places/<ID>

/CGI/ITS/LaneRun/Manage/Places/<ID>	
<b>GET</b>	
<b>Description</b>	Acquire the parameters of lane management cross/location
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<LaneRunManagePlaces>
<b>PUT</b>	
<b>Description</b>	Set the parameters of lane management cross /location
<b>Query</b>	None
<b>Inbound Data</b>	<LaneRunManagePlaces>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This protocol is prepared for acquiring, deleting and deleting the parameters of lane management cross /location.</p> <p><b>Explanations on key parameters:</b>  &lt;id&gt; Table No., not displayed; kernel assignment, default as 0 when adding; send acquired value (start from 1) when editing and deleting  &lt;action&gt; Operation; 0: Add; 1: Edit; 2: Delete (ignored if get)  &lt;placeNo&gt; No.  &lt;placeName&gt; Name  &lt;placeCode&gt; code</p>	

#### LaneRunManagePlaces XML Block

```

<?xml version="1.0" encoding="UTF-8"?>
<LaneRunManagePlaces>
<id><!-- req, xs: integer --></id>
<action><!-- dep, xs: integer --></action>
<placeNo><!-- req, xs:string --></placeNo>
<placeName><!-- req, xs:string --></placeName>

```

```
<placeCode><!-- req, xs:string --></placeCode>
</LaneRunManagePlaces>
```

**Test cases**

**GET /CGI/ITS/LaneRun/Manage/Places/0**

**Request XML:** none

**Response XML:** <LaneRunManagePlaces>

**PUT /CGI/ITS/LaneRun/Manage/Places/0**

**Request XML:** <LaneRunManagePlaces>

**Response XML:** <ResponseStatus>

**DELETE /CGI/ITS/LaneRun/Manage/Places/0**

**Request XML:** none

**Response XML:** <ResponseStatus>

```
<?xml version="1.0" encoding="UTF-8"?>
<LaneRunManagePlaces>
<id>0</id>
<action>0</action>
<placeNo>abc123</placeNo>
<placeName>test1</placeName>
<placeCode>1234</placeCode>
</LaneRunManagePlaces>
```

**2.14.62 /CGI/ITS/LaneRun/Manage/Places**

<b>/CGI/ITS/LaneRun/Manage/Places</b>	
<b>GET</b>	
<b>Description</b>	Acquire parameters of lane management cross/location in batch
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<LaneRunManagePlacesList>
<p><b>Explanations on protocol:</b>  This protocol is prepared for acquiring parameters of cross/location via lane management interface.</p> <p><b>Explanations on key parameters:</b>  &lt;id&gt; Table No., not displayed; kernel assignment, default as 0 when adding; send acquired value (start from 1) when editing and deleting  &lt;action&gt; Operation; 0: Add; 1: Edit; 2: Delete (ignored if get)  &lt;placeNo&gt; No.  &lt;placeName&gt; Name  &lt;placeCode&gt; code</p>	

**LaneRunManagePlacesList XML Block**

```
<?xml version="1.0" encoding="UTF-8"?>
<LaneRunManagePlacesList>
<LaneRunManagePlaces> // Parameter structure, see protocol in item above
<id><!-- req, xs: integer --></id>
<action><!-- dep, xs: integer --></action>
<placeNo><!-- req, xs:string --></placeNo>
<placeName><!-- req, xs:string --></placeName>
</LaneRunManagePlaces>
//...Repeat <LaneRunManagePlaces> Structure
</LaneRunManagePlacesList>
```

**Test cases**

**GET /CGI/ITS/LaneRun/Manage/Places**

**Request XML:** none

**Response XML:** <LaneRunManagePlacesList>

```

<?xml version="1.0" encoding="UTF-8"?>
<LaneRunManagePlacesList>
<LaneRunManagePlaces>
<id>1</id>
<placeNo>abc123</placeNo>
<placeName>test1</placeName>
<placeCode>1234</placeCode>
</LaneRunManagePlaces>
<LaneRunManagePlaces>
<id>2</id>
...
</LaneRunManagePlaces>
</LaneRunManagePlacesList>

```

**2.14.63 /CGI/ITS/LaneRun/Manage/Areas/<ID>**

<b>/CGI/ITS/LaneRun/Manage/Areas/&lt;ID&gt;</b>	
<b>GET</b>	
<b>Description</b>	Acquire the parameters of management lane/detection region
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<LaneRunManageAreas>
<b>PUT</b>	
<b>Description</b>	Set the parameters of management lane/detection region
<b>Query</b>	None
<b>Inbound Data</b>	<LaneRunManageAreas>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This protocol is prepared for acquiring, setting and deleting parameters of management lane/detection region.</p> <p><b>Explanations on key parameters:</b>  &lt;id&gt; Table No., not displayed; kernel assignment, default as 0 when adding; send acquired value (start from 1) when editing and deleting  &lt;action&gt; Operation; 0: Add; 1: Edit; 2: Delete (ignored if get)  &lt;areaNo&gt; No., 1-64  &lt;areaCode&gt; code (do not fill in the same camera lane number) 1-128  &lt;areaName&gt; Name  &lt;direction&gt; Driving direction; 0: From east to west; 1: From west to east; 2: From south to north; 3: From north to south; 4: Enter city; 5: Leave city  &lt;placeNo&gt; Cross No.  &lt;placeName&gt; Cross name  &lt;cameraNo&gt; Camera No.  &lt;cameraName&gt; Camera name  &lt;cameraAreaNo&gt; Camera lane/detection region No., 1-128  &lt;cameraId&gt; Camera ID, not applied in interface  &lt;roadwayType&gt; Lane type  &lt;kkCameraId&gt; In the case of dual intersection lanes, it represents the camera ID of the bayonet device, the interface is not used  &lt;kkCameraAreaNo&gt; When a double intersection lane represents the camera lane / detection area number of the bayonet, 1-128  &lt;kkCrossingNo&gt; When the police at the double intersection snapshots the lanes before and after, it means the intersection number</p>	

**LaneRunManageAreas XML Block**



```

<?xml version="1.0" encoding="UTF-8"?>
<LaneRunManageAreas>
<id><!-- req, xs: integer --></id>
<action><!-- dep, xs: integer --></action>
<areaNo><!-- req, xs: integer --></areaNo>
<areaCode><!-- req, xs: integer --><areaCode>
<areaName><!-- dep, xs:string --></areaName>
<direction><!-- req, xs: integer --></direction>
<placeNo><!-- req, xs:string --></placeNo>
<placeName><!-- req, xs:string --></placeName>
<cameraNo><!-- req, xs:string --></cameraNo>
<cameraName><!-- req, xs:string --></cameraName>
<cameraAreaNo><!-- req, xs: integer --></cameraAreaNo>
<cameraId><!-- dep, xs: integer --></cameraId>
<roadwayType><!-- req, xs: integer --></roadwayType>
< kkCameraId ><!-- req, xs: integer --></ kkCameraId >
<kkcameraAreaNo><!-- req, xs: integer --></kkcameraAreaNo>
<kkCrossingNo><!-- req, xs:string --></kkCrossingNo>
</LaneRunManageAreas>

```

**Test cases**

**GET /CGI/ITS/LaneRun/Manage/Areas/1**

**Request XML:** none

**Response XML:** <LaneRunManageAreas>

**PUT /CGI/ITS/LaneRun/Manage/Area/1**

**Request XML:** <LaneRunManageAreas>

**Response XML:** <ResponseStatus>

```

<?xml version="1.0" encoding="UTF-8"?>
<LaneRunManageAreas>
<id>0</id>
<action>0</action>
<areaNo>1</areaNo>
<areaCode>1<areaCode>
<areaName>test</areaName>
<direction>0</direction>
<placeNo>test1</placeNo>
<placeName>test1</placeName>
<cameraNo>123</cameraNo>
<cameraName>test</cameraName>
<cameraAreaNo>1</cameraAreaNo>
<cameraId>1</cameraId>
<roadwayType>1</roadwayType>
< kkCameraId >2</ kkCameraId >
<kkcameraAreaNo>1</kkcameraAreaNo>
<kkCrossingNo>ss1234</kkCrossingNo>
</LaneRunManageAreas>

```

**2.14.64 /CGI/ITS/LaneRun/Manage/Areas**

/CGI/ITS/LaneRun/Manage/Areas	
<b>GET</b>	
<b>Description</b>	Acquire the parameters of management lane/detection region in batch
<b>Query</b>	None
<b>Inbound Data</b>	None

<b>Success Return</b>	<b>&lt;LaneRunManageAreasList&gt;</b>
-----------------------	---------------------------------------

**Explanations on protocol:**  
This protocol is prepared for acquiring parameters of management lane/detection region in batch.

**Explanations on key parameters:**  
<id> Table No., not displayed; kernel assignment, default as 0 when adding; send acquired value (start from 1) when editing and deleting  
<action> Operation; 0: Add; 1: Edit; 2: Delete (ignored if get)  
<areaNo> No., 1-64  
<areaCode> code (do not fill in the same camera lane number) 1-128  
<areaName> Name  
<direction> Driving direction; 0: From east to west; 1: From west to east; 2: From south to north; 3: From north to south; 4: Enter city; 5: Leave city  
<placeNo> Cross No.  
<placeName> Cross name  
<cameraNo> Camera No.  
<cameraName> Camera name  
<cameraAreaNo> Camera lane/detection region No., 1-128  
<cameraId> Camera ID, not applied in interface  
<roadwayType> Lane type  
<kkPlaceName> When you are at a two-lane lane, it represents the name of the place at the intersection  
<kkCameraName> When the double-lane lane represents the camera name of the bayonet  
<kkCameraNo> When the double-lane represents the number of the bayonet camera  
<kkCameraId> In the case of dual intersection lanes, it represents the camera ID of the bayonet device, the interface is not used  
<kkCameraAreaNo> When a double intersection lane represents the camera lane / detection area number of the bayonet, 1-128  
<kkCrossingNo> When the police at the double intersection snapshots the lanes before and after, it means the intersection number

**LaneRunManageAreasList XML Block**

```
<?xml version="1.0" encoding="UTF-8"?>
<LaneRunManageAreasList>
  <LaneRunManageAreas> // Parameter structure, see protocol in item above
  <id><!-- req, xs: integer --></id>
  <action><!-- dep, xs: integer --></action>
  <areaNo><!-- req, xs: integer --></areaNo>
  <areaCode><!-- req, xs: integer --></areaCode>
  <areaName><!-- dep, xs:string --></areaName>
  <direction><!-- req, xs: integer --></direction>
  <placeNo><!-- req, xs:string --></placeNo>
  <placeName><!-- req, xs:string --></placeName>
  <cameraNo><!-- req, xs:string --></cameraNo>
  <cameraName><!-- req, xs:string --></cameraName>
  <cameraAreaNo><!-- req, xs: integer --></cameraAreaNo>
  <cameraId><!-- dep, xs: integer --></cameraId>
  <roadwayType><!-- req, xs: integer --></roadwayType>
  <kkPlaceName><!-- req, xs:string --></kkPlaceName>
  <kkCameraName><!-- req, xs:string --></kkCameraName>
  <kkCameraNo><!-- req, xs:string --></kkCameraNo>
  <kkCameraId><!-- req, xs: integer --></kkCameraId>
  <kkcameraAreaNo><!-- req, xs: integer --></kkcameraAreaNo>
```

```

<kkCrossingNo><!-- req, xs:string --></kkCrossingNo>
</LaneRunManageAreas>
//...Repeat <LaneRunManageAreas> Structure
</LaneRunManageAreasList>

```

**Test cases**

**GET /CGI/ITS/LaneRun/Manage/Areas**

**Request XML:** none

**Response XML:** <LaneRunManageAreasList>

```

<?xml version="1.0" encoding="UTF-8"?>
<LaneRunManageAreasList>
<LaneRunManageAreas>
<id>1</id>
<areaNo>1</areaNo>
<areaCode>1<areaCode>
<areaName>test</areaName>
<direction>0</direction>
<placeNo>test1</placeNo>
<placeName>test1</placeName>
<cameraNo>123</cameraNo>
<cameraName>test</cameraName>
<cameraAreaNo>1</cameraAreaNo>
<cameraId>1</cameraId>
<roadwayType>1</roadwayType>
<kkPlaceName>test2</kkPlaceName>
<kkCameraName>test2</kkCameraName>
<kkCameraNo>456</kkCameraNo>
< kkCameraId ><!-- req, xs: integer --></ kkCameraId >
<kkcameraAreaNo>1</kkcameraAreaNo>
<kkCrossingNo>ss1234</kkCrossingNo>
</LaneRunManageAreas>
<LaneRunManageAreas>
<id>2</id>
...
</LaneRunManageAreas>
</LaneRunManageAreasList>

```

**2.14.65 /CGI/ITS/ServerUpload**

<b>/CGI/ITS/ServerUpload</b>	
<b>GET</b>	
<b>Description</b>	Acquire uploaded parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ServerUpload>
<b>PUT</b>	
<b>Description</b>	Set uploaded parameters
<b>Query</b>	None
<b>Inbound Data</b>	<ServerUpload>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

This protocol is prepared for acquiring and setting the uploaded parameters of bayonet.

**Explanations on key parameters:**

<passingUpload> data type: bayonet; 0: off; 1: on  
<illegalUpload> data type: illegal; 0: off; 1: on  
<plateType> Platform type: 0: platform version; 1: stand-alone version  
<serverIp> Server ip  
<serverPort> Server port  
<version> Platform version: 0:7.0 and lower; 1:7.1 and higher (above 7.1 in general)  
<resEnable> packet return enable  
<midId> Middleware ID  
<midIp> Middleware IP  
<resEnable> Package return enabling  
<picNameuerDefEnable> Enabling of picture name customization  
<separator> Separator, corresponding to Ascii code  
<picNameList> Structure list of customized picture name  
<picName> Structure of customized picture name  
<nameType> Picture type number, as follows

**ServerUpload XML Block**

```
<?xml version="1.0" encoding="UTF-8"?>
<ServerUpload>
<serverIp><!-- req, xs:string --></serverIp>
<serverPort><!-- req, xs: integer --></serverPort>
<version><!-- req, xs: integer --></version>
<resEnable><!-- req, xs: boolean --></resEnable>
<picNameuerDefEnable><!-- req, xs: boolean --></picNameuerDefEnable>
<separator><!-- req, xs: string --></separator>
<picNameList>
<picName>
<nameType><!-- req, xs: integer --></nameType>
</picName>
</picNameList>
</ServerUpload>
```

**Test cases****GET /CGI/ITS/ServerUpload/****Request XML: none****Response XML: <ServerUpload>****PUT /CGI/ITS/ServerUpload/****Request XML: <ServerUpload>****Response XML: <ResponseStatus>**

```
<?xml version="1.0" encoding="UTF-8"?>
<ServerUpload>
<serverIp>192.168.1.10</serverIp>
<serverPort>5605</serverPort>
<version>1</version>
<resEnable>true</resEnable>
<picNameuerDefEnable>true</picNameuerDefEnable>
<separator>_</separator>
<picNameList>
<picName>
<nameType>1</nameType>
</picName>
<picName>
<nameType>4</nameType>
</picName>
</picNameList>
```

</ServerUpload>

#### 2.14.66 /CGI/ITS/HostId

<b>/CGI/ITS/HostId</b> <b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire host No.
<b>Query</b>	<b>None</b>
<b>Inbound Data</b>	<b>None</b>
<b>Success Return</b>	<HostInfo>
<b>PUT</b>	
<b>Description</b>	Set host No.
<b>Query</b>	<b>None</b>
<b>Inbound Data</b>	<HostInfo>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> Set and query host No.	
<b>Explanations of parameters:</b> hostId: Host No., 3-20bit, invalid if value is 0	

#### HostInfo XML Block

```
<?xml version="1.0" encoding="UTF-8"?>
<hostInfo version="1.0">
<hostId><!-- req, xs: string --></hostId>
</hostInfo>
```

#### Test cases

##### GET /CGI/ITS/HostId

**Request XML:** none

**Response XML:** <HostInfo>

##### PUT /CGI/ITS/HostId

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="2.0" encoding="UTF-8"?>
<hostInfo version="2.0">
<hostId>001</hostId>
</hostInfo>
```

#### 2.14.67 /CGI/ITS/PicDelPolicy

<b>/CGI/ITS/PicDelPolicy</b> <b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire picture deletion strategy
<b>Query</b>	<b>None</b>
<b>Inbound Data</b>	<b>None</b>
<b>Success Return</b>	<PicDelPara>
<b>PUT</b>	
<b>Description</b>	Set picture deletion strategy
<b>Query</b>	<b>None</b>
<b>Inbound Data</b>	<PicDelPara>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

Set and query picture deletion strategy.

**Explanations of parameters:**

hddStatus: Disk status. 1- Normal; 2- Less than warning value; 3. Less than stop working value

delNum: Number of deleted records, 6 bits

keepDay: Days of keeping uploaded records, 6 bits

startTime: Start time of record deleting, hh:mm:ss

stopTime: Stop time of record deleting, hh:mm:ss

maxNum: Max. number of keeping records, 7 bits

**PicDelPara XML Block**

```
<?xml version="1.0" encoding="UTF-8"?>
<picDelPara version="1.0">
<delNum><!-- req, xs:integer --></delNum>
<keepDay><!-- req, xs:integer --></keepDay>
<startTime><!-- req, xs: datetime --></startTime>
<stopTime><!-- req, xs: datetime --></stopTime>
<maxNum><!-- req, xs:integer --></maxNum>
</picDelPara>
```

**Test cases****GET /CGI/ITS/PicDelPolicy**

**Request XML:** none

**Response XML:** <PicDelPara>

**PUT /CGI/ITS/ PicDelPolicy**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="2.0" encoding="UTF-8"?>
<picDelPara version="2.0">
<delNum>500</delNum>
<keepDay>20</keepDay>
<startTime>10:31:00</startTime>
<stopTime>11:31:00</stopTime>
<maxNum>1000000</maxNum>
</picDelPara>
```

**2.14.68 /CGI/ITS/DataQuery**

/CGI/ITS/DataQuery		General Resource v2.0
<b>POST</b>		
<b>Description</b>	Query bayonet data	
<b>Query</b>	None	
<b>Inbound Data</b>	<DataQueryCondition>	
<b>Success Return</b>	<DataQueryResult>	
<b>Explanations on protocol:</b> Query bayonet data <b>Explanations of parameters:</b> Query xml: startTime: Start time endTime: End time beginId: Begin No. endId: End No. crossId: Cross No., 40 bits; means all crosses if number is null laneId: Lane No. 0x7fffffff: means all lanes upLoadStat: Upload state; 0x7fffffff: means all states vehicleType: Vehicle type; 0x7fffffff: means all types brand: Vehicle brand; 0x7fffffff: means all brands color: Vehicle color; 0x7fffffff: means all colors		

direction: Driving direction; 0x7fffffff: means all directions  
illegalType: Illegal type; 0x7fffffff: means all types  
plateType: Plate type; 0x7fffffff: means all types  
license: License number; 32 bits; means all licenses if number is null  
maxOrderId: Query max. ID; this field is 0 in the first query  
count: Query execution result of total amount; if query of total count is not executed, this value is 0  
subbrand: Vehicle sub-brand; 0x7fffffff: means all brands  
plateColor: license plate color  
deviceId: device ID  
mainUpload: the upload status of the main center, 0x7fffffff: indicates all status; 0: not uploaded; 1: uploaded; 2: no picture; 3: blocked  
suborUpload: upload status of sub-center, 0x7fffffff: indicates all status; 0: not uploaded; 1: uploaded; 2: no picture; 3: blocked  
otherUploadState: other center upload status, 0: not uploaded; 1: uploaded; 2: all status  
Reply xml:  
count: Total count of query result  
index: Index of query result  
orderId: Table No.  
chn: Channel No.  
time: Occurrence time of bayonet alarm  
crossName: Cross name, 40 bits; means all crosses if number is null  
picNum: Number of snapshot pictures  
picName: Name of snapshot picture; 32 bits  
picSrc: http path of picture; 256 bits  
licencePicNum: Number of snapshot license pictures  
licencePicName: Name of snapshot license pictures; 32 bits  
licencePicSrc: http path of snapshot license pictures; 256 bits  
facePicNum: Number of snapshot face pictures  
facePicName: Name of snapshot face pictures; 32 bits  
facePicSrc: http path of snapshot face pictures; 256 bits  
subbrand: Vehicle sub-brand; 0x7fffffff: means all brands  
mainUpload: the upload status of the main center, 0x7fffffff: indicates all status; 0: not uploaded; 1: uploaded; 2: no picture; 3: blocked  
suborUpload: upload status of sub-center, 0x7fffffff: indicates all status; 0: not uploaded; 1: uploaded; 2: no picture; 3: blocked  
otherUploadState: other center upload status, 0: not uploaded; 1: uploaded; 2: all status  
plateColor: license plate color, 0: white plate; 1: yellow plate; 2: blue plate; 3: black plate; 4: green plate; 51: yellow-green plate; 52: gradient green plate; 53: red plate; 99: unknown;  
speed: vehicle speed  
mainDriverSex: main driving gender, 0: unknown; 1: male; 2: female;  
copilotSex: co-driver gender, 0: unknown; 1: male; 2: female;  
alarmtype: alarm type  
limitspeed: limited speed  
snapcode: security code  
deviceid: device ID

#### **DataQueryCondition XML Block**

```

<?xml version="2.0" encoding="UTF-8"?>
<dataQueryCondition version="2.0">
<timeSpanList>
<timeSpan>
<startTime><!-- req, xs: datetime --></startTime>
<endTime><!-- req, xs: datetime --></endTime>
</timeSpan>
</timeSpanList>
<sessionId><!--req,sx:integer--></sessionId>
<beginId><!--req,sx:integer--></beginId>
<endId><!--req,sx:integer--></endId>
<crossId><!--req,sx:string--></crossId>
<laneId><!--req,sx: integer--></laneId>
<uploadStat><!--req,sx:integer--></uploadStat>
<vehicleType><!--req,sx:integer--></vehicleType>
<brand><!--req,sx:integer--></brand>
<subbrand><!--req,sx:integer--></subbrand>
<color><!--req,sx:integer--></color>
<direction><!--req,sx:integer--></direction>
<illegalType><!--req,sx:integer--></illegalType>
<plateType><!--req,sx:integer--></plateType>
<plateColor><!--req,sx:integer--></plateColor>
<deviceId><!--req,sx:integer--></deviceId>
<mainUpload><!--req,sx:integer--></mainUpload>
<suborUpload><!--req,sx:integer--></suborUpload>
<otherUploadState><!--req,sx:integer--></otherUploadState>
<alarmtype><!--req,sx:integer--></ alarmtype >
<license><!--req,sx: string--></license>
<maxOrderId ><!--req,sx:integer--></maxOrderId>
<count><!--req,sx:integer--></count>
</dataQueryCondition>

```

#### DataQueryResult XML Block

```

<dataQueryResult version="2.0">
<sessionId><!--req,sx:integer--></sessionId>
<count><!--req,sx:integer--></count>
<matchList>
<matchElement>
<index><!--req,sx:integer--></index>
<orderId><!--req,sx:integer--></orderId>
<chn><!--req,sx:integer--></chn>
<crossId><!--req,sx:string--></crossId >
<crossName><!--req,sx:string--></crossName>
<laneId><!--req,sx: integer--></laneId>
<time><!--req,sx: time--></time>
<uploadStat><!--req,sx:integer--></uploadStat>
<vehicleType><!--req,sx:integer--></vehicleType>
<brand><!--req,sx:integer--></brand>
<subbrand><!--req,sx:integer--></subbrand>
<color><!--req,sx:integer--></color>
<direction><!--req,sx:integer--></direction>
<illegalType><!--req,sx:integer--></illegalType>
<plateType><!--req,sx:integer--></plateType>
<recStartTm><!--req,sx:integer--></recStartTm>
<recEndTm><!--req,sx:integer--></recEndTm>
<mainUpload><!--req,sx:integer--></mainUpload>

```



```

<suborUpload><!--req,sx:integer--></suborUpload>
<otherUploadState><!--req,sx:integer--></otherUploadState>
<plateColor><!--req,sx:integer--></plateColor>
<speed><!--req,sx:integer--></speed>
<mainDriverSex><!--req,sx:integer--></mainDriverSex>
<copilotSex><!--req,sx:integer--></copilotSex>
<alarmtype><!--req,sx:integer--></ alarmtype >
<limitspeed ><!--req,sx:integer--></ limitspeed>
<deviceid ><!--req,sx:integer--></deviceid>
<license><!--req,sx: string--></license>
<picNum><!--req,sx:integer--></picNum>
<picList>
<pic>
<id><!--req,sx:integer--></id>
<picName><!--req,sx: string--></picName>
<picSrc><!--req,sx: string--></picSrc>
</pic>
<id><!--req,sx:integer--></id>
<picName><!--req,sx: string--></picName>
<picSrc><!--req,sx: string--></picSrc>
<capturetime><!--req,sx:integer--></capturetime>
</pic>
...
<pic>
<id><!--req,sx:integer--></id>
<picName><!--req,sx: string--></picName>
<picSrc><!--req,sx: string--></picSrc>
<capturetime><!--req,sx:integer--></capturetime>
<capturetimems><!--req,sx:integer--></capturetimems>
</pic>
</picList>
<snapCodeNum><!--req,sx:integer--></snapCodeNum>
<snapCodeList>
<snapCode>
<value><!--req,sx: string --></value>
</snapCode>
.....
</snapCodeList>
<licencePicNum><!--req,sx:integer--></licencePicNum>
<licencePicList>
<licencePic>
<id><!--req,sx:integer--></id>
<licencePicName><!--req,sx: string--></licencePicName>
<licencePicSrc><!--req,sx: string--></licencePicSrc>
</licencePic>
<id><!--req,sx: integer --></id>
<licencePicName><!--req,sx: string--></licencePicName>
<licencePicSrc><!--req,sx: string--></licencePicSrc>
</licencePic>
...
<licencePic>
<id><!--req,sx: integer --></id>

```

```

<licencePicName><!--req,sx: string--></licencePicName>
<licencePicSrc><!--req,sx: string--></licencePicSrc>
</licencePic>
</licencePicList>
<facePicNum><!--req,sx:integer--></facePicNum>
<facePicList>
<facePic>
<id><!--req,sx: integer --></id>
<facePicName><!--req,sx: string--></facePicName>
<facePicSrc><!--req,sx: string--></facePicSrc>
</facePic>
<id><!--req,sx: integer --></id>
<facePicName><!--req,sx: string--></facePicName>
<facePicSrc><!--req,sx: string--></facePicSrc>
</facePic>
...
<facePic>
<id><!--req,sx: integer --></id>
<facePicName><!--req,sx: string--></facePicName>
<facePicSrc><!--req,sx: string--></facePicSrc>
</facePic>
</facePicList>
</matchList>
</matchElement>
</dataQueryResult>

```

#### Test cases

#### POST /CGI/ITS/DataQuery

**Request XML: <DataQueryCondition> As follows**

```

<?xml version="1.0" encoding="UTF-8"?>
<dataQueryCondition version="1.0">
<timeSpanList>
<timeSpan>
<startTime>2018-08-01T00:00:00Z</startTime>
<endTime>2018-08-02T23:59:59Z</endTime>
</timeSpan>
</timeSpanList>
<sessionId>1</sessionId>
<beginId>0</beginId>
<endId>100</endId>
<crossId></crossId>
<crossName></crossName>
<laneId>2147483647</laneId>
<upLoadStat>2147483647</upLoadStat>
<vehicleType>2147483647</vehicleType>
<brand>2147483647</brand>
<subbrand>2147483647</subbrand>
<color>2147483647</color>
<direction>2147483647</direction>
<illegalType>2147483647</illegalType>
<platType>2147483647</platType>
<plateColor>51</plateColor>
<deviceId>1</deviceId>
<mainUpload>2147483647</mainUpload>
<suborUpload>2147483647</suborUpload>
<otherUploadState>16</otherUploadState>
<alarmtype>1</ alarmtype >

```

```
<deviceid >1</deviceid>
<license></license>
<maxOrderId>0</maxOrderId>
<iCount>0</iCount>
</dataQueryCondition>
```

**Response XML: <dataQueryResult>**

```
<dataQueryResult version="2.0">
<sessionId>1</sessionId>
<iCount>20</iCount>
<matchList>
<matchElement>
<index>0</index>
<orderId>0</orderId>
<ichn>1</ichn>
<crossId>1</crossId >
<crossName> Huake No. 2 Road </crossName>
<laneId>1</laneId>
<time>2018-07-10T12:00:00Z</time>
<upLoadStat>1</upLoadStat>
<vehicleType>1</vehicleType>
<brand>2</brand>
<color>2</color>
<direction>1</direction>
<illegalType>1</illegalType>
<recStartTm>1683218131</recStartTm>
<recEndTm>1683218232</recEndTm>
<mainUpload>0</mainUpload>
<suborUpload>0</suborUpload>
<otherUploadState>1</otherUploadState>
<plateColor>1</plateColor>
<speed>70</speed>
<mainDriverSex>1</mainDriverSex>
<copilotSex>2</copilotSex>
<alarmtype>1</ alarmtype >
<limitspeed>100</limitspeed>
<license>Jin A.88888</license>
<picNum>10</picNum>
<picList>
<pic>
<id>0</id>
<picName>XXXX</picName>
<capturetime>1355487545</capturetime>
<capturetimems>560</capturetimems>
</pic>
<id>1</id>
<picName>XXXX</picName>
</pic>
...
<pic>
<id>n</id>
<picName>XXXX</picName>
</pic>
</picList>
```

```

<snapCodeNum>1</snapCodeNum>
<snapCodeList>
<snapCode>
<value>765D4BE5</value>
</snapCode>
.....
</snapCodeList>
<licencePicNum>5</licencePicNum>
<licencePicList>
<licencePic>
<id>0</id>
<licencePicName>XXXX</licencePicName>
</licencePic>
<id>1</id>
<licencePicName>XXXX</licencePicName>
</licencePic>
...
<licencePic>
<id>n</id>
<licencePicName>XXXX</licencePicName>
</licencePic>
</licencePicList>
<facePicNum>3</facePicNum>
<facePicList>
<facePic>
<id>0</id>
<facePicName>XXXX</facePicName>
</facePic>
<id>1</id>
<facePicName>XXXX</facePicName>
</facePic>
...
<facePic>
<id>n</id>
<facePicName>XXXX</facePicName>
</facePic>
</facePicList>
</matchList>
</matchElement>
</dataQueryResult>

```

### 2.14.69 /CGI/ITS/CountQuery

/CGI/ITS/CountQuery		General Resource v2.0
<b>POST</b>		
<b>Description</b>	Query the total amount of bayonet data	
<b>Query</b>	None	
<b>Inbound Data</b>	<CountQueryCondition>	
<b>Success Return</b>	<CountQueryResult>	
<b>Explanations on protocol:</b> Query bayonet data <b>Explanations of parameters:</b> Query xml: startTime: Start time		

endTime: End time  
 sessionId: Session ID  
 crossId: Cross ID consist of 40 bits, empty ID means all crosses.  
 laneId: Lane No. 0x7fffffff: means all lanes  
 upLoadStat: Upload state; 0x7fffffff: means all states  
 vehicleType: Vehicle type; 0x7fffffff: means all types  
 brand: Vehicle brand; 0x7fffffff: means all brands  
 color: Vehicle color; 0x7fffffff: means all colors  
 direction: Driving direction; 0x7fffffff: means all directions  
 illegalType: Illegal type; 0x7fffffff: means all types  
 plateType: Plate type; 0x7fffffff: means all types  
 license: License number; 32 bits; means all licenses if number is null  
 subbrand: vehicle sub-brand 0x7fffffff: all brands  
 plateColor: license plate color  
 deviceId: device ID  
 mainUpload: the upload status of the main center, 0x7fffffff: indicates all status; 0: not uploaded; 1: uploaded; 2: no picture; 3: blocked  
 suborUpload: upload status of sub-center, 0x7fffffff: indicates all status; 0: not uploaded; 1: uploaded; 2: no picture; 3: blocked  
 otherUploadState: other center upload status, 0: not uploaded; 1: uploaded; 2: all status  
 Reply xml:  
 count: Total pieces of query results, -1, means the query time is too long and not supported; 2 busy external hanging

#### CountQueryCondition XML Block

```

<?xml version="1.0" encoding="UTF-8"?>
<countQueryCondition version="1.0">
  <timeSpanList>
    <timeSpan>
      <startTime><!--req,sx:datetime--></startTime>
      <endTime><!--req,sx:datetime--></endTime>
    </timeSpan>
  </timeSpanList>
  <sessionId><!--req,sx:integer--></sessionId>
  <crossId><!--req,sx:integer--></crossId >
  <laneId><!--req,sx:integer--></laneId>
  <upLoadStat><!--req,sx:integer--></upLoadStat>
  <vehicleType><!--req,sx:integer--></vehicleType>
  <brand><!--req,sx:integer--></brand>
  <subbrand><!--req,sx:integer--></subbrand>
  <color><!--req,sx:integer--></color>
  <direction><!--req,sx:integer--></direction>
  <illegalType><!--req,sx:integer--></illegalType>
  <plateColor><!--req,sx:integer--></plateColor>
  <deviceId><!--req,sx:integer--></deviceId>
  <mainUpload><!--req,sx:integer--></mainUpload>
  <suborUpload><!--req,sx:integer--></suborUpload>
  <otherUploadState><!--req,sx:integer--></otherUploadState>
  <plateType><!--req,sx:integer--></palteType>
  <license><!--req,sx:string--></license>
  <maxOrderId ><!--req,sx:integer--></maxOrderId>
  <count><!--req,sx:integer--></count>
</countQueryCondition>
  
```

### CountQueryResult XML Block

```
<countQueryResult version="1.0">  
<count><!--req,sx:integer--></count>  
</countQueryResult>
```

### Test cases

#### POST /CGI/ITS/DataQuery/

#### Request XML: <DataQueryCondition> As follows

```
<?xml version="1.0" encoding="UTF-8"?>  
<countQueryCondition version="1.0">  
<timeSpanList>  
<timeSpan>  
<startTime>2018-07-10T12:00:00Z</startTime>  
<endTime>2018-07-10T13:30:00Z</endTime>  
</timeSpan>  
</timeSpanList>  
<sessionId>1</sessionId>  
<crossId>1</crossId >  
<laneId>1</laneId>  
<uploadStat>0</uploadStat>  
<vehicleType>1</vehicleType>  
<brand>20</brand>  
<subbrand>2147483647</subbrand>  
<color>3</color>  
<direction>1</direction>  
<illegalType>2</illegalType>  
<plateColor>51</plateColor>  
<deviceId>1</deviceId>  
<mainUpload>2147483647</mainUpload>  
<suborUpload>2147483647</suborUpload>  
<otherUploadState>16</otherUploadState>  
<license>Jin A.88888</license>  
</countQueryCondition>
```

#### Response XML: <dataQueryResult>

```
<countQueryResult version="1.0">  
<count>20</count>  
</countQueryResult>
```

### 2.14.70 /CGI/ITS/DelData

/CGI/ITS/Deldata/		General Resource v2.0
<b>POST</b>		
<b>Description</b>	Delete bayonet data	
<b>Query</b>	None	
<b>Inbound Data</b>	<DelDataPara>	
<b>Success Return</b>	<DelDataResult>	
<b>Explanations on protocol:</b> Deletion of bayonet data, single pieces or multiple pieces		
<b>Explanations of parameters:</b>		
Query xml:		
delNum: Delete the total number of records, and 40 pieces can be deleted at the most at one time.		
orderId: The ID recorded in table		
Reply xml:		

failNum: Delete the total failed umber of records  
 orderId: The ID recorded in table

**DelDataPara XML Block**

```
<?xml version="2.0" encoding="UTF-8"?>
<delDataPara version="2.0">
<delNum><!--req,sx:integer--></delNum>
<orderIdList>
<orderId>
<id><!--req,sx:integer--></id>
</orderId>
</orderIdList>
</delDataPara>
```

**DelDataResult XML Block**

```
<delDataResult version="2.0">
<failNum><!--req,sx:integer--></failNum>
<orderIdList>
<orderId>
<id><!--req,sx:integer--></id>
</orderId>
</orderIdList>
</delDataResult>
```

**Test cases**

**POST /CGI/ITS/DelData**

**Request XML: <DelDataPara> as below**

```
<?xml version="1.0" encoding="UTF-8"?>
<delDataPara version="1.0">
<delNum>2</delNum>
<orderIdList>
<orderId>
<id>5799</id>
</orderId >
<orderId>
<id>5798</id>
</orderId >
</orderIdList>
</delDataPara>
```

**Response XML: <DelDataResult>**

```
<delDataResult version="2.0">
<failNum>1</failNum>
<orderIdList>
<orderId>
<id>5799</id>
</orderId >
</orderIdList>
</delDataResult>
```

**2.14.71 /CGI/ITS/ModifyData**

<b>/CGI/ITS/ModifyData</b>	
<b>General Resource v2.0</b>	
<b>PUT</b>	
<b>Description</b>	Modify record content
<b>Query</b>	None
<b>Inbound Data</b>	<ModifyPara>
<b>Success Return</b>	<ResponseStatus>

**Explanations on protocol:**

Modify the record content queried.

**Explanations of parameters:**

orderId: Table No.

vehicleType: Vehicle type; 0x7ffffff: means all types

brand: Vehicle brand; 0x7ffffff: means all brands

subbrand: Vehicle sub-brand; 0x7ffffff: means all brands

color: Vehicle color; 0x7ffffff: means all colors

illegalType: Illegal type; 0x7ffffff: means all types

license: License number; 32 bits; means all licenses if number is null

picName: Name of the first picture captured is of 32 bits

licenseColor: License color, 0: white; 1: yellow; 2: blue; 3: black; 4: green; 51: yellow; 52: gradient green; 53: red; 99: unknown;

**PicDelPara XML Block**

```
<?xml version="2.0" encoding="UTF-8"?>
<modifyPara version="2.0">
<orderId><!--req,sx:integer--></orderId>
<vehicleType><!--req,sx:integer--></vehicleType>
<brand><!--req,sx:integer--></brand>
<subbrand><!--req,sx:integer--></subbrand>
<color><!--req,sx:integer--></color>
<illegalType><!--req,sx:integer--></illegalType>
<license><!--req,sx: string--></license>
<picName><!--req,sx: string--></picName>
<licenseColor><!--req,sx:integer--></licenseColor></modifyPara>
```

**Test cases****PUT /CGI/ITS/ PicDelPolicy**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<?xml version="2.0" encoding="UTF-8"?>
<ModifyPara version="2.0">
<orderId>1</orderId>
<vehicleType>2</vehicleType>
<brand>20</brand>
<subbrand>2</subbrand>
<color>1</color>
<illegalType>2</illegalType>
<license> Jin A8888</license>
<picName>xxxx</picName>
<licenseColor>99</licenseColor></ModifyPara>
```

**2.14.72 /CGI/ITS/Capability**

<b>/CGI/ITS/Capability</b>	
<b>General Resource v2.0</b>	
<b>POST</b>	
<b>Description</b>	Bayonet acquisition capability set
<b>Query</b>	<b>None</b>
<b>Inbound Data</b>	<Condition>
<b>Success Return</b>	<Capability>



**Explanations on protocol:**

Acquire the list of the parameters of query conditions

**Explanations of parameters:**

Request xml

type: request type, 4. Driving direction 5. Vehicle type 7. Vehicle brand 9. Body color 1. Cross ID/ address name; 2. Lane No./ name of monitoring area; 3. Equipment No./ equipment name; 4. Type of driving direction; 5. Vehicle type; 6. Capture type; 7. Vehicle brand; 8. License; 9. Body color; 10. Name and format of picture; 11. Platform version; vehicle Type: vehicle type

vehicleType: Vehicle type

brand: Vehicle brand

color: Body color

direction: Driving direction

**Condition XML Block**

```
<?xml version="2.0" encoding="UTF-8"?>
<conditionversion="2.0">
<elementList>
<element>
<type><!--req,sx: integer --></type>
</element>
...
</elementList>
</condition>
```

**Capability XML Block**

```
<?xml version="2.0" encoding="UTF-8"?>
<capability version="2.0">
<vehicleTypeList>
<vehicleType>
<value><!--req,sx:integer--></value>
<para><!--req,sx:string--></para>
</vehicleType>
...
</vehicleTypeList>
<brandList>
<brand>
<value><!--req,sx:integer--></value>
<para><!--req,sx:string--></para>
</brand>
...
</brandList>
<subBrandList>
<subBrand>
<value><!--req,sx:integer--></value>
<para><!--req,sx:string--></para>
</subBrand>
...
</subBrandList>

<colorList>
<color>
<value><!--req,sx:integer--></value>
<para><!--req,sx:string--></para>
</color>
...
</colorList>
<directionList>
<direction>
<value><!--req,sx:integer--></value>
```

```
<para><!--req,sx:string--></para>
</direction>
...
</directionList>
</capability>
```

#### Test cases

#### POST /CGI/ITS/Capability/

#### Request XML: <Condition>

```
<?xml version="2.0" encoding="UTF-8"?>
<conditionversion="2.0">
<elementList>
<element>
<type>4</type>
</element>
<element>
<type>5</type>
</element>
<element>
<type>7</type>
</element>
<element>
<type>9</type>
</element>
...
</elementList>
</condition>
```

#### Response XML: <Capability>

```
<?xml version="2.0" encoding="UTF-8"?>
<capability version="2.0">
<vehicleTypeList>
<vehicleType>
<value>1</value>
<para>truck</para>
</vehicleType>
...
</vehicleTypeList>
<brandList>
<brand>
<value>1</value>
<para>Volkswagen</para>
</brand>
...
</brandList>
<colorList>
<color>
<value>1</value>
<para>Red</para>
</color>
...
</colorList>
<directionList>
<direction>
<value>1</value>
<para> From right to left</para>
</direction>
...
</directionList>
```

</capability>

### 2.14.73/CGI/ITS/LaneRun/TrafficJamPara/channels/<ID>

/CGI/ITS/LaneRun/TrafficJamPara/channels/<ID>General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire driveintojamcross parameter
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<TrafficJamPara>
<b>PUT</b>	
<b>Description</b>	Set driveintojamcross parameter
<b>Query</b>	None
<b>Inbound Data</b>	<TrafficJamPara>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for the acquisition and setting of the driveintojamcross parameters of the illegal snap, helping client or IE query and setthe driveintojamcross of equipment via CGI protocol.	
<b>Explanations on key parameters:</b> <trafficLightCheckTimes> Traffic light check times, 3-5. < trafficJamCapDelayTime> trafficJamCapDelayTime, in second, 1-60. <trafficJamCheckLightType> whether to use the status of traffic lights when entering the cross to snap, 0 not defined, 1 snap only the green light is on	

#### TrafficJamPara XML Block

```
<TrafficJamPara version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<trafficLightCheckTimes>
<!-- req, xs:integer -->
</trafficLightCheckTimes>
< trafficJamCapDelayTime>
<!-- req, xs:integer -->
</ trafficJamCapDelayTime>
<trafficJamCheckLightType>
<!-- req, xs:integer -->
</ trafficJamCheckLightType>
</trafficJamPara>
```

#### Test cases

**GET /CGI/ITS/LaneRun/TrafficJamPara/channels/1**

**Request XML:** none

**Response XML:** < TrafficJamPara>

**PUT/CGI/ITS/LaneRun/TrafficJamPara/channels/1**

**Response XML:** < TrafficJamPara>

**Request XML:** as below

```
<?xml version="2.0" encoding="UTF-8"?>
< trafficJamPara >
<trafficLightCheckTimes>2</trafficLightCheckTimes>
< trafficJamCapDelayTime>30</ trafficJamCapDelayTime>
<trafficJamCheckLightType>0</ trafficJamCheckLightType>
</trafficJamPara>
```

## 2.14.74/CGI/ITS/SystemRun/ItsAlarmLinkAudio/channels/<ID>/scene/<ID>

/CGI/ITS/SystemRun/ItsAlarmLinkAudio/channels/<ID>/scene/<ID> General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire traffic alarm linkage audio parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ItsAlarmLinkAudio>
<b>PUT</b>	
<b>Description</b>	Set traffic alarm linkage audio parameters
<b>Query</b>	None
<b>Inbound Data</b>	<ItsAlarmLinkAudio>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b> This protocol is prepared for acquiring and setting traffic alarm linkage audio parameters, helping client or IE query and sett traffic alarm linkage audio parameters via CGI protocol.</p> <p><b>Explanations on key parameters:</b>            &lt;playMode&gt; means play mode, 1: Illegal alarm 2: Loop payback3: sound expelling            &lt;playModeEnable&gt; means play mode enable, true: Enable; false : Not enable            &lt;audioType&gt; means the type of linkage audio 1: Audio files 2: Text            &lt;audioNo&gt; means the N. of linkage audio 1~20            &lt; audioText&gt; means the length of the text input is not more than 64 characters            &lt;timeNumber&gt; represents the total number of time periods            &lt;timeid&gt; represents the sequence number corresponding to the time period 1 ~ 8            &lt;timeenable&gt; represents the time enable switch, true: on, false: off            &lt;startTime&gt; represents the start time in the format: 10:31 (hour: minute)            &lt;endTime&gt; represents the end time, the format is: 10:32 (hour: minute)            &lt;delayedTime&gt; represents the time interval of each play, the format is: 8 (seconds)            &lt;continuedTime&gt; represents the duration of the alarm tone: unit: seconds Range: 10S-300S</p>	

### ItsAlarmLinkAudio XML Block

<pre> &lt;?xml version="2.0" encoding="UTF-8"?&gt; &lt;ItsAlarmLinkAudio version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema"&gt; &lt;ItsAlarmLinkAudioList&gt; &lt;ItsAlarmLinkAudioInfo&gt; &lt;playMode&gt;&lt;!-- req, xs:integer--&gt;&lt;/playMode&gt;   &lt;playModeEnable&gt;&lt;!-- req, xs:boolean --&gt;&lt;/playModeEnable&gt;   &lt;audioType&gt;&lt;!-- req, xs:integer--&gt;&lt;/audioType&gt;   &lt;audioNo&gt;&lt;!-- req, xs:integer--&gt;&lt;/audioNo&gt;   &lt;audioText&gt;&lt;!-- req, xs:string--&gt;&lt;/audioText&gt;   &lt;timeNumber&gt;&lt;!-- req, xs:integer--&gt;&lt;/timeNumber&gt;   &lt;continuedTime&gt;&lt;!-- req, xs:integer--&gt;&lt;/continuedTime&gt;   &lt;audioList&gt;     &lt;audioItem&gt;       &lt;timeid&gt;&lt;!-- req, xs:integer--&gt;&lt;/timeid&gt;         &lt;timeenable&gt;&lt;!-- req, xs:boolean --&gt;&lt;/timeenable&gt;         &lt;startTime&gt;&lt;!-- req, xs:string, --&gt;&lt;/startTime&gt;         &lt;endTime&gt;&lt;!-- req, xs:string, --&gt;&lt;/endTime&gt;         &lt;delayedTime&gt;&lt;!-- req, xs:integer--&gt;&lt;/delayedTime&gt;         &lt;audioType&gt;&lt;!-- req, xs:integer--&gt;&lt;/audioType&gt;         &lt;audioNo&gt;&lt;!-- req, xs:integer--&gt;&lt;/audioNo&gt; </pre>
---

```
        <audioText><!-- req, xs:string--></audioText>
    </audioItem >
</audioList >
</ItsAlarmLinkAudioInfo>
</ItsAlarmLinkAudioList>
</ItsAlarmLinkAudio>
```

**Test cases**

**GET /CGI/ITS/SystemRun/ItsAlarmLinkAudio/channels/1/scene/1**

**Request XML: none**

**Response XML: <ItsAlarmLinkAudio>**

**PUT /CGI/ITS/SystemRun/ItsAlarmLinkAudio/channels/1/scene/1**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<?xml version="1.0" encoding="UTF-8"?>
<ItsAlarmLinkAudio>
<ItsAlarmLinkAudioList>
<ItsAlarmLinkAudioInfo>
<playMode>1</playMode>
<playModeEnable>true</playModeEnable>
<audioType>1</audioType>
<audioNo>2</audioNo>
<audioText></audioText>
</ItsAlarmLinkAudioInfo>
<ItsAlarmLinkAudioInfo>
<playMode>2</playMode>
<playModeEnable>true</playModeEnable>
<audioType>2</audioType>
<audioNo>3</audioNo>
< timeNumber>1</ timeNumber>
< audioList >
  < audioItem >
    <timeid>1</timeid>
    <timeenable>true</ timeenable >
    <startTime>00:30</startTime>
    <endTime>12:00</endTime>
    < delayedTime>8</ delayedTime>
    <audioType>1</audioType>
    <audioNo>2</audioNo>
    <audioText></audioText>
  </ audioItem >
</ audioList >
<audioText> please lay attention to safety </audioText>
</ItsAlarmLinkAudioInfo>
<ItsAlarmLinkAudioInfo>
  <playMode>3</playMode>
  <playModeEnable>true</playModeEnable>
  <audioType>1</audioType>
  <audioNo>3</audioNo>
  <continuedTime>20</continuedTime>
  <audioText></audioText>
```

```

    <timeNumber ></timeNumber>
</ItsAlarmLinkAudioInfo>
</ItsAlarmLinkAudioList>
</ItsAlarmLinkAudio>

```

### 2.14.75 /CGI/ITS/ComityPedestrianPara/channels/<ID>/scences/<ID>

<b>/CGI/ITS/ComityPedestrianPara/channels/&lt;ID&gt;/scences/&lt;ID&gt;General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire motor vehicle gives way to pedestrian parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ComityPedestrianPara>
<b>PUT</b>	
<b>Description</b>	Set motor vehicle gives way to pedestrian parameters
<b>Query</b>	None
<b>Inbound Data</b>	<ComityPedestrianPara>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>            This protocol is prepared for acquiring and setting motor vehicle gives way to pedestrian parameters, helping client or IE query and set motor vehicle gives way to pedestrian parameters via CGI protocol.</p> <p><b>Explanations on key parameters:</b>            &lt;captureMode&gt; snap mode 0- no signal light 1- pedestrian signal light 2- vehicle pedestrian light            &lt;capPedestrianOrientation&gt; Direction of pedestrians upon snap 0-not defined 1- pedestrian from left to right 2- pedestrian from right to left            &lt;laneRunNum&gt; Lane No.            &lt;pedestrianDispSensitivity&gt; pedestrian displacement sensitivity corresponding to lane, 1-100</p>	

#### ComityPedestrianPara XML Block

```

<ComityPedestrianPara version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<captureMode><!-- req, xs:integer --></captureMode>
<capPedestrianOrientation><!-- req, xs:integer --></capPedestrianOrientation>
<ComityPedestrianLaneList>
<ComityPedestrianLaneInfo>
<laneRunNum><!-- req, xs:integer--></laneRunNum>
    <pedestrianDispSensitivity><!-- req, xs:integer--></pedestrianDispSensitivity>
</ComityPedestrianLaneInfo>
</ComityPedestrianLaneList>
</ComityPedestrianPara>

```

#### Test cases

**GET /CGI/ITS/ComityPedestrianPara/channels/1**

**Request XML:** none

**Response XML:** <ComityPedestrianPara>

**PUT /CGI/ITS/ComityPedestrianPara/channels/1**

**Response XML:** <ComityPedestrianPara>

**Request XML:** as below

```

<?xml version="2.0" encoding="UTF-8"?>
<ComityPedestrianPara>
<captureMode>0</captureMode>
<capPedestrianOrientation>1</capPedestrianOrientation>
<ComityPedestrianLaneList>
<ComityPedestrianLaneInfo>
<laneRunNum>1</laneRunNum>
  <pedestrianDispSensitivity>80</pedestrianDispSensitivity>
</ComityPedestrianLaneInfo>
</ComityPedestrianLaneList>
</ComityPedestrianPara>

```

#### 2.14.76/CGI/ITS/ShotPara/PicOsdExcept/channels/<ID>

/CGI/ITS/ShotPara/PicOsdExcept /channels/<ID>	
General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire picture overlay exception parameter
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<PicOsdExcept>
<b>PUT</b>	
<b>Description</b>	Set picture overlay exception parameter
<b>Query</b>	None
<b>Inbound Data</b>	<PicOsdExcept>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This protocol is prepared for acquiring and setting picture overlay exception parameters, helping client or IE query and set picture overlay exception parameters via CGI protocol.</p> <p><b>Explanations on key parameters:</b>  pageIndex / &lt;pageIndex&gt; means the number of the page. 0- composite picture, 1- first page, 2- second page, 3- third page, 4- fourth, 5- fifth, 6- sixth  capType /&lt;capType&gt; means the numbering scope of illegal types, 1-100, consistent with the illegal type of the page of illegal dictionary.  &lt;noPlusType&gt; means the type of character overlay exception information, and character overlay information of traffic pictures.</p>	

#### PictureOverlay XML Block

```

<PicOsdExcept="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<pageIndexList>
<pageIndexData>
<pageIndex><!-- req, xs:integer--></pageIndex>
<capTypeList>
<capTypeData>
<capType><!-- req, xs: integer --></capType>
<noPlusTypeList>
<noPlusTypeData>
<noPlusType><!-- req, xs:integer--></noPlusType>
</ noPlusTypeData>
</ noPlusTypeList>
</capTypeData>
</capTypeList>
</pageIndexData>
</ pageIndexList>
</PicOsdExcept>

```

#### Test cases

**GET /CGI/ITS/ShotPara/PicOsdExcept/channels/1**

**Request XML:** none  
**Response XML:** <PicOsdExcept>  
**PUT /CGI/ITS/ShotPara/PicOsdExcept/channels/1**  
**Response XML:** <ResponseStatus>  
**Request XML:** as below

```

<?xml version="1.0" encoding="UTF-8"?>
<PicOsdExcept>
<pageIndexList>
<pageIndexData>
<pageIndex>1</pageIndex>
<capTypeList>
<capTypeData>
<capType>1</capType>
<noPlusTypeList>
<noPlusTypeData>
<noPlusType>1</noPlusType>
</noPlusTypeData>
</noPlusTypeList>
</capTypeData>
</capTypeList>
</pageIndexData>
</pageIndexList>
</PicOsdExcept>
  
```

**2.14.77 /CGI/ITS/OverSpeedIllegalPara/channels/<ID>/scences/<ID>**

<b>/CGI/ITS/ OverSpeedIllegalPara /channels/&lt;ID&gt;/scences/&lt;ID&gt;General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire vehicle overspeed snap parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<OverSpeedIllegalPara>
<b>PUT</b>	
<b>Description</b>	Set vehicle overspeed snap parameters
<b>Query</b>	None
<b>Inbound Data</b>	<OverSpeedIllegalPara>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> This protocol is prepared for acquiring and setting picture overlay exception parameters, helping client or IE query and set picture overlay exception parameters via CGI protocol. <b>Explanations on key parameters:</b> <carOverSpeedTypeEnable> car over speed type enable; false- disaable; true- enable	

**OverSpeedIllegalPara XML Block**

```

< OverSpeedIllegalPara version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<carOverSpeedTypeEnable><!-- req, xs: Boolean --></carOverSpeedTypeEnable>
</ OverSpeedIllegalPara >
  
```

**Test cases**

**GET /CGI/ITS/OverSpeedIllegalPara/channels/1/scences/1**  
**Request XML:** none  
**Response XML:** <OverSpeedIllegalPara>  
**PUT /CGI/ITS/OverSpeedIllegalPara/channels/1/scences/1**  
**Response XML:** <ResponseStatus>  
**Request XML:** as below



```

<?xml version="1.0" encoding="UTF-8"?>
<OverSpeedIllegalPara>
<carOverSpeedTypeEnable>true</carOverSpeedTypeEnable>
</OverSpeedIllegalPara>

```

#### 2.14.78 traffic picture character overlaying information

0	Overlay time enable
1	Overlay cross name enable
2	Overlay lane name enable
3	Overlay lane direction enable
4	Overlay speed
5	Overlay speed limit
6	Overlay overspeed ratio
7	Overlay license enable
8	Overlay equipment No. enable
9	Overlay red light time
10	Overlay illegal park test time set enable
11	Overlay illegal park test No. enable, such as “preset 1 region 3”
12	Regional setting display overlay enable
13	DSP module debugging information display enable
14	Command of illegal park prompt display switch
15	Overlay watch position enable
16	Overlay equipment status enable
17	Overlay license color
18	Overlay body color enable
19	Overlay cross No. enable
20	Overlay illegal type enable
21	Overlay lane upgoing / downgoing enable
22	Overlay security code
23	Overlay car logo enable
24	Lane No.
25	Red light ending time
26	Overlay safety belt enable
27	Overlay post-red light enable
28	Overlay acquisition agency code enable
29	Overlay vehicle type enable
30	Overlay self-definition 1 enable
31	Overlay self-definition 2 enable
32	Overlay illegal code enable
33	Overlay license thumbnail enable
34	Overlay main driver face detect enable
35	Overlay sec pilot face detect enable
36	Overlay illegal park box enable
37	Overlay listening phone
38	Main driver’s sun visor overlay enable
39	Co-driver’s sun visor overlay enable

40	Overlay hazardous chemical vehicle enable
41	Overlay yellow label car vehicle
42	Overlay pendant enable
43	Overlay tissue box enable
44	Overlay annual inspection label enable
45	Overlay distant light enable
46	Overlay out top window enable
47	Overlay abnormal license enable
48	Overlay lathe parabolic enable
49	Overlay gender detect enable
50	Face thumbnail
51	Overlay check car head
52	Overlay channel property
53	Overlay cradle child in front row
54	Overlay age information
55	Overlay eye information
56	Overlay facial mask information
57	Background image overlays thumbnail position display
58	Overlay race information
59	Total duration of violations
60	Overlapped temperature information
61	Where the event occurred
62	Event type

#### 2.14.79 illegal dictionary

ID	Illegal action
0	
1	Motor vehicles that travel in reverse direction
2	Motor vehicles that travel failing to observe signal lights
3	Motor vehicles that travel not inside motorway
4	Motor vehicles that do not drive into the lane according to the needed driving direction when passing by light control cross
5	Motor vehicles that violate the indications of ban markings
6	Motor vehicles that park and wait within the crosswalk and cross hatch when the motor vehicles in the front are parking or queuing or travelling slowly
7	Motor vehicles that travel over the specified speed per hour
8	Motor vehicles that turn round in the places where there are the signs and graticules that forbid turning round or left
9	Motor vehicles that use the special lanes in violation of the rules
10	Motor vehicles that reverse in violation of the rules
11	Motor vehicles that affect the motor vehicles travelling normally when changing lane
12	Motor vehicles that violate the indications of prohibitory signs.
13	Drivers or passengers do to use safety belt as required
14	Drivers that listen to phone while driving

15	Motor vehicles that do not decelerate or stop and give way to walking people when passing crosswalk
16	Motor vehicles that do not give way to vehicles and pedestrians that go straight when turning
17	Motor vehicles that overtake in crosswalks or road sections where the traffic is busy
18	Drive motor vehicles less than 10% over the specified speed per hour
19	Drive motor vehicles other than passenger and cargo vehicles above medium-size and hazardous goods transportation vehicles at a speed more than 10% but less than 20% over the specified speed
20	Drive motor vehicles other than passenger and cargo vehicles above medium-size, school buses and hazardous goods transportation vehicles on the roads other than expressway at a speed more than 20% but less than 30% over the specified speed.
21	Drive motor vehicles other than passenger and cargo vehicles above medium-size, school buses and hazardous goods transportation vehicles on the roads other than expressway at a speed more than 30% but less than 50% over the specified speed.
22	Drive motor vehicles other than passenger and cargo vehicles above medium-size, school buses and hazardous goods transportation vehicles on the roads other than expressway at a speed more than 50% but less than 70% over the specified speed.
23	Drive motor vehicles other than passenger and cargo vehicles above medium-size, school buses and hazardous goods transportation vehicles on the roads other than expressway at a speed more than 70% but less than 100% over the specified speed.
24	Drive motor vehicles other than passenger and cargo vehicles above medium-size, school buses and hazardous goods transportation vehicles on the roads other than expressway at a speed 100% over the specified speed.
25	Drive motor vehicles other than passenger and cargo vehicles above medium-size, school buses and hazardous goods transportation vehicles at a speed more than 20% but less than 50% over the specified speed.
26	Drive motor vehicles other than passenger and cargo vehicles above medium-size, school buses and hazardous goods transportation vehicles at a speed more than 50% over the specified speed.
27	Overtake through other lane or by occupying the opposite lane or going between waiting vehicles when the motor vehicles in front are parking and queuing or driving slowly
28	Hide vehicle license plate
29	Violate indications of traffic light
30	Hazardous goods vehicles that do not travel in the designated special lanes for hazardous goods transportation
31	Hide vehicle license plate on purpose
32	Non-motor vehicles travel not according to traffic signals
33	Pedestrians that run the red light
34	Motor vehicles that enter congested intersections illegally
35	Non-motor vehicles that travel in reverse direction
36	Drive passenger vehicles above medium-size on the roads other than expressway and urban expressway at a speed less than 10% over the specified speed per hour
37	Drive cargo trucks above medium-size on the roads other than expressway and urban expressway at a speed less than 10% over the specified speed per hour

38	Drive passenger vehicles above medium-size on the roads other than expressway and urban expressway at a speed less than 20% over the specified speed per hour
39	Drive cargo trucks above medium-size on the roads other than expressway and urban expressway at a speed less than 20% over the specified speed per hour
40	Drive passenger vehicles above medium-size on the roads other than expressway and urban expressway at a speed more than 20% but less than 50% over the specified speed per hour
41	Drive cargo trucks above medium-size on the roads other than expressway and urban expressway at a speed more than 20% but less than 50% over the specified speed per hour
42	Drive passenger vehicles above medium-size on urban expressway at a speed less than 20% over the specified speed per hour
43	Drive cargo trucks above medium-size on urban expressway at a speed less than 20% over the specified speed per hour
44	Drive passenger vehicles above medium-size on urban expressway at a speed more than 20% but less than 50% over the specified speed per hour
45	Drive passenger vehicles above medium-size on urban expressway at a speed more than 20% but less than 50% over the specified speed per hour
46	Drive passenger vehicles above medium-size on the roads other than expressway at a speed 50% over the specified speed per hour
47	Drive cargo trucks above medium-size on the roads other than expressway at a speed 50% over the specified speed per hour
48	Drive passenger vehicles above medium-size on expressway at a speed less than 20% over the specified speed per hour
49	Drive cargo trucks above medium-size on expressway at a speed less than 20% over the specified speed per hour
50	Drive passenger vehicles above medium-size on expressway at a speed more than 20% but less than 50% over the specified speed per hour
51	Drive cargo trucks above medium-size on expressway at a speed more than 20% but less than 50% over the specified speed per hour
52	Drive passenger vehicles above medium-size on expressway at a speed more than 50% over the specified speed per hour
53	Drive cargo trucks above medium-size on expressway at a speed more than 50% over the specified speed per hour
54	Horn in the areas or road sections where honking is prohibited
55	Motor vehicles do not pass in sequence and in turn when meeting motor vehicles that are parking and queuing or travelling slowly at the road sections or crosses where lanes are decreased.
56	When motor vehicles are travelling in expressway, they do not keep a safe spacing from other vehicles in the same lane.

**2.14.80/CGI/ITS/ExFixture/RfidLoop/channels/<ID>/type/<type>**

<b>/CGI/ITS/ExFixture/RfidLoop/channels/&lt;ID&gt;/type/&lt;type&gt;</b>
<b>General Resource v2.0</b>
<b>GET</b>

<b>Description</b>	Acquire RFID loop configuration parameter
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<RfidLoop>
<b>PUT</b>	
<b>Description</b>	Set RFID loop configuration parameters
<b>Query</b>	None
<b>Inbound Data</b>	<RfidLoop>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  This proposal is prepared for system type switching.  &lt;type&gt; means camera type: 1 bayonet 2 electronic police  &lt;snap&gt; means snap loop No.: 1-100  &lt;turnRight&gt; means the No. of turn right loop: 1-100  &lt;straight&gt; means the No. of go straight loop: 1-100  &lt;straightRight&gt; means the No. of go straight and turn right loop: 1-100  &lt;straightLeft&gt; means the No. of go straight and turn left loop: 1-100  &lt;turnLeft&gt; means the No. of turn left loop:1-100  &lt;leftRetrograde&gt; means the No. of turn left and go in the reverse direction loop :1-100  &lt;turnAround&gt; means the No. of turn round loop:1-100  &lt;loopInterval&gt; means loop spacing, in mm, scope: 1 m -10 m</p>	

**ReferenceLines XML Block**

```
<RfidLoop version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<Type><!-- req, xs:integer --></Type>
<RfidLoopList>
<RfidLoopInfo>
<snap><!-- req, xs:integer --></snap>
<turnRight><!-- req, xs:integer --></turnRight>
<straight><!-- req, xs:integer --></straight>
<straightRight><!-- req, xs:integer --></straightRight>
<straightLeft><!-- req, xs:integer --></straightLeft>
<turnLeft><!-- req, xs:integer --></turnLeft>
<leftRetrograde><!-- req, xs:integer --></leftRetrograde>
<turnAround><!-- req, xs:integer --></turnAround>
<loopInterval><!-- req, xs:integer --></loopInterval>
</RfidLoopInfo>
</RfidLoopList>
</RfidLoop>
```

**Test cases**

**GET /CGI/ITS/ExFixture/RfidLoop/channels/1/type/1**

**Request XML: none**

**Response XML: <RfidLoop>**

**PUT /CGI/ITS/ExFixture/RfidLoop/channels/1/type/1**

**Response XML: <ResponseStatus>**

**Request XML: as below**

```
<?xml version="2.0" encoding="UTF-8"?>
<RfidLoop version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<type>0</type>
<RfidLoopList>
<RfidLoopInfo>
<snap>1</snap>
<turnRight>2</turnRight>
<turnAround>5</turnAround>
<turnLeft>25</turnLeft>
<loopInterval>5000</loopInterval>
</RfidLoopInfo>
</RfidLoopList>
```

</RfidLoop>

#### 2.14.81 /CGI/ITS/IOLinkRoad/channels/<ID>

/CGI/ITS/IOLinkRoad/channels/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire the corresponding relationship between the io of io converter and lane	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<IOLinkRoadPara>	
<b>PUT</b>		
<b>Description</b>	Set the corresponding relationship between the io of io converter and lane	
<b>Query</b>	None	
<b>Inbound Data</b>	<IOLinkRoadPara>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b> The protocol is prepared for acquiring and setting the corresponding relationship between the IO No. of io converter and the lane ID of traffic camera		
<b>Explanations on key parameters:</b> <ioNum>: means the io No. of io converter, starting from 1 <ioStatus>: means the status of io; open: normally on; close: normally off <ipcNum>: No. of traffic camera <roadNum>: means the lane ID of traffic camera, starting from 1. 0: clear		

#### StreamingChannelXML Block

```
<IOLinkRoadPara version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<IOLinkRoadList>
<IOLinkRoadInfo>
  <ioNum><!-- req, xs:integer--></ioNum>
  <ioStatus><!-- req, xs:string--></ioStatus >
  <ipcNum><!-- req, xs:integer--></ipcNum >
  <roadNum><!-- req, xs:integer--></roadNum>
</IOLinkRoadInfo>
</IOLinkRoadList>
</IOLinkRoadPara>
```

#### Test cases

**GET /CGI/ITS/IOLinkRoad/channels/1**

**Request XML:** none

**Response XML:** <IOLinkRoadPara>

**PUT /CGI/ITS/IOLinkRoad/channels/1**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<IOLinkRoadPara version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<IOLinkRoadList>
<IOLinkRoadInfo>
<ioNum>1</ioNum>
<ioStatus>open</ioStatus>
<ipcNum>1</ipcNum>
<roadNum>1</roadNum>
</IOLinkRoadInfo>
<IOLinkRoadInfo>
<ioNum>2</ioNum>
<ioStatus>close</ioStatus>
```

```

<ipcNum>2</ipcNum>
<roadNum>2</roadNum>
</IOLinkRoadInfo>
</IOLinkRoadList>
</IOLinkRoadPara>

```

## 2.14.82 /CGI/ITS/Network/LaneCmrInfo

/CGI/ITS /Network/ LaneCmrInfo		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire the parameter information of traffic camera	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	< LaneCmrInfo >	
<b>PUT</b>		
<b>Description</b>	Set the parameter information of traffic camera	
<b>Query</b>	None	
<b>Inbound Data</b>	< LaneCmrInfo >	
<b>Success Return</b>	<ResponseStatus>	
<p><b>Explanations on protocol:</b>            The protocol is prepared for acquiring and setting the traffic camera IP that the current equipment needs to connect to, helping client or IE query and set the traffic camera parameters that equipment needs to connect.</p> <p><b>Explanations on key parameters:</b>            &lt;id&gt; means the No. of traffic camera            &lt;ipAddress&gt; traffic camera IP            &lt; connectState &gt; means disconnected, connect: Connect; disconnect: disconnect            &lt; laneNumber &gt; means number of the lanes supported</p>		

### LaneCmrInfo XML Block

```

<LaneCmrInfo version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
< cmrInfoList>
< cmrInfo>
<id><!--req, xs:integer--></id>
<ipAddress><!-- dep, xs:string --></ipaddress>
<connectState><!-- dep, xs:string, "connect,disconnect"--></connectState>
<laneNumber><!--req, xs:integer--></laneNumber>
</cmrInfo>
</cmrInfoList>
</LaneCmrInfo>

```

### Test cases

**GET /CGI/ITS/Network/LaneCmrInfo**

**Request XML:** none

**Response XML:** < LaneCmrInfo >

**PUT /CGI/ITS/Network/LaneCmrInfo**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```

<cmrInfoList>
<cmrInfo>
<id>1</id>
<ipAddress>192.168.1.2</ipAddress>
<connectState>connect</connectState>
<laneNumber>6</laneNumber>
</cmrInfo>
<cmrInfo>

```

```

<id>2</id>
<ipAddress>192.168.1.3</ipAddress>
<connectState>connect</connectState>
<laneNumber>4</laneNumber>
</cmrInfo>
</cmrInfoList>
</LaneCmrInfo>

```

#### 2.14.83 /CGI/ITS/PassTrigger/channels/<ID>

/CGI/ITS/PassTrigger/channels/<ID> General Resource v2.0	
<b>PUT</b>	
<b>Description</b>	Set lane simulation of trigger car travelling signal
<b>Query</b>	None
<b>Inbound Data</b>	<PassTrigger>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> The protocol is prepared for car travelling signal of lane simulation. <b>Explanations on key parameters:</b> <laneID> land ID, starting from 1	

#### PassTrigger XML Block

```

<PassTrigger version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<laneID><!-- req, xs:integer --></laneID>
</PassTrigger>

```

#### Test cases

**PUT/CGI/ITS/PassTrigger/channels/1**

**Response XML:** <PassTrigger>

**Request XML:** as below

```

<?xml version="2.0" encoding="UTF-8"?>
<PassTrigger>
<laneID>1</laneID>
</PassTrigger>

```

#### 2.14.84/CGI/ITS/ContentMgmt/TrafficFlowSearch/channels/<ID>

/ISAPI/ITS/ContentMgmt/TrafficFlowSearch      General Resource    v2.0	
<b>POST</b>	
<b>Description</b>	Vehicle flow query
<b>Query</b>	None
<b>Inbound Data</b>	<MemFlowSearch>
<b>Success Return</b>	<MemFlowSearchResult>
<b>Explanations on protocol:</b> The protocol is prepared for acquiring and setting vehicle flow, helping client or IE query and set vehicle traffic that the equipment detects via CGI. <b>Explanations on key parameters:</b> <ID>    means channel ID <startTime> represents start time <endTime> represents end time <searchResultPosition> represents search result position. This field cannot be omitted, (when searching from the 1st log, the assigned value is 1, not 0) <maxResults> means of the number of queries (no more than 20) <totalNums> means the total number of files <trafficFlow> means traffic data; details of major parameters are the same as 2.14.25	



### MemFlowSearch XML Block

```
<?xml version="1.0" encoding="UTF-8"?>
<MemFlowSearch version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<ID><!--req,sx:integer --></ID>
<timeSpanList>
<timeSpan>
<startTime>2013-05-18T10:31:26Z</startTime>
<endTime> 2013-05-18T10:31:26Z</endTime>
</timeSpan>
</timeSpanList>
<searchResultPostion><!--opt,sx:integer--></searchResultPostion>
<maxResults><!--opt,sx:integer--></maxResults>
</MemFlowSearch>
```

### MemFlowSearchResult XML Block

```
<MemFlowsearchResult version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<ID><!--req,sx:integer --></ID>
<totalNums><!--req:inter ></totalNums>
<matchList>
<trafficFlow>
<laneID><!-- req, xs:integer --></laneID>
<laneName><!-- dep, xs:string --></laneName>
<beginTime><!-- dep, xs:date Time></beginTime>
<endTime><!-- dep, xs:date Time></endTime>
<vehicleFlow><!-- dep, xs:integer --></vehicleFlow>
<holdRate><!-- dep, xs:integer --></holdRate>
<averageSpeed><!-- dep, xs:integer,km/h --></averageSpeed>
<headWay><!-- dep, xs:integer --></headWay>
<vehicleTypeList><!-- dep,opt -->
<vehicleTypeItem>
<vehicleType><!-- dep, xs:integer --></vehicleType>
<vehicleNum><!-- dep, xs:integer --></vehicleNum>
</vehicleTypeItem>
</vehicleTypeList>
<carQueueLength><!-- dep, xs:integer --></ carQueueLength >
<hardDistance><!-- dep, xs:integer --></hardDistance>
<roomRate><!-- dep, xs:integer --></roomRate>
<runState><!-- dep, xs:integer --></runState>
</trafficFlow>
</matchList>
</MemFlowsearchResult>
```

### Test cases

**POST/ISAPI/ContentMgmt/ MemFlowSearch**

**Response XML: < MemFlowSearchResult >**

**Request XML: < MemFlowSearch > is as below**

### Query historical data

```
<MemFlowSearch>
<ID>1</ID>
<timeSpan>
<startTime>2016-12-14T00:00:00Z</startTime>
<endTime>2016-12-14T23:00:00Z</endTime>
</timeSpan>
<searchResultPostion>1</searchResultPostion>
<maxResults>20</maxResults>
</MemFlowSearch>
```

```

<MemFlowsearchResult version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <ID>1</ID>
  <totalNums>55</totalNums>
  <matchList>
    <trafficFlow>
      <laneID>1</laneID>
      <laneName>111</laneName>
      <beginTime>2017-07-07T01:04:47Z</beginTime>
      <endTime>2017-07-07T09:04:47Z</endTime>
      <vehicleFlow>2</vehicleFlow>
      <holdRate>80</holdRate>
      <averageSpeed>70</averageSpeed>
      <headWay>2</headWay>
      <vehicleTypeList>
        <vehicleTypeItem>
          <vehicleType>1</vehicleType>
          <vehicleNum>2</vehicleNum>
        </vehicleTypeItem>
      </vehicleTypeList>
      <carQueueLength>200</ carQueueLength >
      <hardDistance>5</hardDistance>
      <roomRate>3000</roomRate>
      <runState>0</runState>
    </trafficflow>
    <trafficFlow>
      <laneID>2</laneID>
      <laneName>111</laneName>
      <beginTime>2017-07-07T01:04:47Z</beginTime>
      <endTime>2017-07-07T09:04:47Z</endTime>
      <vehicleFlow>2</vehicleFlow>
      <holdRate>80</holdRate>
      <averageSpeed>70</averageSpeed>
      <headWay>2</headWay>
      <vehicleTypeList>
        <vehicleTypeItem>
          <vehicleType>1</vehicleType>
          <vehicleNum>2</vehicleNum>
        </vehicleTypeItem>
      </vehicleTypeList>
      <carQueueLength>200</ carQueueLength >
      <hardDistance>5</hardDistance>
      <roomRate>3000</roomRate>
      <runState>0</runState>
    </trafficflow>
  </matchList>
</MemFlowsearchResult>

```

**2.14.85 /CGI/ITS/SystemRun/TimeSnap/channels/<ID>**

/CGI/ITS/SystemRun/TimeSnap/channels/<ID> General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Acquire automatic equipment snap time
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<TimeSnap>

<b>PUT</b>	
<b>Description</b>	Set automatic equipment snap time
<b>Query</b>	None
<b>Inbound Data</b>	<TimeSnap>
<b>Success Return</b>	<ResponseStatus>
<p><b>Explanations on protocol:</b>  The protocol can be prepared for acquiring and setting the automatic snap time of equipment, helping client or IE query and set the automatic snap time of equipment via CGI.</p> <p><b>Explanations on key parameters:</b>  &lt;enabled&gt; represents enabling, true: start, false: not start  &lt;frequency&gt; snap frequency, 0~6 from Sunday to Saturday; 7- everyday; 8- never  &lt;hour&gt; means hour  &lt;minute&gt; means minute</p>	

**TimeSnap XML Block**

```
<TimeSnap version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<enabled><!-- req, xs:Boolean --></enabled>
<frequency><!-- req, xs: integer --></frequency>
<hour><!-- req, xs:integer --></hour>
<minute><!-- req, xs: integer --></minute>
</TimeSnap>
```

**Test cases**

**GET /CGI/ITS/SystemRun/TimeSnap/channels/1**

**Request XML:** none

**Response XML:** <TimeSanp>

**PUT/CGI/ITS/SystemRun/TimeSnap/Channels/1**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<TimeSnap>
<enabled>true</enabled>
<frequency>7</frequency>
<hour>10</hour>
<minute>0</minute>
</TimeSnap>
```

**2.14.86/CGI/ITS/IOctrl/RadarAccess/channels/<ID>**

<b>/CGI/ITS/IOctrl/RadarAccess/channels/&lt;ID&gt;</b>	
<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Acquire the list of access radar parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<RadarParameter>
<b>PUT</b>	
<b>Description</b>	Set the list of access radar parameters
<b>Query</b>	None
<b>Inbound Data</b>	<RadarAccessParameter>
<b>Success Return</b>	<ResponseStatus>

Explanations on protocol:

The protocol is prepared for acquiring and setting the parameters of access radars in the customization of DZ19749 signal converter, including radar IP address, radar type, horizontal distance from the object to the front radar (in mm) and the horizontal position of lane lines to radars.

Explanations on key parameters:

<radarID> means radar ID, starting from 1

<radarIPAddress> means radar ip address

<radarType> means radar type,; front means front radar and behind means behind radar

<horizontalDistance> means the horizontal distance from the object to the radar, in mm, scope 0~5,000, 50 by default

<line> lane ID

<distance> means the horizontal distance from radar, in mm, scope 0~5,000, default 50

#### **RadarAccessParameter XML Block**

```
<RadarAccessParameter version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<RadarParameterList>
<RadarParameter>
<radarID>1</radarID>
<radarIPAddress><!-- req, xs:string--></radarIPAddress>
<radarType><!-- req, xs:string--></radarType>
<horizontalDistance><!-- req, xs:integer--></horizontalDistance>
<lineDistancelist>
<lineDistance>
<line><!-- req, xs:integer--></line>
<distance><!--req, xs:integer--></distance>
</lineDistance>
</lineDistancelist>
</RadarParameter>
</RadarParameterList>
</RadarAccessParameter>
```

#### **Test cases**

**GET /CGI/ITS/IOctrl/RadarAccess/channels/<ID>**

**Request XML:** none

**Response XML:** <RadarAccessParameter>

**PUT /CGI/ITS/IOctrl/RadarAccess/channels/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** as below

```
<RadarAccessParameter version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<RadarParameterList>
<RadarParameter>
<radarID>1</radarID>
<radarIPAddress>192.168.1.22</radarIPAddress>
<radarType>front</radarType>
<horizontalDistance>50</horizontalDistance>
<lineDistancelist>
<lineDistance>
<line>1</line>
<distance>50</distance>
</lineDistance>
<lineDistance>
<line>2</line>
<distance>50</distance>
</lineDistance>
</lineDistancelist>
</RadarParameter>
<radarID>2</radarID>
<radarIPAddress>192.168.1.23</radarIPAddress>
```

```

<radarType>behind</radarType>
<horizontalDistance>50</horizontalDistance>
<lineDistancelist>
<lineDistance>
<line>1</line>
<distance>50</distance>
</lineDistance>
<lineDistance>
<line>2</line>
<distance>50</distance>
</lineDistance>
</lineDistancelist>
</RadarParameter>
</RadarParameterList>
</RadarAccessParameter>

```

### 2.14.87 /CGI/ITS/Expand/Capability

<b>/CGI/ITS/Expand/Capability</b>	
<b>General Resource v2.0</b>	
<b>POST</b>	
<b>Description</b>	Acquire bayonet extensions
<b>Query</b>	<b>None</b>
<b>Inbound Data</b>	<b>&lt;Condition&gt;</b>
<b>Success Return</b>	<b>&lt;Capability&gt;</b>
<p><b>Explanations on protocol:</b> Acquire the list of the parameters of query conditions</p> <p><b>Explanations of parameters:</b> Request xml type: request type, subBarnd, vehicle subbrand brand: Main brand No. of vehicle. Several main brands shall be separated with comma. 300 main brands are supported at the most. subBrand: Vehicle subbrand</p>	

#### Condition XML Block

```

<?xml version="2.0" encoding="UTF-8"?>
<conditionversion="2.0">
<elementList>
<element>
<type><!--req,sx: string--></type>
<brand><!--req,sx: string--></brand>
</element>
...
</elementList>
</condition>

```

#### Capability XML Block

```

<?xml version="2.0" encoding="UTF-8"?>
<capability version="2.0">
<BrandList>
<brand><!--req,sx: integer --></brand> // main brand
<subBrandList> // subbrand list
<subBrand> // subbrand parameter
<value><!--req,sx:integer--></value>
<para><!--req,sx:string--></para>
</subBrand>
...
</subBrandList>

```

```

<brand><!--req,sx: integer --></brand>
<subBrandList>
<subBrand>
<value><!--req,sx:integer--></value>
<para><!--req,sx:string--></para>
</subBrand>
...
</subBrandList>
</BrandList>
</capability>

```

**Test cases**

**POST /CGI/ITS/Expand/Capability/**

**Request XML: <Condition>**

```

<?xml version="2.0" encoding="UTF-8"?>
<conditionversion="2.0">
<elementList>
<element>
<type>subBarnd</type>
<brand>20,22</brand>
</element>
...
</elementList>
</condition>

```

**Response XML: <Capability>**

```

<?xml version="2.0" encoding="UTF-8"?>
<capability version="2.0">
<BrandList>
<brand>20</brand>
<subBrandList>
<subBrand>
<value>1</value>
<para>Volkswagen</para>
</subBrand>
...
</subBrandList>

<brand>22</brand>
<subBrandList>
<subBrand>
<value>1</value>
<para> Audi</para>
</subBrand>
...
</subBrandList>
</BrandList>

</capability>

```

**2.15 /CGI/CloudUpload**

**2.15.1 /CGI/CloudUpload/Version/channels/<ID>**

<b>/CGI/CloudUpload/Version/channels/&lt;ID&gt;</b>		<b>General Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Acquire the latest version of equipment	

<b>Query</b>	<b>None</b>
<b>Inbound Data</b>	<b>None</b>
<b>Success Return</b>	<b>&lt;VersionParameter&gt;</b>
<p><b>Explanations on protocol:</b> The protocol is prepared for acquiring and setting whether the equipment can upgrade via CGI protocol.</p> <p><b>Explanations on key parameters:</b>          &lt;versionRetState&gt; version acquisition 0: Version being tested; 1: When the testing is over time, please confirm whether the network is connected and test again 2: It is the latest version 3: Unsupported protocol          (0 when there is a new version; 1 when it fails to acquire; 3 when it is not handled for the temporary)          &lt;newVersionStatus&gt;0: There is no new version 1: There is a new version          &lt;version&gt; Cloud version          &lt;releaseDate&gt; Release date          &lt;chn&gt; newly added channel ID          Note: The field of channel ID is expanded in the URL of this protocol, so that it can meet new requirements and be compatible with the old version. If there is no channel ID or the channel ID is 0xFFFF in the protocol, acquire the latest cloud version of NVR; otherwise, acquire the latest cloud version of IPC. Channel ID starts from 1.</p>	

**VersionParameter XML Block**

<pre>&lt;VersionParameter&gt; &lt;chn&gt;&lt;!--req, xs:integer--&gt;&lt;/chn&gt;   &lt;versionRetState&gt;&lt;!--req, xs:integer--&gt;&lt;/versionRetState&gt;   &lt;newVersionStatus&gt;&lt;!--req, xs:integer--&gt;&lt;/newVersionStatus&gt;   &lt;version&gt;&lt;!--req, xs:string--&gt;&lt;/version&gt;   &lt;releaseDate&gt;&lt;!--req, xs:string--&gt;&lt;/releaseDate&gt; &lt;/VersionParameter&gt;</pre>
---

**Test cases**

**GET /CGI/CloudUpload/Version/<ID>**

**Request XML: none**

**Response XML: <VersionParameter>**

<pre>&lt;?xml version="1.0" encoding="UTF-8"?&gt; &lt;VersionParameter &gt;   &lt;chn&gt;1&lt;/chn&gt;   &lt;versionRetState&gt;0&lt;/versionRetState&gt;   &lt;newVersionStatus&gt;1&lt;/newVersionStatus&gt;   &lt;version&gt;DVRS_V9.9.4.20171124&lt;/version&gt;   &lt;releaseDate&gt;20171128&lt;/releaseDate&gt; &lt;/VersionParameter&gt;</pre>
--

## 2.14.89/CGI/ITS/ShotPara/LicensePlate/Channels/<ID>

<b>/CGI/ITS/ShotPara/LicensePlate /Channels/&lt;ID&gt;General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Get the license plate black and white list parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<b>&lt;LicensePlateInfo&gt;</b>
<b>PUT</b>	
<b>Description</b>	Set license plate black and white list parameters
<b>Query</b>	None

<b>Inbound Data</b>	<b>&lt;LicensePlateInfo&gt;</b>
<b>Success Return</b>	<b>&lt;ResponseStatus&gt;</b>
<p><b>Protocol description:</b>  This protocol is to realize the query and setting of black and white list parameters in illegal parking ball, and to realize the function of filtering the illegal parking ball snapshot, including the parameters such as license plate number \ license plate number.</p> <p><b>Key parameter description:</b>  &lt;enabled&gt; means enable and disable, true: enable black and white list, false: disable black and white list  &lt;licenseType&gt; license plate type, blacklist blacklist, whitelist whitelist  &lt;licenseNum&gt; represents the license plate number</p>	

**LicensePlate XML Block**

```
<LicensePlateInfo version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<enabled><!-- req, xs:boolean --></enabled>
<licenseType><!-- req, xs:string --></licenseType>
<licensePlateList>
<licensePlatePara>
<licenseNum><!-- req, xs:string --></licenseNum>
</licensePlatePara>
</licensePlateList>
</LicensePlateInfo>
```

**Test case**

**GET /CGI/ITS/ShotPara/LicensePlate/Channels/1**

**Request XML: None**

**Response XML: <LicensePlateInfo>**

**PUT /CGI/ITS/ShotPara/LicensePlate/Channels/1**

**Response XML: <ResponseStatus>**

**Request XML: as follows**

```
<LicensePlateInfo version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<enabled>>true</enabled>
<licenseType>whitelist</licenseType>
<licensePlateList>
<licensePlatePara>
<licenseNum> Jin N00000 </ licenseNum>
</licensePlatePara>
<licensePlatePara>
<licenseNum> Jin N11111 </ licenseNum>
</licensePlatePara>
</licensePlateList>
</LicensePlateInfo>
```



## 2.14.90/CGI/ITS/Channels/<ID>/IllegalParkSnap/Scene/<ID>/Areas/<ID>/Type/<ID>

/CGI/ITS/Channels/<ID>/IllegalParkSnap/Scene/<ID>/Areas/<ID>/Type/<ID> General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Get illegal snapshot parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<IllegalParkSnap>
<b>PUT</b>	
<b>Description</b>	Set illegal capture parameters
<b>Query</b>	None
<b>Inbound Data</b>	<IllegalParkSnap>
<b>Success Return</b>	<ResponseStatus>
<p><b>Protocol description:</b></p> <p>This protocol is to realize the query and setting of the snapshot parameters, and the client or IE can query and set the device snapshot through the CGI protocol, including the illegal type, the number of snapshots, the snapshot scene type, the close proportion, the snapshot interval, the distinction between bus Enable sign for other models.</p> <p><b>Key parameter description:</b></p> <p>/ Scene / &lt;ID&gt; represents the scene number, the value is 0-15 during automatic snapshot, and the value is 0x7FFFFFFF for manual snapshot</p> <p>/ Areas / &lt;ID&gt; represents the area number, the value is 1-8 during automatic capture, and the value is 0x7FFFFFFF for manual capture</p> <p>/ Type / &lt;ID&gt; represents the type of snapshot 0: manual snapshot 1: automatic snapshot &lt;illegalParkType&gt; represents the illegal type value 0: illegal parking 1: violation of stop marking 2: violation of prohibition sign</p> <p>&lt;snapJpegNum&gt; represents the number of snapshots taken, with a value of 3-6</p> <p>&lt;snapJpegTypeList&gt; represents the snapshot scene list</p> <p>&lt;snapJpegType&gt; represents the snapshot scene</p> <p>&lt;jpegId&gt; represents the serial number of the snapshotted picture, 1-6: first to sixth</p> <p>&lt;jpegType&gt; represents the scene type of each snapshotted picture 0: distant scene 1: near scene 2: semi-close scene 3: special close scene</p> <p>&lt;proportion&gt; stands for the proximity ratio, when the "proximity" option is selected, 0: small 1: medium 2: large, default 1: Medium</p> <p>&lt;distinguishVehicleType&gt; stands for distinguishing whether the snapshotting interval between buses and other models is checked, false: no true: yes</p> <p>&lt;intervalTypeList&gt; represents the type list of snapshot interval</p> <p>&lt;intervalTypeValue&gt; represents the type of snapshot interval 0: does not distinguish between buses and other models 1: buses 2: other models</p>	

<nearSnapIntervalList> represents the snapshot interval list of adjacent snapshots  
 <snapIntervalId> represents the snapshot interval between two pictures 1: between the first and second pictures 2: between the second and third pictures 3: between the third and fourth pictures 4: the first Between the fourth and fifth pictures 5: Between the fifth and sixth pictures  
 <snapIntervalTime> represents the length of the snapshot interval, unit: seconds, value range 0-1000 seconds

#### IllegalParkSnapXML Block

```
<IllegalParkSnap version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <illegalParkType><!-- req, xs: integer --></illegalParkType>
  <snapJpegNum><!-- req, xs:integer --></snapJpegNum>
  <snapJpegTypeList>
    <snapJpegType>
      <jpegId><!-- req, xs:integer --></jpegId>
      <jpegType><!-- req, xs:integer --></jpegType>
    </snapJpegType>
  </snapJpegTypeList>
  <proportion><!-- req, xs: integer --></proportion>
  <distinguishVehicleType><!-- req, xs:Boolean"true,false"--></distinguishVehicleType>
  <intervalTypeList>
    <intervalType>
      <intervalTypeValue><!-- req, xs:integer --></ intervalTypeValue>
      <nearSnapIntervalList>
        <snapInterval>
          <snapIntervalId><!-- req, xs:integer --></snapIntervalId>
          <snapIntervalTime><!-- req, xs:integer --></snapIntervalTime>
        </snapInterval>
      </nearSnapIntervalList>
    </IntervalType>
  </intervalTypeList>
</IllegalParkSnap>
```

#### Test case

**GET/CGI/ITS/Channels/1/IllegalParkSnap/Scene/0x7FFFFFFF/Areas/0x7FFFFFFF/Type/0**

**Request XML: None**

**Response XML: <IllegalParkSnap>**

**PUT/CGI/ITS/Channels/1/IllegalParkSnap/Scene/0x7FFFFFFF/Areas/0x7FFFFFFF/Type/0**

**Response XML: <ResponseStatus>**

**Request XML: as follows**

```
<IllegalParkSnap version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <illegalParkType>1</illegalParkType>
  <snapJpegNum>4</SnapJpegNum>
  <snapJpegTypeList>
    <snapJpegType>
```

```
<jpegId>1</jpegId>
  <jpegType>0</jpegType>
</snapJpegType>
<snapJpegType>
  <jpegId>2</jpegId>
  <jpegType>2</jpegType>
</snapJpegType>
<snapJpegType>
  <jpegId >3</jpegId>
  <jpegType>1</jpegType>
</snapJpegType>
<snapJpegType>
  <jpegId>4</jpegId>
  <jpegType>3</jpegType>
</snapJpegType>
</snapJpegTypeList>
<proportion>1</proportion>
<distinguishVehicleType>true</distinguishVehicleType>
<intervalTypeList>
  <intervalType>
    <intervalTypeValue>1</intervalTypeValue>
    <nearSnapIntervalList>
      <snapInterval>
        <snapIntervalId>1</snapIntervalId>
        <snapIntervalTime>30</snapIntervalTime>
      </snapInterval>
      <snapInterval>
        <snapIntervalId>2</snapIntervalId>
        <snapIntervalTime>60</snapIntervalTime>
      </snapInterval>
      <snapInterval>
        <snapIntervalId>3</snapIntervalId>
        <snapIntervalTime>190</snapIntervalTime>
      </snapInterval>
    </nearSnapIntervalList>
  </intervalType>
  <intervalType>
    <intervalTypeValue>2</intervalTypeValue>
    <nearSnapIntervalList>
      <snapInterval>
        <snapIntervalId>1</snapIntervalId>
        <snapIntervalTime>130</snapIntervalTime>
      </snapInterval>
      <snapInterval>
```

```

        <snapIntervalId>2</snapIntervalId>
        <snapIntervalTime>260</snapIntervalTime>
    </snapInterval>
    <snapInterval>
        <snapIntervalId>3</snapIntervalId>
        <snapIntervalTime>90</snapIntervalTime>
    </snapInterval>
</nearSnapIntervalList>
</intervalType>
</intervalTypeList>
</IllegalParkSnap>

```

## 2.14.91/CGI/ITS/ShotPara/SingleItsFeaturePlus /Channels/<ID>/Scene/<ID>

<b>/CGI/ITS/ShotPara/SingleItsFeaturePlus/Channels/&lt;ID&gt;/Scene/&lt;ID&gt;General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Obtain the parameters of a single close-up image of the snapshotted picture output
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<SingleItsFeaturePlus>
<b>PUT</b>	
<b>Description</b>	Set the parameters of the single close-up image of the snapshot output
<b>Query</b>	None
<b>Inbound Data</b>	<SingleItsFeaturePlus>
<b>Success Return</b>	<ResponseStatus>
<p><b>Protocol description:</b>                      This protocol is to realize the query and setting of the single close-up picture parameters of the captured picture output, and the client or IE to query and set the parameters of the single close-up picture output of the captured picture of the device through the CGI protocol.</p> <p><b>Key parameter description:</b>                      &lt;singleItsFeatureEnable&gt;-Represents whether to output a single close-up picture, true: enabled, false: not enabled                      &lt;singleItsFeatureArea&gt;-Represents a single close-up image cutout range: as a denominator value such as 4, indicates that the cutout range is the original image 1/4 size 9 represents 1/9 size 16 represents 1/16 size The parameter value is 4 / 9/16                      &lt;singleItsFeatureOriginNO&gt; --Represents a single close-up picture cutout choice                      &lt;singleItsFeatureOSDEnable&gt;-Represents whether a single close-up image is overlapped with characters, true: enabled, false: not enabled</p>	

### SingleItsFeaturePlusXML Block

```
<?xml version="2.0" encoding="UTF-8"?>
<SingleItsFeaturePlus version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<singleItsFeatureEnable><!-- req, xs:boolean--></singleItsFeatureEnable>
<singleItsFeatureArea><!-- req, xs:integer--></singleItsFeatureArea>
<singleItsFeatureOriginNO><!-- req, xs:integer--></singleItsFeatureOriginNO>
<singleItsFeatureOSDEnable><!-- req, xs:boolean--></singleItsFeatureOSDEnable>
</SingleItsFeaturePlus>
```

#### Test case

**GET/CGI/ITS/ShotPara/SingleItsFeaturePlus/Channels/<ID>/Scene/<ID>**

**Request XML: None**

**Response XML: <SingleItsFeaturePlus>**

**PUT/CGI/ITS/ShotPara/SingleItsFeaturePlus/Channels/<ID>/Scene/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as follows**

```
<?xml version="2.0" encoding="UTF-8"?>
<SingleItsFeaturePlus version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<singleItsFeatureEnable>true</singleItsFeatureEnable>
<singleItsFeatureArea>1</singleItsFeatureArea>
<singleItsFeatureOriginNO>1</singleItsFeatureOriginNO>
<singleItsFeatureOSDEnable>true</singleItsFeatureOSDEnable>
</SingleItsFeaturePlus>
```

## 2.14.92/CGI/ITS/Channels/<ID>/NoParkingTime

/CGI/ITS /channels/<ID>/NoParkingTime	General Resource v2.0
<b>GET</b>	
<b>Description</b>	Get the parameters of no-stop time set by type
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	< <b>NoParkingTime</b> >
<b>PUT</b>	
<b>Description</b>	Set no-stop time parameters set by type
<b>Query</b>	None
<b>Inbound Data</b>	< <b>NoParkingTime</b> >
<b>Success Return</b>	< <b>ResponseStatus</b> >

**Protocol description:**

This protocol uses CGI and shared memory protocol to send and obtain the parameters of ban time set by type to realize the function.

**Key parameter description:**

<beginTime> represents the start time: hour: minute: second

<endTime> represents the end time: hour: minute: second

<vehicleType> represents the type of prohibited vehicles: 0: All vehicles are captured 1: All vehicles are not captured, 2: Only buses are captured, 3: Other vehicles other than buses are captured

<dayOfWeek> represents weekdays : Monday to Sunday (1-7)

<timeID> represents the time period number: 1-8

**NoParkingTimeListXML Block**

```

<NoParkingTime>
<noParkingTimeList >
<noParkingTimeBlock>
  <dayOfWeek><!-- req, xs:integer --></dayOfWeek>
  <noParkingTimeRange>
    <timeID><!-- req, xs: integer --></timeID>
    <beginTime><!-- req, xs: string --></beginTime>
    <endTime><!-- req, xs: string --></endTime>
    <vehicleType><!-- req, xs:integer --></vehicleType>
  </noParkingTimeRange>
</noParkingTimeBlock>
</noParkingTimeList>
</NoParkingTime>

```

## Test case

GET /CGI/ITS/channels/<ID>/NoParkingTime

Request XML: None

Response XML: <NoParkingTime>

PUT/CGI/ITS/channels/<ID>/NoParkingTime

Response XML: <ResponseStatus>

Request XML: as follows

```

<?xml version="1.0" encoding="UTF-8"?>
<NoParkingTime>
<noParkingTimeList>
<noParkingTimeBlock>
<dayOfWeek>1</dayOfWeek>
<noParkingTimeRange>
<timeID>1</timeID>
<beginTime>01:30:00</beginTime>
<endTime>12:00:00</endTime>
<vehicleType >1</vehicleType >

```

```
</noParkingTimeRange>
<noParkingTimeRange>
<timeID>2</timeID>
<beginTime>00:00:00</beginTime>
<endTime>00:00:00</endTime>
<vehicleType >0</vehicleType >
</noParkingTimeRange>
<noParkingTimeRange>
<timeID>3</timeID>
<beginTime>00:00:00</beginTime>
<endTime>00:00:00</endTime>
<vehicleType >0</vehicleType >
</noParkingTimeRange>
<noParkingTimeRange>
<timeID>4</timeID>
<beginTime>00:00:00</beginTime>
<endTime>00:00:00</endTime>
<vehicleType >0</vehicleType >
</noParkingTimeRange>
<noParkingTimeRange>
<timeID>5</timeID>
<beginTime>00:00:00</beginTime>
<endTime>00:00:00</endTime>
<vehicleType >0</vehicleType >
</noParkingTimeRange>
<noParkingTimeRange>
<timeID>6</timeID>
<beginTime>00:00:00</beginTime>
<endTime>00:00:00</endTime>
<vehicleType >0</vehicleType >
</noParkingTimeRange>
<noParkingTimeRange>
<timeID>7</timeID>
<beginTime>00:00:00</beginTime>
<endTime>00:00:00</endTime>
<vehicleType >0</vehicleType >
</noParkingTimeRange>
<noParkingTimeRange>
<timeID>8</timeID>
<beginTime>00:00:00</beginTime>
<endTime>00:00:00</endTime>
<vehicleType >0</vehicleType >
</noParkingTimeRange>
</noParkingTimeBlock>
```

..... omitted 2-6

```
<noParkingTimeBlock>
<dayOfWeek>7</dayOfWeek>
<noParkingTimeRange>
<timeID>1</timeID>
<beginTime>00:00:00</beginTime>
<endTime>00:00:00</endTime>
<vehicleType >0</vehicleType >
</noParkingTimeRange>
<noParkingTimeRange>
<timeID>2</timeID>
<beginTime>00:00:00</beginTime>
<endTime>00:00:00</endTime>
<vehicleType >0</vehicleType >
</noParkingTimeRange>
<noParkingTimeRange>
<timeID>3</timeID>
<beginTime>00:00:00</beginTime>
<endTime>00:00:00</endTime>
<vehicleType >0</vehicleType >
</noParkingTimeRange>
<noParkingTimeRange>
<timeID>4</timeID>
<beginTime>00:00:00</beginTime>
<endTime>00:00:00</endTime>
<vehicleType >0</vehicleType >
</noParkingTimeRange>
<noParkingTimeRange>
<timeID>5</timeID>
<beginTime>-00:00:00</beginTime>
<endTime>-00:00:00</endTime>
<vehicleType >0</vehicleType >
</noParkingTimeRange>
<noParkingTimeRange>
<timeID>6</timeID>
<beginTime>-00:00:00</beginTime>
<endTime>00:00:00</endTime>
<vehicleType >0</vehicleType >
</noParkingTimeRange>
<noParkingTimeRange>
<timeID>7</timeID>
<beginTime>00:00:00</beginTime>
<endTime>00:00:00</endTime>
<vehicleType >0</vehicleType >
```



```

</noParkingTimeRange>
<noParkingTimeRange>
<timeID>8</timeID>
<beginTime>00:00:00</beginTime>
<endTime>00:00:00</endTime>
<vehicleType >0</vehicleType>
</noParkingTimeRange>
</noParkingTimeBlock>
</noParkingTimeList >
</NoParkingTime>

```

## 2.14.93/CGI/ITS/SceneParams/Channels/<ID>/Scene/<ID>

/CGI/ITS/SceneParams/Channels/<ID>/Scene/<ID>	
General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Get scene parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<SceneParams>
<b>PUT</b>	
<b>Description</b>	Set scene parameters
<b>Query</b>	None
<b>Inbound Data</b>	<SceneParams>
<b>Success Return</b>	<ResponseStatus>
<b>Protocol description:</b>	
This protocol is used for setting and obtaining scene number / scene name / intersection number / associated template / application type in scene parameters.	
<b>Important parameter description:</b>	
Scene: Scene number: 0-15	
<sceneName> // Scene name: maximum 63 characters	
<crossingID> // Intersection number: up to 63 characters	
<sceneApplyType> // Application type: 0-default, 1-illegal parking, 2-illegal U-turn, 3-illegal detection, 4-bayonet detection, 5-flow statistics	
<template> // Related template: 0x7fffffff-not related, 0-outdoor, 1-indoor, 2-traffic, 3-wide dynamic, 4-sport, 5 highlight, 6-colorful, 7-custom	

### sceneParams XML Block

```

<SceneParams version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<sceneName><!-- req, xs:string--></sceneName>
<crossingID><!-- req, xs:string--></crossingID>
<sceneApplyType><!-- req, xs:integer--></sceneApplyType>
<template><!-- req, xs:integer--></template>
</SceneParams>

```

**Test case**

**GET/CGI/ITS/SceneParams/Channels/1/Scene/1**

**Request XML: None**

**Response XML: <SceneParams>**

**PUT/CGI/ITS/SceneParams/Channels/1/Scene/1**

**Response XML: <ResponseStatus>**

**Request XML: as follows**

```

<SceneParams version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<sceneName>test1</sceneName>
<crossingID>1</crossingID>
<sceneApplyType>2</sceneApplyType>
<template>1</template>
</SceneParams>

```

**2.14.94/CGI/ITS/SceneParams/IllegalPark/Channels/<ID>/Scene/**

**<ID>**

<b>/CGI/ITS/SceneParams/IllegalPark/Channels/&lt;ID&gt;/Scene/&lt;ID&gt;</b>	
<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Get the parameters of the scene of illegal parking application
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<b>&lt;IllegalParkParams&gt;</b>
<b>PUT</b>	
<b>Description</b>	Set the parameters of the scene of illegal parking application
<b>Query</b>	None
<b>Inbound Data</b>	<b>&lt;IllegalParkParams&gt;</b>
<b>Success Return</b>	<b>&lt;ResponseStatus&gt;</b>
<b>Protocol description:</b> This protocol is used for setting and obtaining the parameters of the scene of illegal parking application. <b>Important parameter description:</b> <b>Scene id Range: 0-15</b> <b>Types of illegal parking applications:</b> <totalArea> Total number of illegal areas: 1-8 <id> Violation zone number, 1-8, need to be converted according to scene number when applying <tempStop> detect temporary parking: true-enabled, false-disabled <areaName> Name of illegal area: max 63 characters	

<laneDir> Lane direction: maximum 63 characters  
 <laneAlias> Lane direction alias: up to 63 characters  
 <markAreaNum> Mark area: 0, 2, 3, 4  
 <checkParkTime> Parking judgment time: 0 ~ 120, unit: second  
 <sensitivity> algorithm detection sensitivity, 0-low, 1-medium, 2-high  
 <positionX> X coordinate ratio  
 <positionY> Y coordinate ratio  
 <whitePlateNum> Number of license plates in illegal parking area  
 <whitePlate> Filtering conditions for license plates in illegal areas. If one of the Chinese characters and letters is not filtered, the value of the unfiltered item is \*. For example, both filters: Jing A, only Chinese characters: Jing \*, only letters: \* A, if there is no filtering, there is no value, whitePlateNum value is 0

### IllegalParkParams XML Block

```

<IllegalParkParams version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <totalArea><!-- req, xs: integer --></totalArea>
  <areaList>
    <areaPara>
      <id><!-- req, xs: integer --></id>
      <tempStop><!--req,xs:bool--></tempStop>
      <areaName><!-- req, xs:string--></areaName>
      <laneDir><!-- req, xs: string --></laneDir>
      <laneAlias><!-- req, xs: string --></laneAlias>
      <checkParkTime><!-- req, xs: integer --></checkParkTime>
      <sensitivity><!-- req, xs: integer --></sensitivity>
      <pointCounts><!-- req, xs: integer --></pointCounts>
      <RegionCoordinatesList>
        <RegionCoordinates>
          <positionX><!-- req, xs:integer--></positionX>
          <positionY><!-- req, xs:integer --></positionY>
        </RegionCoordinates>
      </RegionCoordinatesList>
      <markAreaNum><!-- req, xs: integer --></markAreaNum>
      <markAreaList>
        <markArea>
          <pointCounts><!-- req, xs: integer --></pointCounts>
          <RegionCoordinatesList>
            <RegionCoordinates>
              <positionX><!-- req, xs: integer --></positionX>
              <positionY><!-- req, xs: integer --></positionY>
            </RegionCoordinates>
          </RegionCoordinatesList>
        </markArea>
      </markAreaList>
      <whitePlateNum><!-- req, xs: integer --></whitePlateNum>
  
```

```

    <whitePlateList>
      <whitePlatePara>
        <whitePlate><!-- req, xs:string --></whitePlate>
      </whitePlatePara>
    </whitePlateList>
  </areaPara>
</areaList>
</IllegalParkParams>

```

**Test case**

**GET /CGI/ITS/SceneParams/IllegalPark/Channels/1/Scene/1**

**Request XML: None**

**Response XML: <IllegalParkParams>**

**PUT CGI/ITS/SceneParams/IllegalPark/Channels/1/Scene/1**

**Response XML: <ResponseStatus>**

**Request XML: as follows**

```

<IllegalParkParams version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<totalArea>4</totalArea>
<areaList>
  <areaPara>
<id>1</id>
    <tempStop>true</tempStop>
    <areaName> No. 1 illegal park </ areaName>
    <laneDir> From east to west </ laneDir>
    <laneAlias> East to West </ laneAlias>
    <checkParkTime>10</checkParkTime>
    <sensitivity>2</sensitivity>
    <pointCounts>6</pointCounts>
    <RegionCoordinatesList>
      <RegionCoordinates>
        <positionX>1000</positionX>
        <positionY>1000</positionY>
      </RegionCoordinates>
      <RegionCoordinates>
        <positionX>2000</positionX>
        <positionY>2000</positionY>
      </RegionCoordinates>
      <RegionCoordinates>
        <positionX>3000</positionX>
        <positionY>3000</positionY>
      </RegionCoordinates>
      <RegionCoordinates>
        <positionX>4000</positionX>
        <positionY>4000</positionY>
      </RegionCoordinates>
    </RegionCoordinatesList>
  </areaPara>
</areaList>
</IllegalParkParams>

```

```

    </RegionCoordinates>
    <RegionCoordinates>
      <positionX>5000</positionX>
      <positionY>5000</positionY>
    </RegionCoordinates>
    <RegionCoordinates>
      <positionX>6000</positionX>
      <positionY>6000</positionY>
    </RegionCoordinates>
  </RegionCoordinatesList>
  <markAreaNum>2</markAreaNum>
  <markAreaList>
    <markArea>
      <pointCounts>4</pointCounts>
      <RegionCoordinatesList>
        <RegionCoordinates>
          <positionX>2000</positionX>
          <positionY>2000</positionY>
        </RegionCoordinates>
        <RegionCoordinates>
          <positionX>3000</positionX>
          <positionY>3000</positionY>
        </RegionCoordinates>
        <RegionCoordinates>
          <positionX>4000</positionX>
          <positionY>4000</positionY>
        </RegionCoordinates>
        <RegionCoordinates>
          <positionX>5000</positionX>
          <positionY>5000</positionY>
        </RegionCoordinates>
      </RegionCoordinatesList>
    </markArea>
  </markAreaList>
  <whitePlateNum>1</whitePlateNum>
  <whitePlateList>
    <whitePlatePara>
      <whitePlate> Beijing B </ whitePlate>
    </whitePlatePara>
  </whitePlateList>
</areaPara>
... Omit 2-7
  <areaPara>
</id>8</id>

```

```
<tempStop>true</tempStop>
<areaName> No. 1 illegal park </ areaName>
<laneDir> From east to west </ laneDir>
<laneAlias> East to West </ laneAlias>
<checkParkTime>10</checkParkTime>
<sensitivity>2</sensitivity>
<pointCounts>6</pointCounts>
<RegionCoordinatesList>
  <RegionCoordinates>
    <positionX>1000</positionX>
    <positionY>1000</positionY>
  </RegionCoordinates>
  <RegionCoordinates>
    <positionX>2000</positionX>
    <positionY>2000</positionY>
  </RegionCoordinates>
  <RegionCoordinates>
    <positionX>3000</positionX>
    <positionY>3000</positionY>
  </RegionCoordinates>
  <RegionCoordinates>
    <positionX>4000</positionX>
    <positionY>4000</positionY>
  </RegionCoordinates>
  <RegionCoordinates>
    <positionX>5000</positionX>
    <positionY>5000</positionY>
  </RegionCoordinates>
  <RegionCoordinates>
    <positionX>6000</positionX>
    <positionY>6000</positionY>
  </RegionCoordinates>
</RegionCoordinatesList>
<markAreaNum>2</markAreaNum>
<markAreaList>
  <markArea>
    <pointCounts>4</pointCounts>
    <RegionCoordinatesList>
      <RegionCoordinates>
        <positionX>2000</positionX>
        <positionY>2000</positionY>
      </RegionCoordinates>
      <RegionCoordinates>
        <positionX>3000</positionX>
```

```

        <positionY>3000</positionY>
    </RegionCoordinates>
</RegionCoordinates>
        <positionX>4000</positionX>
        <positionY>4000</positionY>
    </RegionCoordinates>
</RegionCoordinates>
        <positionX>5000</positionX>
        <positionY>5000</positionY>
    </RegionCoordinates>
</RegionCoordinatesList>
</markArea>
</markAreaList>
</areaPara>
</areaList>
</IllegalParkParams>

```

**2.14.95/CGI/ITS/CapTrigger/Channels/<ID>**

<b>/CGI/ITS/CapTrigger/Channels/&lt;ID&gt;</b> <b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Obtain the trigger mode parameters of illegal parking snapshot
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<b>&lt;CapTrigger&gt;</b>
<b>PUT</b>	
<b>Description</b>	Set the parameters of the trigger mode for illegal parking snapshot
<b>Query</b>	None
<b>Inbound Data</b>	<b>&lt;CapTrigger&gt;</b>
<b>Success Return</b>	<b>&lt;ResponseStatus&gt;</b>
<p><b>Protocol description:</b>  This protocol is to realize the query and setting of the manual capture function of illegal parking. The client or IE can query and set the state of the capture trigger mode of illegal parking through the CGI protocol.</p> <p><b>Key parameter description:</b>  &lt;triggerWay&gt;-Triggering mode of illegal parking snapshot, 0-automatic snapshot, 1-manual snapshot, other-invalid value;</p>	

**CapTrigger XML Block**

```
<CapTrigger version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<triggerWay><!--req, xs:integer --></triggerWay>
</CapTrigger>
```

**Test case**

**GET /CGI/ITS/CapTrigger/Channels/<ID>**

**Request XML: None**

**Response XML: <CapTrigger>**

**PUT /CGI/ITS/CapTrigger/Channels/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: as follows**

```
<CapTrigger>
<triggerWay>0</triggerWay>
</CapTrigger>
```

## 2.14.96/CGI/ITS/ManualCapArea/Channels/<ID>/Scene/<ID>

/CGI/ITS/ManualCapArea/Channels/<ID>/Scene/<ID> <b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Obtain the parameters of the manual capture area for illegal parking
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ManualCapArea>
<b>PUT</b>	
<b>Description</b>	Set the manual capture area parameters for illegal parking
<b>Query</b>	None
<b>Inbound Data</b>	<ManualCapArea>
<b>Success Return</b>	<ResponseStatus>
<p><b>Protocol description:</b>  This protocol is to realise the acquisition and setting of the manual capture area of illegal parking, and the client or IE to obtain and set the parameters of the manual capture area of illegal parking through the CGI protocol.</p> <p><b>Key parameter description:</b>  Scene number range: 0-15  &lt;capAreaNum&gt; --- Capture area number, up to 16 areas;  &lt;areaID&gt; --- Manual snapshot area ID;</p>	



<enable> --- Manual snapshot area enable, true enable, false disable;

<pointNum> --- Number of vertices in the manually captured area;

<positionX> --- Vertex coordinate X;

<positionY> --- vertex coordinate Y;

note:

When setting the snapshot area, only the snapshot area parameters of the frame will be issued, and the parameters of the area that are already in effect are not included;

When deleting and reporting the snapshot area, you can handle multiple;

### ManualCapArea XML Block

```
<ManualCapArea version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
```

```
<capAreaNum><!--req, xs:integer --></capAreaNum>
```

```
<manualCapAreaList> --- Capture area list
```

```
<capArea>
```

```
  <areaID><!--req, xs:integer --></areaID>
```

```
  <enable><!--req, xs:boolean--></enable>
```

```
  <pointNum><!--req, xs:integer --></pointNum>
```

```
  <RegionCoordinatesList> --- Snapshot area vertex coordinates list
```

```
  <RegionCoordinates>
```

```
    <positionX><!--req:integer --></positionX>
```

```
    <positionY><!--req:integer --></positionY>
```

```
  </RegionCoordinates>
```

```
    .....
```

```
  </RegionCoordinatesList>
```

```
</capArea>
```

```
.....
```

```
</manualCapAreaList>
```

```
</ ManualCapArea >
```

### Test case

**GET /CGI/ITS/ManualCapArea/Channels/<ID>/Scenes/<ID>**

**Request XML: None**

**Response XML: <ManualCapArea>**

**PUT /CGI/ITS/ManualCapArea/Channels/<ID>/Scenes/<ID>>**

**Response XML: <ResponseStatus>**

**Request XML: as follows**

```
<ManualCapArea version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
```

```
<capAreaNum>1</capAreaNum>
```

```
<manualCapAreaList>
```

```
<capArea>
```

```
  <areaID>0</areaID>
```

```
  <enable>>true</enable>
```

```
  <pointNum>4</pointNum>
```

```
  <RegionCoordinatesList>
```

```

    <RegionCoordinates>
      <positionX>825</positionX>
      <positionY>486</positionY>
    </RegionCoordinates>
    <RegionCoordinates>
      <positionX>1017</positionX>
      <positionY>486</positionY>
    </RegionCoordinates>
    <RegionCoordinates>
      <positionX>1017</positionX>
      <positionY>626</positionY>
    </RegionCoordinates>
    <RegionCoordinates>
      <positionX>825</positionX>
      <positionY>626</positionY>
    </RegionCoordinates>
  </RegionCoordinatesList>
</capArea>
</manualCapAreaList>
</ManualCapArea>

```

**2.14.97/CGI/ITS/CaptureParams/Channels/<ID>**

<b>/CGI/ITS/CaptureParams/Channels/&lt;ID&gt;</b>	
<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Get the parameters of the illegal snapshot mode
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<b>&lt;CaptureParams&gt;</b>
<b>PUT</b>	
<b>Description</b>	Set scene parameters
<b>Query</b>	None
<b>Inbound Data</b>	<b>&lt;CaptureParams&gt;</b>
<b>Success Return</b>	<b>&lt;ResponseStatus&gt;</b>
<p><b>Protocol description:</b>          This protocol is used to set and obtain the parameters of illegal capture.</p> <p><b>Important parameter description:</b>          &lt;captureMode&gt; Capture mode: 1- one-by-one anti-blocking, 2-polling to capture, 3-one-by-one capturing (not anti-blocking)          &lt;captureType&gt; Capture mode: 0-manual capture, 1-automatic capture, 2-mixed capture          &lt;fastCapEnable&gt; Quick snapshot: enable-true, disable-false          &lt;featureKeepEnable&gt; Close-up hold: enable-true, disable-false, polling mode does not support</p>	

close-up hold

**sceneParams XML Block**

```
<CaptureParamsversion="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <captureMode><!--req, xs:integer --></captureMode>
  <captureType><!--req, xs: integer --></captureType>
  <fastCapEnable><!--req, xs: bool--></fastCapEnable>
  <featureKeepEnable><!--req, xs: xs:bool--></featureKeepEnable>
</CaptureParams>
```

**Test case**

**GET/CGI/ITS/CaptureParams/Channels/1**

**Request XML: None**

**Response XML: <CaptureParams>**

**PUT/CGI/ITS/CaptureParams/Channels/1**

**Response XML: <ResponseStatus>**

**Request XML: as follows**

```
<CaptureParamsversion="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <captureMode>2</captureMode>
  <captureType>1</captureType>
  <fastCapEnable>true</fastCapEnable>
  <featureKeepEnable>>false</featureKeepEnable>
</CaptureParams>
```

## 2.14.98/CGI/ITS/channels/<ID>/TurnAroundArea/Scene/<ID>

CGI/ITS/channels/<ID>/TurnAroundArea/Scene/<ID> General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Get the parameters of the violation zone
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<TurnAroundArea>
<b>PUT</b>	
<b>Description</b>	Set violation zone parameters
<b>Query</b>	None
<b>Inbound Data</b>	<TurnAroundArea>
<b>Success Return</b>	<ResponseStatus>
<b>Protocol description:</b>	
This protocol is to realize the query and setting of the parameters of the illegal U-turn area. The client or IE can query and set the illegal U-turn parameters of the device through the CGI protocol, including the illegal area number of the illegal U-turn area parameter, the name of the illegal area and whether to output the card. mouth.	
<b>Key parameter description:</b>	
/ Scene / <ID> represents the number of the scene to which the violation area belongs, value	

0-15

<totalArea> The total number of illegal areas, now there is only one

<id> represents the number of the violation area

<areaName> represents the name of the violation area, the maximum length is 32 bits

<bayonetEnable> represents whether to output bayonet, false: no, true: yes

#### TurnAroundArea XML Block

```
<TurnAroundArea version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<totalArea><!-- req, xs: integer --></totalArea>
<areaList>
  <areaPara>
    <id><!-- req, xs: integer --></id>
    <areaName><!-- req, xs:string --></areaName>
  </areaPara>
</areaList>
<bayonetEnable><!-- req, xs:Boolean"true,false"--></bayonetEnable>
</TurnAroundArea>
```

#### Test case

**GET /CGI/ITS/channels/1/TurnAroundArea/Scene/1**

**Request XML: None**

**Response XML: <TurnAroundArea>**

**PUT /CGI/ITS/channels/1/TurnAroundArea/Scene/1**

**Response XML: <ResponseStatus>**

**Request XML: as follows**

```
<TurnAroundArea version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<totalArea>1</totalArea>
<areaList>
  <areaPara>
    <id>1</id>
    <areaName> violated area </ areaName>
  </areaPara>
</areaList>
<bayonetEnable>true</bayonetEnable>
</TurnAroundArea>
```

## 2.14.108/CGI/ITS/DockSet/HxCloudConfig

/CGI/ITS/DockSet/HxCloudConfig	
<b>GET</b>	
<b>Description</b>	Get Hx (cloud platform docking) setting parameters
<b>Query</b>	None
<b>Inbound Data</b>	<b>no</b>

<b>Success Return</b>	<HxCloudConfig>
<b>PUT</b>	
<b>Description</b>	Set Hx (cloud platform docking) parameters
<b>Query</b>	None
<b>Inbound Data</b>	<HxCloudConfig>
<b>Success Return</b>	<ResponseStatus>
<p><b>Protocol description:</b> This protocol is to achieve the acquisition and setting of Hisense (cloud platform docking) configuration in platform docking. Fixed platform number 10</p> <p><b>Key parameter description:</b> &lt;cloudIP&gt; Cloud storage server &lt;cloudPort&gt; Cloud storage port &lt;cloudType&gt; cloud storage type &lt;accessKey&gt; storage access key &lt;encryptionKey&gt; storage protocol encryption key &lt;resourcePoolID&gt; storage resource pool ID</p>	

### HxCloudConfig XML Block

```
<?xml version="1.0" encoding="UTF-8"?>
<HxCloudConfig>
  <cloudIP><!-- req, xs: string --></cloudIP>
  <cloudPort><!-- req, xs:integer --></cloudPort>
  <cloudType><!-- req, xs: integer --></cloudType>
  <accessKey><!-- req, xs:string --></accessKey>
  <encryptionKey><!-- req, xs:string --></encryptionKey>
  <resourcePoolID><!-- req, xs:string --></resourcePoolID>
</HxCloudConfig>
```

### Test case

#### GET /CGI/ITS/DockSet/HxCloudConfig

**Request XML:** None

**Response XML:** <HXCloudConfig>

```
<?xml version="1.0" encoding="UTF-8"?>
<HxCloudConfig>
  <cloudIP><!-- req, xs: string --></cloudIP>
  <cloudPort><!-- req, xs:integer --></cloudPort>
  <cloudType><!-- req, xs: integer --></cloudType>
  <accessKey><!-- req, xs:string --></accessKey>
  <encryptionKey><!-- req, xs:string --></encryptionKey>
  <resourcePoolID><!-- req, xs:string --></resourcePoolID>
</HxCloudConfig>
```

#### PUT/CGI/ITS/DockSet/HxCloudConfig

**Request XML:** <HXCloudConfig>

**Response XML:** <ResponseStatus>

```

<?xml version="1.0" encoding="UTF-8"?>
<HxCloudConfig>
  <cloudIP><!-- req, xs: string --></cloudIP>
  <cloudPort><!-- req, xs:integer --></cloudPort>
  <cloudType><!-- req, xs: integer --></cloudType>
  <accessKey><!-- req, xs:string --></accessKey>
  <encryptionKey><!-- req, xs:string --></encryptionKey>
  <resourcePoolID><!-- req, xs:string --></resourcePoolID>
</HxCloudConfig>

```

## 2.14.109/CGI/ITS/DockSet/HxMqConfig/PlatType/<id>

/CGI/ITS/DockSet/HxMqConfig	
<b>GET</b>	
<b>Description</b>	Get Hisense Mq setting parameters
<b>Query</b>	None
<b>Inbound Data</b>	<b>no</b>
<b>Success Return</b>	<HxMqConfig>
<b>PUT</b>	
<b>Description</b>	Set Hisense Mq parameters
<b>Query</b>	None
<b>Inbound Data</b>	<HxMqConfig>
<b>Success Return</b>	<ResponseStatus>
<p><b>Protocol description:</b>  This protocol is to achieve the acquisition and setting of Hisense Mq configuration in platform docking.</p> <p><b>Key parameter description:</b>  &lt;platType&gt; The type of docking platform. Hisense MQ configuration is obtained according to the platform. 2 for Hisense FTP, 10 for Hisense Cloud Storage  &lt;mqEnable&gt; Mq enable  &lt;signalEnable&gt; signal mechanism is enabled  &lt;mqServer1&gt; Mq server 1  &lt;mqPort1&gt; Mq port 1  &lt;mqServer2&gt; Mq server 2  &lt;mqPort2&gt; Mq port 2  &lt;kkTopic&gt; Mq bayonet topic  &lt;djTopic&gt; Mq illegal topic  &lt;faultTopic&gt; Mq fault topic  &lt;alarmTopic&gt; Mq alarm topic  &lt;userName&gt; Mq username  &lt;passWord&gt; Mq password  &lt;versionKk&gt; bayonet version  &lt;versionDjSpeed&gt; illegal version number-overspeed</p>	

```
<versionDjRedLight> illegal version number-red light
```

### HxMqConfig XML Block

```
<?xml version="1.0" encoding="UTF-8"?>
<HxMqConfig>
  <platType><!-- req, xs:integer --></platType>
  <mqEnable><!-- req,sx:boolean --></mqEnable>
  <signalEnable><!-- req,sx:boolean --></signalEnable>
  <mqServer1><!-- req, xs: string --></mqServer1>
  <mqPort1><!-- req, xs:integer --></mqPort1>
  <mqServer2><!-- req, xs: string --></mqServer2>
  <mqPort2><!-- req, xs:integer --></mqPort2>
  <kkTopic><!-- req, xs: string --></kkTopic>
  <djTopic><!-- req, xs:string --></djTopic>
  <faultTopic><!-- req, xs: string --></faultTopic>
  <alarmTopic><!-- req, xs:string --></alarmTopic>
  <userName><!-- req, xs:string --></userName>
  <passWord><!-- req, xs:string --></passWord>
  <versionKk><!-- req, xs:integer --></versionKk>
  <versionDjSpeed><!-- req, xs:integer --></versionDjSpeed>
  <versionDjRedLight><!-- req, xs:integer --></versionDjSpeed>
</HxMqConfig>
```

### Test case

#### GET /CGI/ITS/DockSet/HxMqConfig

**Request XML:** None

**Response XML:** <HxMqConfig>

```
<?xml version="1.0" encoding="UTF-8"?>
<HxMqConfig>
<platType>2</platType>
  <mqEnable>ture</mqEnable>
  <signalEnable>ture </signalEnable>
  <mqServer1>192.168.100.10</mqServer1>
  <mqPort1>61616</mqPort1>
  <mqServer2>192.168.100.10</mqServer2>
  <mqPort2>61616</mqPort2>
  <kkTopic>HIATMP.HISENSE.PASS.PASSINF</kkTopic>
  <djTopic>HIATMP.HISENSE.ILLEGAL</djTopic>
  <faultTopic></faultTopic>
  <alarmTopic></alarmTopic>
  <userName>admin</userName>
  <passWord>1111</passWord>
  <versionKk>4</versionKk>
  <versionDjSpeed>7</versionDjSpeed>
```

```
<versionDjRedLight>7</versionDjSpeed>
</HxMqConfig>
```

**PUT /CGI/ITS/DockSet/HxMqConfig**

**Request XML: <HxMqConfig>**

**Response XML: <ResponseStatus>**

```
<?xml version="1.0" encoding="UTF-8"?>
<HxMqConfig>
  <platType>2</platType>
  <mqEnable>ture</mqEnable>
  <signalEnable>ture </signalEnable>
  <mqServer1>192.168.100.10</mqServer1>
  <mqPort1>61616</mqPort1>
  <mqServer2>192.168.100.10</mqServer2>
  <mqPort2>61616</mqPort2>
  <kkTopic>HIATMP.HISENSE.PASS.PASSINF</kkTopic>
  <djTopic>HIATMP.HISENSE.ILLEGAL</djTopic>
  <faultTopic></faultTopic>
  <alarmTopic></alarmTopic>
  <userName>admin</userName>
  <passWord>1111</passWord>
  <versionKk>4</versionKk>
  <versionDjSpeed>7</versionDjSpeed>
  <versionDjRedLight>7</versionDjSpeed>
</HxMqConfig>
```

**2.14.110/CGI/ITS/DockSet/HkWebConfig**

<b>/CGI/ITS/DockSet/HxMqConfig</b>	
<b>GET</b>	
<b>Description</b>	Get Haikang Web Setting Parameters
<b>Query</b>	None
<b>Inbound Data</b>	<b>no</b>
<b>Success Return</b>	<b>&lt;HkWebConfig&gt;</b>
<b>PUT</b>	
<b>Description</b>	Set Haikang Web Parameters
<b>Query</b>	None
<b>Inbound Data</b>	<b>&lt;HkWebConfig&gt;</b>
<b>Success Return</b>	<b>&lt;ResponseStatus&gt;</b>
<b>Protocol description:</b> This protocol is to achieve the acquisition and setting of the Haikang Web configuration in platform docking. Fixed platform number 6	
<b>Key parameter description:</b>	



<kkWebservice> bayonet webservice upload address <djWebservice> Upload address for illegal police webservice
---

**HkWebConfig XML Block**

<pre> &lt;?xml version="1.0" encoding="UTF-8"?&gt; &lt;HkWebConfig&gt;   &lt;kkWebservice&gt;&lt;!--req,sx:string --&gt;&lt;/kkWebservice&gt;   &lt;djWebservice&gt;&lt;!-- req, xs: string --&gt;&lt;/djWebservice&gt; &lt;/HkWebConfig&gt; </pre>
---

**Test case**

**GET /CGI/ITS/DockSet/HkWebConfig**

**Request XML: None**

**Response XML: <HkWebConfig>**

<pre> &lt;?xml version="1.0" encoding="UTF-8"?&gt; &lt;HxWebConfig&gt;   &lt;kkWebservice&gt;http://192.168.101.108:8080/EHL_TVCDDB_WEBSERVICE1.0.0.2/services/ TgsService&lt;/kkWebservice&gt;   &lt;djWebservice&gt;http://192.168.101.105/Ehl.Atms.Tgs.WebService/VcpService.asmx&lt;/djWebs ervice&gt; &lt;/HxWebConfig&gt; </pre>
--

**PUT /CGI/ITS/DockSet/HkWebConfig**

**Request XML: <HkWebConfig>**

**Response XML: <ResponseStatus>**

<pre> &lt;?xml version="1.0" encoding="UTF-8"?&gt; &lt;HxWebConfig&gt;   &lt;kkWebservice&gt;'http://192.168.101.108:8080/EHL_TVCDDB_WEBSERVICE1.0.0.2/services/ TgsService&lt;/kkWebservice&gt;   &lt;djWebservice&gt;http://192.168.101.105/Ehl.Atms.Tgs.WebService/VcpService.asmx'&lt;/djWebs ervice&gt; &lt;/HxWebConfig&gt; </pre>
--

**2.14.111/CGI/ITS/Calibrate/Channels/<ID>**

<b>/CGI/ITS/Calibrate/Channels/&lt;ID&gt;General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Get calibration parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<CalibrateInfo>
<b>PUT</b>	
<b>Description</b>	Set calibration parameters
<b>Query</b>	None

<b>Inbound Data</b>	<b>&lt;CalibrateInfo&gt;</b>
<b>Success Return</b>	<b>&lt;ResponseStatus&gt;</b>
<p><b>Protocol description:</b>  This protocol is to query and set the calibration parameters of the radar screen and video screen in the rader and vedio all-in-one machine, and realize the coordinate calibration function</p> <p><b>Key parameter description:</b>  &lt;calibrateList&gt; represents the calibration points 4-8  &lt;itemId&gt; represents the calibration point ID, range 1 ~ 8  &lt;posX&gt; represents the X coordinate in the video image of the calibration point, ten thousandth  &lt;posY&gt; represents the Y coordinate of the video image at the calibration point, ten thousandth  &lt;radarX&gt; represents the X coordinate in the radar screen of the calibration point, [0 ~ 100000] corresponds to [-500 ~ 500] (after the software takes the value minus 50000 divided by 100, the accuracy is 0.01 unit meter) -10.15 meters 50000 = 48985), the network sends 48985  &lt;radarY&gt; represents the Y coordinate in the radar screen of the calibration point, [0 ~ 100000] corresponds to [-500 ~ 500] (after software value minus 50000 divided by 100, accuracy 0.01 unit meter) 20.15 meters (20.15 × 100 + 50000 = 52015), the network sends 52015</p>	

#### Calibrate XML Block

```

<CalibrateInfo version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <calibrateList>
    <calibrateItem>
      <ItemId><!-- req, xs:integer --></ItemId>
<posX><!-- req, xs:integer --></posX>
<posY><!-- req, xs:integer --></posY>
<radarX><!-- req, xs:integer --></radarX>
<radarY><!-- req, xs:integer --></radarY>
    </calibrateItem>
  </calibrateList>
</CalibrateInfo>

```

#### Test case

**GET /CGI/ITS/Calibrate/Channels/1**

**Request XML: None**

**Response XML: <CalibrateInfo>**

**PUT /CGI/ITS/Calibrate/Channels/1**

**Response XML: <ResponseStatus>**

**Request XML: as follows**

```

<CalibrateInfo version="2.0">
  <calibrateList>
< calibrateItem >
      <ItemId>1</ItemId>
<posX>6000</posX>

```

```

<posY>6000</posY>
<radarX>8985</radarX>
<radarY>15600</radarY>
  </calibrateItem >
  <calibrateItem >
    <ItemId>2</ItemId>
<posX>8000</posX>
<posY>8500</posY>
  <radarX>15230</radarX>
<radarY>5980</radarY>
</calibrateItem>
  <calibrateList>
</CalibrateInfo>

```

## 2.14.112/CGI/ITS/ParkEventPara/channels/<ID>

/CGI/ITS/ParkEventPara/channels/<ID>General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Get the parameters of a parking event
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ParkEventPara>
<b>PUT</b>	
<b>Description</b>	Set parameters for parking events
<b>Query</b>	None
<b>Inbound Data</b>	<ParkEventPara>
<b>Success Return</b>	<ResponseStatus>
<p><b>Protocol description:</b>            This protocol is to realize the parameter acquisition and setting of the parking event, and realize the query and setting of the parking event parameter of the device by the client or IE through the CGI protocol.</p> <p><b>Key parameter description:</b>            &lt;parkjudgmenttime&gt; Parking judgment time (seconds) 1-43200</p>	

### ParkEventPara XML Block

```

<ParkEventPara version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
  <parkjudgmenttime><!-- req, xs:integer--></parkjudgmenttime>
</ParkEventPara>

```

### Test case

GET /CGI/ITS/ParkEventPara/channels/1

**Request XML: None**

**Response XML: <ParkEventPara>**

**PUT/CGI/ITS/ParkEventPara/channels/1**

**Response XML: <ParkEventPara>**

**Request XML: as follows**

```
<?xml version="2.0" encoding="UTF-8"?>
<ParkEventPara>
<parkjudgmenttime>10</parkjudgmenttime>
</ParkEventPara>
```

## 2.14.113/CGI/ITS/ImportInfo/FileType/<id>

/CGI/ITS/ImportInfo		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Get parameter import information	
<b>Query</b>	None	
<b>Inbound Data</b>	<b>None</b>	
<b>Success Return</b>	<b>&lt;ResponseStatus&gt;</b>	
<b>Protocol description:</b> This protocol is to obtain the parameter import information and prompt the actual situation of import.		
<b>Key parameter description:</b> fileType: Represents the file type 7. Traffic host manual deployment control 8. Traffic host black license plate management, 9. Traffic host white license plate management, 10. Traffic host vehicle information, successNum: number of successful imports repeatNum: import repeat number failNum: number of failed imports		

**Test case**

**GET /CGI/ITS/ImportInfo/FileType/7**

**Request XML: None**

**Response XML: <ResponseStatus>**

```
<?xml version="2.0" encoding="UTF-8"?>
<ImportInfo>
  <successNum>5</successNum >
  <repeatNum>1</repeatNum>
  <failNum>0</failNum>
</ImportInfo>
```

## 2.14.114/CGI/ITS/UsbExport

<b>/CGI/ITS/UsbExport</b>	
<b>GET</b>	
<b>Description</b>	Get Usb export setting parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<UsbExport>
<b>PUT</b>	
<b>Description</b>	Set Usb export setting parameters
<b>Query</b>	None
<b>Inbound Data</b>	<UsbExport>
<b>Success Return</b>	<ResponseStatus>
<p><b>Protocol description:</b> This protocol is to obtain and set the parameters of the USB export function of traffic data.</p> <p><b>Key parameter description:</b>            &lt;usbEnable&gt; Usb enable: 0: not enabled; 1: enabled            &lt;exportStateEnable&gt; Whether the state is updated after export, 0: no; 1: yes            &lt;exportPlateEnable&gt; Export license plate is enabled, 0: not enabled; 1: enabled            &lt;passingExport&gt; Picture export type type bayonet 0: off; 1: on            &lt;illegalExport&gt; Illegal image export type 0: off; 1: on            &lt;picUrlUserDefEnable&gt; Picture path customization enable            &lt;picUrlSeparator&gt; Picture path connector            &lt;picUrlList&gt; Customized picture path structure list            &lt;picUrl&gt; Customized picture path structure            &lt;urlType&gt; The path type number, as follows            Time, host IP, lane name, lane direction, illegal type. Acquired by ability level            &lt;picNameUserDefEnable&gt; Picture name customization enable            &lt;picNameSeparator&gt; Picture name connector            &lt;picNameList&gt; custom picture name structure list            &lt;picName&gt; custom picture name structure            &lt;nameType&gt; Picture type number, as follows            1 host number, 2 intersection / location number, 3 device number, 4 direction number, 5            snapshot time, 6 lane / detection area number Acquired by ability level</p>	

### UsbExport XML Block

```
<?xml version="1.0" encoding="UTF-8"?>
<UsbExport>
  <usbEnable><!-- req, xs: integer --></usbEnable>
  <exportStateEnable><!-- req, xs: integer --></exportStateEnable>
  <exportPlateEnable><!-- req, xs: integer --></exportPlateEnable>
  <passingExport><!-- req, xs: integer --></passingExport>
  <illegalExport><!-- req, xs: integer --></illegalExport>
```

```

<picUrlUserDefEnable><!-- req, xs:boolean --></picUrlUserDefEnable>
<picUrlSeparator><!-- req, xs:string --></picUrlSeparator>
<picUrlList>
<picUrl>
<urlType><!-- req, xs: integer --></urlType>
</picUrl>
</picUrlList>
<picNameUserDefEnable><!-- req, xs:boolean --></picNameUserDefEnable>
<picNameSeparator><!-- req, xs:string --></picNameSeparator>
<picNameList>
<picName>
<nameType><!-- req, xs: integer --></nameType>
</picName>
</picNameList>
</UsbExport>

```

**Test case**

**GET /CGI/ITS/UsbExport/**

**Request XML: None**

**Response XML: <UsbExport>**

**PUT /CGI/ITS/UsbExport/**

**Request XML: <UsbExport>**

**Response XML: <ResponseStatus>**

```

<?xml version="1.0" encoding="UTF-8"?>
<UsbExport>
  <usbEnable>1</usbEnable>
  <exportStateEnable>1</exportStateEnable>
  <exportPlateEnable>1</exportPlateEnable>
  <passingExport>1</passingExport>
  <illegalExport>1</illegalExport>
  <picUrlUserDefEnable>true</picUrlUserDefEnable>
  <picUrlSeparator>_</picUrlSeparator>
  <picUrlList>
  <picUrl>
  <urlType>1</urlType>
  </picUrl>
  <picUrl>
  <urlType>2</urlType>
  </picUrl>
  </picUrlList>
  <picNameUserDefEnable>true</picNameUserDefEnable>
  <picNameSeparator>_</picNameSeparator>
  <picNameList>
  <picName>
  <nameType>1</nameType>

```

```

</picName>
<picName>
<nameType>2</nameType>
</picName>
</picNameList>
</UsbExport>

```

### 2.14.115/CGI/ITS/TrafficPara/CaptureFilter

<b>/CGI/ITS/TrafficPara/CaptureFilter</b>	
<b>GET</b>	
<b>Description</b>	Get snapshot filter parameters in traffic parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<CaptureFilter>
<b>PUT</b>	
<b>Description</b>	Set snapshot filter parameters in traffic parameters
<b>Inbound Data</b>	<CaptureFilter>
<b>Success Return</b>	<ResponseStatus>
<p><b>Protocol description:</b>  This protocol is to achieve the acquisition and setting of snapshot filtering parameters in traffic parameters.</p> <p><b>Key parameter description:</b>  &lt;filterNoPlateEnable&gt; Filter without license plate record enable  &lt;filterRepeatEnable&gt; Filter illegal repeat snapshot enable  &lt;repeatInterval&gt; Repeat interval: 1 ~ 1440 minutes</p>	

**CaptureFilter XML Block**

```

<?xml version="1.0" encoding="UTF-8"?>
<CaptureFilter>
  <filterNoPlateEnable><!-- req, xs:boolean --></filterNoPlateEnable>
  <filterRepeatEnable><!-- req, xs:boolean --></filterRepeatEnable>
  <repeatInterval><!-- req, xs: integer --></repeatInterval>
</CaptureFilter>

```

**Test case**

**GET /CGI/ITS/TrafficPara/CaptureFilter**

**Request XML: None**

**Response XML: <CaptureFilter>**

**PUT /CGI/ITS/TrafficPara/CaptureFilter**

**Request XML: <CaptureFilter>**

**Response XML: <ResponseStatus>**

```
<?xml version="1.0" encoding="UTF-8"?>
<CaptureFilter>
  <filterNoPlateEnable>true</filterNoPlateEnable>
  <filterRepeatEnable>false</filterRepeatEnable>
  <repeatInterval>60</repeatInterval>
</CaptureFilter>
```

## 2.14.116/CGI/ITS/TrafficPara/LogPara

/CGI/ITS/TrafficPara/LogPara		General Resource v2.0
<b>Get</b>		
<b>Description</b>	Get traffic log parameters	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<LogPara>	
<b>PUT</b>		
<b>Description</b>	Set the traffic log parameters.	
<b>Query</b>	None	
<b>Inbound Data</b>	<LogPara>	
<b>Success Return</b>	<ResponseStatus>	
<b>Protocol description:</b> This protocol is to achieve the acquisition or setting of traffic log parameters.		
<b>Parameter Description:</b> <logLevel> Path type number, the following sequence number 2 vigilance, 3 standards, 4 errors, 5 warnings, 6 systems, 7 debugging. <logReservedDay> Number of days to keep logs 1-7		

### LogParaXML Block

```
<?xml version="2.0" encoding="UTF-8"?>
<LogPara>
  <logLevel><!-- req, xs:integer--></logLevel>
  <logReservedDay><!-- req, xs:integer--></logReservedDay>
</LogPara>
```

**Test case**



**GET /CGI/ITS/TrafficPara/LogPara**

**Request XML: None**

**Response XML: <LogPara>**

**PUT /CGI/ITS/TrafficPara/LogPara**

**Request XML: <LogPara>**

**Response XML: <ResponseStatus>**

```
<?xml version="2.0" encoding="UTF-8"?>
<LogPara>
  <logLevel>5</logLevel>
  <logReservedDay>1</logReservedDay>
</LogPara>
```

## 2.14.117/CGI/ITS/TrafficPara/SystemSet

/CGI/ITS/TrafficPara/SystemSet	
<b>POST</b>	
<b>Description</b>	Get system configuration parameters in traffic parameters
<b>Query</b>	None
<b>Inbound Data</b>	
<b>Success Return</b>	<SystemSet>
<b>PUT</b>	
<b>Description</b>	Set system configuration parameters in traffic parameters
<b>Query</b>	None
<b>Inbound Data</b>	<SystemSet>
<b>Success Return</b>	<ResponseStatus>
<b>Protocol description:</b> This protocol to achieve the acquisition and setting of system information parameters in traffic parameters.	
<b>Key parameter description:</b> <systemEnableList> system enable list <systemEnable> System enable structure <enableType> enable type: 0: reserved; 1: deployment alarm; 2: picture verification; 3: HTTP protocol authentication <enablePara> Enable parameter: 0: not enabled; 1: enabled	

### SystemSetConditionXML

```
<?xml version="2.0" encoding="UTF-8"?>
<SystemSetCondition>
  <systemEnableList>
    <systemEnable>
      <enableType><!--req,sx: integer --></enableType>
```

```
    </systemEnable>
  </systemEnableList>
</SystemSetCondition>
```

### SystemSet XML Block

```
<?xml version="1.0" encoding="UTF-8"?>
<SystemSet>
  <systemEnableList>
    <systemEnable>
      <enableType><!--req,sx:integer--></enableType>
      <enablePara><!--req,sx:integer--></enablePara>
    </systemEnable>
  </systemEnableList>
</SystemSet>
```

### Test case

#### POST /CGI/ITS/TrafficPara/SystemSet

##### Request XML: <SystemSetCondition>

```
<?xml version="1.0" encoding="UTF-8"?>
<SystemSetCondition>
  <systemEnableList>
    <systemEnable>
      <enableType>1</enableType>
    </systemEnable>
  </systemEnableList>
</SystemSetCondition>
```

##### Response XML: <SystemSet>

```
<?xml version="1.0" encoding="UTF-8"?>
<SystemSet>
  <systemEnableList>
    <systemEnable>
      <enableType>1</enableType>
      <enablePara>1</enablePara>
    </systemEnable>
  </systemEnableList>
</SystemSet>
```

#### PUT /CGI/ITS/TrafficPara/SystemSet

##### Request XML: <SystemSet>

##### Response XML: <ResponseStatus>

```

<?xml version="1.0" encoding="UTF-8"?>
<SystemSet>
  <systemEnableList>
    <systemEnable>
      <enableType>1</enableType>
      <enablePara>1</enablePara>
    </systemEnable>
    <systemEnable>
      <enableType>2</enableType>
      <enablePara>1</enablePara>
    </systemEnable>
    <systemEnable>
      <enableType>3</enableType>
      <enablePara>1</enablePara>
    </systemEnable>
  </systemEnableList>
</SystemSet>

```

## 2.14.118/CGI/ITS/DockSet/PlatSelect

<b>/CGI/ITS/DockSet/PlatSelect</b>	
<b>GET</b>	
<b>Description</b>	Get platform selection parameters in platform docking settings
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<PlatSelect>
<b>PUT</b>	
<b>Description</b>	Set platform selection parameters in platform docking settings
<b>Query</b>	None
<b>Inbound Data</b>	<PlatSelect>
<b>Success Return</b>	<ResponseStatus>
<p><b>Protocol description:</b>  This protocol is to achieve the acquisition and setting of platform selection parameters in platform docking settings.</p> <p><b>Key parameter description:</b>  &lt;platSelectList&gt; Platform enable list  &lt;platType&gt; Platform type  &lt;PlatEnable&gt; The platform is enabled. 0: not enabled; 1: enabled</p>	

### PlatSelect XML Block

```
<?xml version="1.0" encoding="UTF-8"?>
<PlatSelect>
  <platType><!--req,sx:integer--></platType>
</PlatSelect>
```

**Test case**

**GET /CGI/ITS/DockSet/PlatSelect/**

**Request XML: None**

**Response XML: <PlatSelect>**

**PUT /CGI/ITS/DockSet/PlatSelect/**

**Request XML: <PlatSelect>**

**Response XML: <ResponseStatus>**

```
<?xml version="1.0" encoding="UTF-8"?>
<PlatSelect>
  <platType>1</platType>
</PlatSelect>
```

**2.14.119/CGI/ITS/DockSet/PlatDockData/PlatType/<id>/PlatId/<id>**

<b>/CGI/ITS/DockSet/PlatDockData/PlatType/&lt;id&gt;/PlatId/&lt;id&gt;</b>	
<b>GET</b>	
<b>Description</b>	Get the parameters of docking data in platform docking
<b>Query</b>	None
<b>Inbound Data</b>	<b>no</b>
<b>Success Return</b>	<b>&lt;PlatDockData&gt;</b>
<b>PUT</b>	
<b>Description</b>	Set the docking data parameters during platform docking
<b>Query</b>	None
<b>Inbound Data</b>	<b>&lt;PlatDockData&gt;</b>
<b>Success Return</b>	<b>&lt;ResponseStatus&gt;</b>
<b>Protocol description:</b> This rprotocol is to realize the docking data acquisition and setting in the parameter setting of platform docking.	
<b>Key parameter description:</b> <platType> docking platform number, used to distinguish the specific platform type, the main and auxiliary numbers are modified according to the platform center <platId> docking platform center 1: main center; 2: sub-center <platEnable> docking platform enable <passingData> Passing data type	

<videoData> Video data type  
<platDataList> docking data configuration list  
<platData> Interconnection data configuration structure  
<dataType> docking data type, as shown below:  
0: bayonet, 1: retrograde, 2: running a red light, 3: specific violations such as motor vehicles run inside the non-motor vehicles lanes  
<dataEnable> docking data enable

### PlatDockDataXML Block

```
<?xml version="1.0" encoding="UTF-8"?>
<PlatDockData>
  <platEnable><!--req,sx:boolean --></platEnable>
  <passingData><!-- req, xs:boolean --></passingData>
  <videoData><!-- req, xs:boolean --></videoData>
  <platDataList>
    <platData>
      <dataType><!--req,sx: integer --></dataType>
      <dataEnable><!--req,sx: integer --></dataEnable>
    </platData>
  </platDataList>
</PlatDockData>
```

### Test case

GET/CGI/ITS/DockSet/PlatDockData/PlatType/1/PlatId/1

**Request XML:** None

**Response XML:** <PlatDockData>

```
<?xml version="1.0" encoding="UTF-8"?>
<PlatDockData>
  <platEnable>true</platEnable>
  <passingData>true</passingData>
  <videoData>true</videoData>
  <platDataList>
    <platData>
      <dataType>1</dataType>
      <dataEnable>1</dataEnable>
    </platData>
  </platDataList>
</PlatDockData>
```

PUT /CGI/ITS/DockSet/PlatDockData/PlatType/1/PlatId/1

**Request XML:** <PlatDockData>

**Response XML:** <ResponseStatus>

```

<?xml version="1.0" encoding="UTF-8"?>
<PlatDockData>
  <platEnable>true</platEnable>
  <passingData>true</passingData>
  <videoData>true</videoData>
  <platDataList>
    <platData>
      <dataType>1</dataType>
      <dataEnable>1</dataEnable>
    </platData>
  </platDataList>
</PlatDockData>

```

## 2.14.120/CGI/ITS/DockSet/PlatDockConfig/PlatType/<id>/PlatId/

<id>

/CGI/ITS/DockSet/PlatDockConfig/PlatType/<id>/PlatId/<id>	
<b>GET</b>	
<b>Description</b>	Obtain the docking setting parameters in platform docking
<b>Query</b>	None
<b>Inbound Data</b>	<b>no</b>
<b>Success Return</b>	<PlatDockConfig>
<b>PUT</b>	
<b>Description</b>	Set the docking setting parameters in platform docking
<b>Query</b>	None
<b>Inbound Data</b>	<PlatDockConfig>
<b>Success Return</b>	<ResponseStatus>
<p><b>Protocol description:</b>            This protocol is to achieve the acquisition and setting of docking settings in platform docking.</p> <p><b>Key parameter description:</b>            &lt;platType&gt; docking platform number, used to distinguish the specific platform type, the main and auxiliary numbers are modified according to the platform center            &lt;platId&gt; docking platform number 1: main center; 2: sub-center            &lt;ftpConfigList&gt; FTP connection configuration list            &lt;ftpConfig&gt; FTP connection configuration structure            &lt;ftpType&gt; Ftp upload data type            &lt;ftpServerAddr&gt; FTP server address            &lt;ftpPort&gt; Ftp upload port            &lt;ftpSharedPath&gt; Ftp upload shared path</p>	

```
<ftpUserName> Ftp upload username, account  
<ftpPassword> FTP upload user password  
<statusAddr> Status reporting address  
<videoAddr> Video reporting address  
<ntpServer> NTP time server  
<ntpPort> NTP port  
<timeError> time error threshold
```

### PlatDockConfig XML Block

```
<?xml version="1.0" encoding="UTF-8"?>  
<PlatDockConfig>  
  <ftpConfigList>  
    <ftpConfig>  
      <ftpType><!-- req, xs: integer --></ftpType>  
      <ftpServerAddr><!-- req, xs:string --></ftpServerAddr>  
      <ftpPort><!-- req, xs: integer --></ftpPort>  
      <ftpSharedPath><!-- req, xs:string --></ftpSharedPath>  
      <ftpUserName><!-- req, xs:string --></ftpUserName>  
      <ftpPassword><!-- req, xs:string --></ftpPassword>  
    </ftpConfig>  
  </ftpConfigList>  
  <statusAddr><!-- req, xs:string --></statusAddr>  
  <videoAddr><!-- req, xs:string --></videoAddr>  
  <ntpServer><!-- req, xs:string --></ntpServer>  
  <ntpPort><!-- req, xs: integer --></ntpPort>  
  <timeError><!-- req, xs: integer --></timeError>  
</PlatDockConfig>
```

### Test case

**GET /CGI/ITS/DockSet/PlatDockConfig/PlatType/1/PlatId/1**

**Request XML: None**

**Response XML: <PlatDockConfig>**

```
<?xml version="1.0" encoding="UTF-8"?>
<PlatDockConfig>
  <ftpConfigList>
    <ftpConfig>
      <ftpType>1</ftpType>
      <ftpServerAddr>10.30.41.21</ftpServerAddr>
      <ftpPort>21</ftpPort>
      <ftpSharedPath>kakou</ftpSharedPath>
      <ftpUserName>admin</ftpUserName>
      <ftpPassword>123456</ftpPassword>
    </ftpConfig>
    <ftpConfig>
      <ftpType>2</ftpType>
      <ftpServerAddr>10.30.41.21</ftpServerAddr>
      <ftpPort>21</ftpPort>
      <ftpSharedPath>weifa</ftpSharedPath>
      <ftpUserName>admin</ftpUserName>
      <ftpPassword>123456</ftpPassword>
    </ftpConfig>
  </ftpConfigList>
  <statusAddr>http://101.113.40.4:8080/thirdpart/passingCar/statusReport</statusAddr>
  <videoAddr>http://101.113.40.4:8080/thirdpart/passingCar/uploadVideo</videoAddr>
  <ntpServer>100.100.100.196</ntpServer>
  <ntpPort>23</ntpPort>
  <timeError>123</timeError>
</PlatDockConfig>
```

**PUT /CGI/ITS/DockSet/PlatDockConfig/PlatType/1/PlatId/1**

**Request XML:** <PlatDockConfig>

**Response XML:** <ResponseStatus>



```

<?xml version="1.0" encoding="UTF-8"?>
<PlatDockConfig>
  <ftpConfigList>
    <ftpConfig>
      <ftpType>1</ftpType>
      <ftpServerAddr>10.30.41.21</ftpServerAddr>
      <ftpPort>21</ftpPort>
      <ftpSharedPath>kakou</ftpSharedPath>
      <ftpUserName>admin</ftpUserName>
      <ftpPassword>123456</ftpPassword>
    </ftpConfig>
    <ftpConfig>
      <ftpType>2</ftpType>
      <ftpServerAddr>10.30.41.21</ftpServerAddr>
      <ftpPort>21</ftpPort>
      <ftpSharedPath>weifa</ftpSharedPath>
      <ftpUserName>admin</ftpUserName>
      <ftpPassword>123456</ftpPassword>
    </ftpConfig>
  </ftpConfigList>
  <statusAddr>http://101.113.40.4:8080/thirdpart/passingCar/statusReport</statusAddr>
  <videoAddr>http://101.113.40.4:8080/thirdpart/passingCar/uploadVideo</videoAddr>
  <ntpServer>100.100.100.196</ntpServer>
  <ntpPort>23</ntpPort>
  <timeError>120</timeError>
</PlatDockConfig>

```

## 2.14.121/CGI/ITS/DockSet/FilenameConfig

/CGI/ITS/DockSet/FilenameConfig	
<b>POST</b>	
<b>Description</b>	Obtain the parameters of the uploaded file during platform docking
<b>Query</b>	None
<b>Inbound Data</b>	<FilenameCondition>
<b>Success Return</b>	<FilenameConfig>
<b>PUT</b>	
<b>Description</b>	Set file upload parameters during platform docking
<b>Query</b>	None
<b>Inbound Data</b>	<FilenameConfig>
<b>Success Return</b>	<ResponseStatus>

**Protocol description:**

This protocol is to achieve the acquisition and setting of the uploaded file in the platform docking.

**Key parameter description:**

<platType> docking platform number, used to distinguish the specific platform type, the main and auxiliary numbers are modified according to the platform center

<platId> docking platform number 1: main center; 2: sub-center

<fileNameList> FTP upload file name setting list

<fileNameItem> FTP upload file name structure

<fileNameType> FTP upload file type

1: bayonet snap shot, 2: electric police snap shot, 3: electric police violation, 4: data file

<separator> separator, corresponding to Ascii code

<ftpNameList> customized file name structure list

<ftpNameItem> customized picture name structure

<ftpNameType> file name type number, the following sequence number

0 reserved, 1 equipment number, 2 intersection number, 3 driving direction, 4 lane number, 5 travel time, 6 Vehicle plate number, etc.

**FilenameCondition XML Block**

```
<?xml version="2.0" encoding="UTF-8"?>
<FilenameCondition>
  <platId><!-- req, xs: integer --></platId>
  <platType><!-- req, xs: integer --></platType>
  <fileNameList>
    <fileNameItem>
      <fileNameType><!-- req, xs: integer --></fileNameType>
    </fileNameItem>
    ...
  </fileNameList>
</FilenameCondition>
```

**FilenameConfig XML Block**

```
<?xml version="1.0" encoding="UTF-8"?>
<FilenameConfig>
  <ftpFileNameSetList>
    <ftpFileName>
      <ftpFileType><!-- req, xs: integer --></ftpFileType>
      <separator><!-- req, xs: string --></separator>
      <fileName>1,2,3,4</fileName>
    </ftpFileName>
    ...
  </ftpFileNameSetList>
</FilenameConfig>
```

**Test case**

## POST /CGI/ITS/DockSet/FilenameConfig

### Request XML: <FilenameCondition>

```
<?xml version="2.0" encoding="UTF-8"?>
<FilenameCondition>
  <platId>1</platId>
  <platType>1</platType>
  <fileNameList>
    <fileNameItem>
      <fileNameType>1</fileNameType>
    </fileNameItem>
  </fileNameList>
</FilenameCondition>
```

### Response XML: <FilenameConfig>

```
<?xml version="1.0" encoding="UTF-8"?>
<FilenameConfig>
  <ftpFileNameSetList>
    <ftpFileName>
      <ftpFileType>1</ftpFileType>
      <separator>_</separator>
      <fileName>1,3</fileName>
    </ftpFileName>
    <ftpFileName>
      <ftpFileType>2</ftpFileType>
      <separator>_</separator>
      <fileName>1,3</fileName>
    </ftpFileName>
  </ftpFileNameSetList>
</FilenameConfig>
```

## PUT /CGI/ITS/DockSet/FilenameConfig

### Request XML: <FilenameConfig>

### Response XML: <ResponseStatus>

```
<?xml version="1.0" encoding="UTF-8"?>
<FilenameConfig>
  <ftpFileNameSetList>
    <platId>1</platId>
    <platType>1</platType>
    <ftpFileName>
      <ftpFileType>1</ftpFileType>
      <separator>_</separator>
      <fileName>1,3</fileName>
    </ftpFileName>
    <ftpFileName>
      <ftpFileType>2</ftpFileType>
      <separator>_</separator>
    </ftpFileName>
  </ftpFileNameSetList>
</FilenameConfig>
```

```

        <fileName>1,3</fileName>
    </ftpFileName>
</ftpFileNameSetList>
</FilenameConfig>

```

## 2.14.122/CGI/ITS/LedDev

/CGI/ITS/LedDev		General Resource v2.0
<b>PUT</b>		
<b>Description</b>	Add / modify / delete LED device	
<b>Query</b>	None	
<b>Inbound Data</b>	<LedDev>	
<b>Success Return</b>	<ResponseStatus>	
<b>GET</b>		
<b>Description</b>	Get a list of LED devices	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<LedDevList>	
<b>Protocol description:</b>		
This protocol is to add, edit, acquire, and delete LED devices.		
<b>Parameter Description:</b>		
<id> The serial number in the table, not displayed, the kernel is assigned, the default is 0 when adding, and it can be transparently transmitted according to the obtained value when editing and deleting (starting from 1)		
<action> operation, 0 add, 1 edit, 2 delete (don't pay attention when get)		
<ledDevNo> number		
<ledDevName> prompt screen name		
<ledDevModel> Model		
<crossingNo> Intersection where is located		
<ledDevWidth> Screen pixels (width)		
<ledDevHeight> Screen pixels (height)		
<ip>ip		
<port> Port number		
<ledDevType> screen type		
<count> Number of <devItem> after replying to xml		
<crossingName> intersection name		

### LedDev XML Block

```

<?xml version="1.0" encoding="UTF-8"?>
<LedDev>
  <id><!-- req, xs: integer--></id>
  <action><!-- req, xs: integer--></action>
    <ledDevType><!-- req, xs: integer--></ledDevType>

```

```

<port><!-- req, xs:integer --></port>
<ledDevModel><!-- req, xs: integer--></ledDevModel>
<ledDevWidth><!-- req, xs:integer --></ledDevWidth>
<ledDevHeight><!-- req, xs:integer --></ledDevHeight>
<ledDevNo><!-- req, xs: string--></ledDevNo>
<ledDevName><!-- req, xs:string--></ledDevName>
<crossingNo><!-- req, xs: string --></crossingNo>
<ip><!-- req, xs:string --></ip>
</LedDev>

```

### LedDevList XML Block

```

<?xml version="" encoding="UTF-8"?>
<LedDevList version="1.0">
  <count><!-- req, xs:integer --></count>
  <devItem>
    <id><!-- req, xs: integer--></id>
    <ledDevType><!-- req, xs: integer--></ledDevType>
    <port><!-- req, xs:integer --></port>
    <ledDevModel><!-- req, xs: integer--></ledDevModel>
    <ledDevWidth><!-- req, xs:integer --></ledDevWidth>
    <ledDevHeight><!-- req, xs:integer --></ledDevHeight>
    <ledDevNo><!-- req, xs: string--></ledDevNo>
    <ledDevName><!-- req, xs:string--></ledDevName>
    <crossingNo><!-- req, xs: string --></crossingNo>
    <ip><!-- req, xs:string --></ip>
    <crossingName><!-- req, xs: string --></crossingName>
  </devItem>
  ...
</LedDevList>

```

### Test case

#### PUT /CGI/ITS/LedDev

**Response XML:** <ResponseStatus>

**Request XML:** as follows

```

<?xml version="1.0" encoding="UTF-8"?>
<LedDev>
<id>0</id>
<action>0</action>
  <ledDevType>1</ledDevType>
  <ledDevNo>222</ledDevNo>
  <ledDevName> Test screen </ ledDevName>
  <ledDevModel>1</ledDevModel>
  <crossingNo>22222</crossingNo>
  <ledDevWidth>96</ledDevWidth>

```

```

    <ledDevHeight>96</ledDevHeight>
    <ip>10.30.41.88</ip>
    <port>8868</port>
</LedDev>

```

**GET /CGI/ITS/LedDev**

**Request XML: None**

**Response XML: <LedDevList>**

```

<?xml version="1.0" encoding="UTF-8"?>
<LedDevList>
<count>2</count>
  <devItem>
<id>1</id>
  <ledDevNo>222</ledDevNo>
  <ledDevName> Test screen </ ledDevName>
  <ledDevModel>MODEL:LED001</ledDevModel>
  <crossingNo>22222</crossingNo>
  <ledDevWidth>96</ledDevWidth>
  <ledDevHeight>96</ledDevHeight>
  <ip>10.30.41.88</ip>
  <port>8868</port>
  <ledDevType> Congestion reminder screen </ ledDevType>
<crossingName> Screen 1 </ crossingName>
  </devItem>
  ...
</LedDevList>

```

## 2.14.123/CGI/ITS/LedOsd

/CGI/ITS/LedOsd		General Resource v2.0
<b>PUT</b>		
<b>Description</b>	Add / modify / delete Led device character overlap.	
<b>Query</b>	None	
<b>Inbound Data</b>	<LedOsd>	
<b>Success Return</b>	<ResponseStatus>	
<b>GET</b>		
<b>Description</b>	Obtain LED device character overlapping information	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<LedOsdList>	

**Protocol description:**

This protocol is to add, modify, query, delete and obtain the LED device character overlapped setting information.

**Parameter Description:**

<id> The serial number in the table, not displayed, the kernel is assigned, the default is 0 when adding, and it can be transparently transmitted according to the obtained value when editing and deleting (starting from 1)

<action> operation, 0 add, 1 edit, 2 delete (don't pay attention when get)

<ledTypeId> Led type id

<ledTypeNo> Led number (Led device foreign key)

<alarmTypeId> illegal type id

<fontWidth> character width

<fontHeight> character height

<fontColor> font color

<hintInfo> prompt content

<hintTime> Hint time

<count> Number of <osdItem> after replying to xml

<LedName> Led name

<LedSize> screen size

<hintInfoType> prompt type, 0 with car prompt, 1 without car prompt

**LedOsd XML Block**

```
<?xml version="1.0" encoding="UTF-8"?>
<LedOsd>
  <id><!-- req, xs: integer--></id>
  <action><!-- req, xs: integer--></action>
  <ledTypeId><!-- req, xs:integer--></ledTypeId>
  <fontWidth><!-- req, xs:integer--></fontWidth>
  <fontHeight><!-- req, xs:integer--></fontHeight>
  <hintTime><!-- req, xs:integer--></hintTime>
  <alarmTypeId><!-- req, xs:string--></alarmTypeId>
  <ledTypeNo><!-- req, xs:string--></ledTypeNo>
  <fontColor><!-- req, xs:string--></fontColor>
  <hintInfo><!-- req, xs:string--></hintInfo>
  <hintList>
    <hintItem>
      < hintInfoType><!-- req, xs:integer--></ hintInfoType>
      <hintInfo><!-- req, xs:string--></hintInfo>
      <hintTime><!-- req, xs:integer--></hintTime>
    </hintItem>
  </hintList>
</LedOsd>
```

### LedOsdList XML Block:

```
<?xml version="1.0" encoding="UTF-8"?>
<LedOsdList>
  <count><!-- req, xs:integer --></count>
  <osdItem>
    <id><!-- req, xs: integer--></id>
    <ledTypeId><!-- req, xs:integer--></ledTypeId>
    <fontWidth opt="16, 32, 64"><!-- req, xs:integer--></fontWidth>
    <fontHeight opt="16, 32, 64"><!-- req, xs:integer--></fontHeight>
    <hintTime><!-- req, xs:integer--></hintTime>
    <alarmTypeId><!-- req, xs:string--></alarmTypeId>
    <ledTypeNo><!-- req, xs:string--></ledTypeNo>
    <fontColor><!-- req, xs:string--></fontColor>
    <hintInfo><!-- req, xs:string--></hintInfo>
    <ledName><!-- req, xs:string--></ledName>
    <ledSize><!-- req, xs:integer--></ledSize>
    <hintList>
      <hintItem>
        <hintInfoType ><!-- req, xs:integer--></hintInfoType >
        <hintInfo><!-- req, xs:string--></hintInfo>
        <hintTime><!-- req, xs:integer--></hintTime>
      </hintItem>
    </hintList>
  </osdItem>
</LedOsdList>
```

### Test case

#### PUT /CGI/ITS/LedOsd

**Response XML:** <ResponseStatus>

**Request XML:** as follows

```
<?xml version="1.0" encoding="UTF-8"?>
<LedOsd>
  <id>0</id>
  <action>0</action>
  <ledTypeId>1</ledTypeId>
  <fontWidth>16</fontWidth>
  <fontHeight>16</fontHeight>
  <hintTime>60</hintTime>
  <alarmTypeId>8</alarmTypeId>
  <ledTypeNo>222</ledTypeNo>
  <fontColor>000255000000</fontColor>
  <hintInfo>111</hintInfo>
  <hintList>
    <hintItem>
```



```

    < hintInfoType>1</ hintInfoType>
    <hintInfo>666</hintInfo>
    <hintTime>60</hintTime>
  </hintItem>
  <hintItem>
    <hintInfoType>2</ hintInfoType>
    <hintInfo>777</hintInfo>
    <hintTime>60</hintTime>
  </hintItem>
</hintList>
</LedOsd>

```

## 2.14.124/CGI/ITS/MediaDev

/CGI/ITS/MediaDev		General Resource v2.0
<b>PUT</b>		
<b>Description</b>	Add / modify / delete multimedia devices	
<b>Query</b>	None	
<b>Inbound Data</b>	<MediaDev>	
<b>Success Return</b>	<ResponseStatus>	
<b>GET</b>		
<b>Description</b>	Get a list of multimedia devices	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<MediaDevList>	
<b>Protocol description:</b>		
This protocol is to add, edit, acquire, and delete multimedia devices.		
<b>Parameter Description:</b>		
<id> The serial number in the table, not displayed, the kernel is assigned, the default is 0 when adding, and it can be transparently transmitted according to the obtained value when editing and deleting (starting from 1)		
<action> operation, 0 add, 1 edit, 2 delete (don't pay attention when get)		
<id> Database primary key ID		
<mediaDevId> Device ID		
<severAddr> server address		
<port> port		
<heartBeatInterval> Heartbeat interval		
<ipcId> camera id		
<ipcName> camera name		
<ipcNo> camera number		
<count> Number of <devItem> after replying to xml		

### MultimediaDev XML Block:

```
<?xml version="1.0" encoding="UTF-8"?>
<MediaDev>
  <id><!-- req, xs: integer--></id>
    <action><!-- req, xs: integer--></action>
    <mediaDevId><!-- req, xs: string--></mediaDevId>
    <severAddr><!-- req, xs: string--></severAddr>
    <port><!-- req, xs: integer--></port>
    <heartBeatInterval><!-- req, xs: integer--></heartBeatInterval>
    <ipcName><!-- req, xs: string--></ipcName>
    <ipcNo><!-- req, xs: string--></ipcNo>
    <ipcId><!-- req, xs: integer--></ipcId>
</MediaDev>
```

### MediaDevList XML Block:

```
<?xml version="1.0" encoding="UTF-8"?>
<MediaDevList>
  <count><!-- req, xs:integer --></count>
  <devItem>
    <id><!-- req, xs: integer--></id>
    <mediaDevId><!-- req, xs: string--></mediaDevId>
    <severAddr><!-- req, xs: string--></severAddr>
    <port><!-- req, xs: integer--></port>
    <heartBeatInterval><!-- req, xs: integer--></heartBeatInterval>
    <ipcName><!-- req, xs: string--></ipcName>
    <ipcNo><!-- req, xs: string--></ipcNo>
    <ipcId><!-- req, xs: integer--></ipcId>
  </devItem>
  ...
</MediaDevList>
```

Test case:

### PUT/CGI/ITS/MmediaDev

#### Request XML:

```
<?xml version="1.0" encoding="UTF-8"?>
<MediaDev>
  <id>0</id>
  <action>0</action>
  <mediaDevId>222</mediaDevId>
  <severAddr>1.1.1.1</severAddr>
  <port>30</port>
  <heartBeatInterval>30</heartBeatInterval>
  <ipcName>1111</ipcName>
  <ipcNo>1111</ipcNo>
```

```
<ipcId>1</ipcId>
</MediaDev>
```

**Response XML:** <ResponseStatus>

## 2.14.125/CGI/TTS/VehicleInfo

/CGI/TTS/VehicleInfo		General Resource v2.0
<b>POST</b>		
<b>Description</b>	Query vehicle information	
<b>Query</b>	None	
<b>Inbound Data</b>	<QueryCondition>	
<b>Success Return</b>	<VehicleList>	
<b>PUT</b>		
<b>Description</b>	Add / edit / delete vehicle information	
<b>Query</b>	None	
<b>Inbound Data</b>	<VehicleInfo>	
<b>Success Return</b>	<ResponseStatus>	
<p><b>Protocol description:</b> This protocol is to add, edit, obtain and delete vehicle information</p> <p><b>Parameter Description:</b>            &lt;id&gt; The serial number in the table, not displayed, the kernel is assigned, the default is 0 when adding, and it can be transparently transmitted according to the obtained value when editing and deleting (starting from 1)            &lt;action&gt; Operation, 0 add, 1 edit, 2 delete (don't pay attention when posting)            &lt;plateNo&gt; license plate number            &lt;plateColor&gt; license plate color            &lt;vehicleColor&gt; Body color            &lt;brand&gt; Vehicle brand            &lt;vehicleOwner&gt; Name of owner            &lt;parkingNo&gt; parking number            &lt;department&gt; Department            &lt;phone&gt; Phone            &lt;detail&gt; Detailed information            &lt;remarks&gt; Remarks            &lt;count&gt; Number of &lt;ehicleItem&gt; after replying to xml            &lt;startId&gt; Start number            &lt;endId&gt; end number            &lt;maxId&gt; The maximum ID of the query</p>		

### VehicleInfo XML Block:

```
<?xml version="1.0" encoding="UTF-8"?>
<VehicleInfo>
```

```

<id><!-- req, xs: integer--></id>
  <action><!-- req, xs: integer--></action>
  <plateColor><!-- dep, xs:integer --></plateColor>
  <vehicleColor><!-- dep, xs:integer --></vehicleColor>
  <brand><!-- dep, xs:integer --></brand>
  <plateNo><!-- req, xs:string --></plateNo>
  <vehicleOwner><!-- dep, xs:string --></vehicleOwner>
  <parkingNo><!-- dep, xs:string --></parkingNo>
  <department><!-- dep, xs:string --></department>
  <phone><!-- dep, xs:string --></phone>
  <detail><!-- dep, xs:string --></detail>
  <remarks><!-- dep, xs:string --></remarks>
</VehicleInfo>

```

### QueryCondition XML Block

```

<?xml version="1.0" encoding="UTF-8"?>
<QueryCondition>
  <startId><!-- req, xs:integer--></startId>
  <endId><!-- req, xs:integer--></endId>
  <maxId><!-- req, xs:integer--></maxId>
  <plateNo><!-- req, xs:string --></plateNo>
</QueryCondition>

```

### VehicleList XML Block

```

<?xml version="1.0" encoding="UTF-8"?>
<VehicleList>
  <count><!-- req, xs:integer --></count>
  <vehicleItem>
    <id><!-- req, xs: integer--></id>
    <plateNo><!-- req, xs:string --></plateNo>
    <PlateColor><!-- dep, xs:integer --></plateColor>
    <vehicleColor><!-- dep, xs:integer --></vehicleColor>
    <brand><!-- dep, xs:integer --></brand>
    <vehicleOwner><!-- dep, xs:string --></vehicleOwner>
    <parkingNo><!-- dep, xs:string --></parkingNo>
    <department><!-- dep, xs:string --></department>
    <phone><!-- dep, xs:string --></phone>
    <detail><!-- dep, xs:string --></detail>
    <remarks><!-- dep, xs:string --></remarks>
  </vehicleItem>
  ...
</VehicleList>

```

**Test case:**

### PUT /CGI/ITS/VehicleInfo

**Response XML:** <ResponseStatus>

**The request XML is as follows:**

```
<?xml version="1.0" encoding="UTF-8"?>
<VehicleInfo>
<id>0</id>
<action>0</action>
<plateNo> Jin 12345 </ plateNo>
<plateColor> White card </ plateColor>
<vehicleColor> White </ vehicleColor>
<brand> BMW </ brand>
<vehicleOwner> Zhang San </ vehicleOwner>
<parkingNo>A10</parkingNo>
<department> Sales Department </ department>
<phone>13845511111</phone>
<detail>bb</detail>
<remarks>bb</remarks>
</VehicleInfo>
```

### POST /CGI/ITS/VehicleInfo

**Request XML:**

```
<?xml version="1.0" encoding="UTF-8"?>
<QueryCondition>
<plateNo> JIN A12345 </ plateNo>
<QueryCondition>
```

**Response XML:** <VehicleList>

```
<?xml version="1.0" encoding="UTF-8"?>
<VehicleList>
<count>2</count>
<vehicleItem >
<Id>1</id>
<plateNo> Jin 12345 </ plateNo>
<plateColor> White card </ plateColor>
<vehicleColor> White </ vehicleColor>
<brand> BMW </ brand>
<vehicleOwner> Zhang San </ vehicleOwner>
<parkingNo>A10</parkingNo>
<department> Sales Department </ department>
<phone>13845511111</phone>
<detail></detail>
<remarks></remarks>
</vehicleItem>
...
```

```
</VehicleList>
```

## 2.14.126/CGI/ITS/QueryVehicleInfoCount

/CGI/ITS/QueryVehicleInfoCount		General Resource v2.0
<b>POST</b>		
<b>Description</b>	Get total vehicle information	
<b>Query</b>	None	
<b>Inbound Data</b>	<QueryCondition>	
<b>Success Return</b>	<VehicleInfoCount>	
<b>Protocol description:</b> This protocol is to obtain the total number of vehicle information.		
<b>Parameter Description:</b> <count> The total number of vehicle information (the license plate number exists in the table where the id is returned, there is no total number returned) <plateNo> license plate number		

### QueryCondition XML Block

```
<?xml version="1.0" encoding="UTF-8"?>
<QueryCondition>
  <plateNo><!-- req, xs:string --></plateNo>
</QueryCondition>
```

### VehicleInfoCount XML Block

```
<?xml version="1.0" encoding="UTF-8"?>
<VehicleInfoCount>
  <count><!-- req, xs:integer --></count>
</VehicleInfoCount>
```

## 2.14.127/CGI/ITS/WhiteListControl

/CGI/ITS/WhiteListControl		General Resource v2.0
<b>POST</b>		
<b>Description</b>	Find whitelist license plate information by license plate number	
<b>Query</b>	None	
<b>Inbound Data</b>	<QueryCondition>	
<b>Success Return</b>	<VehicleWhiteList>	
<b>PUT</b>		
<b>Description</b>	Add or modify whitelist vehicle information	
<b>Query</b>	None	

<b>Inbound Data</b>	<b>&lt;VehicleWhite&gt;</b>
<b>Success Return</b>	<b>&lt;ResponseStatus&gt;</b>
<p><b>Protocol description:</b>  <b>Realize search (support fuzzy query), add, modify, delete whitelist license plates.</b></p> <p><b>Parameter Description:</b>  &lt;id&gt; The serial number in the table, not displayed, the kernel is assigned, the default is 0 when adding, and it can be transparently transmitted according to the obtained value when editing and deleting (starting from 1)  &lt;plateNo&gt; license plate number  &lt;action&gt; Operation, 0 add, 1 edit, 2 delete (don't pay attention when get or post)  &lt;count&gt; Number of &lt;item&gt; after replying to xml  &lt;startId&gt; Start number  &lt;endId&gt; end number  &lt;maxId&gt; The maximum ID of the query</p>	

**QueryCondition XML Block:**

```
<?xml version="1.0" encoding="UTF-8"?>
<QueryCondition>
  <startId><!-- req, xs:integer--></startId>
  <endId><!-- req, xs:integer--></endId>
  <maxId><!-- req, xs:integer--></maxId>
  <plateNo><!-- req,xs:string!--></plateNo>
</QueryCondition>
```

**VehicleWhite XML Block:**

```
<?xml version="1.0" encoding="UTF-8"?>
<VehicleWhite>
  <id><!-- req, xs: integer--></id>
  <action><!-- req, xs: integer--></action>
  <plateNo><!-- req, xs:string --></plateNo>
</VehicleWhite>
```

**VehicleWhiteList XML Block:**

```
<?xml version="1.0" encoding="UTF-8"?>
<VehicleWhiteList>
  <count><!-- req, xs:integer --></count>
  <item>
    <id><!-- req, xs: integer--></id>
    <plateNo><!-- req, xs:string --></plateNo>
  </item>
  ...
</VehicleWhiteList>
```

**PUT /CGI/ITS/WhiteListControl**

**Request xml:**

```
<?xml version="1.0" encoding="UTF-8"?>
<VehicleWhite>
<id>0</id>
  <action>0</action>
  <plateNo> CHUAN 12345 </ plateNo>
</VehicleWhite>
```

**Reply xml:** <ResponseStatus>

**2.14.128/CGI/TTS/QueryWhiteListCount**

<b>/CGI/TTS/QueryWhiteListCount</b>		<b>General Resource v2.0</b>
<b>POST</b>		
<b>Description</b>	Get the total number of white license plates	
<b>Query</b>	None	
<b>Inbound Data</b>	<QueryCondition>	
<b>Success Return</b>	<VehicleWhiteListCount>	
<b>Protocol description:</b> This protocol is to obtain the total number of white license plates.		
<b>Parameter Description:</b>		
<count> The total number of white license plates (the license plate number exists in the table where the id is returned, there is no total number returned)		
<plateNo> license plate number		

**VehicleWhiteListCount XML Block**

```
<?xml version="1.0" encoding="UTF-8"?>
<VehicleWhiteListCount>
  <count><!-- req, xs: integer--></count>
</VehicleWhiteListCount>
```

**QueryCondition XML Block**

```
<?xml version="1.0" encoding="UTF-8"?>
<QueryCondition>
  <plateNo><!-- req, xs:string --></plateNo>
</QueryCondition>
```

**2.14.129/CGI/TTS/ManualControl**

<b>/CGI/TTS/ManualControl</b>		<b>General Resource v2.0</b>
<b>POST</b>		
<b>Description</b>	Obtain a list of controlled vehicle information by license plate number	



<b>Query</b>	<b>None</b>
<b>Inbound Data</b>	<b>&lt;QueryCondition&gt;</b>
<b>Success Return</b>	<b>&lt;ControlInfoList&gt;</b>
<b>PUT</b>	
<b>Description</b>	Add / Revoke Controlled Vehicle
<b>Query</b>	<b>None</b>
<b>Inbound Data</b>	<b>&lt;ControlInfo&gt;</b>
<b>Success Return</b>	<b>&lt;ResponseStatus&gt;</b>
<p><b>Protocol description:</b> This protocol mainly realizes adding control, canceling control and deleting control in manual control.</p> <p><b>Parameter Description:</b>  &lt;id&gt; The serial number in the table, not displayed, the kernel is assigned, the default is 0 when adding, and it can be transparently transmitted according to the obtained value when editing and deleting (starting from 1)  &lt;action&gt; Operation, 0 add, 1 delete, 2 undo control (do not pay attention when get, post)  &lt;fuzzyControl&gt; Fuzzy control  &lt;plateNo&gt; license plate number  &lt;plateColor&gt; license plate color  &lt;plateType&gt; plate type  &lt;contorller&gt; The current login user name is defaulted by the controller  &lt;alarmType&gt; alarm type  &lt;brand&gt; Vehicle brand  &lt;vehicleShape&gt; Vehicle shape  &lt;vehicleColor&gt; vehicle color  &lt;controlPositionList&gt; Control location list  &lt;positionId&gt; Position Id  &lt;controlDeadline&gt; control deadline  &lt;addReason&gt; Reason for joining  &lt;description&gt; Case description  &lt;vehicleControlStatus&gt; deployment control status  &lt;cancelReason&gt; Reason for withdrawal  &lt;canceRemarks&gt; Remarks for withdrawal  &lt;cancelPerson&gt; Withdrawal person  &lt;count&gt; Number of &lt;item&gt; after replying to xml  &lt;startId&gt; Start number  &lt;endId&gt; end number  &lt;maxId&gt; The maximum ID of the query</p>	

**QueryCondition XML Block:**

```

<?xml version="1.0" encoding="UTF-8"?>
<QueryCondition>
  <startId><!-- req, xs:integer--></startId>
  <endId><!-- req, xs:integer--></endId>

```

```
<maxId><!-- req, xs:integer--></maxId>
<plateNo><!-- req,xs:string!--></plateNo>
</QueryCondition>
```

### ControlInfo XML Block:

```
<?xml version="1.0" encoding="UTF-8"?>
<ControlInfo>
<id><!-- req, xs: integer--></id>
  <action><!-- req, xs:integer --></action>
  <alarmType><!-- req, xs:integer --></alarmType>
  <vehicleControlStatus><!-- req, xs:integer --></vehicleControlStatus>
  <controlDeadline><!-- req, xs:string --></controlDeadline>
  <fuzzyControl><!-- req, xs:integer--></fuzzyControl>
  <plateNo><!-- req, xs:string --></plateNo>
  <plateColor><!-- req, xs:string --></plateColor>
  <plateType><!-- dep, xs:string --></plateType>
  <contorller><!-- dep, xs:string --></contorller>
  <brand><!-- dep, xs:string --></brand>
  <vehicleShape><!-- dep, xs:string --></vehicleShape>
  <vehicleColor><!-- dep, xs:string --></vehicleColor>
  <controlPositionList>
  <count><!-- req, xs:integer--></count>
  <item>
    <positionId><!-- req, xs:integer--></positionId>
  </item>
  .....
</controlPositionList>
  <addReason><!-- req, xs:string --></addReason>
  <description><!-- dep, xs:string --></description>
  <cancelReason><!-- dep, xs:string --></cancelReason>
  <cancleRemarks><!-- dep, xs:string --></cancleRemarks>
  <cancelPerson><!-- dep, xs:string --></cancelPerson>
</ControlInfo>
```

### ControlInfoList XML Block:

```
<?xml version="1.0" encoding="UTF-8"?>
<ControlInfoList>
<count><!-- req, xs:integer --></count>
  <item>
    <id><!-- req, xs:integer --></id>
    <alarmType><!-- req, xs:integer --></alarmType>
    <vehicleControlStatus><!-- req, xs:integer --></vehicleControlStatus>
    <controlDeadline><!-- req, xs:string--></controlDeadline>
    <fuzzyControl><!-- req, xs:integer --></fuzzyControl>
```

```

    <plateNo><!-- req, xs:string --></plateNo>
    <plateColor><!-- req, xs:string --></plateColor>
    <plateType><!-- dep, xs:string --></plateType>
    <contorller>admin</contorller>
    <brand><!-- dep, xs:string --></brand>
    <vehicleShape><!-- dep, xs:string --></vehicleShape>
    <vehicleColor><!-- dep, xs:string --></vehicleColor>
    <controlPositionList>
<count><!-- req, xs:integer--></count>
    <item>
        <positionId><!-- req, xs:integer--></positionId>
    </item>
    .....
</controlPositionList>
    <addReason><!-- req, xs:string --></addReason>
    <description><!-- dep, xs:string --></description>
    <cancelReason><<!-- dep, xs:string --></cancelReason>
    <cancelRemarks><!-- dep, xs:string --></cancelRemarks>
    <cancelPerson><<!-- dep, xs:string --></cancelPerson>
    </item>
...
</ControlInfoList>

```

**Test case:**

**Repeal control**

**PUT /CGI/ITS/ManualControl**

**Request XML Block:**

```

<?xml version="1.0" encoding="UTF-8"?>
<ControlInfo>
<id>1</id>
<action>3</action>
<alarmType>1</alarmType>
<fuzzyControl>0</fuzzyControl>
<plateNo> CHUAN 12345 </ plateNo>
<plateColor> white </ plateColor>
<plateType> Small car </ plateType>
<contorller>admin</contorller>
<brand> Changan </ brand>
<vehicleShape>suv</vehicleShape>
<vehicleColor> Red </ vehicleColor>
<controlPositionList>
<count>2</count>
<item>
<positionId>1</positionId>

```

```

</item>
  <item>
    <positionId>2</positionId>
  </item>
</controlPositionList>
<controlDeadline>2020-02-19</controlDeadline>
<addReason> Expired logout </ addReason>
<description> None </ description>
<vehicleControlStatus>1</vehicleControlStatus>
<cancelReason>aaaa</cancelReason>
<cancelRemarks>aaaa</cancelRemarks>
<cancelPerson></cancelPerson>
</ControlInfo>

```

**Reply XML: <ResponseStatus>**

## 2.14.130/CGI/ITS/QueryManualControlCount

<b>/CGI/ITS/QueryManualControlCount</b>		<b>General Resource v2.0</b>
<b>POST</b>		
<b>Description</b>	Get the total number of manual deployment	
<b>Query</b>	<b>None</b>	
<b>Inbound Data</b>	<b>&lt;QueryCondition&gt;</b>	
<b>Success Return</b>	<b>&lt;ManualControlCount&gt;</b>	
<b>Protocol description:</b> This protocol is to obtain the total number of manual deployment.		
<b>Parameter Description:</b> <count> The total number of manual deployment (the license plate number exists in the table where the id is returned, there is no total number returned) <plateNo> license plate number		

### ManualControlCount XML Block

```

<?xml version="1.0" encoding="UTF-8"?>
<ManualControlCount>
  <count><!-- req, xs: integer--></count>
</ManualControlCount>

```

### QueryCondition XML Block

```

<?xml version="1.0" encoding="UTF-8"?>
<QueryCondition>
  <plateNo><!-- req, xs:string --></plateNo>
</QueryCondition>

```

## 2.14.131/CGI/TTS/BlackListControl

/CGI/TTS/BlackListControl      General Resource v2.0	
<b>POST</b>	
<b>Description</b>	Query black license plate by vehicle plate number
<b>Query</b>	None
<b>Inbound Data</b>	<QueryCondition>
<b>Success Return</b>	<BlackPlateList>
<b>PUT</b>	
<b>Description</b>	Add / Edit Black Vehicle Plate
<b>Query</b>	None
<b>Inbound Data</b>	<BlackPlateInfo>
<b>Success Return</b>	<ResponseStatus>
<p><b>Protocol description:</b> This protocol mainly realizes adding, editing, inquiring and deleting black license plates.</p> <p><b>Parameter Description:</b> &lt;id&gt; The serial number in the table, not displayed, the kernel is assigned, the default is 0 when adding, and it can be transparently transmitted according to the obtained value when editing and deleting (starting from 1) &lt;action&gt; Operation type: 0 add, 1 modify, 2 delete (get ignored) &lt;plateNo&gt; license plate number &lt;plateColor&gt; license plate color &lt;alarmType&gt; alarm type &lt;addReason&gt; Reason for joining &lt;remarks&gt; Remarks &lt;count&gt; Number of &lt;item&gt; after replying to xml &lt;startId&gt; Start number &lt;endId&gt; end number &lt;maxId&gt; The maximum ID of the query &lt;time&gt; deployment time</p>	

### QueryCondition XML Block:

```
<?xml version="1.0" encoding="UTF-8"?>
<QueryCondition>
  <startId><!-- req, xs:integer--></startId>
  <endId><!-- req, xs:integer--></endId>
  <maxId><!-- req, xs:integer--></maxId>
  <plateNo><!-- req,xs:string!--></plateNo>
</QueryCondition>
```

### BlackPlateInfoXML Block:

```
<?xml version="1.0" encoding="UTF-8"?>
<BlackPlateInfo>
```

```

<id><!-- req, xs: integer--></id>
<action><!-- req, xs:integer--></action>
  <alarmType><!-- req, xs:integer--></alarmType>
  <plateNo><!-- req, xs:string --></plateNo>
  <plateColor><!-- req, xs:string --></plateColor>
  <addReason><!-- dep, xs:string --></addReason>
  <remarks><!-- dep, xs:string --></remarks>
  <time><!-- dep, xs:string --></time>
</BlackPlateInfo>

```

### BlackPlateList XML Block:

```

<?xml version="1.0" encoding="UTF-8"?>
<BlackPlateList>
<count><!-- req, xs:integer --></count>
  <item>
    <id><!-- req, xs: integer--></id>
      <alarmType><!-- req, xs:integer--></alarmType>
      <plateNo><!-- req, xs:string --></plateNo>
      <plateColor><!-- req, xs:string --></plateColor>
      <addReason><!-- dep, xs:string --></addReason>
      <remarks><!-- dep, xs:string --></remarks>
      <time><!-- dep, xs:string --></time>
    </item>
    ...
  </BlackPlateList>

```

### Test case:

#### PUT /CGI/ITS/BlackListControl

#### Request XML Block:

```

<?xml version="1.0" encoding="UTF-8"?>
<BlackPlateInfo>
<id>0</id>
  <action>0</action>
  <alarmType>1</alarmType>
  <plateNo> CHUAN 12345 </ plateNo>
  <plateColor> white </ plateColor>
  <addReason></addReason>
  <remarks></remarks>
  <time>2020-03-05 12:00:00</time>
</BlackPlateInfo>

```

#### Reply XML <ResponseStatus>

## 2.14.132/CGI/TTS/QueryBlackListCount

<b>/CGI/TTS/QueryBlackListCount</b>		<b>General Resource v2.0</b>
<b>POST</b>		
<b>Description</b>	Get the total number of black license plates	
<b>Query</b>	None	
<b>Inbound Data</b>	<QueryCondition>	
<b>Success Return</b>	<VehicleBlackListCount>	
<p><b>Protocol description:</b> This protocol is to obtain the total number of black license plates.</p> <p><b>Parameter Description:</b> &lt;count&gt; The total number of black license plates (the license plate number exists in the table where the id is returned, there is no total number returned) &lt;plateNo&gt; license plate number</p>		

### VehicleBlackListCount XML Block

```
<?xml version="1.0" encoding="UTF-8"?>
<VehicleBlackListCount>
  <count><!-- req, xs: integer--></count>
</VehicleBlackListCount>
```

### QueryCondition XML Block

```
<?xml version="1.0" encoding="UTF-8"?>
<QueryCondition>
  <plateNo><!-- req, xs:string --></plateNo>
</QueryCondition>
```

## 2.14.133/CGI/TTS/IpPara/Stat/Channels/<ID>

<b>/CGI/TTS/IpPara/Stat/Channels/&lt;ID&gt;</b>	
<b>GET</b>	
<b>Description</b>	Get bayonet device status parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<ItsCameraStatus>
<p><b>Protocol description:</b> This protocol is to obtain the interface state parameters of the bayonet device.</p> <p><b>Key parameter description:</b> &lt;deviceId&gt; device number &lt;ipcTemp&gt; Camera temperature &lt;coilsStat&gt; Coil status: 0 abnormal, 1 normal, 9 unknown &lt;lightStat&gt; Signal light detector status</p>	

### ItsCameraStatusXML Block

```
<?xml version="1.0" encoding="UTF-8"?>
<ItsCameraStatus>
<deviceId><!-- req, xs: integer --></deviceId>
<ipcTemp><!-- req, xs: integer --></ipcTemp>
<coilsStat><!-- dep, xs:string --></coilsStat>
<lightStat><!-- dep, xs:string --></lightStat>
</ItsCameraStatus>
```

### Test case

GET /CGI/ITS/IpcPara/Stat/Channels/1

Request XML: None

Response XML: <ItsCameraStatus>

```
<?xml version="1.0" encoding="UTF-8"?>
<ItsCameraStatus>
<deviceId>1</deviceId>
<ipcTemp>37.2</ipcTemp>
<coilsStat>9,9,9,9,9,9,9</coilsStat>
<lightStat>0,0,0,0,0,0,0</lightStat>
</ItsCameraStatus>
```

## 2.14.134/CGI/ITS/ShotPara/SnapPicMerge

/CGI/ITS/ShotPara/SnapPicMerge	
<b>GET</b>	
<b>Description</b>	Get before and after snapshot synthesis parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<SnapPicMergePara>
<b>PUT</b>	
<b>Description</b>	Set front and back snapshot synthesis parameters
<b>Query</b>	None
<b>Inbound Data</b>	<SnapPicMergePara>
<b>Success Return</b>	<ResponseStatus>
<b>Protocol description:</b>	
This protocol is to achieve the acquisition and setting of the synthesis parameters of the front and back snapshots of the host	
<mergeEnable>-Represents whether synthesis is enabled, 0: no synthesis, 1: synthesis	
<kkMergeMode>-Kaka synthesis mode, 0: vertical, 1: horizontal	
<dkMergeMode>-Electric card synthesis mode, 0: 3 + 1 synthesis, 1: 4 + 2 synthesis, 2: illegal	



(vertical)

<mergeRate>-Synthesis ratio, 0: full resolution synthesis, 1: 1/4 resolution synthesis

<picCompressQP>-Image compression quality

<picCompressSize>-The size of the image after compression

<fnMergeMode>-Non-motor vehicle retrograde, 3 + 1 synthesis

<kkMergeEnable> represents whether Kaka synthesis is enabled 0, reserved; 1, supported; 2, not supported

<dkMergeEnable> represents whether the electronic card synthesis is enabled 0, reserved; 1, supported; 2, not supported

### SnapPicMergePara XML Block

```
<?xml version="1.0" encoding="UTF-8"?>
<SnapPicMegerPara>
  <mergeEnable><!--req,sx: integer --></mergeEnable>
  <kkMergeMode><!--req,sx: integer --></kkMergeMode>
  <dkMergeMode><!--req,sx: integer --></dkMergeMode>
  <mergeRate><!--req,sx: integer --></mergeRate>
  <picCompressQP><!--req,sx: integer --></picCompressQP>
  <picCompressSize><!--req,sx: integer --></picCompressSize>
  <fnMergeMode><!--req,sx: integer --></fnMergeMode>
  <kkMergeEnable><!--req,sx: integer --></kkMergeEnable>
  <dkMergeEnable><!--req,sx: integer --></dkMergeEnable>
</SnapPicMegerPara>
```

### Test case

**GET** /CGI/ITS/ShotPara/SnapPicMerge

**Request XML:** None

**Response XML:** <SnapPicMergePara>

**PUT** /CGI/ITS/ShotPara/SnapPicMerge

**Response XML:** <ResponseStatus>

**Request XML:** as follows

```
<?xml version="1.0" encoding="UTF-8"?>
<SnapPicMegerPara>
  <mergeEnable>1</mergeEnable>
  <kkMergeMode>0</kkMergeMode>
  <dkMergeMode>0</dkMergeMode>
  <mergeRate>0</mergeRate>
  <picCompressQP>90</picCompressQP>
  <picCompressSize>6144</picCompressSize>
  <fnMergeMode>0</fnMergeMode>
  <kkMergeEnable>1</kkMergeEnable>
  <dkMergeEnable>1</dkMergeEnable>
</SnapPicMegerPara>
```

## 2.14.135/CGI/ITS/Reset/UploadFlag

<b>/CGI/ITS/Reset/UploadFlag</b>	
<b>POST</b>	
<b>Description</b>	re-upload
<b>Query</b>	None
<b>Inbound Data</b>	<ReUploadPara>
<b>Success Return</b>	<ReUploadResult>
<b>Protocol description:</b> This protocol is to realize the re-upload of snapshot data.	
<b>Key parameter description:</b> reUploadNum: Re-upload the total number of records, and re-upload a maximum of 40 records at a time logkey: the serial number recorded in the table	

### ResetUploadParaXML Block

```
<?xml version="1.0" encoding="UTF-8"?>
<ReUploadPara>
<reUploadNum><!--req,sx:integer--></reUploadNum>
<logkeylist>
<logkey>
<id><!--req,sx:integer--></id>
</logkey>
</logkeylist>
</ReUploadPara>
```

### ReUploadResult XML Block

```
<ReUploadResult version="2.0">
<failNum><!--req,sx:integer--></failNum>
< logkeylist>
< logkey>
<id><!--req,sx:integer--></id>
</ logkey>
</ logkeylist>
</ReUploadResult >
```

### Test case

PUT /CGI/ITS/Reset/UploadFlag

**Request XML:** <ReUploadPara>

**Response XML:** <ReUploadResult>

```

<?xml version="1.0" encoding="UTF-8"?>
<ReUploadPara>
<reUploadINum>2</reUploadNum>
<logkeylist>
<logkey>
<id>21039</id>
</logkey>
<logkey>
<id>21040</id>
</logkey>
</logkeylist>
</ReUploadPara>

```

## 2.14.136/CGI/ITS/TrafficJamEventPara/channels/<ID>

/CGI/ITS/TrafficJamEventPara/channels/<ID>General Resource v2.0	
<b>GET</b>	
<b>Description</b>	Get parameters of congestion events
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<TrafficJamEventPara>
<b>PUT</b>	
<b>Description</b>	Set parameters for congestion events
<b>Query</b>	None
<b>Inbound Data</b>	<TrafficJamEventPara>
<b>Success Return</b>	<ResponseStatus>
<b>Protocol description:</b> This protocol is to realize the parameter acquisition and setting of the congestion event, and realize the query and setting of the device congestion event parameter by the client or IE through the CGI protocol.	
<b>Key parameter description:</b> <trafficJamJudgeTime> Congestion judgment time (min) 1-60	

### TrafficJamEventPara XML Block

```

<TrafficJamEventPara version="2.0" xmlns="http://www.isapi.com/ver20/XMLSchema">
<trafficJamJudgeTime><!-- req, xs:integer--></trafficJamJudgeTime>
</TrafficJamEventPara>

```

### Test case

**GET /CGI/ITS/TrafficJamEventPara/channels/1**

**Request XML: None**

**Response XML:** <TrafficJamEventPara>

**PUT/CGI/ITS/TrafficJamEventPara/channels/1**

**Response XML:** <TrafficJamEventPara>

**Request XML:** as follows

```
<?xml version="2.0" encoding="UTF-8"?>
<TrafficJamEventPara>
<trafficJamJudgeTime>0</trafficJamJudgeTime>
</TrafficJamEventPara>
```

### 2.15.2 /CGI/CloudUpload/Detect/channels/<ID>

/CGI/CloudUpload/Detect/channels/<ID>		General Resource v2.0
<b>PUT</b>		
<b>Description</b>	Detect cloud version	
<b>Query</b>	<b>None</b>	
<b>Inbound Data</b>	<b>None</b>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b> IE enables the equipment to detect the functions of the latest version from the cloud platform via CGI protocol Note: The field of channel ID is expanded in the URL of this protocol, so that it can meet new requirements and be compatible with the old version. If there is no channel ID or the channel ID is 0xFFFF in the protocol, acquire the latest cloud version of NVR; otherwise, detect the latest cloud version of IPC. Channel ID starts from 1.		

**Test cases**

**PUT /CGI/CloudUpload/Detect/channels/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** None

### 2.15.3 /CGI/CloudUpload/Start/channels/<ID>

/CGI/CloudUpload/Start/channels/<ID>		General Resource v2.0
<b>PUT</b>		
<b>Description</b>	Cloud upgrade function	
<b>Query</b>	<b>None</b>	
<b>Inbound Data</b>	<b>None</b>	
<b>Success Return</b>	<ResponseStatus>	
<b>Explanations on protocol:</b> IE sends cloud upgrade commands via CGI protocol Note: The field of channel ID is expanded in the URL of this protocol, so that it can meet new requirements and be compatible with the old version. If there is no channel ID or the channel ID is 0xFFFF in the protocol, NVR starts cloud upgrade; otherwise, IPC will start cloud upgrade. Channel ID starts from 1.		

**Test cases**

**PUT /CGI/CloudUpload/Start/channels/<ID>**

**Response XML:** <ResponseStatus>

**Request XML:** None

### 2.15.4 /CGI/CloudUpload/DownloadState/channels/<ID>

/CGI/CloudUpload/DownloadState/channels/<ID>		General Resource v2.0
--	--	-----------------------

<b>GET</b>	
<b>Description</b>	Acquire downloading status
<b>Query</b>	<b>None</b>
<b>Inbound Data</b>	<b>None</b>
<b>Success Return</b>	<DownloadState>
<p><b>Explanations on protocol:</b> Acquire upgrade package downloading status</p> <p><b>Explanations on key parameters:</b> &lt;status&gt; download status, 0-idle, 1- downloading, 2- download succeeds, 3- download fails, 4- download fails, please connect the disk and try again</p> <p>&lt;progress&gt; download progress</p> <p>Note: The field of channel ID is expanded in the URL of this protocol, so that it can meet new requirements and be compatible with the old version. If there is no channel ID or the channel ID is 0xFFFF in the protocol, acquire the download loading of NVR cloud upgrade; otherwise, acquire the download status of IPC. Channel ID starts from 1.</p>	

#### DownloadState Block

```
<DownloadState>
<chn><!--req, xs:integer--></chn>
  <status><!--req, xs:integer--></status>
  <progress><!--req, xs:integer--></progress>
</DownloadState>
```

#### Test cases

**GET /CGI/CloudUpload/DownloadState/channels/<ID>**

**Request XML: none**

**Response XML: <DownloadState> is as below**

```
<?xml version="1.0" encoding="UTF-8"?>
<DownloadState>
<chn>1</chn>
  <status>1</status>
  <progress>100</progress>
</DownloadState>
```

#### 2.15.5 /CGI/CloudUpload/GetProgress/channels/<ID>

<b>/CGI/CloudUpload/GetProgress/channels/&lt;ID&gt; General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Query cloud upgrade progress
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<CloudProgress>
<p><b>Explanations on protocol:</b> This protocol is prepared for query of device upgrade progress, helping client or IE query the device upgrade progress via CGI protocol.</p> <p>Note: The field of channel ID is expanded in the URL of this protocol, so that it can meet new requirements and be compatible with the old version. If there is no channel ID or the channel ID is 0xFFFF in the protocol, acquire NVR upgrade progress; otherwise, acquire IPC upgrade progress. Channel ID starts from 1.</p> <p><b>Explanations on key parameters:</b> &lt;status&gt; means equipment upgrade status. Meanings of all figures, 0: System upgrade in progress; 1: System upgrade completed; 2: System upgrade error; 3: Upgrade package is transmitted successfully; 4: Wrong chip model; 5: Wrong main version No.; 6: Wrong secondary version No.; 7: Verification and error; 8: Save the errors of temporary packages; 9: Upgrade data errors; 10: Wrong small version No.; 11:</p>	

Incomplete box  
 <chn> means channel ID; in case of 0xFFFF or N/A, it means to query NVR upgrade progress; otherwise, it means to query IPC.

**CloudProgress XML Block**

```
<CloudProgress version="1.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
<chn><!--req, xs:integer; id --></chn>
<status><!--req, xs:integer; id --></status>
<progress><!--req, xs:integer; id --></progress >
</CloudProgress>
```

**Test cases**

**GET /CGI/CloudProgress/GetProgress/channels/<ID>**

**Request XML: none**

**Response XML: <CloudProgress>**

```
<?xml version="1.0" encoding="UTF-8"?>
<CloudProgress>
<chn>1</chn>
<status>0</status>
<progress>90</progress>
</CloudProgress>
```

**2.16/CGI/Security**

**2.16.1/CGI/Security/CreatePwdResetQRcode/type/<ID>**

<b>/CGI/Security/CreatePwdResetQRcode/type/&lt;ID&gt;</b>		<b>Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Acquire QR code /SN code	
<b>Query</b>	<b>None</b>	
<b>Inbound Data</b>	<b>None</b>	
<b>Success Return</b>	<b>&lt;ResponseStatus&gt;</b>	
<p><b>Explanations on protocol:</b>          Generate a QR code picture used to reset password via CGI protocol          Explanations on key parameters:          Type in Url means acquisition type; 1 means QR code. Reply to the path where QR code picture is at</p> <p style="padding-left: 100px;">2 means SN code          3 means email QR code, reply to the path where the QR code picture is</p>		

**QRcodeOrSn Block**

```
<QRcodeOrSn>
  <codeInfo><!--req, xs:string--></codeInfo>
</QRcodeOrSn>
```

**Test cases**

**GET /CGI/Security/CreatePwdResetQRcode/type/<ID>**

**Response XML: <QRcodeOrSn>**

**Request XML: None**

```

<QRcodeOrSn>
  <string>passwd.bmp</string>
</QRcodeOrSn>

```

### 2.16.2 /CGI/Security/SecurityCodeCheck

/CGI/Security/SecurityCodeCheck		Resource v2.0
<b>POST</b>		
<b>Description</b>	Validate verification code	
<b>Query</b>	None	
<b>Inbound Data</b>	<SecurityCodePara>	
<b>Success Return</b>	<SecurityCodeStatus>	
<p><b>Explanations on protocol:</b>            IE sends verification code to the equipment to verify via CGI protocol. The equipment will send verification result to IE. If the verification code validation is passed, it will send back 200 and key and user password. If the validation fails, it will send back 400 and error status code.</p> <p><b>Explanations on key parameters:</b>            &lt;securityCode&gt; verification code            &lt;password&gt; user password</p> <p>Besides: In this protocol, &lt;ResponseStatus&gt; that CGI sends back to IE is added with statusCode: "9", statusString"Check securitycode failed" and subStatusCode: CodeError, as well as CodeInvalid and CodeErrorFiveTimes</p>		
<b>SecurityCodePara Block</b>		
<pre> &lt;SecurityCodePara&gt;   &lt;securityCode&gt;&lt;!--req, xs:string--&gt;&lt;securityCode&gt; &lt;/SecurityCodePara&gt; </pre>		
<b>SecurityCodeStatus Block</b>		
<pre> &lt;SecurityCodeStatus&gt;   &lt;access&gt;&lt;!--req, xs:string--&gt;&lt;/access&gt;   &lt;password&gt;&lt;!--req, xs:string--&gt;&lt;password&gt; &lt;/SecurityCodeStatus&gt; </pre>		
<b>Test cases</b>		
<b>POST /CGI/Security/SecurityCodeCheck</b>		
<b>Request XML: &lt;SecurityCodePara&gt;</b>		
<pre> &lt;?xml version="1.0" encoding="UTF-8"?&gt; &lt;SecurityCodePara&gt;   &lt;testSecurityCode&gt;35416115&lt;/testSecurityCode&gt; &lt;/SecurityCodePara&gt; </pre>		
<b>Response XML: &lt;SecurityCodeStatus&gt;</b>		
<pre> &lt;?xml version="1.0" encoding="UTF-8"?&gt; &lt;SecurityCodeStatus&gt;   &lt;access&gt;94AAABB419A9820DC171B43240CEEF41&lt;/access&gt;   &lt;password&gt;T6g05arqzu4=&lt;/password&gt; &lt;/SecurityCodeStatus&gt; </pre>		

### 2.16.3 /CGI/Security/ReserveMsg/type/<ID>

/CGI/Security/ReserveMsg/type/<ID>		General Resource v2.0
<b>GET</b>		
<b>Description</b>	Acquire reserved information	
<b>Query</b>	None	
<b>Inbound Data</b>	None	

<b>Success Return</b>	<ReserveMsg>
<b>PUT</b>	
<b>Description</b>	Set reserved information
<b>Query</b>	None
<b>Inbound Data</b>	<ReserveMessage>
<b>Success Return</b>	<ResponseStatus>
<b>Explanations on protocol:</b> IE acquires or sets the reserved MP or email of the equipment via CGI protocol.	
<b>Explanations on key parameters:</b> Type in Url means the type of reserved information; 1 MP; 2 email and 3 new mailbox <synchroFlag> whether it needs to synchronize to the front; true means yes <phone> MP <mail> email	

**ReserveMsg Block**

```
<ReserveMsg>
  <phone><!--req, xs:string--></phone>
  <mail><!--req, xs:string--></mail>
</ReserveMsg>
```

**ReserveMessage Block**

```
<ReserveMessage>
  <synchroFlag><!--req, xs:string--></synchroFlag>
  <phone><!--req, xs:string--></phone>
  <mail><!--req, xs:string--></mail>
</ReserveMessage>
```

**Test cases**

**GET /CGI/Security/Reservemsg/type/<ID>**

**Request XML: None**

**Response XML: <ReserveMsg>**

```
<?xml version="1.0" encoding="UTF-8"?>
<ReserveMsg>
  <phone>12233445566</phone>
  <mail></mail>
</ReserveMsg>
```

**PUT /CGI/Security/Reservemsg/type/<ID>**

**Response XML: <ResponseStatus>**

**Request XML: <ReserveMessage> is as below**

**ReserveMessage Block**

```
<ReserveMessage>
  <synchroFlag>true</synchroFlag>
  <phone>12233445566</phone>
  <mail></mail>
</ReserveMessage>
```

**2.16.4/CGI/Security/CountDown/type/<ID>**

<b>/CGI/Security/CountDown/type/&lt;ID&gt;</b>		<b>Resource v2.0</b>
<b>GET</b>		
<b>Description</b>	Acquire countdown	
<b>Query</b>	None	
<b>Inbound Data</b>	None	
<b>Success Return</b>	<SecondForCountDown>	



**Explanations on protocol:**

Acquire the remaining time of the current locking of equipment safety code via CGI protocol.

**Explanations on key parameters:**

Type in Url means acquisition type; 1 means safety code. Others are to be extended

**SecondForCountDown Block**

```
<SecondForCountDown>
  <howManySecond><!--req, xs:string--></howManySecond>
</SecondForCountDown>
```

**Test cases**

**GET** /CGI/Security/CountDown/type/<ID>

**Response XML:** <SecondForCountDown >

**Request XML:** None

```
<SecondForCountDown>
  <howManySecond>87</howManySecond>
</SecondForCountDown>
```

## 2.17/CGI/Device

### 2.17.1/CGI/Device/Radar/channels/<ID>/Version

#### /CGI/Device/Radar/channels/<ID>/Version

General Resource v2.0

**GET**

<b>Description</b>	Get radar version number and radar status
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<RadarVersion>

**Protocol description:**

This protocol is to obtain radar version number and radar status information.

**Key parameter description:**

<radarType> radar type, 1-ChuanSu radar(CSR), other values-reserved

<radarVersion> radar version number, string, up to 64 bytes

<radarStatus> Radar status, 1 – online, 0 – offline, other values – reserved

**RadarVersion XML Block**

```
<RadarVersion version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <radarType><!-- req, xs: integer --></radarType>
  <radarVersion><!-- req, xs: string --></radarVersion>
  <radarStatus><!-- req, xs: integer --></radarStatus>
</RadarVersion>
```

**Test case**

**GET** /CGI/Device/Radar/channels/1/Version

**Request XML:** None

**Response XML: <RadarVersion>**

```

<RadarVersion version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <radarType>1</radarType>
  <radarVersion>CSR_TNS25_V1.3_Q1.7.7_HWLK_1.4.1_20200331A</radarVersion>
  <radarStatus>1</radarStatus>
</RadarVersion>

```

**2.17.2/CGI/Device/Radar/channels/<ID>/Para**

<b>/CGI/Device/Radar/channels/&lt;ID&gt;/Para</b>	
<b>General Resource v2.0</b>	
<b>GET</b>	
<b>Description</b>	Get radar parameters
<b>Query</b>	None
<b>Inbound Data</b>	None
<b>Success Return</b>	<b>&lt;RadarPara&gt;</b>
<b>PUT</b>	
<b>Description</b>	Set radar parameters
<b>Query</b>	None
<b>Inbound Data</b>	<b>&lt;RadarPara&gt;</b>
<b>Success Return</b>	<b>&lt;ResponseStatus&gt;</b>
<p><b>Protocol description:</b>            This protocol is to acquire and set radar parameters.</p> <p><b>Key parameter description:</b>            &lt;radarType&gt; radar type, 1-ChuanSu radar(CSR), other values-reserved            &lt;radarRoadNum&gt; Number of lanes, integer, range [1,12], default value 1            &lt;radarRoadWidth&gt; Lane width, float, range [1,4], default value 3.75            &lt;radarRoadDirId&gt; Lane ID, integer, the range is the same as radarRoadNum            &lt;radarRoadDirValue&gt; Lane direction, integer, 0 – the coming lane, 1 – the going lane, the default value is 0            &lt;radarMeasureMax&gt; upper limit of ranging, floating point number, range [1,280], default value 250            &lt;radarMeasureMin&gt; Lower range, floating point, range [1,256], default value 30            &lt;radarCrossSectionId&gt; Section Id, integer, range [1,4]            &lt;radarCrossSectionPos&gt; section position, integer, range [0,250], default value 0 means no section is configured            &lt;radarHeight&gt; Radar installation height, floating point, range [1,10], default value 7            &lt;radarAngleDelta&gt; Radar angle correction, floating point, range [-100,100] default value 0            &lt;radarCoordDelta&gt; radar coordinate correction, floating point, range [-10,10], default value 0            &lt;trafficJamStartLine&gt; Congestion judgment start position (m), integer, 0-250 default value 0</p>	

<trafficJamTerminationLine> Congestion judgment termination location (m), integer, 0-250 default value 0

<queueLengthThreshold> Queue length threshold, integer, 0-8 default value 0

<trafficJamCarNumber> Congestion vehicle threshold, integer, 0-128 default value 0

<IsolationBeltDriveway> the lane where the isolation belt is located, integer, 0-12 default value 0

<leftToTheLane> The number of left and right lanes, integer, 0-8 The default value of 0 is all the direction

### **RadarPara XML Block**

```
<RadarPara version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <radarType><!-- req, xs: integer --></radarType>
  <radarRoadNum><!-- req, xs: integer --></radarRoadNum>
  <radarRoadWidth><!-- req, xs: float --></radarRoadWidth>
  <radarRoadDirList>
    <radarRoadDir><!-- req, -->
      <radarRoadDirId><!-- req, xs: integer --></radarRoadDirId>
      <radarRoadDirValue><!-- req, xs: integer --></radarRoadDirValue>
    </radarRoadDir>
  </radarRoadDirList>
  <radarMeasureMax><!-- req, xs: float --></radarMeasureMax>
  <radarMeasureMin><!-- req, xs: float --></radarMeasureMin>
  <radarCrossSectionList>
    <radarCrossSection><!-- req, -->
      <radarCrossSectionId><!-- req, xs: integer --></radarCrossSectionId>
      <radarCrossSectionPos><!-- req, xs: integer --></radarCrossSectionPos>
    </ radarCrossSection>
  </radarCrossSectionList>
  <radarHeight><!-- req, xs: float --></radarHeight>
  <radarAngleDelta><!-- req, xs: float --></radarAngleDelta>
  <radarCoordDelta><!-- req, xs: float --></radarCoordDelta>
  <trafficJamStartLine><!-- req, xs:integer--></trafficJamStartLine>
  <trafficJamTerminationLine><!-- req, xs:integer--></trafficJamTerminationLine>
  <queueLengthThreshold><!-- req, xs:integer--></queueLengthThreshold>
  <trafficJamCarNumber><!-- req, xs:integer--></trafficJamCarNumber>
  <IsolationBeltDriveway><!-- req, xs:integer--></IsolationBeltDriveway>
  <leftToTheLane><!-- req, xs:integer--></leftToTheLane>
</RadarPara>
```

### **Test case**

**GET /CGI/Device/Radar/channels/1/Para**

**Request XML: None**

**Respond XML: <RadarPara>**

```
<RadarPara version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <radarType>1</radarType>
  <radarRoadNum>1</radarRoadNum>
  <radarRoadWidth>3.75</radarRoadWidth>
  <radarRoadDirList>
    <radarRoadDir>
      <radarRoadDirId>1</radarRoadDirId>
      <radarRoadDirValue>0</radarRoadDirValue>
    </radarRoadDir>
  </radarRoadDirList>
  <radarMeasureMax>250</radarMeasureMax>
  <radarMeasureMin>30</radarMeasureMin>
  <radarCrossSectionList>
    <radarCrossSection>
      <radarCrossSectionId>1</radarCrossSectionId>
      <radarCrossSectionPos>10</radarCrossSectionPos>
    </radarCrossSection>
  </radarCrossSectionList>
  <radarHeight>7</radarHeight>
  <radarAngleDelta>0</radarAngleDelta>
  <radarCoordDelta>0</radarCoordDelta>
</RadarPara>
```

**PUT /CGI/Device/Radar/channels/1/Para**

**Request XML:** <RadarPara>

**Response XML:** <ResponseStatus>

```
<RadarPara version="2.0" xmlns="http://www.isapi.org/ver20/XMLSchema">
  <radarType>1</radarType>
  <radarRoadNum>1</radarRoadNum>
  <radarRoadWidth>3.75</radarRoadWidth>
  <radarRoadDirList>
    <radarRoadDir>
      <radarRoadDirId>1</radarRoadDirId>
      <radarRoadDirValue>0</radarRoadDirValue>
    </radarRoadDir>
  </radarRoadDirList>
  <radarMeasureMax>250</radarMeasureMax>
  <radarMeasureMin>30</radarMeasureMin>
  <radarCrossSectionList>
    <radarCrossSection>
      <radarCrossSectionId>1</radarCrossSectionId>
      <radarCrossSectionPos>10</radarCrossSectionPos>
    </radarCrossSectionId>
  </radarCrossSectionList>
  <radarHeight>7</radarHeight>
```

```
<radarAngleDelta>0</radarAngleDelta>  
<radarCoordDelta>0</radarCoordDelta>  
<trafficJamStartLine>0</trafficJamStartLine>  
<trafficJamTerminationLine>0</trafficJamTerminationLine>  
<queueLengthThreshold>0</queueLengthThreshold>  
<trafficJamCarNumber>0</trafficJamCarNumber>  
<IsolationBeltDriveway>0</IsolationBeltDriveway>  
<leftToTheLane>1</leftToTheLane>  
</RadarPara>
```