

Recovering the ProtoNode

Introduction

A stalled ProtoNode can be identified by the CPU LED not flashing at a 1Hz rate after a few minutes after cycling power to the ProtoNode. For larger configurations it could take up to 5 minutes to load before the CPU LED will start flashing.

Recovery from a Bad Config Download

This procedure requires the IP address of the ProtoNode. If not known, proceed to the Recovery using the Basic Firmware section.

- Power cycle the ProtoNode.
- Connect the ProtoNode Ethernet port to the PC using a cat5 cable.
- Set the PC to a static IP address that matches the subnet of the ProtoNode.
- Open a Windows command prompt window on the PC.
- Type the following: ping <ip address of the ProtoNode> (e.g. ping 192.168.1.168)
- If the ping fails, proceed to the Recovery using the Basic Firmware section.
- If the ping passes, type telnet <ip address of the ProtoNode> (e.g. telnet 192.168.1.168)
- Enter the following information:
 - User: fst
 - Password: GkL91aMz
- For older units, use the following information:
 - User: root
 - Password: password
- Type 'cd jffs2' and then hit the 'enter' key.
- Type 'cd ProtoNode' and then hit the 'enter' key.
- Type 'rm config.csv' and then hit the 'enter' key.
- Type 'reboot' and then hit the 'enter' key.
- Connect to the ProtoNode using Remote User Interface (RUI) and download a config file. After downloading the config, restart the ProtoNode for the changes to take effect.

Recovery using the Basic Firmware

The following is needed for this procedure:

- Basic firmware files (PNjffs2.gz and PNUlinux.gz)
- Original firmware file (nlpn.bin)
- Original config file (config.csv)
- Null modem cable
- Cat5 cable
- TFTP Server (we recommend Solar Winds TFTP Server.
http://www.solarwinds.com/products/freetools/free_tftp_server.aspx)
- Obtain the basic firmware files and the original firmware file from Tech Support.
- Set the PC to a static IP address of 192.168.1.11.
- Connect the ProtoNode Ethernet port to the PC using a cat5 cable.
- Start the TFTP server.
- Configure the TFTP server to transmit and receive files from the directory where the basic firmware files are saved.
- Using a null modem cable, connect serial port 1 of the ProtoNode to the serial port of the PC.
- Start a HyperTerminal connection and set it for the following:
 - Baud – 9600
 - Data Bits – 8
 - Stop Bits – 1
 - Parity – None
 - Flow Control – None

- Power cycle the ProtoNode.
- While the serial LEDs are flashing, type in 'password' in the HyperTerminal window.
- Type "net my_ip=192.168.1.168" and hit the 'enter' key.
- Type "save" and hit the 'enter' key.
- Type "update -os sip=192.168.1.11 file=PNuClinux.gz".
- Hit the 'enter' key.
- When prompted, type 'y' and hit the 'enter' key. Wait for the download to complete.
- When the download is complete, type "update -jffs2 sip=192.168.1.11 file=PNjffs2.gz".
- Hit the 'enter' key.
- When prompted, type 'y' and hit the 'enter' key. Wait for the download to complete.
- Type 'exit' to restart the ProtoNode.
- Connect to the ProtoNode using Remote User Interface (RUINET) and download the original firmware file and the original config file. After downloading, restart the ProtoNode for the changes to take effect.