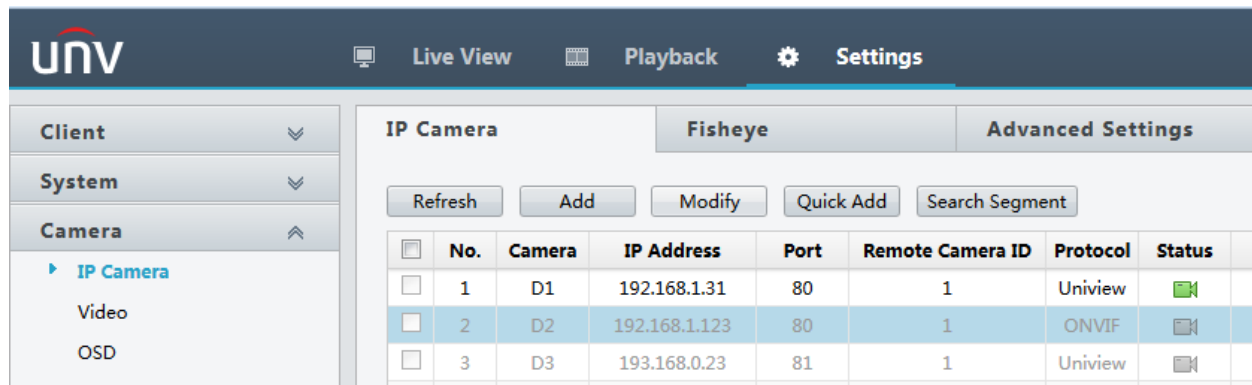


Pulling RTSP Stream Into NVR Channel

Prior to setting up the Uniview NVR to pull an RTSP video stream from a remote device you will need to find the appropriate RTSP URL string to use, along with an appropriate username and password for the remote device. For this document, we will be connecting to a remote 3rd party DVR and pulling video from one of its channels into an NVR channel. Pulling video from a remote device in this manner will only allow you to view the live feed and record it continuously. This type of connection does not allow for configuration of the remote device.

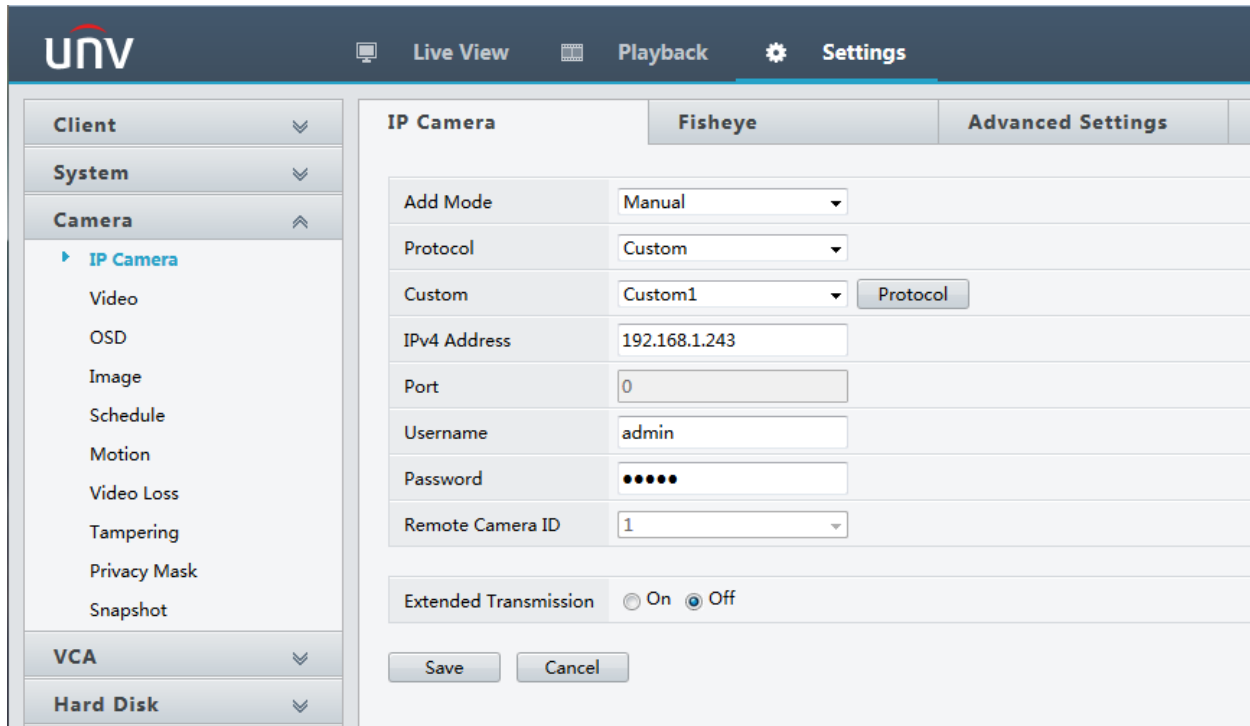
The NVR we are working with provides PoE ports for connecting cameras so the first step is to configure the channel to not use the PoE port and to look to an external IP address. Within the NVR Settings section go to Camera > IP Camera on the left hand menu and select the channel that you wish to configure..



The screenshot shows the Uniview NVR Settings interface. The top navigation bar includes 'UNV', 'Live View', 'Playback', and 'Settings'. The left sidebar shows a menu with 'Client', 'System', and 'Camera' sections. Under 'Camera', 'IP Camera' is selected. The main content area is titled 'IP Camera' and has tabs for 'Fisheye' and 'Advanced Settings'. Below the tabs are buttons for 'Refresh', 'Add', 'Modify', 'Quick Add', and 'Search Segment'. A table lists the configured IP cameras:

<input type="checkbox"/>	No.	Camera	IP Address	Port	Remote Camera ID	Protocol	Status
<input type="checkbox"/>	1	D1	192.168.1.31	80	1	Uniview	
<input type="checkbox"/>	2	D2	192.168.1.123	80	1	ONVIF	
<input type="checkbox"/>	3	D3	193.168.0.23	81	1	Uniview	

Once you have highlighted the channel, press the Modify button to open the configuration options. The Add Mode field should be changed from Plug and Play to Manual. For the Protocol field, we will be defining the parameters for a custom RTSP protocol that is dependent upon the device being accessed so select Custom. The Custom field will allow you to define a large number of customized protocols, in the example below we have chosen to modify the "Custom1" protocol to work with the device we are connecting to. The IPV4 Address field should contain the IP address of the device to which we are connecting and the Username and Password fields should also be configured. The Port field will be taken care of by defining the custom protocol as will the Remote Camera ID field. The Extended Transmission option should be set to Off for this type of configuration.



Once these fields are properly configured, press the Protocol button. The Protocol Name may be configured as you wish. The default port for the RTSP protocol is 554 and you may configure the connection to use either UDP or TCP to match the device to which you are connecting. The Enable Main Stream box will always be checked, and you may decide whether you wish to pull a Sub Stream as well. The Resource Path field is where the meat of this connection occurs. This is where the RTSP URL will be entered to make the connection to the device. The string may contain up to 127 characters and is case sensitive. The NVR will provide the preamble components of the URL string (rtsp://<ip address>:<port #>/) and you will complete the remainder of necessary information. For this example we are connecting to a dahua CVI DVR for which the RTSP string is as follows:

```
rtsp://192.168.1.243:554/cam/realmonitor?channel=1&subtype=0
```

The portion of the RTSP string above that is highlighted in yellow is automatically provided by the NVR. The portion that is highlighted in blue will be added within the Resource Path field. For this example, the subtype=0 is used to pull the Mainstream of the channel and subtype=1 will pull the Substream.

Once this information is entered press the Save button to return to the previous configuration menu and press the Save button on that screen.

Protocol	
Custom	Custom1
Protocol Name	Custom1
Port	554
Transfer Protocol	UDP
Enable Main Stream	<input checked="" type="checkbox"/>
Resource Path	rtsp://<ip>:<port>/ cam/realmonitor?channel=1&subt
Enable Sub Stream	<input checked="" type="checkbox"/>
Resource Path	rtsp://<ip>:<port>/ cam/realmonitor?channel=1&subt

After properly entering this information the NVR should connect to the remote device and pull the appropriate video stream into the channel.

If you experience problems in connecting to a remote device, the most common cause is a typo in the RTSP string. Be careful to check for the “?” and “&” characters as their positioning is vital. A good tool to use in testing RTSP connections to remote devices is the VLC Media Player which can pull network feeds from devices into a live window.