Internet Connectivity Test for AlarmNet
And Total Connect Services

The TELNET tool at the DOS Command Prompt can be a useful tool to confirm network connectivity to a server and diagnose IP connectivity problems. It is best to perform this test from a PC or laptop using the same network cable that plugs directly into the AlarmNet communicator or with a Wi-Fi connection to the same Access Point.

**Telnet Test Procedure:**

1. Open a DOS command prompt window:
   A. To do this, click “Start” and then click “Run”.
   B. When the dialog box opens type, “cmd” and press <enter>.

2. A valid Telnet command will be entered like this:
   
   C:\> telnet {Server Name or IP Address} {Port} <ENTER>

3. As an example, at the DOS prompt “C:\>” you will type the following to test connectivity to the server named “auiredir1.alarmnet.com” over port 443:

   telnet auiredir1.alarmnet.com 443 <ENTER>

   After entering the Telnet command and clicking <ENTER>, the window should “blank out” and the cursor will return to the top left and flash.

   Note: When provided, it is recommended to perform the telnet test to the server names (auiredir1.alarmnet.com) in addition to the IP address (204.141.57.100) because this will also test the DNS service for IP resolution. If the test fails with the server name, but passes when the IP address is used, there is likely an issue with the network DNS service.

4. Next, type about 15 – 20 characters, you will see the socket quickly close and your command prompt will return, “C:\>”. This indicates connectivity to the designated server is working. Refer to pages 4-6 of this document for the full list of server names, IP addresses, and ports that should be tested.

**If there is a problem…**

1. “Connecting to 204.141.57.100…” followed about 30-60 seconds later by “Could not open…” In this case, there was a full failure to connect to the Server or IP address requested. The customer (or Network Administrator) should check their router and firewall
settings to verify ports 80 and 443 are not blocked for **outbound** traffic. Please note there is no need to open any ports for **inbound** traffic.

2. The window does “blank out” but when you type a bunch of characters and hit <ENTER> you get an **HTTP-type long error** page. There is likely a PROXY server between the computer being used to TELNET and the Internet. In general, *our equipment won’t work behind a Proxy*, but there may be some network engineering that can be done at the site to work around this, depending on the equipment being used.

While our units were designed to work behind Firewalls and usually require no additional network configuration, some networks employ security measures that can cause connectivity failures. These may include:

- Proxy Servers
- Stateful Packet Inspection (SPI)
- Packet or IP filtering
- Any software that attempts to open or look inside our encrypted data packets.

If there is a problem reaching any of the AlarmNet servers, the customer should contact their network administrator and ask them to exclude the AlarmNet Servers and IP addresses from Firewall rules, SPI, and PROXY settings and ensure the IP addresses have unrestricted access to the internet over the listed ports (**for outbound traffic only**).

AlarmNet Technical Support can answer general questions, but cannot assist with making modifications to the end-user network. These changes should be made by a network professional or someone familiar with the network requirements and other parameters.

**Static or DHCP Settings**

AlarmNet Internet products can use either DHCP or Static IP addressing. If problems occur due to automatic IP releasing\(^1\) on the network, the AlarmNet device should be switched to a Static IP. If static IP’s are being used, the following information is needed from the Network Administrator before installation:

- Static IP address for the AlarmNet device
- Subnet Mask
- Default Gateway
- DNS IP Address

\(^1\) Automatic IP Releasing: AlarmNet Internet products ping AlarmNet every 20 seconds to verify connectivity; therefore, it releases the previously assigned IP address at the end of its session and requests a new one each time it checks connectivity.
IP addresses and Servers used for AlarmNet Services

**Alarm Reporting and other AlarmNet Services**
The Server names and IP Addresses below are used for alarm reporting, Total Connect services, and Compass over IP. Test these at the AlarmNet IP Communicator.

- REDIR 1 ................. auiredir1.alarmnet.com (204.141.57.100) {ports 80, 443} *
- REDIR 2 ................. auiredir2.alarmnet.com (204.141.57.101) {ports 80, 443} *
- REDIR 3 ................. Test to IP address only (12.149.218.73) {ports 80, 443} *

* Port 80 is required only for Alarm Reporting with older, legacy AlarmNet communicators (7845i, 7845i-ent) and the 7810 receiver.

**Total Connect Services**
The IP Addresses below are used for Total Connect 1.0 and 2.0 services. Test these at the AlarmNet IP Communicator.

- REDIR 1 ................ auiredir1.alarmnet.com (204.141.57.100) {port 443}
- REDIR 2 ................ auiredir2.alarmnet.com (204.141.57.101) {port 443}
- REDIR 3 ................ Test to IP address only (12.149.218.73) {port 443}
- Data Server1 ....... dataserver1.alarmnet.com (204.141.58.80) {port 443}
- Data Server2 ....... dataserver2.alarmnet.com (204.141.58.81) {port 443}

**Total Connect video:**
The Server names and IP Addresses below are used for LEGACY (non-HD) Total Connect Video services (TC1 and TC2).

To verify connectivity for cameras from the user network, use a web browser to verify connectivity to [https://video.alarmnet.com/test.aspx](https://video.alarmnet.com/test.aspx). Bypass the warnings for an invalid certificate and continue on. Once connected, you should see a page that shows the public DNS for one of the AlarmNet video servers.

To verify that cameras will be able to upload video clips, use a web browser to verify connectivity to [https://files.alarmnet.com/test.htm](https://files.alarmnet.com/test.htm) - you should get back a screen that says “This is a test...”

If the problem is on a mobile app, use a browser to verify successful connection to [https://video.secure.alarmnet.com/test.aspx](https://video.secure.alarmnet.com/test.aspx)
Compass:
The Server names and IP Addresses below are used for Compass IP Downloading. Test these at the AlarmNet communicator and programming PC/laptop.

    REDIR 1 ................ auiredir1.alarmnet.com (204.141.57.100) {port 80, 443}
    REDIR 2 ................ auiredir2.alarmnet.com (204.141.57.101) {port 80, 443}
    REDIR 3 .......................................................
    (12.149.218.73) {port 80, 443}
    Control Server .... controlserver.alarmnet.com (204.141.58.115) {ports 80, 443}
    Data Server1 ...... dataserver1.alarmnet.com (204.141.58.80) {ports 80, 443}
    Data Server2 ...... dataserver2.alarmnet.com (204.141.58.81) {ports 80, 443}

Enabling Telnet in Windows Vista/Windows 7

1. Open “Control Panel”
2. Go to “Programs and Features”
3. Click “Turn on Windows Features On or Off“
4. Select “Telnet Client”
5. Click on “OK”
6. Now follow procedures to Telnet