

PPP Mode for NPort 5600: Dial-in

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This Tech Note applies to the NPort 5600 device server. The following models are included:

- NPort 5610
- NPort 5630
- NPort 5650

What is PPP Mode?

The NPort 5600 provides standard PP service for out-of-band management if the Ethernet network crashes. With PPP mode, users have remote dial-in access to the network. The NPort itself acts as the PPP server and is connected to a modem or modems that receive dial-in connection requests from remote devices.



Configuring the NPort 5600 for Dial-in PPP Mode

Before performing the following steps, restore the NPort 5600 default settings by holding the reset button down for 5 seconds.

1. Turn the NPort on. The Ready LED should turn green.
2. Make sure that the NPort and the host PC are properly connected to the network.
3. Run "NPort Administrator". This can be installed from the NPort Document and Software CD.
4. In NPort Administrator, use **Search** or **Search IP** to find your NPort on the network.
5. Select your NPort and click **Web** to open its web console. From this point forward, you will be submitting changes to the NPort's settings. Once all the

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changes have been submitted, you will restart the NPort with the new settings.

6. In the web console under **Basic Settings**, modify the server name and time settings if desired. Remember to submit any changes that are made.
7. In the web console under **Network Settings**, modify the NPort's IP address, netmask, gateway, and other IP parameters as necessary. You must set the NPort 5600's IP address so that it is in the same network as your PC. You may also need to modify the host PC's IP configuration. Make sure you can ping the NPort from your host PC.

Remember, the IP addresses of the NPort and the PC must be on the same subnet. If one IP address is modified, you may need to modify the other IP address.

8. In the web console under **Operating Settings**, select the serial port that will be set to PPP Mode. Set **Operation Mode** to PPP mode. New parameters should become available, and they should be modified as follows:
 - **Source IP Address:** the IP address of this serial port
 - **Destination IP Address:** the IP address to assign to the remote client
 - **IP Netmask:** 255.255.255.255
 - **Modem Initial String:** AT&S0=1 (modem auto answer)
9. In the web console under **Serial Settings**, select the serial port that will be set to PPP Mode. Adjust the serial communication parameters as necessary for your modem (RS-485 2 Wire is not supported for PPP).
10. In the web console under **PPP User Table**, add a user account entry for the remote client.
11. Make sure all changes have been submitted. In the web console, select **Save/Restart** to restart the NPort with the new settings activated.

Testing PPP Mode for the NPort 5600



1. Connect or install a modem in your PC and connect the phone line. Note the phone number for that line (12345 in this example).
2. Set the PC's IP address to 192.168.127.1.
3. Connect Port 1 on the NPort to another modem and connect the phone line. Note the phone number for that line (54321 in this example).
4. Set the NPort's IP address to 192.168.127.2.
5. On the NPort, set Port 1 as follows:
 - **Operation Mode:** PPP
 - **Source IP Address:** 192.168.128.2 (NPort's IP)
 - **Destination IP Address:** 192.168.128.1 (remote client IP)

- **IP Netmask:** 255.255.255.0
 - **Modem Initial String:** AT&S0=1 (modem auto answer)
 - **Baudrate:** 115200
 - **Parity:** N
 - **Data Bits:** 8
 - **Stop Bits:** 1
 - **Flow Control:** RTS/CTS
 - **Serial Interface:** RS-232
6. Make sure the modem attached to the NPort is enabled and adjust its settings appropriately.
 7. In the NPort's web console under **PPP User Table**, add a user name called "test" with password of "test".
 8. In the NPort's web console, submit and save changes and restart the NPort.
 9. Disconnect the PC from the Ethernet network.
 10. Create a "Network Connection" on the PC. Use "test" for the login/username and "test" for the password.
 11. Initiate the network connection by dialing the number to the NPort (54321 in this example).
 12. After the NPort accepts the dial-in connection, the PC will have access to the network through the NPort.
 13. You can verify the connection from the PC by pinging the NPort's IP address from a command prompt. Enter "ping 192.168.128.2".

If either the PC or the NPort are installed on local LANs, you may need to add additional routing entries in order for the PC to gain access to the NPort's network.

Cable Wiring

