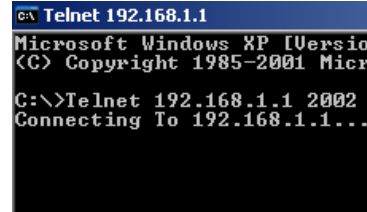


Problem: Unable to Telnet to NetGuardian
Platform: NetGuardian

Are you incurring costly windshield time by driving to remote sites just to access your RTU? Connect to your NetGuardian with Telnet and handle the process remotely.



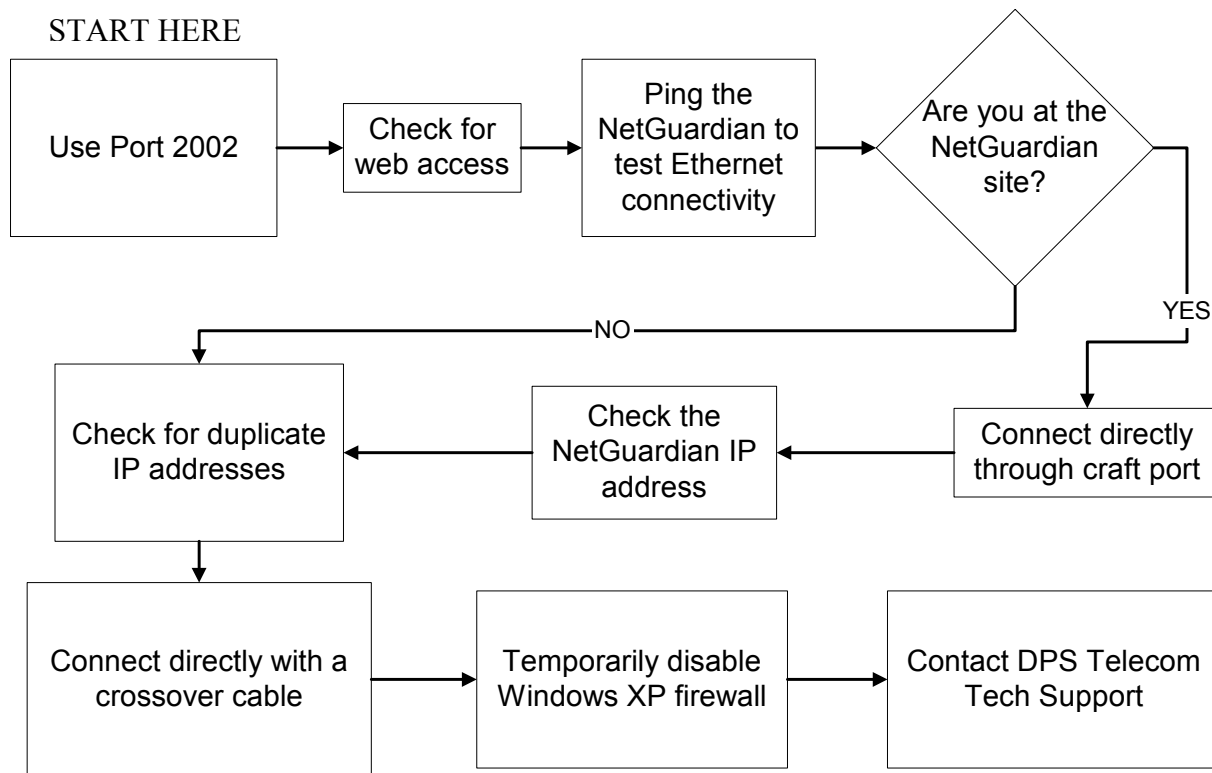
Connecting to a NetGuardian with Telnet allows you to quickly access from a remote location. Establishing a Telnet connection involves just a few quick steps. Use the following "techno knowledge" paper to Telnet to your NetGuardian for the first time, or to troubleshoot common connection issues.

This "techno knowledge" paper can help you if:

- You are unable to Telnet to your NetGuardian.

Quick Reference Chart

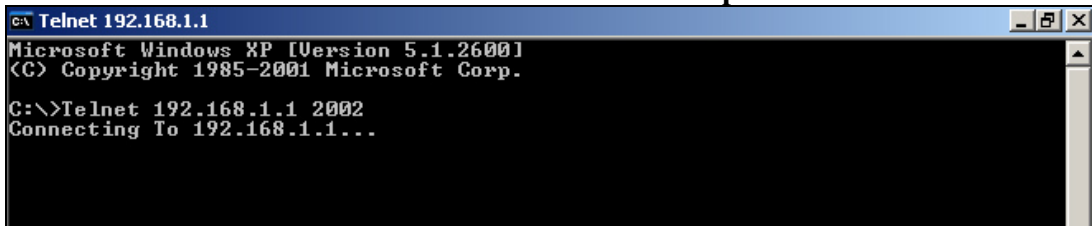
(for more details, review the troubleshooting checklist, starting on page 2 of this guide)



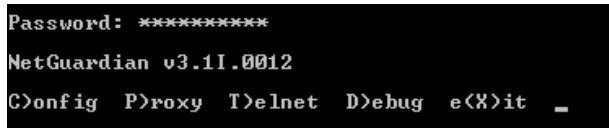
Troubleshooting Checklist

- ❑ **Telnet to port 2002, not the default port 23.**
 - This can be specified in most Telnet clients, specifically in
 - Windows Command Prompt
 (Click: Start → Programs → Accessories → Command Prompt
 OR Start → Run → type “cmd”)
 - Hyperterminal
 (Click: Start → Programs → Accessories → Communications → HyperTerminal)

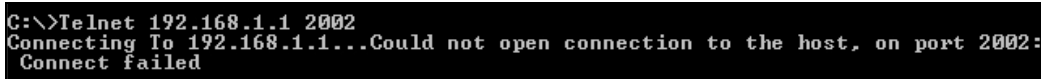
Windows Command Prompt



In the Command Prompt window, type “Telnet”, the NetGuardian’s IP address, and “2002”. Press Enter.

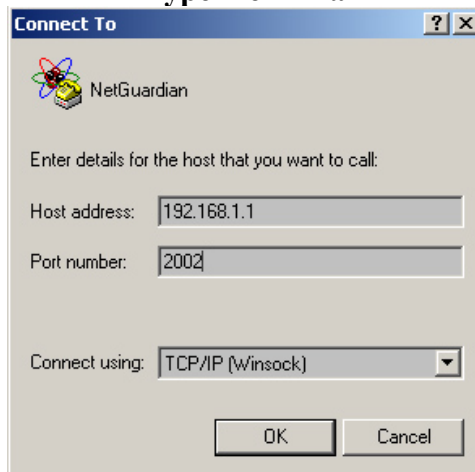


If the connection is successful, you will be prompted for a password (default password is “dpstelecom”).

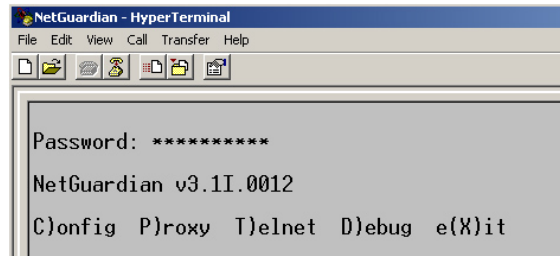


If the connection attempt fails, proceed to the next step:

HyperTerminal



Create a new connection by entering the NetGuardian’s IP address and port number 2002.



If the connection succeeds, enter a password (default password is “dpstelecom”) to log on.

If the Telnet connection fails and you do not see this message, proceed to the next step:

❑ **Check for web access.**

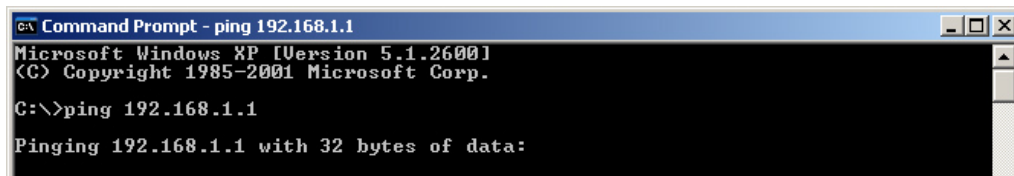
- NOTE: This step is intended as an easy network check for web connectivity to the NetGuardian only. A web-based login will not be used as a substitute for Telnet access.
- Open a web browser to the NetGuardian’s IP address and watch for the logon web page:



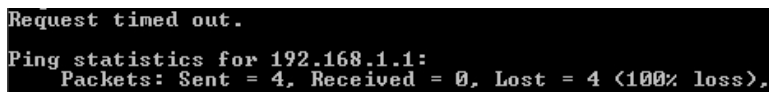
If the web page logon appears correctly, check the firewall settings as described on page 3 of this guide.

If the logon page does not appear, proceed to the next step:

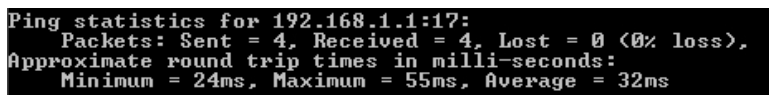
❑ **Check that the PC has Ethernet IP connectivity to the NetGuardian by pinging the NetGuardian’s IP address. (default = 192.168.1.1)**



Ping the NetGuardian’s IP address



If the pings do not return, check the Ethernet connectivity for firewalls, general hardware connections, and IP address settings. Also, ping the gateway to further test connectivity.



If the pings return successfully, proceed to the next step:

❑ **Check the NetGuardian IP address**

- The default IP address (192.168.1.1) most likely will not be compatible with your network configuration.
- Configure the NetGuardian IP address, subnet mask, and gateway for your network.
 - The best way to check or configure the NetGuardian’s IP address settings is to connect through the front craft port:
 - Connect your laptop to the front DB9 of the NetGuardian. Use a serial-to-serial or USB-to-serial cable.
 - Establish a connection in HyperTerminal (no handshaking, 9600 baud)
 - Type “dpscfg” and press Enter
 - Enter your password (default is “dpstelecom”)
 - Press ‘C’ for Config, then ‘E’ for Edit, then ‘E’ for Ethernet
 - View/change the NetGuardian’s IP settings

```

Password: *****
NetGuardian v3.0L.0225
NGRD_205 @ RR03

C)onfig P)roxy T)elnet D)ebug e(X)it
E)dit M)onitor P)ing S)tats T)une Modem R)eset Port (ESC) ? E
E)thernet n(V)ram P)PP R)eboot s(Y)stem (ESC) ? E

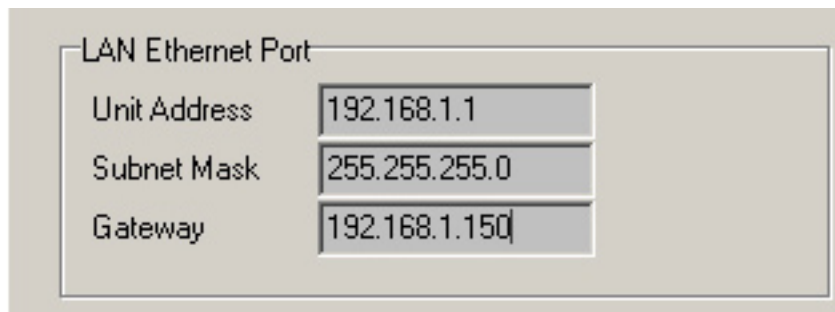
Unit Address      : 126.010.230.205 (126.010.230.205)
SubNet Mask       : 255.255.192.000 (255.255.192.000)
Default Gateway   : 126.010.220.254 (126.010.220.254)

MAC Address       : 00.10.81.00.03.17
Features          : 006B-73-0C5C

U)nit Address S)ubnet Mask G)ateway F)eatures (ESC) ?
    
```

The best way to configure the NetGuardian’s IP settings is by connecting through the front craft port

- Alternatively, you can check and change settings in the NGEDIT software.
 - Click the ‘Ports’ tab to view/change the NetGuardian’s IP settings
 - Be sure to write the configuration file from your PC to the NetGuardian after making any changes.

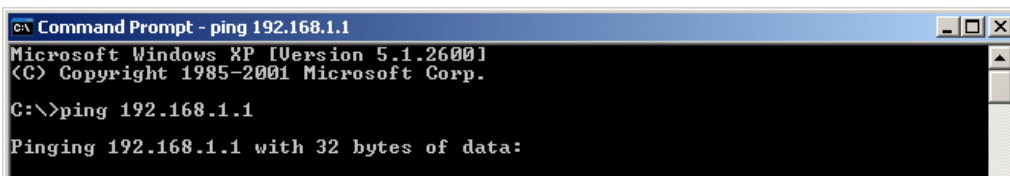


Alternatively, you can view/edit IP settings in the ‘Ports’ tab of the NGEDIT software

❑ **Check for duplicate IP addresses.**



First, Unplug the NetGuardian Ethernet port



Ping the NetGuardian's IP address again

```

Ping statistics for 192.168.1.1:17:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 24ms, Maximum = 55ms, Average = 32ms
    
```

If the pings continue to return without the Net Guardian plugged in, check for duplicate IP addresses on the network.

```

Request timed out.

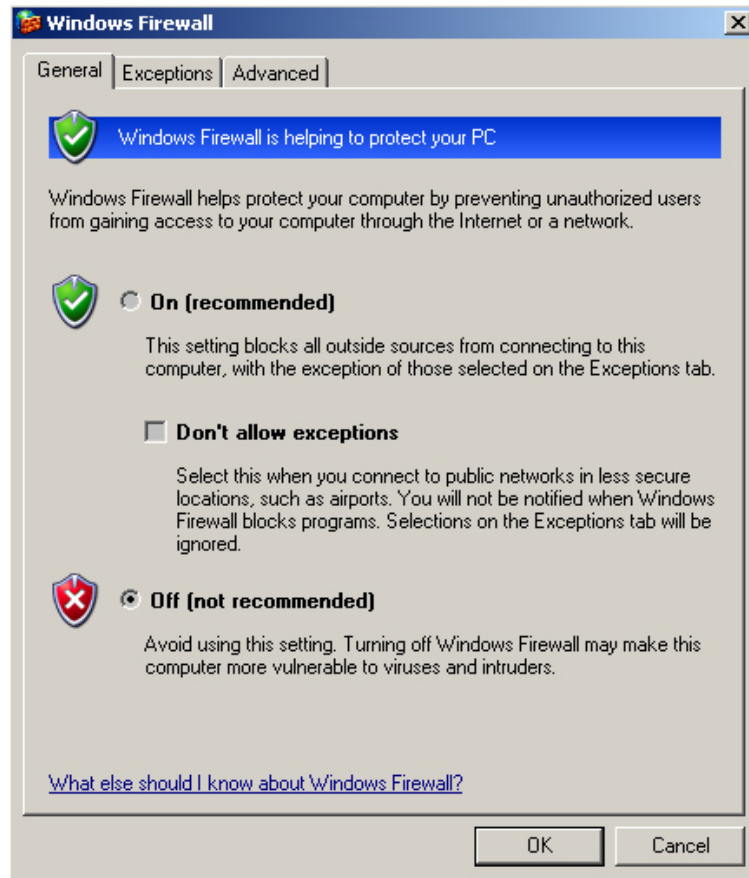
Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
    
```

If the pings are not returned with the NetGuardian unplugged, proceed to the next step:

❑ **Connect directly with a crossover cable**

- Connect the test PC to the NetGuardian using an Ethernet crossover cable. (If you do not have a crossover cable on hand, you can also use a simple hub or switch)
 - You may need to temporarily change the IP address of your PC to be directly on the NetGuardian's subnet.
- If the PC can connect fine when directly connected, check the network firewall or network connectivity.
- If the PC cannot establish a connection even when directly connected, proceed to the next step:

- **Set the Windows XP firewall to 'off'**
 - Click Start → Settings → Control Panel → Windows Firewall
 - You may want to open a single port (2002) for Telnet alone, but fully disabling the Firewall may be a more useful testing procedure in many cases.
 - If it is 'on', temporarily set the software Firewall to 'off':



Set the Windows XP firewall to 'off'

NOTE: Disabling your firewall temporarily is a troubleshooting measure only and not intended as a long-term solution for connection issues. DPS Telecom does not recommend that you leave your firewall disabled for extended periods.

If you continue to have issues connecting to the NetGuardian via Telnet, please contact DPS Telecom Tech Support.
