

# DMNR in the EN-1000

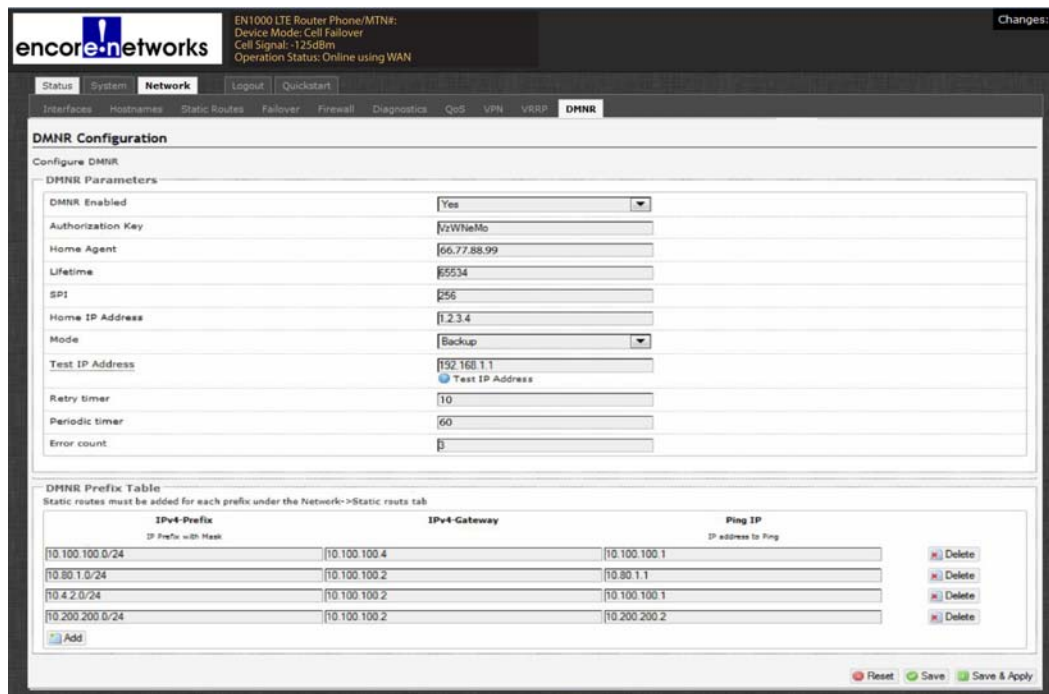
This document discusses implementation of dynamic mobile network routing (DMNR) in the EN-1000.

## 4.1 Setting Up DMNR

**Note:** Get all parameter values from your network administrator.

- 1 On the EN-1000 management system, select the **Network** tab.
- 2 Then select the **DMNR** tab.
  - ❖ The DMNR Configuration Screen is displayed (Figure 4-1).

Figure 4-1. DMNR Configuration Screen



**DMNR Configuration**

Configure DMNR

DMNR Parameters

DMNR Enabled	Yes
Authorization Key	!zWheMo
Home Agent	66.77.88.99
Lifetime	65534
SP1	256
Home IP Address	1.2.3.4
Mode	Backup
Test IP Address	192.168.1.1
	<input checked="" type="radio"/> Test IP Address
Retry timer	10
Periodic timer	60
Error count	0

**DMNR Prefix Table**  
Static routes must be added for each prefix under the Network->Static routes tab

IPv4 Prefix <small>IP Prefix with Mask</small>	IPv4 Gateway	Ping IP <small>IP address to Ping</small>	
10.100.100.0/24	10.100.100.4	10.100.100.1	Delete
10.80.1.0/24	10.100.100.2	10.80.1.1	Delete
10.4.2.0/24	10.100.100.2	10.100.100.1	Delete
10.200.200.0/24	10.100.100.2	10.200.200.2	Delete

Buttons: Add, Reset, Save, Save & Apply

- 3 On the DMNR Configuration Screen, under the heading **DMNR Parameters**, configure the following items:

- **DMNR Enabled**      Yes

- **Authorization Key** A character string used for access to the mobile network. Get this value from your network administrator.
- **Home Agent** IP address for registering the mobile device on the mobile network. Get this value from your network administrator.
- **Lifetime** Number of seconds until the authorization key expires. Get this value from your network administrator.
- **SPI** The security parameter index. Get this value from your network administrator.
- **Home IP Address** Consult your network administrator for the value to use.
- **Mode** **Primary** if the cellular wireless connection is the default route  
**Note:** If this connection fails, the Ethernet connection is used immediately.  
**Backup** if the Ethernet connection is the default route  
**Note:** If this connection fails, the cellular wireless connection is used immediately.
- **Test IP Address** The IP address to use for testing the cellular wireless connection  
**Note:** This parameter is displayed only if the **Mode** is **Backup**.
- **Retry Timer** The number of seconds to wait after sending a registration request before sending another registration request
- **Periodic Timer** The number of seconds to wait after timing out before starting another set of registration requests
- **Error Count** The maximum number of times to request registration before timing out

**4** Under the heading **DMNR Prefix Table**, view the prefix table.

**5** Do one of the following:

- a** If you wish to modify a record, make the changes in one or more fields of that record.
- b** If you wish to delete a record, select the **Delete** button at the far right of that record.
- c** If you wish to add a record, select the **Add** button at the lower left of the screen.

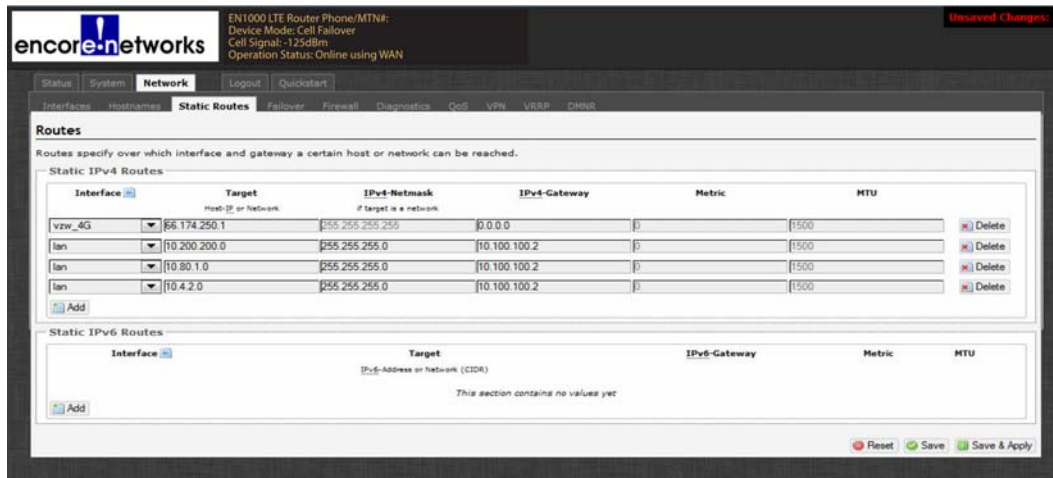
❖ A new, empty record is displayed. Perform [step 5](#) for that new record.

**6** When you have finished configuring the DMNR parameters and prefix table, select the **Save & Apply** button.

❖ The changes are saved and are used immediately.

- 7 On the EN-1000 management system, select the **Network** tab.
- 8 Then select the **Static Routes** tab.
  - ❖ The Static Routes Screen is displayed (Figure 4-2).

Figure 4-2. Static Routes Screen



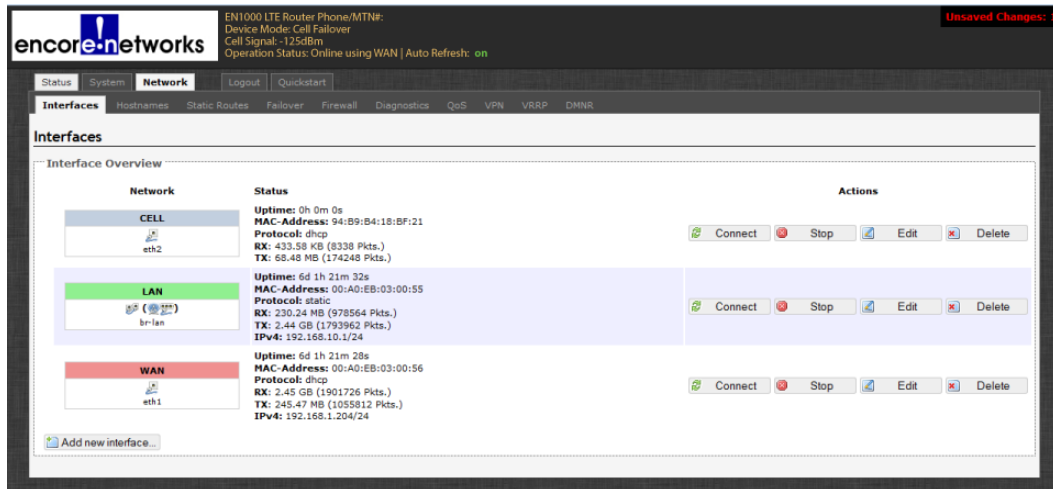
- 9 Under the heading **Static IPv4 Routes**, view the static routing table.
- 10 Do one of the following to configure a static route for each entry in the DMNR Prefix Table (recall Figure 4-1):
  - a If you wish to modify a record, make the changes in one or more fields of that record.
  - b If you wish to delete a record, select the **Delete** button at the far right of that record.
  - c If you wish to add a record, select the **Add** button at the lower left of the screen.
    - ❖ A new, empty record is displayed. Perform [step 10](#) for that new record.
- 11 When you have finished configuring the static routing table, select the **Save & Apply** button.
  - ❖ The changes are saved and are used immediately.

## 4.2 Setting the APN

To set the access point number (APN) for the cellular wireless interface, perform the following steps.

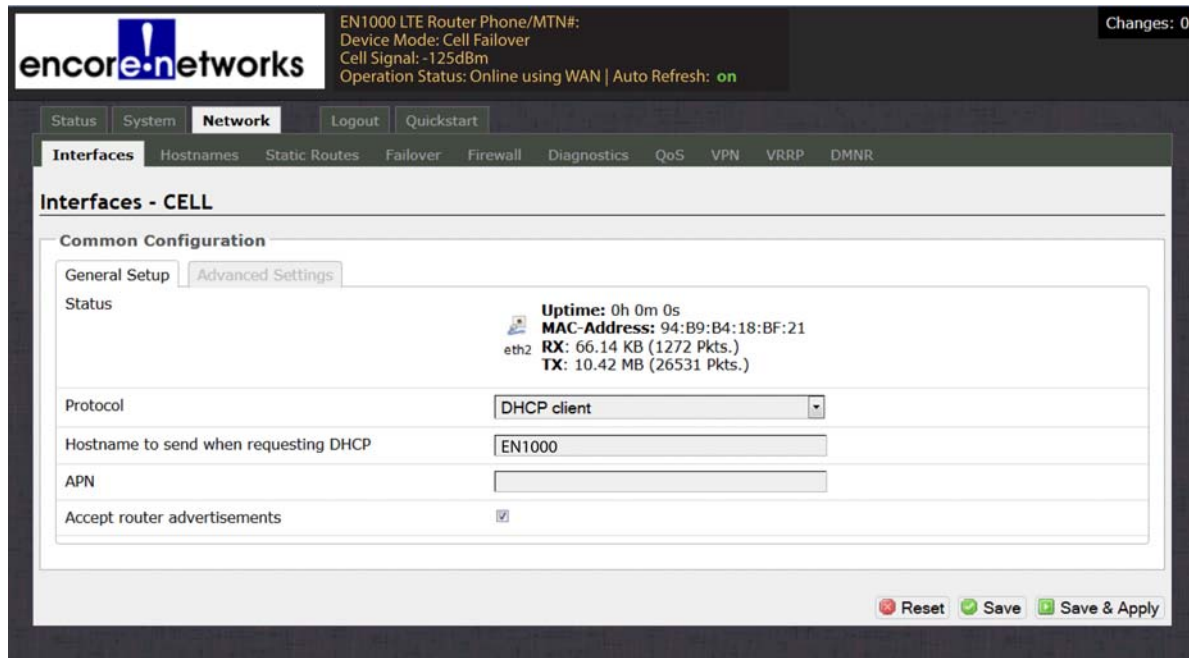
- 1 On the EN-1000 management system, select the **Network** tab.
- 2 Then select the **Interfaces** tab.
  - ❖ The Network Interfaces Screen is displayed (Figure 4-3).

Figure 4-3. Network Interfaces Screen



- 3 On the Network Interfaces Screen, select the **Edit** button in the row for the **Cell** interface.
  - ❖ The Cellular Wireless Interface Screen for General Set-Up is displayed (Figure 4-4). The APN might be displayed automatically. If your network administrator has designated a different APN to use, continue to [step 4](#).

Figure 4-4. Cellular Wireless Interface Screen for General Set-Up



- 4 In the **APN** field, type the access point number (Get the APN's value from your network administrator.)
- 5 Then select the **Save & Apply** button at the lower right of the screen.
  - ❖ The new APN is assigned to the EN-1000.