Monitoring the EN-2000

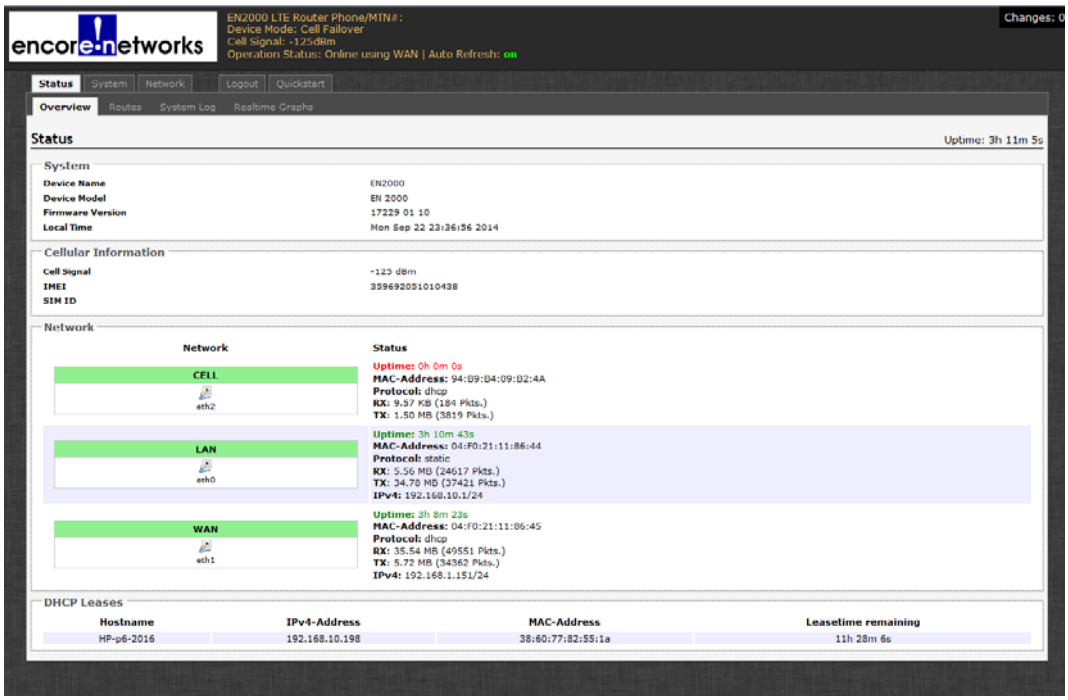
This document provides information for monitoring the EN-2000 router's configuration and performance. Screens specifically for monitoring the EN-2000 are discussed in this document.

Note: You can also monitor information and performance by viewing configuration screens. On those screens, you can make changes in the configuration if they are needed. See *Configuring the EN-2000 for its Network Functions*.

Caution: Always consult your network administrator before changing settings in the EN-2000. If you have any problems when monitoring the EN-2000, contact the vendor or distributor.

After log-in, the Status Overview Screen displays information on the EN-2000's connections (Figure 14-1). (For log-in details, see *Logging In*, on page 2 of *Using the EN-2000's Management System*.)

Figure 14-1. Status Overview Screen



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On screens for the EN-2000 management system, the top row of tabs indicates the management area, and the second row indicates configuration areas—items to configure or monitor within the selected management area.

Note: The EN-2000 senses its hardware configuration and displays tabs to represent that configuration.

In each management area, you can select items you wish to manage on the EN-2000.

1 To monitor the EN-2000, do the following:

a Select a management area tab.

b Then select a configuration area tab.

c Occasionally there will be a third row of tabs, for details. If so, select a detail tab.

❖ The selected screen is displayed.

14.1 Graphs

The EN-2000 management system includes graphs that provide visual depictions of trends. The EN-2000 displays graphs that start at the current time (that is, at the time display of the graph is selected).

To view graphs of EN-2000 traffic statistics beginning at the current second and updating through three-second intervals (in real time), do the following on the EN-2000 management screens.

1 Select the **Status** management area.

2 Select the **Realtime Graphs** configuration area.

3 If necessary, select the **Load** detail tab.

❖ The Realtime Load Performance Graph is displayed (Figure 14-2).

Figure 14-2. Realtime Load Performance Graph

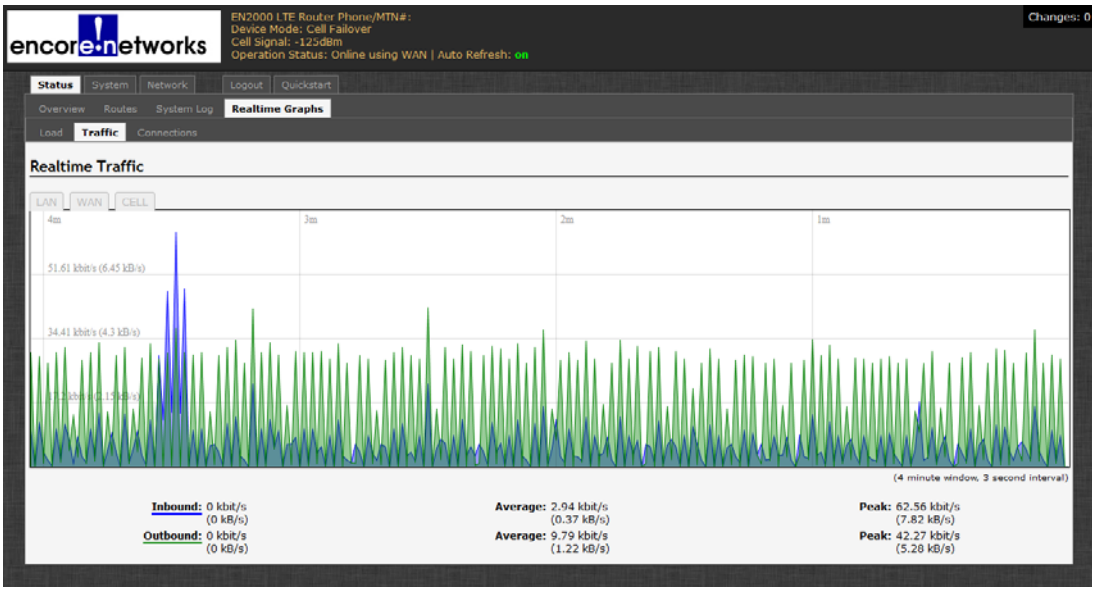
This screen depicts all traffic through the EN-2000 in real time (that is, as that traffic occurs). Below the graph, labels (underscored with colors corresponding to areas in the graph) provide quick information for the current **Load**, the mean **Average**, and the **Peak** traffic for:

- The past **one minute** (sometimes displayed as pink; sometimes displayed as dark orange)
- The past **five minutes** (usually displayed as medium orange)
- The past **fifteen minutes** (usually displayed as light orange, almost yellow)

4 Select the **Traffic** detail tab.

❖ The Realtime Performance Graph of All EN-2000 Traffic is displayed (Figure 14-3).

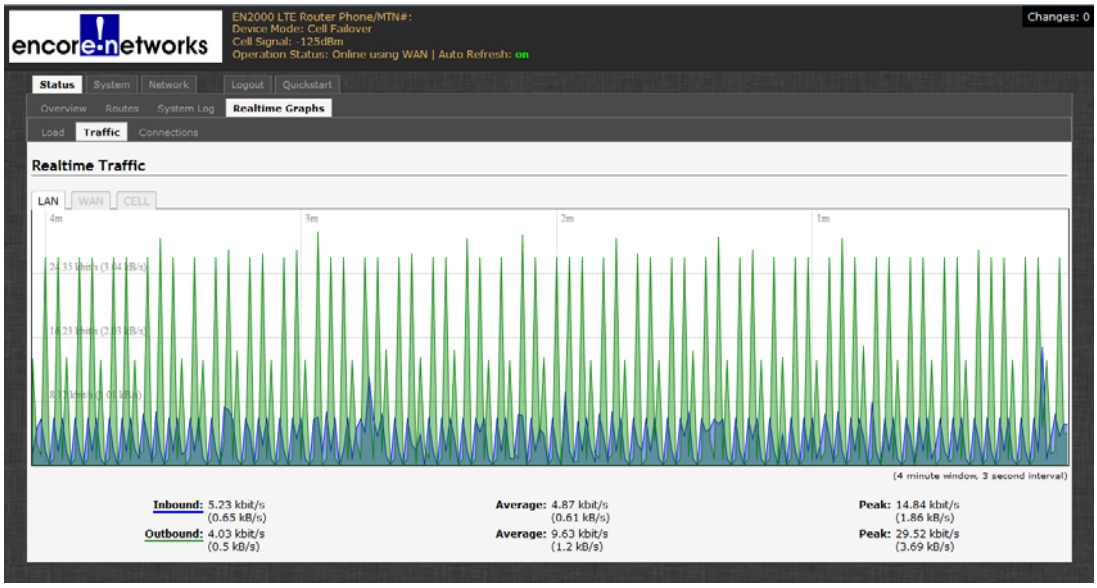
Figure 14-3. Realtime Performance Graph of All EN-2000 Traffic



a On this same screen, select the **LAN** detail area.

❖ The Realtime Performance Graph of the EN-2000's LAN Port Traffic is displayed (Figure 14-4).

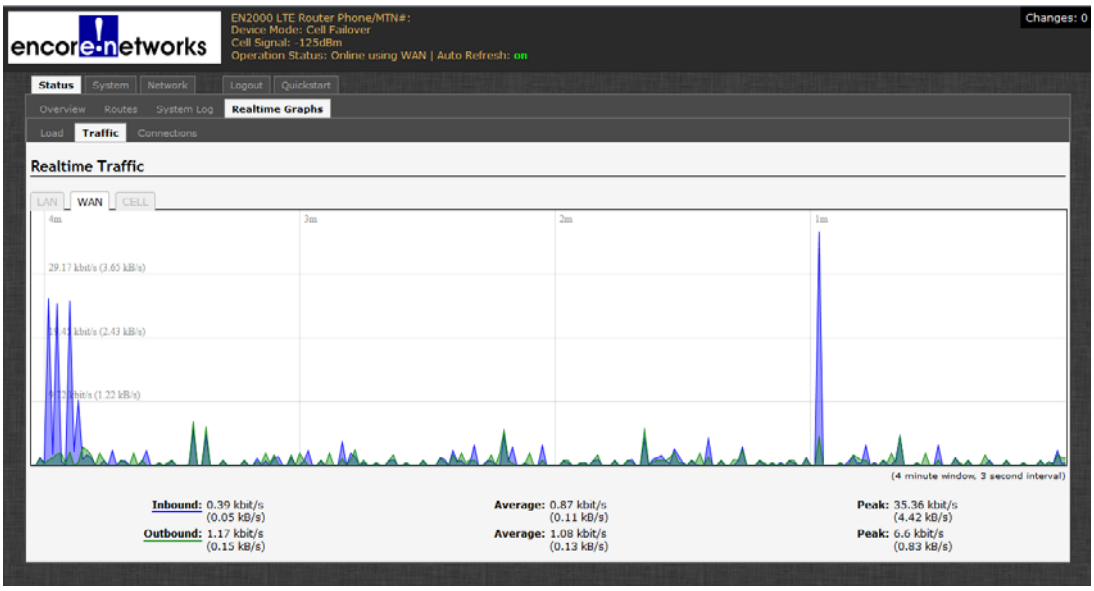
Figure 14-4. Realtime Performance Graph
of the EN-2000's LAN Port Traffic



b On this same screen, select the **WAN** detail area.

❖ The Realtime Performance Graph of the EN-2000's WAN Port Traffic is displayed (Figure 14-5).

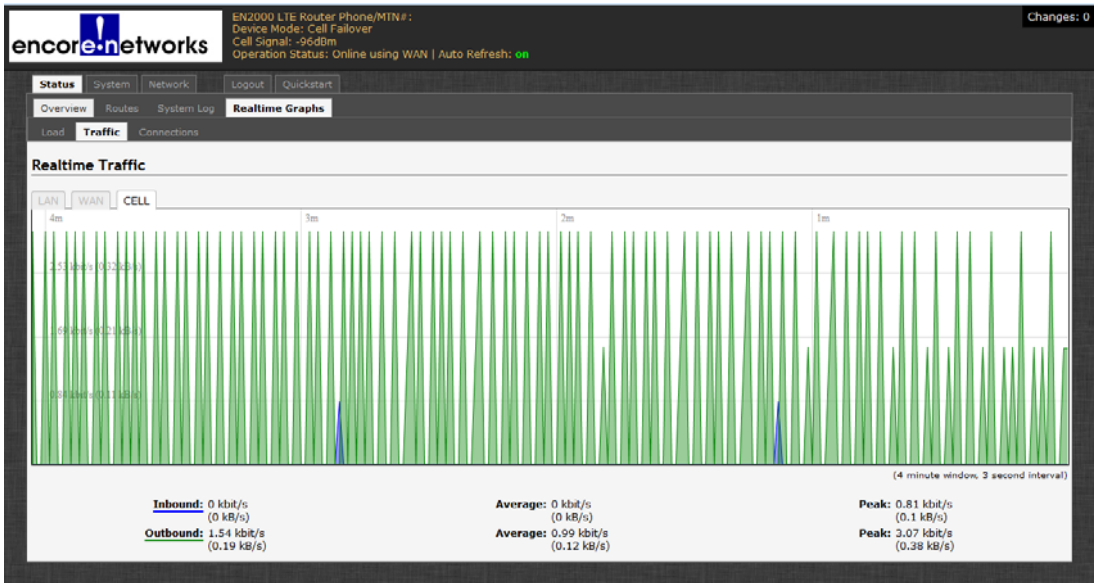
Figure 14-5. Realtime Performance Graph
of the EN-2000's WAN Port Traffic



c On this same screen, select the **CELL** detail area.

❖ The Realtime Performance Graph of the EN-2000's Cellular Wireless Traffic is displayed (Figure 14-6).

Figure 14-6. Realtime Performance Graph
of the EN-2000's Cellular Wireless Traffic



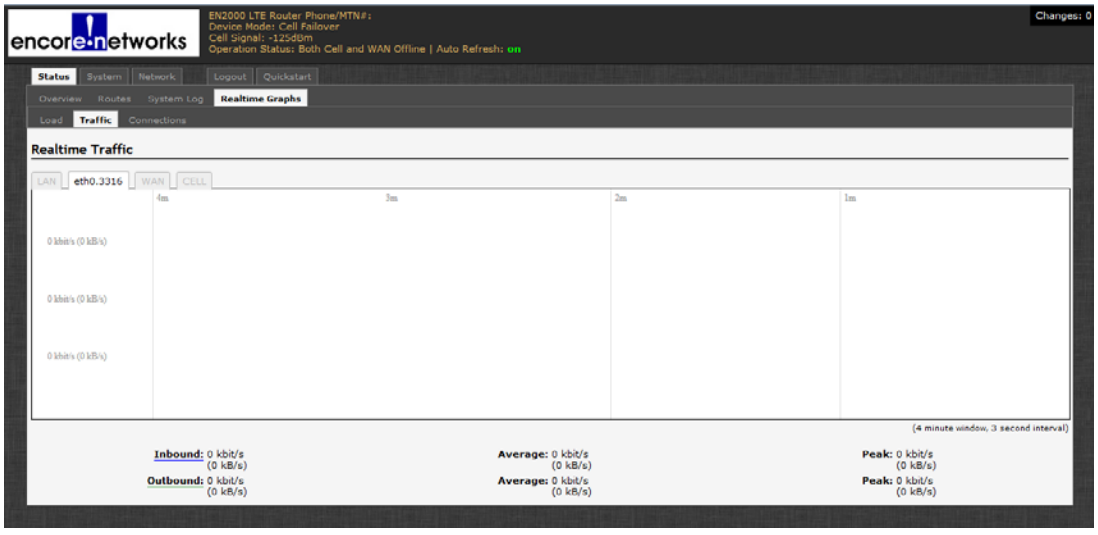
d On this same screen, select the detail area for **eth0.3316** [the 5 GHz 802.11 wireless module].

Note: A tab for **eth0.3316** is displayed only if the EN-2000 holds an 802.11 wireless module.

❖ The Realtime Performance Graph of the EN-2000's 802.11 Wireless Traffic is displayed (Figure 14-7).

Note: Figure 14-7 shows that no traffic is crossing the 802.11 wireless connection at the moment.

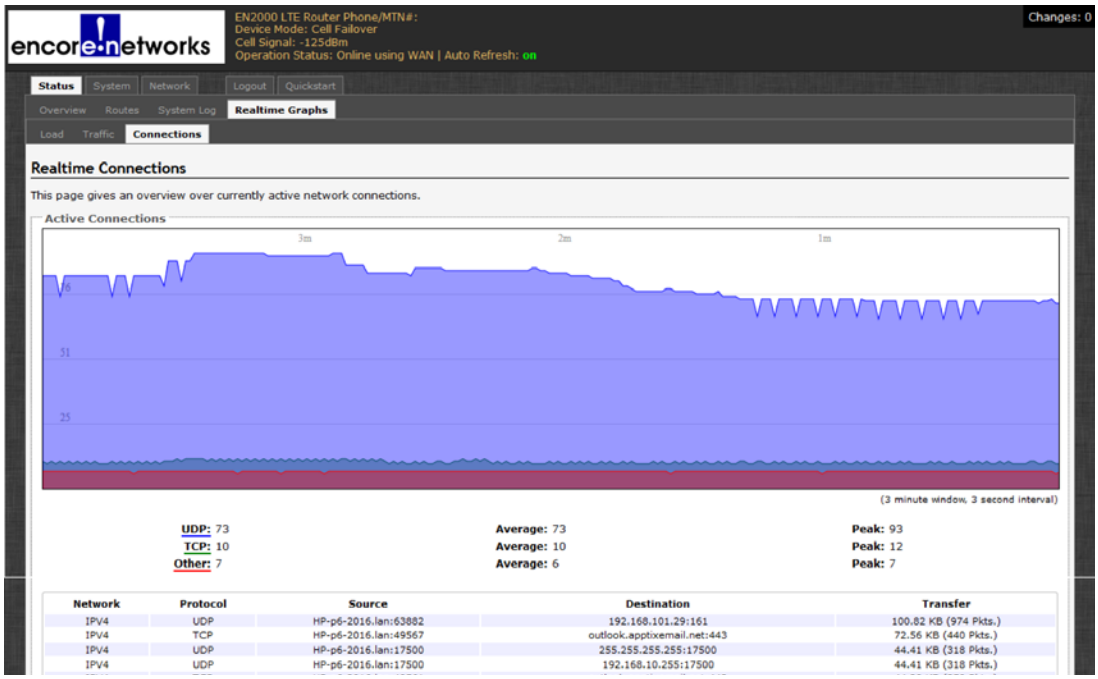
Figure 14-7. Realtime Performance Graph
of the EN-2000's 802.11 Wireless Traffic



5 Select the **Connections** detail tab.

❖ The Realtime Performance Graph of Network Connections is displayed (Figure 14-8).

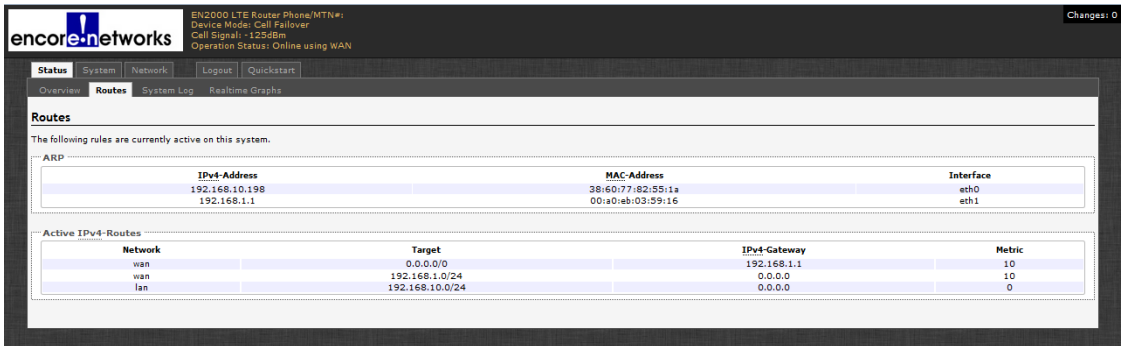
Figure 14-8. Realtime Performance Graph
of Network Connections
(Partial Display of Screen)



14.2 Routing Information

Figure 14-9 (**Status**, **Routes**) displays the Address Resolution Protocol (ARP) Table and the IP routes for ports on the EN-2000.

Figure 14-9. Status Routes Screen



14.3 Pings and Other Network Diagnostics

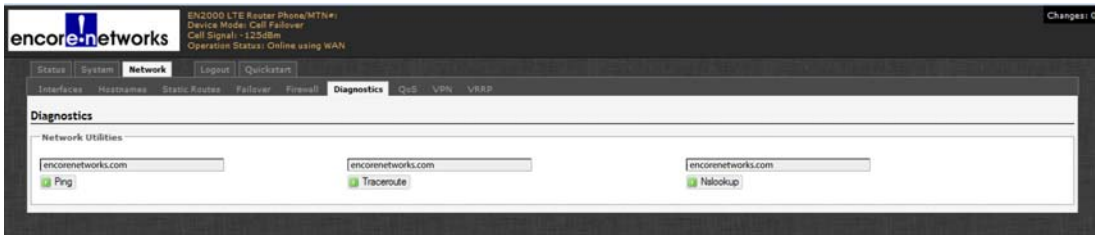
The EN-2000 can use a ping, route tracing, or nslookup to test or resolve connections. Do the following to test a connection:

1 On the EN-2000 management system, select the **Network** tab.

2 Under **Networks**, select the **Diagnostics** tab.

❖ The Diagnostics Screen is displayed (Figure 14-10).

Figure 14-10. Diagnostics Screen



3 Look at the ping set-up area on the left of the screen, under the heading **Network Utilities** (Figure 14-11).

Figure 14-11. Ping Set-Up Area (Detail of Diagnostics Screen)

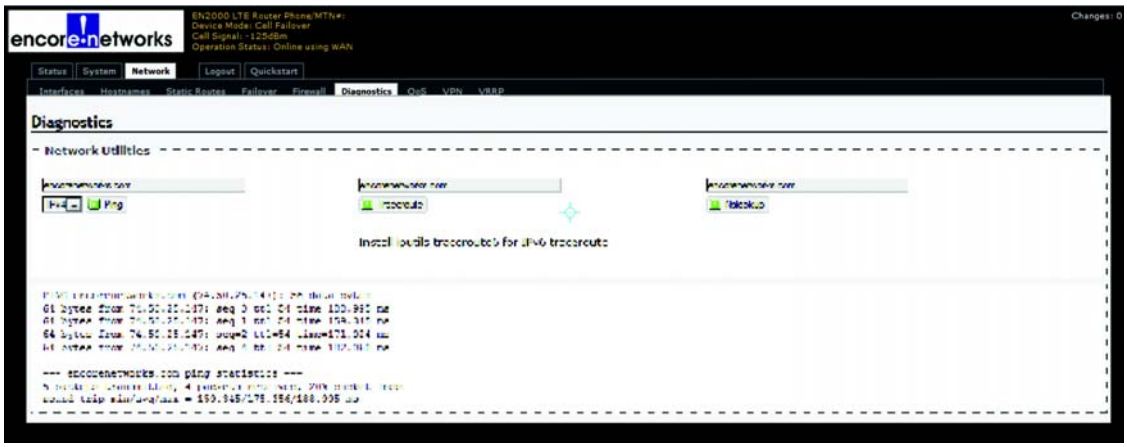
4 In the top field, enter the ping destination.

Note: The destination can be entered as an IP address or as a URL (a website path and name). If you type an IP address, use IP version 4 (IPv4). In Figure 14-11, the destination is **google.com**.

5 In the action box below the field, select the **Ping** button.

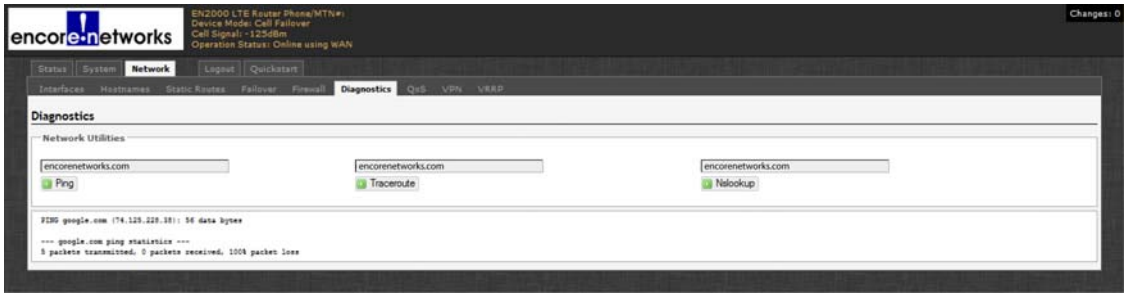
❖ If the ping is successful, the screen displays ping statistics, indicating that the VPN tunnel is active (Figure 14-12).

Figure 14-12. Messages Showing Successful Ping



❖ If the ping is unsuccessful, the screen indicates that no acknowledgments were returned. That means that there is no communication (Figure 14-13).

Figure 14-13. Message Showing Unsuccessful Ping



6 If the ping is unsuccessful, check the connections and IP address, and repeat Step 4 through Step 5.

14.4 Logs

You can review information logged by the system. See Figure 14-14, System Log.

Figure 14-14. System Log
(Sample; Partial Listing)