Summary

If your cameras are connected directly to a DVR or video encoder, then they are analog cameras, which must be encoded by the DVR or encoder to be accessed via network. If you have IP cameras connected to an isolated subnet of an NVR, then they cannot be reached from your router or main local area network subnet. In both cases, the cameras can be added to a Monitoreal Security Assistant (MR) by adding the video channels served by the DVR, NVR or encoder (video server). The network should resemble the following diagram.
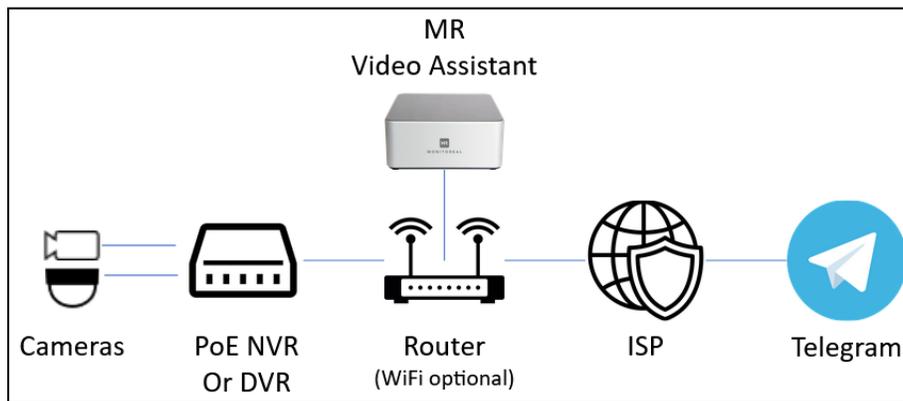
Example with analog cameras on DVR or IP cameras on NVR subnet

Instructions

1. Connect MR via Ethernet to a switch or router that is also connected to the video server.

2. Add cameras using stream and snapshot URLs provided by the video server.

    a. Try adding the video server automatically using the camera search. This will work if the device is ONVIF conformant. You will need the username and password for the video server. Enter the IP address of the video server to avoid searching the entire network for additional ONVIF devices.

Adding an encoder using camera search

    b. The first camera from the video server will be added to MR. Open the **Details** of the first camera.

Location of camera/encoder connection details

c. Copy the stream and snapshot URLs to a notepad.
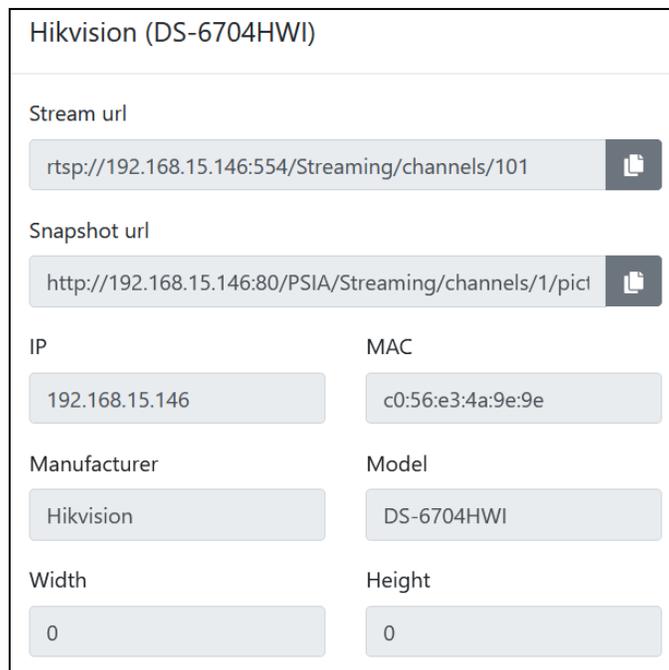
Example of camera/encoder connection details

d. Manually add more cameras from the video server using the copied URLs with modification of the camera channel. To get the 2nd camera in this example with an old Hikvision digital video server (encoder), change the number 101 in the stream URL to 201, and the number 1 in the snapshot URL to 2.

    i. Hikvision devices address the channel (C) and stream (S) with a four-digit number formatted CCSS. For example, channel 1, stream 1 is 0101, and the leading 0 can be omitted. Channel 16, stream 1 is 1601. For streams, 01 is mainstream and 02 is substream.

    ii. Devices from other manufacturers may use a different convention.

    iii. See <u>More ways to find stream and snapshot URLs</u> on page 4 for other options.

Manually adding 2nd channel from encoder with modified URLs
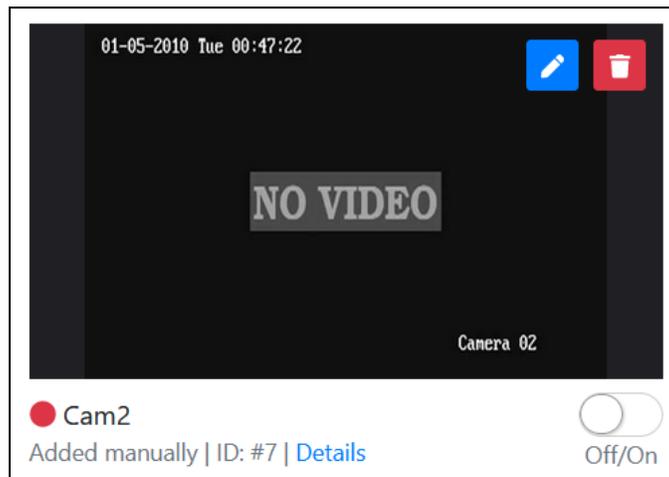
2nd channel from encoder successfully added

e. Activate each camera added to MR by flipping the toggle switches to the On position.

More ways to find stream and snapshot URLs

1. Ask the manufacturer, or search their support documents.
2. Use one of the following databases.

    https://www.ispyconnect.com/cameras

    https://camlytics.com/cameras

    a. Select the vendor of the video server.

    b. Find (Ctrl-f) your video server model and click its row.

    c. Enter the IP address of your video server in the URL Generator

    d. Delete any prefilled username and password and leave them blank. These will be entered separately in the MR WUI.

    e. Set the desired video channel if needing a channel other than the first.

    f. Generate the URL as shown below.

Example of finding stream and snapshot URLs using ispyconnect.com

The URL generator dialog on ispyconnect.com