Setup instructions for Neutron Optics GigE PoE neutron camera at SNS (2021)

courtesy of Mary Odom

Because instrument devices use static IP addresses at SNS, we cannot use the default DHCP setup specified in the documentation that comes with Neutron Optics cameras. To set a static IP on a GigE PoE camera do the following.

Download **eBUS Player Toolkit** and its Quick Start Guide from:

https://go.pleora.com/l/120682/2019-03-12/6js343

> There are versions here too, but I have not used any of these:
> https://supportcenter.pleora.com/s/topic/0TO34000000PW53GAG/ebus-player
> https://supportcenter.pleora.com/s/article/eBUS-Player-6-0-Toolkit-Dwnload
> And a version of the Quick Start Guide at:
> https://supportcenter.pleora.com/servlet/fileField?entityId=ka00y000000TmKwAAK&field=File__Body__s

Set your PC ethernet to any IP address on 169.254.177.x (such as 169.254.177.1). Connect your PC ethernet card directly to the camera's PoE adapter (which is connected to power and to the camera ethernet.)

> Detailed steps how to set Windows10 PC IP address:
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> 1. Go to Windows settings, choose Network & Internet.
> 2. Choose Ethernet, click "Change adapter options".
> 3. When box opens, click Properties. Click once to highlight Internet Protocol Version 4, then click Properties.
> 4. Type in the IP address you want. Any subnet mask is fine, and default gateway and DNS servers need not be changed or entered.

Run eBUS setup program to install eBUS software and tools.

Start eBUS Driver Installation Tool and **install BOTH the GigE drivers and the USB3 drivers.**

Then run eBUS Player and click Select/Connect.

Check the box beneath Available devices to "**Show unreachable Network Devices**". The camera should appear.

Highlight the camera and click OK in bottom right.

When the camera connects, click box in bottom left for Device Control.

In dialog box scroll down to **Transport Layer Control**.

Change the GevPersistentIPAddress, GevPersistentSubnetMask and GevPersistentDefaultGateway to what your camera will need when in operation.

Set GevPersistentIPConfigurationDHCP to False and GevPersistentIPConfigurationPersistenIP to True.

Close the Device Control dialog box.

Disconnect from the camera, and close eBUS Player.

(**At this point, you might want to set your PC ethernet IP address back to what it was.**)

Plug the camera ethernet cable into the network it will be on during operation, and run FlyCap2 from a PC on that same network, and you will be able to see and configure the camera with the FlyCap2 software.

Overview: https://flir.custhelp.com/app/answers/detail/a_id/3032/kw/persistent