

MODIFICATION RECOMMENDED

**N4903B-04**

**S E R V I C E N O T E**

Supersedes:  
None

The N4903B does not respond to network “pings”.

Serial Numbers: MY49101000 – MY49101020

**Due to a Microsoft Windows configuration problem the N4903B does not respond to network “pings”.  
Apply the correct configuration steps described below to allow “pings” to be answered by the N4903B.**

**Parts Required:**

P/N	Description	Qty.
None		

**ADMINISTRATIVE INFORMATION**

SERVICE NOTE CLASSIFICATION:			
<b>MODIFICATION RECOMMENDED</b>			
ACTION CATEGORY:	<input type="checkbox"/> ON SPECIFIED FAILURE <input checked="" type="checkbox"/> AGREEABLE TIME	STANDARDS	LABOR: 0.25 Hours
LOCATION CATEGORY:	<input type="checkbox"/> CUSTOMER INSTALLABLE <input checked="" type="checkbox"/> ON-SITE <input type="checkbox"/> SERVICE CENTER <input type="checkbox"/> CHANNEL PARTNER	SERVICE INVENTORY: <input type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input type="checkbox"/> SEE TEXT	USED PARTS: <input type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input type="checkbox"/> SEE TEXT
AVAILABILITY:	PRODUCT'S SUPPORT LIFE	NO CHARGE AVAILABLE UNTIL: 31-Dec-2013	
AUTHOR:	HK	PRODUCT LINE: PL24	
ADDITIONAL INFORMATION:			

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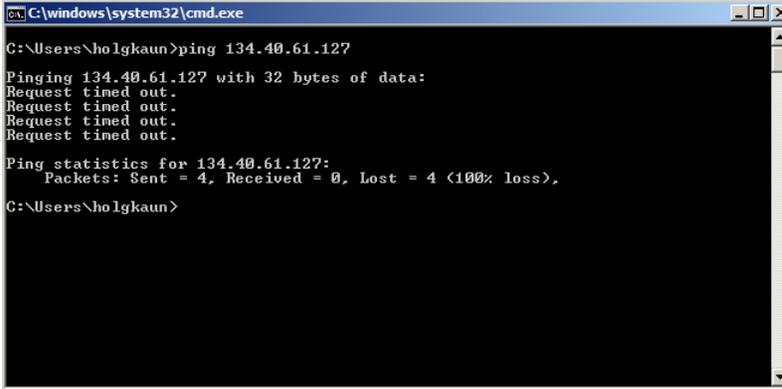
February 23, 2012

Rev. 19



**Situation:**

A N4903B, which is connected to the network and has a valid IP address should respond to “pings”. A “ping” is a computer network administration utility used to test the reachability of a computer system on a network. A “ping” operates by sending an ICMP (Internet Control Message Protocol) echo request packet to the target computer system and waiting for an ICMP response. If the target system does not answer, it records a packet loss.

A screenshot of a Windows command prompt window. The title bar reads "C:\windows\system32\cmd.exe". The command prompt shows the user typing "ping 134.40.61.127". The output shows four "Request timed out." messages, followed by "Ping statistics for 134.40.61.127:" and "Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),". The prompt ends with "C:\Users\holgkaun>".

```
C:\windows\system32\cmd.exe
G:\Users\holgkaun>ping 134.40.61.127
Pinging 134.40.61.127 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.
Ping statistics for 134.40.61.127:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
G:\Users\holgkaun>
```

To debug connectivity problems it is often very helpful to have computer system and instruments respond to “pings”.

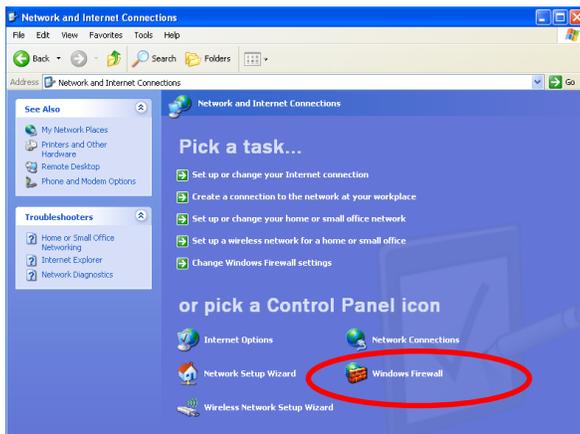
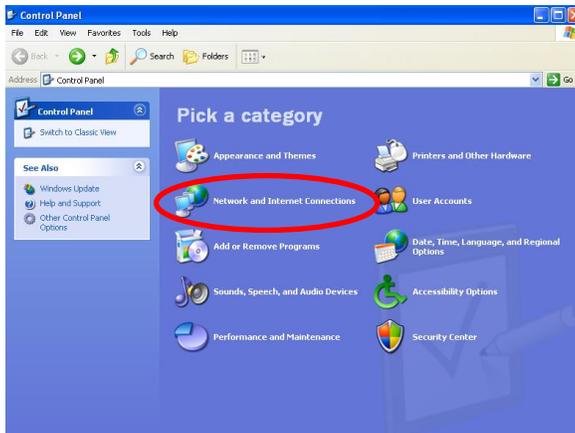
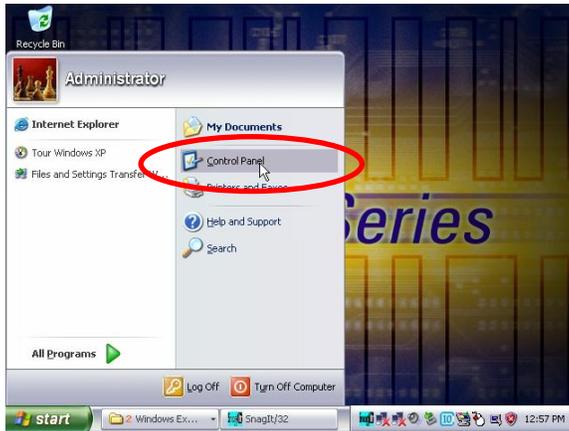
It is possible to configure the Windows Firewall to not allow responses to “pings”, i.e. disable incoming ICMP echo requests.

The Windows image on the N4903B systems of the specified serial number range (see above) has disabled “incoming echo requests” by accident.

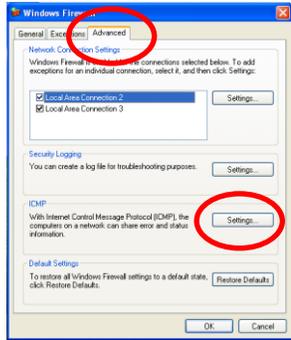
**Solution/Action:**

Please perform the following steps in order to enable ICMP echo requests:

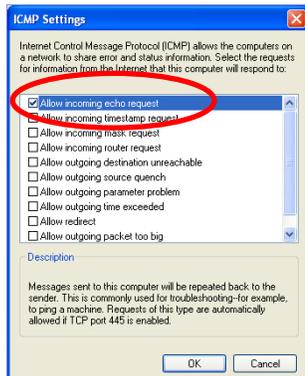
1. Start the N4903B and wait for the unit to have fully booted.
2. Go to the “Control Panel” → “Network and Internet Connections” → “Windows Firewall”



3. On the “Windows Firewall” go to the “Advanced” tab and then on “ICMP Settings”:

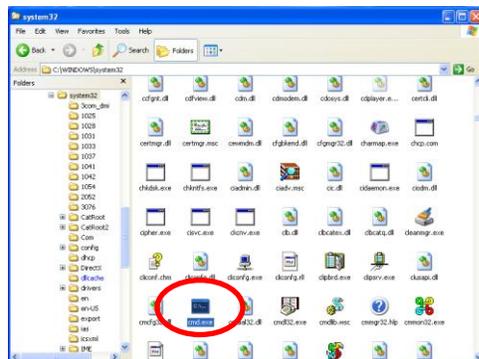


Then check the checkbox “Allow incoming echo request”

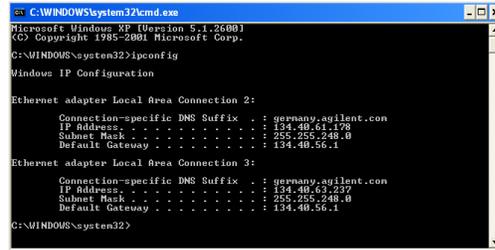


Click “OK” and “OK” again and then close the “Control Panel”.

4. Now quickly test the solution by trying out a “ping” from a remote computer system to your N4903B.
- Connect the N4903B to the network by connecting 2 LAN cables to the 2 network ports on the back of the instrument. You can also execute the following steps sequentially: one network port after the other.
  - Start the Windows explorer on the N4903B, navigate to the directory C:\Windows\system32 and find the file “cmd.exe” and double-click on it.



- c. A command window will start. Enter the command “ipconfig”:



```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows [Version 5.1.2600]
(c) Copyright 1985-2000 Microsoft Corp.

C:\WINDOWS\system32>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection 2:

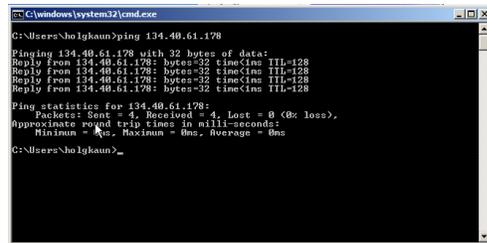
    Connection-specific DNS Suffix  . : germany.agilent.com
    IP Address. . . . . : 134.40.61.178
    Subnet Mask . . . . . : 255.255.248.0
    Default Gateway . . . . . : 134.40.56.1

Ethernet adapter Local Area Connection 3:

    Connection-specific DNS Suffix  . : germany.agilent.com
    IP Address. . . . . : 134.40.63.237
    Subnet Mask . . . . . : 255.255.248.0
    Default Gateway . . . . . : 134.40.56.1

C:\WINDOWS\system32>
```

- d. Write down the 2 IP addresses. In the picture above they are: 134.40.61.178 and 134.40.63.237.
- e. Now go to a PC that is connected to the same network, start a command window (description above) and type “ping 134.40.61.178. You should get a response as shown below;



```
C:\windows\system32\cmd.exe

C:\Users\holgkaun>ping 134.40.61.178

Pinging 134.40.61.178 with 32 bytes of data:
Reply from 134.40.61.178: bytes=32 time<ms TTL=128

Ping statistics for 134.40.61.178:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milliseconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\Users\holgkaun>
```

Repeat the ping for the other IP address.