

Applying a System Software Patch to the EN-2000 Operating Software

Under rare circumstances, the EN-2000 router might experience an event or condition that needs immediate resolution. In such a case, a software patch for the EN-2000 will be available from your EN-2000 distributor for quick download and application. This document provides quick steps for applying a patch to the EN-2000's operating software.

Note: A patch resolves a specific concern. It does not replace standard software upgrades.

After you have downloaded the patch from your EN-2000 distributor, perform the following steps:

- 14 On a management terminal (for example, a PC), open a web browser. In the browser's address field, type the EN-2000's IP address. (For example, type **http://192.168.10.1** for the local LAN port. For an EN-2000 router at a remote site, type the required prefix **https://** and the static IP address for the EN-2000's WAN port or cellular wireless port.) Then press the console's **Enter** key (Figure G-1).

Figure G-1. Browser Address Field



- ❖ The browser displays the EN-2000 Log-In Screen (Figure G-2).

Figure G-2. EN-2000 Log-In Screen

Please enter your username and password.

<p>Username <input type="text"/></p> <p>Password <input type="password"/></p>
<p>Login Reset</p>

15 Type the user name and password.

Note: For the EN-2000™, 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 contained in information on a sticker on the bottom of the router's chassis. Retain that sticker; you will need that 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 log-in, the Status Overview Screen is displayed ([Figure G-3](#)). This screen provides a summary of the EN-2000's operation and its ports.

Figure G-3. Status Overview Screen

The screenshot shows the EN-2000 management interface. At the top left is the Encore Networks logo. To the right, it displays: EN2000 LTE Router Phone/MTN#: [redacted], Device Mode: Cell Failover, Cell Signal: -125dBm, and Operation Status: Online using WAN | Auto Refresh: on. A 'Changes: 0' indicator is in the top right corner.

The navigation menu includes: Status (selected), System, Network, Logout, and Quickstart. Below this is a sub-menu: Overview (selected), Routes, System Log, and Realtime Graphs.

The main content area is titled 'Status' and shows 'Uptime: 20h 30m 26s'. It is divided into several sections:

- System:** Device Name: EN2000, Device Model: EN 2000, Firmware Version: 17322 03 12, Local Time: Tue Mar 31 13:08:17 2015.
- Cellular Information:** Cell Signal: -125 dBm, IMEI: 359692051021120, SIM ID: [redacted], APN: ne01.VZWSTATIC.
- Network:** A table showing network interfaces and their status.

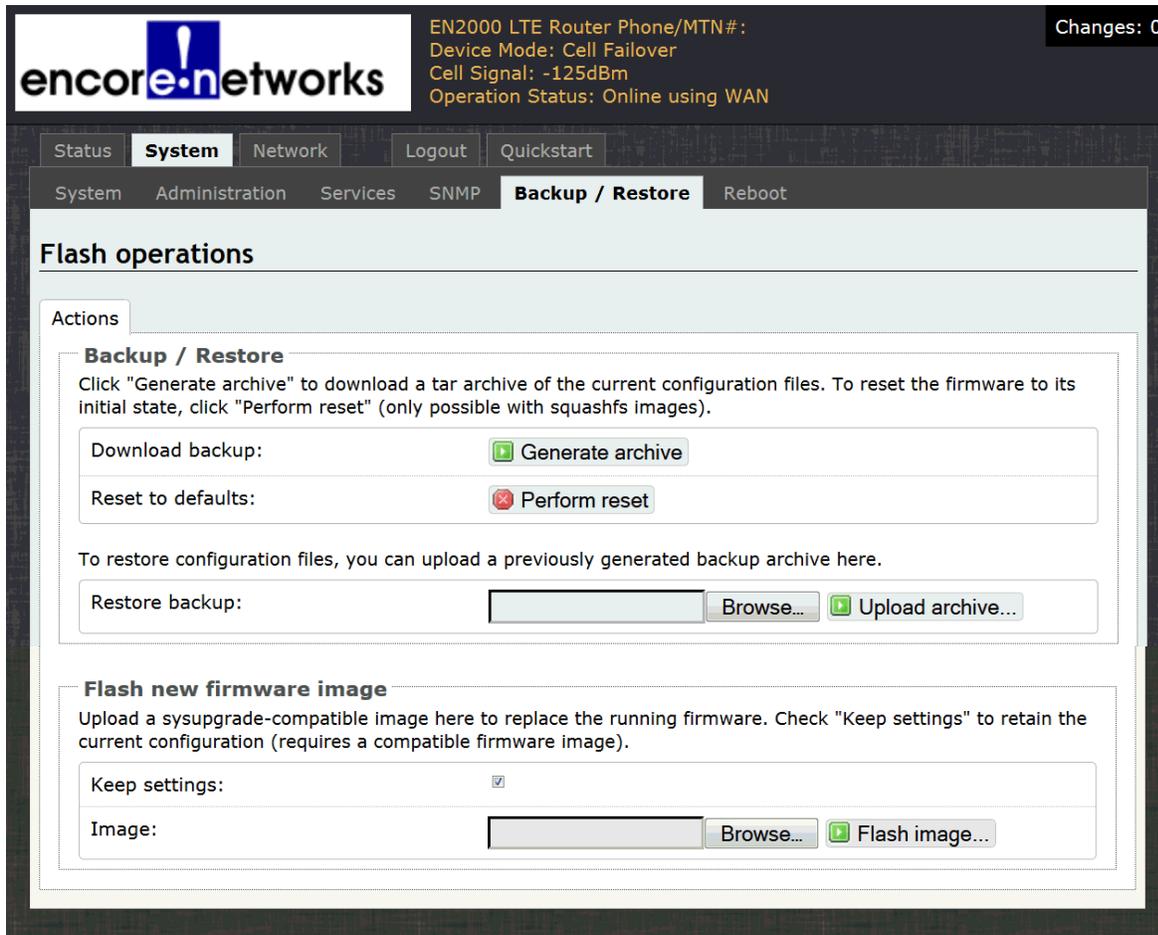
Network	Status
CELL eth2	Uptime: 0h 0m 0s MAC-Address: 94:B9:B4:18:BF:21 Protocol: dhcp RX: 61.26 KB (1178 Pkts.) TX: 9.65 MB (24565 Pkts.)
LAN br-lan	Uptime: 20h 29m 10s MAC-Address: 00:A0:EB:03:00:55 Protocol: static RX: 90.35 MB (125815 Pkts.) TX: 143.25 MB (141481 Pkts.) IPv4: 192.168.10.1/24
WAN eth1	Uptime: 20h 29m 5s MAC-Address: 00:A0:EB:03:00:56 Protocol: dhcp RX: 140.27 MB (144459 Pkts.) TX: 89.42 MB (118133 Pkts.) IPv4: 192.168.1.204/24
- DHCP Leases:** A table showing active DHCP leases.

Hostname	IPv4-Address	MAC-Address	Leasetime remaining
HP-p6-2016	192.168.10.198	38:60:77:82:55:1a	10h 9m 48s

- 16 On the EN-2000 management screen, select the **System** tab; then select the **Backup/Restore** tab.

❖ The Flash Operations Screen is displayed (Figure G-4).

Figure G-4. Flash Operations Screen



Note: We will use this screen to apply the software patch.¹

- 17 On the Flash Operations Screen, in the row for **Restore Backup**, select the **Browse** button.
 - ❖ A window opens so that you can select the directory and file.
- 18 Browse to the directory and select the patch file to upload—for example, **en2k_patch1.tar.gz**. (The file must have the extension "tar.gz.")
 - ❖ The names of the selected path and file are displayed in the **Restore Backup** field.
- 19 Then select the **Upload Archive** button.

Note: During the upload, the EN-2000's management system might display information similar to the message in [Figure G-5](#).

1. This screen can also be used for the following actions:
 - To save a back-up of the EN-2000's current configuration,
 - To restore a previous configuration to the EN-2000,
 - To reset the EN-2000 to its default configuration,
 - or
 - To load new operating system software into the EN-2000.

For information on those procedures, see [Software Management](#) in the document [EN-2000 System Administration](#).

Figure G-5. Message during Upload



- ❖ After the upload, the management system displays the Log-In Screen (recall [Figure G-2](#)).

20 On the Log-In Screen, type the user name and password. Then select the button to **Log In**.

Note: For the EN-2000™, 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 contained in information on a sticker on the bottom of the router's chassis. Retain that sticker; you will need that 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.

- ❖ The EN-2000 software management system opens. The Status Overview screen is displayed. (You can also reach this screen by selecting the **Status** tab, then the **Overview** tab.) This screen shows the firmware version ([Figure G-6](#), partial display of the screen). If a patch has been applied, the patch is also indicated.

Figure G-6. Firmware Version Listed on Status Overview Screen

EN 2000 Phone/MTN#: [redacted]
Device Mode: Cell Failover
Auto Refresh: **on**

encore networks

Status System Network Logout Quickstart

Overview Routes System Log Realtime Graphs EnCloud

Status

System	
Device Name	EN2000
Device Model	EN 2000
Firmware Version	17322 05 00
Build	247auto5w
Local Time	Thu Feb 15 17:57:05 2018
Operation Status	Online using WAN

21 To see detailed firmware information, select the **Network**, **Failover**, and **Advanced** tabs.

- ❖ The Troubleshooting Screen is displayed ([Figure G-7](#), partial display of the screen). The detailed firmware information is listed as the top line.

Figure G-7. Troubleshooting Screen

EN2000 LTE Router Phone/MTN# :
 Device Mode: Cell Failover
 Cell Signal: -125dBm
 Operation Status: Online using WAN | Auto Refresh: **on**

Changes: 0

encore!networks

Status System **Network** Logout Quickstart

Interfaces Hostnames Static Routes **Failover** Firewall Diagnostics QoS VPN VRRP DMNR

Overview Interfaces Members Policies Rules **Advanced**

Troubleshooting

Software versions :

17322 03 12 (117p1)

Firewall default output policy (must be ACCEPT) :

ACCEPT

Output of "ip route show" :

default via 192.168.1.1 dev eth1 proto static metric 10
 192.168.1.0/24 dev eth1 proto static scope link metric 10
 192.168.10.0/24 dev br-lan proto kernel scope link src 192.168.10.1

Output of "ip rule show" :

0: from all lookup local
 1001: from all fwmark 0x100/0xff00 lookup 1001
 1016: from all fwmark 0x1000/0xff00 lookup 1016

The firmware version detail might read as something similar to the following:

- 17322 03 12 (117p1)

Note: The suffix "p1," shown above, indicates that patch #1 has been applied.