EN-1000™ Quick Configuration Guide

CAT-1 LTE

The EN-1000™ is a high-performance, low-cost VPN router designed for CAT-1 LTE public and private networks. This compact IP router provides IP, VPN, firewall, Ethernet and IP interworking with an embedded LTE cellular wireless module. The EN-1000 provides remote monitoring, video/alarm panel surveillance, and business continuity, as part of enterprise support.

The EN-1000 router supports cellular data and traditional broadband networks such as DSL, cable, and Ethernet.

This document provides information to configure the EN-1000 router quickly. Confer with your network administrator for specific values to use in your network.
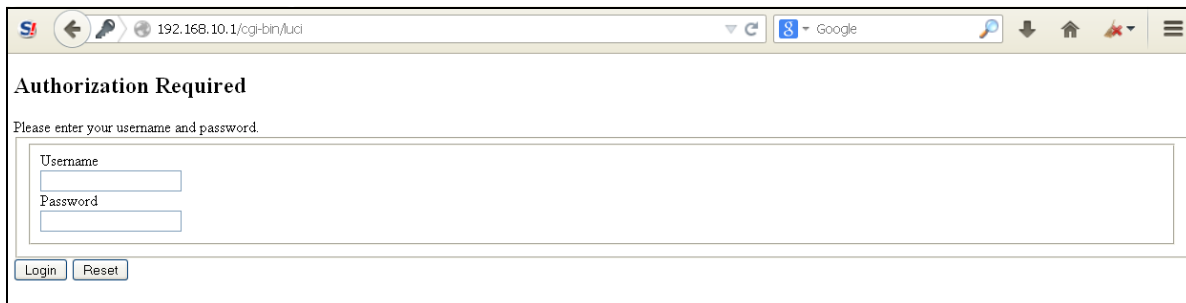
Note: The *EN-1000™ Quick Installation Guide* provides important information for setting up the EN-1000 hardware. For LED patterns, see the *Quick Guide to EN-1000™ LED Codes*. You may download those documents and other EN-1000 documentation at:

http://encorenetworks.com/documentation/document-catalog-2-2/

Connecting the EN-1000

1 Use an Ethernet cable to connect a management PC to the LAN port on the EN-1000.

2 Power up the EN-1000.

3 On the management PC, open a browser, type the IP address **http://192.168.10.1**, and press the **Enter** key.[1]

❖ The EN-1000 Log-In Screen is displayed.

EN-1000 Log-In Screen

---

1. Instead of using a direct connection to the LAN port, you can connect across a public network. In that case, type **https://** followed by the EN-1000's public IP address.

4   Log in with the user name and the router's password.

Note: For EN-4000™ routers, the default user name is **root**. For all other EN™ routers, including the EN-1000, the default user name is **admin**. In addition:

• Devices shipped before July 09, 2018, use the default password **encore!1**.

• Devices shipped from the factory on or after July 09, 2018, use a randomly generated default password. That password is listed in the lower right corner of a sticker on the bottom of the router's chassis. Retain that sticker; you will need the default password if the router must be reset. (For details, see the document *Password Policy for EN™ Routers.*)

Encore Networks, Inc., advises users to change a router's password upon first configuration of the router.

❖   After successful log-in, the EN-1000 management system's Status Overview screen opens.

EN-1000 Status Overview Screen

5   On the Status Overview screen, select the **Quickstart** tab.

❖ The Application Configuration screen opens.

EN-1000 Application Configuration Screen

Note: The lower part of the Application Configuration screen might provide a **Device Password** configuration area. Change the password only if your network administrator provides a new password.

Selecting the EN-1000's Device Mode

Make sure you have performed step 1 through step 5 on pages 1 and 2.

6 In the upper part of the Application Configuration screen, under the heading **Parameters**, select the **Device Mode**:

Note: When you select the **Device Mode**, the screen displays the parameters to configure for that mode.

a Select **Cell Failover** for automatic connection via a cellular wireless connection when the wired connection fails.

❖ The screen displays parameters for this device mode. See *Configuring the EN-1000 for Cell Failover*, on page 4.

Note: Cell Failover is the default configuration for the EN-1000 router. If that is your organization's preferred configuration for the EN-1000, no further configuration is necessary. The router may begin its functions in your organization's network.

b Select **Cell Router** when cellular wireless will be the principal method of connection to a network.

Note: Configuring the EN-1000 as a cell router also configures the WAN port as a second LAN port. (The EN-1000 management system's Status screen may not show IP information for the WAN port the same way as it does for the LAN port.)

❖ The screen displays parameters for this device mode. See *Configuring the EN-1000 as a Cell Router* on page 5.

c Select **IP Passthrough** to provide connection between an existing non-wireless router and a network. Connect the non-wireless router to the EN-1000's LAN port.

   Note: The device connected to the EN-1000's LAN port will see the IP address of the cellular port or of the WAN port.

   ❖ The screen displays parameters for this device mode. See *Configuring the EN-1000 for IP Passthrough* on page 6.

d Select **VRRP Backup** to use the EN-1000 as a backup router in a VRRP set.

   ❖ The screen displays parameters for this device mode. See *Configuring the EN-1000 for VRRP Backup* on page 6.

Configuring the EN-1000 for Cell Failover

Make sure you have performed step 6a on page 3.

Application Configuration Screen to use EN-1000 in Cell Failover Mode
(WAN Protocol Displayed as Static)

7 Do the following when the EN-1000 will provide cell failover:

a Modify the following parameters, if required:

• **Device Name**	• **LAN DHCP Server**
• **LAN IP**	• **enCloud Enabled**
• **LAN Netmask**	

b Pull down the menu at the right of the **WAN Protocol** field, and select the EN-1000's WAN protocol (**DHCP Client**, **PPPoE**, or **Static**).

   ❖ Parameters are displayed for the selected **WAN Protocol** (as indicated in the following table).

Parameters Displayed	WAN Protocol		
	DHCP Client	PPPoE	Static
PPPoE Username		•	
PPPoE Password		•	
WAN IP			•
WAN Netmask			•
WAN Gateway			•
DNS Server			•
Failover Ping IP	•	•	•
Failover Ping Timeout	•	•	•
Failover Ping Retries	•	•	•
VPN Mode	•	•	•

c Configure the parameters for the WAN protocol you selected.

d When you are satisfied with the parameters, select the **Save & Apply** button (in the lower right corner of the screen).

❖ The configuration is saved and the EN-1000 reboots. After rebooting, the log-in screen is displayed.

e Go to *Using the EN-1000's Configuration*, on page 7.

Configuring the EN-1000 as a Cell Router

Make sure you have performed step 6b on page 3.

Application Configuration Screen to use EN-1000 in Cell Router Mode

8 Do the following when the EN-1000 will perform as a cell router:

a Modify the following parameters, if required:

- **Device Name**
- **LAN IP**
- **LAN Netmask**
- **LAN DHCP Server**
- **VPN Mode**
- **enCloud Enabled**

b When you are satisfied with the parameters, select the **Save & Apply** button (in the lower right corner of the screen).

❖ The configuration is saved and the EN-1000 reboots. After rebooting, the log-in screen is displayed.

c Go to *Using the EN-1000's Configuration*, on page 7.

Configuring the EN-1000 for IP Passthrough

Make sure you have performed step 6c on page 3.

Application Configuration Screen to use EN-1000 in IP Passthrough Mode

9 Do the following if the EN-1000 will send all traffic from the cellular network or the WAN network directly to the LAN port:

a Modify the following parameters, if required:

- **Device Name**
- **Passthrough Mode**
- **Management HTTPS Port**
- **Management IP**
- **enCloud Enabled**

b When you are satisfied with the parameters, select the **Save & Apply** button (in the lower right corner of the screen).

❖ The configuration is saved and the EN-1000 reboots. After rebooting, the log-in screen is displayed.

c Go to *Using the EN-1000's Configuration* on page 7.

Configuring the EN-1000 for VRRP Backup

Make sure you have performed step 6d on page 3.

Application Configuration Screen to use EN-1000 in VRRP Backup Mode

10 Do the following when the EN-1000 will act as a backup router in a VRRP set:

  a Modify the following parameters, if required:

- • **Device Name**
- • **LAN IP**
- • **LAN Netmask**
- • **VRRP ID**

- • **VRRP IP**
- • **VPN Mode**
- • **enCloud Enabled**

  b When you are satisfied with the parameters, select the **Save & Apply** button (in the lower right corner of the screen).

    ❖ The configuration is saved and the EN-1000 reboots. After rebooting, the log-in screen is displayed.

  c Go to *Using the EN-1000's Configuration* on page 7.

Using the EN-1000's Configuration

Make sure you have selected the **Save & Apply** button (in the lower right corner of the screen). That saves the configuration, reboots the EN-1000, and displays the log-in screen (recall the EN-1000 Log-In Screen shown on page 1).

Note: The EN-1000 reboots when the **Save & Apply** button is selected only after the initial configuration. Later configurations also use the **Save & Apply** button, but they do not require reboot.

11 When the log-in screen is displayed, log in again. (If you changed the password, use the new password.)

  ❖ The Status Overview screen is displayed. This screen provides quick information about the connections in the EN-1000.

EN-1000 Status Overview Screen

12 If you need to reconfigure the device mode (for example, to change the DHCP Server setting), select the **Quickstart** tab.

  ❖ The Application Configuration screen is displayed. The screen shows the current configuration parameters.

Returning to the Default Configuration

! **Caution:** If your EN-1000's configuration is not correct, try to reconfigure the EN-1000
• before returning to the default configuration. Do not perform the action described here
unless there is no other way to resolve problems with the EN-1000 configuration.

1   Power up the unit and wait for 2.5 minutes.

2   On the front of the chassis, insert the end of a paper clip into the hole marked **Reset**.

   Note: The paper clip will stop when it reaches the **Reset** button.

3   Press the paper clip in slightly and hold the button in, while watching the **Sys Status**
LED (also on the front of the chassis).

   Note: As you hold the **Reset** button in, the **Sys Status** LED will flash slowly one
time, then again a second time, then (possibly) a third time. Then it will flash fast.

4   When the **Sys Status** LED starts to flash fast, release the **Reset** button.

   ❖   At this point, the **Cell** LED and **Net Status** LED should flash at the same time.
This indicates that the unit is resetting back to factory defaults.

5   Wait one (1) full minute; then log into the EN™ router's management system (the GUI
menu) via a web browser.

6   When the Status Overview screen is displayed, select the **Quickstart** tab (returning
to) and proceed again with the EN-1000's quick configuration.