

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 (for example, **admin**) and your password (for example, **encore!1**).
- ❖ 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 'Status Overview Screen' for an EN-2000 LTE Router. The top header includes the Encore Networks logo and system details: EN2000 LTE Router Phone/MTN#, Device Mode: Cell Failover, Cell Signal: -125dBm, and Operation Status: Online using WAN | Auto Refresh: on. The 'Changes: 0' indicator is in the top right.

The main navigation bar includes 'Status', 'System', 'Network', 'Logout', and 'Quickstart'. The 'Overview' sub-tab is active, with other options being 'Routes', 'System Log', and 'Realtime Graphs'.

The 'Status' section shows 'Uptime: 20h 30m 26s'. Below this are three main 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, APN: ne01.VZWSTATIC.
- Network:** A table showing the status of three interfaces:

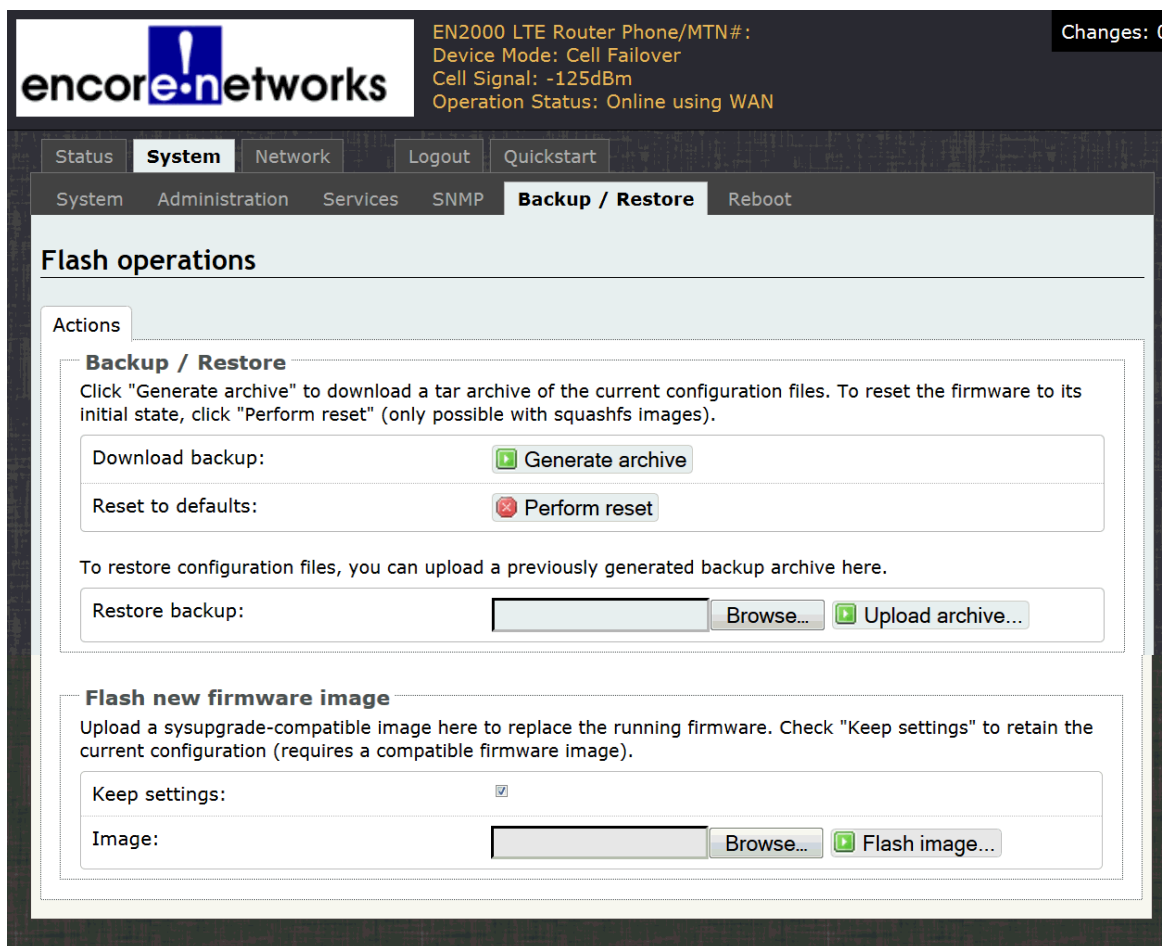
Network	Status
CELL eth2	Uptime: 0h 0m 0s MAC-Address: 94:B9:B4:18:BF:21 Protocol: dhcp RX: 61.26 KB (1178 Pkts.) TX: 9.65 MB (24565 Pkts.)
LAN br-lan	Uptime: 20h 29m 10s MAC-Address: 00:A0:EB:03:00:55 Protocol: static RX: 90.35 MB (125815 Pkts.) TX: 143.25 MB (141481 Pkts.) IPv4: 192.168.10.1/24
WAN 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

At the bottom, the 'DHCP Leases' section shows a table of active 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.

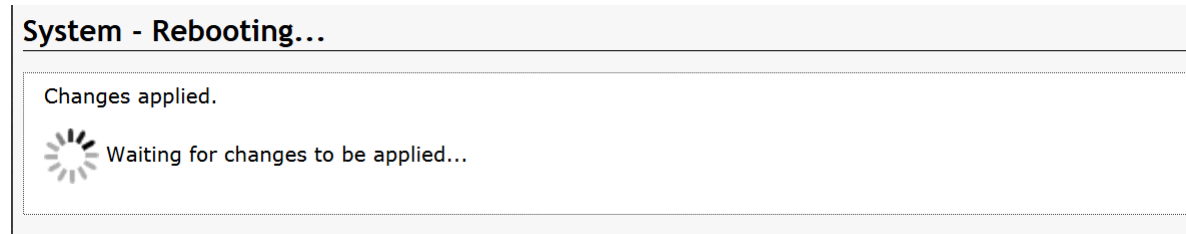
Note: During the upload, the EN-2000's management system might display information similar to the message in [Figure G-5](#).

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.

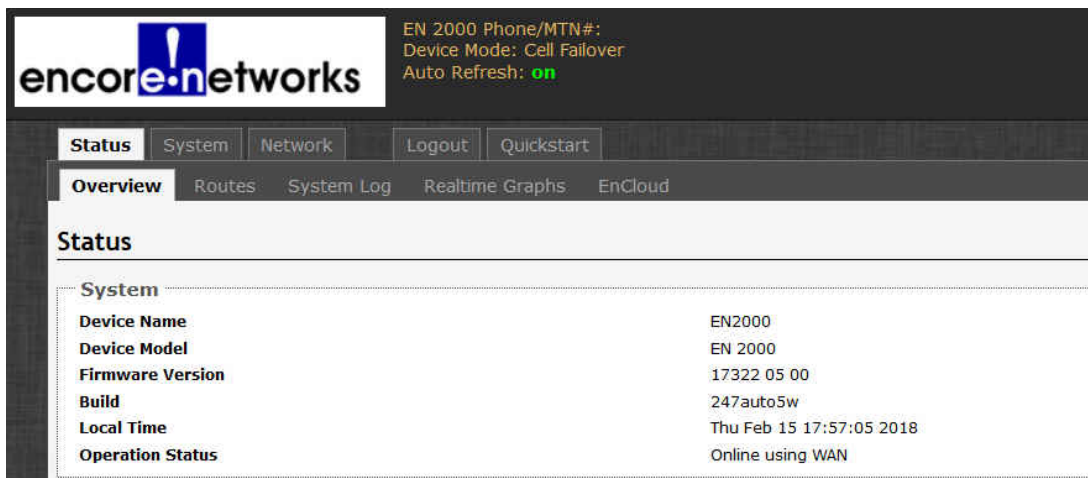
For information on those procedures, see [Software Management](#) in the document [EN-2000 System Administration](#).

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 (for example, **admin**) and your password (for example, **encore!1**). Then select the button to **Log In**.
- ❖ 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



- 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

The screenshot displays the Encore Networks management interface. At the top left is the logo. The top right shows system information: EN2000 LTE Router Phone/MTN#, Device Mode: Cell Failover, Cell Signal: -125dBm, and Operation Status: Online using WAN | Auto Refresh: on. A 'Changes: 0' indicator is also present. The navigation menu includes Status, System, Network (selected), Logout, and Quickstart. Under Network, there are sub-menus: Interfaces, Hostnames, Static Routes, Failover (selected), Firewall, Diagnostics, QoS, VPN, VRRP, and DMNR. The Failover sub-menu has Overview, Interfaces, Members, Policies, Rules, and Advanced (selected). The main content area is titled 'Troubleshooting' and contains the following information:

```
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.

