P50xxA/B, P93xxA/B LAN (TCPIP) Remote Communication

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Background

- Keysight Streamline Series product P50xxA/B, P93xxA/B use USB or Thunderbolt interface.

- Hence, a controller PC is required to act as the host, if user would like to access to the P50xxA/B, P93xxA/B off-site remotely from their 2nd PC (other than host PC). Refer to the subsequent pages for solution.

Prerequisites

- An "always-on" controller PC connected to LAN, with VNA firmware and Keysight Connection Expert installed.

- VNA firmware needs to be launched on host PC in enabling communications via SCPI command.

Related to VNA Web Help: How to Configure for GPIB, SCPI, and SICL

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Step 1: P50xxA/B, P93xxA/B Address Identification

- Launch VNA firmware.

- Navigate to System > System Setup > Remote Interface.

- Identify the *Legacy HiSLIP* address. Shown is the example with address of 0.

Note: HiSLIP (modern) is not officially supported.
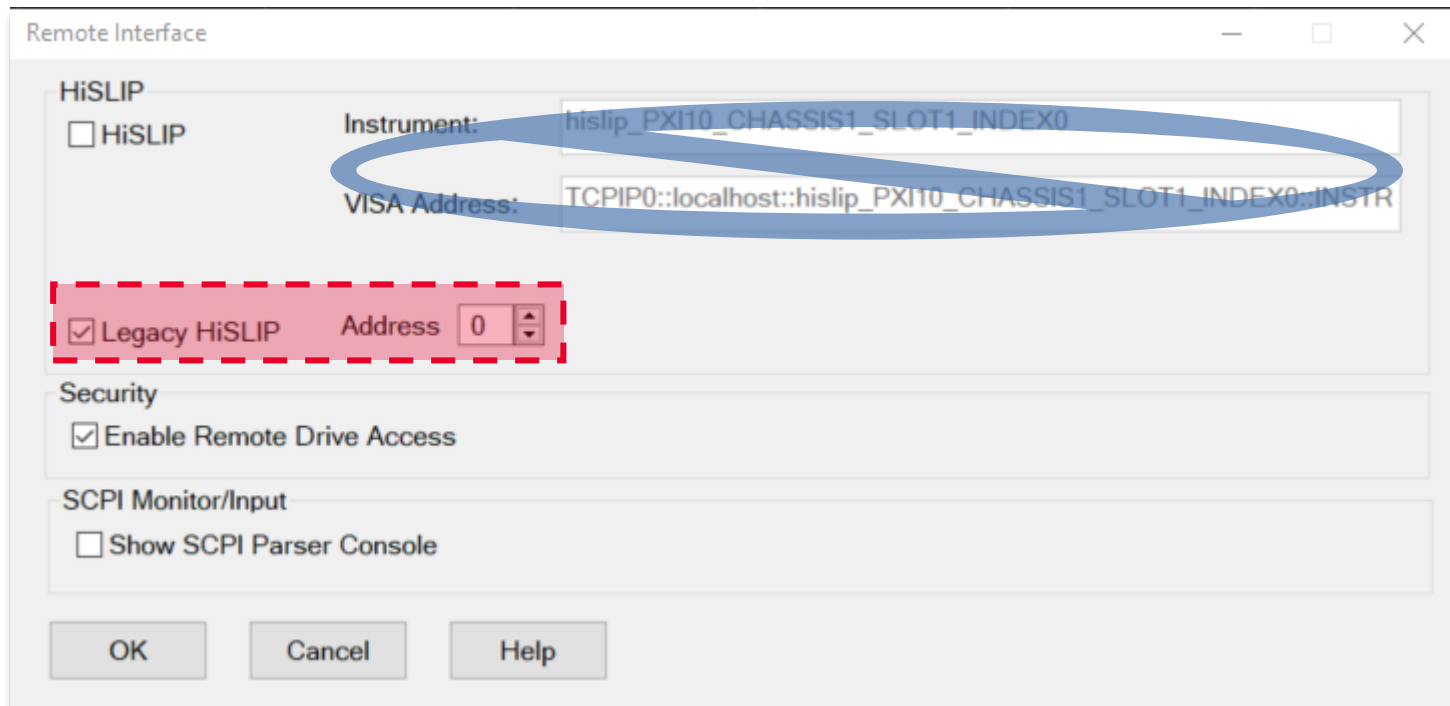
Step 2-1: Create LAN instrument in Keysight Connection Expert
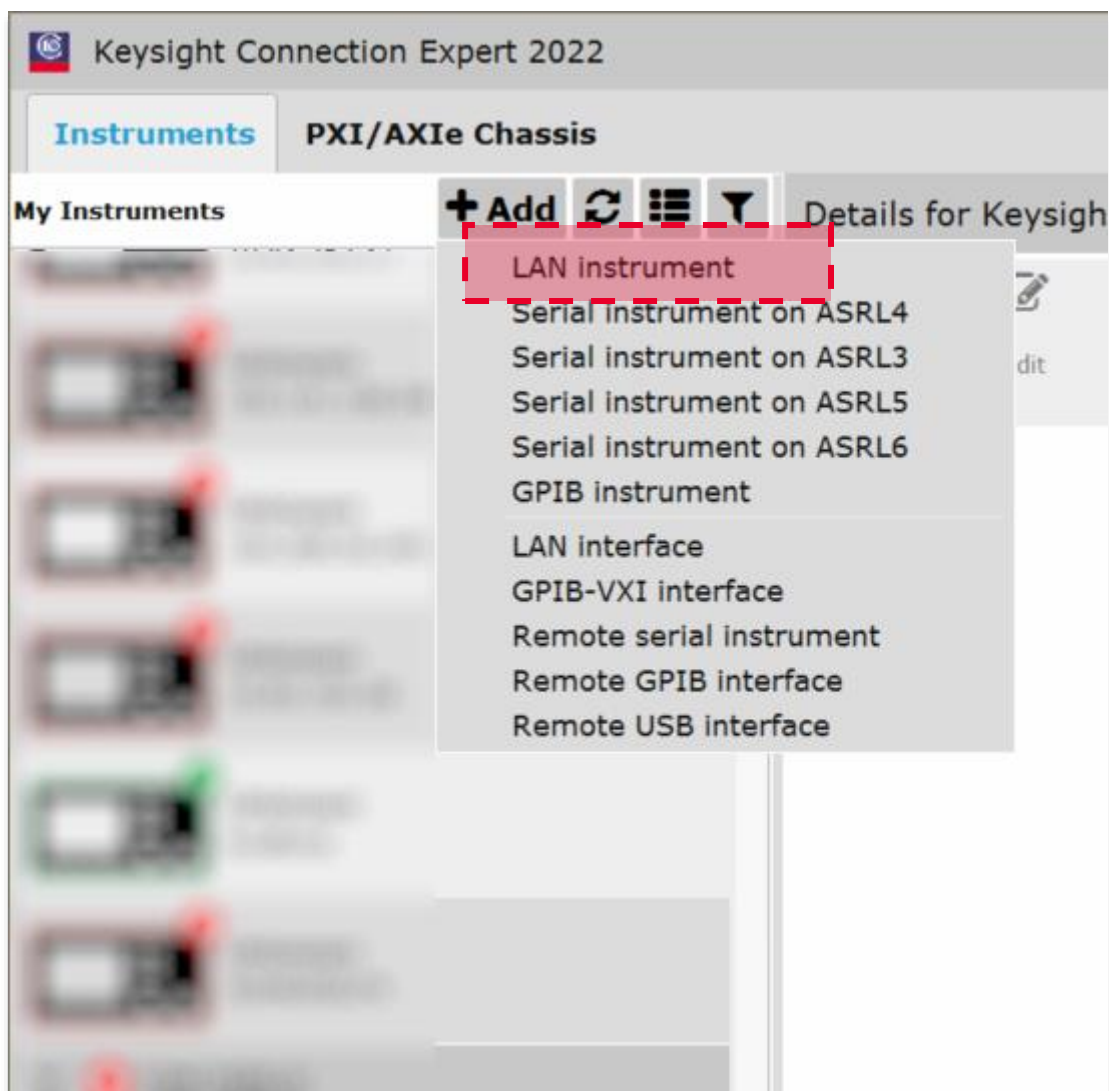
- Launch Keysight Connection Expert. Select Add> "LAN instrument".

Step 2-2: Create LAN instrument in Keysight Connection Expert
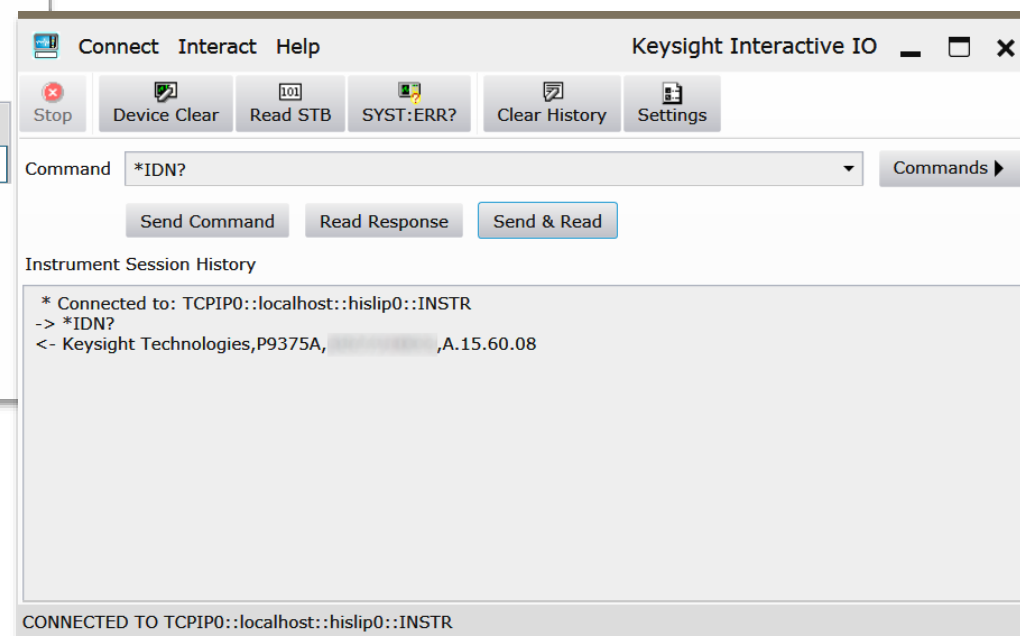

- In the Hostname or IP address, enter "localhost".

- In Set Protocol, select HiSlip. Ensure the address matches with the VNA HiSlip address in VNA Firmware.

- Verify the connection with "Test This VISA Address".

- Click OK to save the changes.

Step 3-1: Communication using LAN (TCPIP) – Single VNA
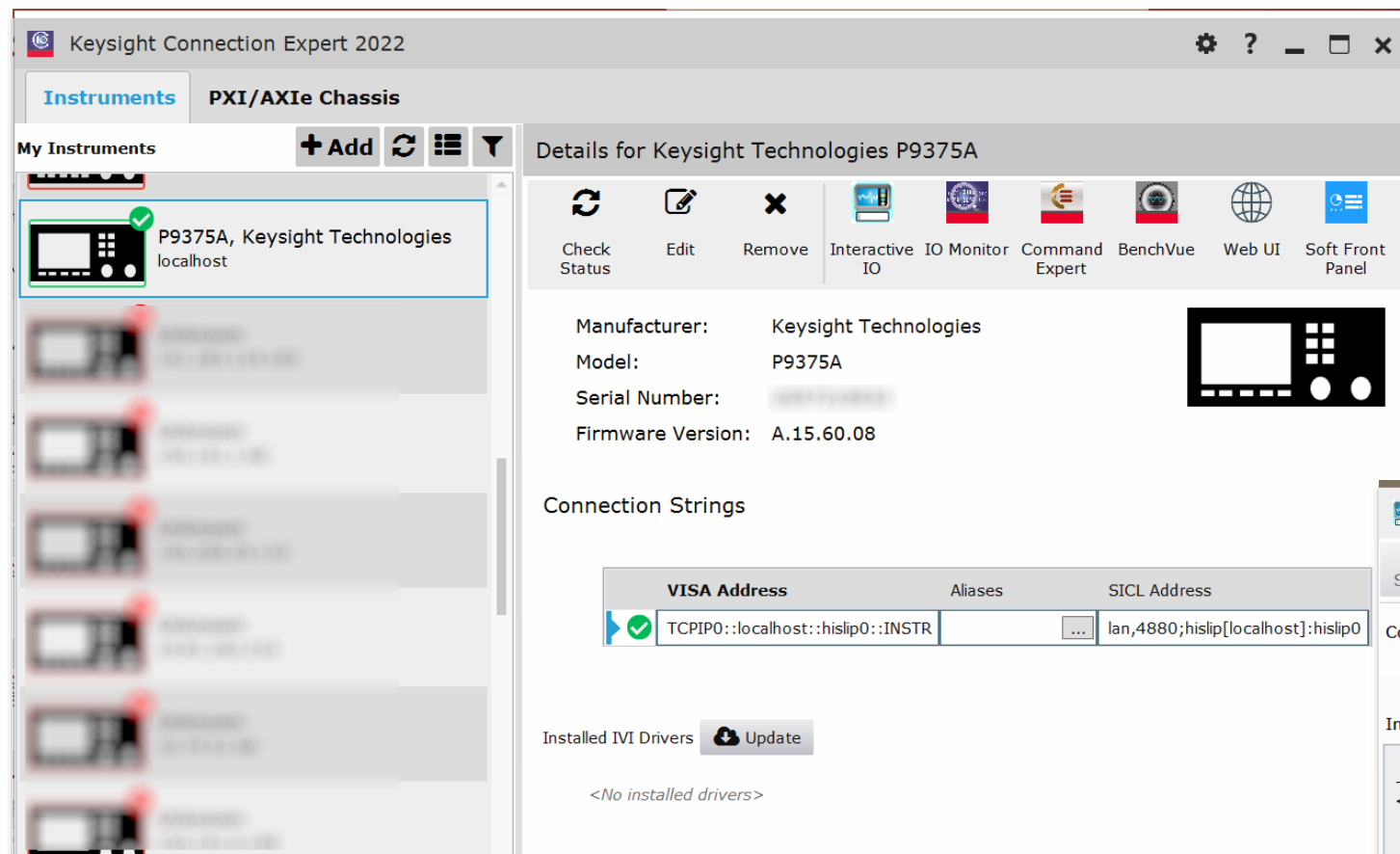
- The newly added VNA will appear in the LAN (TCPIP0) group with "localhost".

- Click Interactive IO and user may proceed to communicate similarly to a benchtop VNA.

Step 3-2: Communication using LAN (TCPIP) – Multiple VNAs

- For multiples P50xxA/B, P93xxA/B connections, ensure the correct HiSlip addresses (w/o duplicates) are set for individual VNAs respectively. For the following example, address 0 is assigned to P5020A, address 1 is assigned to P9375A.

Step 3-3: Communication using LAN (TCPIP) – Keysight Command Expert

Step 4: Communication of VNA using non-host PC via LAN (TCPIP)
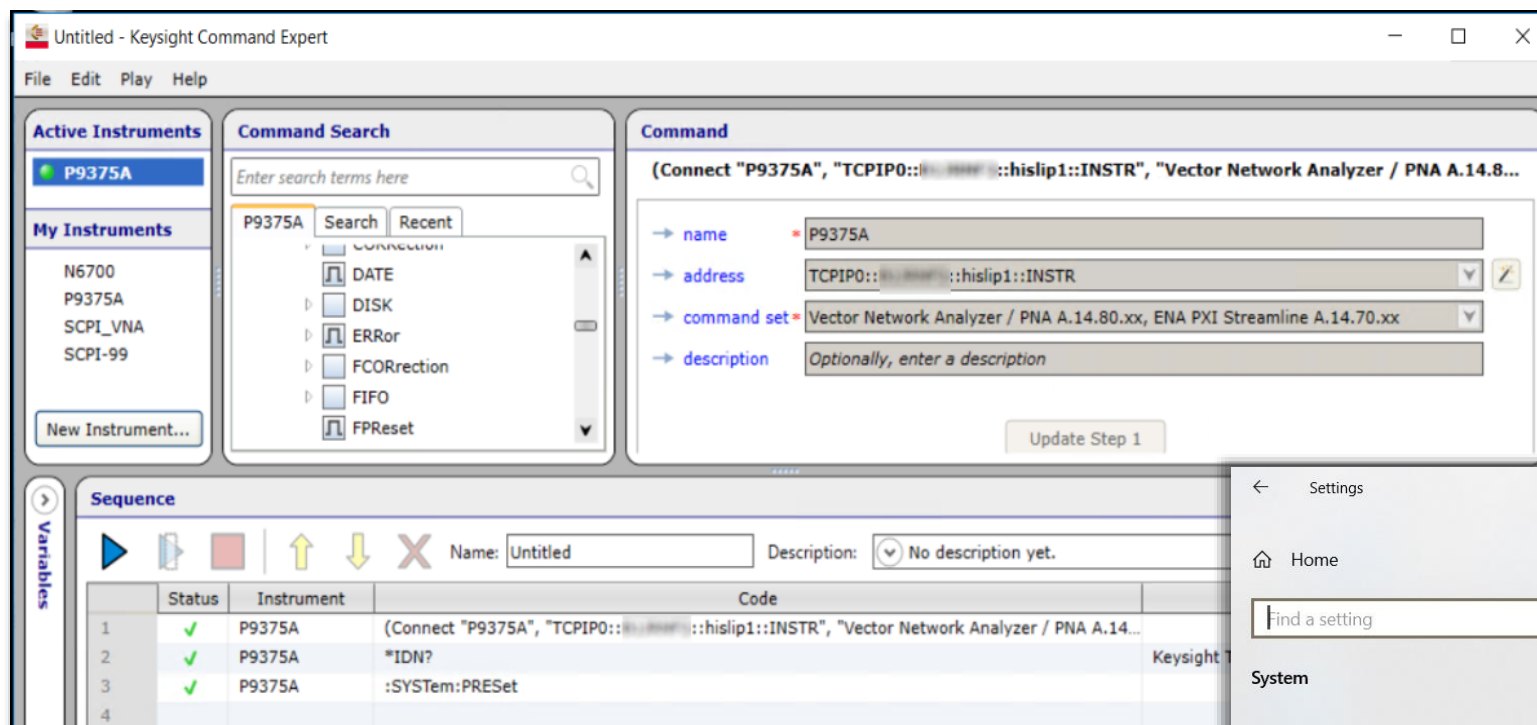
- Replace *localhost* with the actual host PC name enables P50xxA/B, P93xxA/B to be added as a device from another PC remotely.

- Tips: PC name is listed as "Device Name" in "This PC" → About your PC. In older OS revision, it is known as Computer Name.

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