

## 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).

and the second s	on Status: Online using WAN			
Status System Network Logout				
Interfaces Hostnames Static Routes Fa	lover Firewall Diagnostics QoS VPN VRI	DMNR		
MNR Configuration				
onfigure DMNR				
DMNR Parameters				
DMNR Enabled	Yes			
Authorization Key	VzWNeMo	8		
Home Agent	66.77.88.99			
Lifetime	65534			
SPI	\$56			
Home IP Address	1.2.3.4			
Mode	Backup			
Test IP Address	192.168.1.1			
	Test IP Address			
Retry timer	10			
Periodic timer	60			
Error count	þ			
DMNR Prefix Table				
Static routes must be added for each prefix und	or the Network->Static routs tab			
IPv4-Prefix IP Prefix with Mask	IPv4-Gateway		ng IP	
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	R Delete	
10.4.2.0/24	(10.100.100.2	10.100.100.1	E Delete	
10.200.200.0/24	10.100.100.2	10 200 200 2	💌 Delete	
Add				

Figure 4-1. DMNR Configuration Screen

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

<ul> <li>Authorization Key</li> </ul>	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	<b>Primary</b> if the cellular wireless connection is the default route
	<b>Note:</b> If this connection fails, the Ethernet connection is used immediately.
	Backup if the Ethernet connection is the default route
	<b>Note:</b> 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
	<b>Note:</b> This parameter is displayed only if the <b>Mode</b> is <b>Backup</b> .
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

	Network Logout C						
iterfaces Host	Static Routes	over Firewall Diagnostics Q	OS VPN VRRP DMNR				
utes							
utes specify ov Static IPv4 R		y a certain host or network can	be reached.				
Interface		IPv4-Netmask if target is a network	IPv4-Gateway	,	1etric	МТО	
vzw_4G	▼ 66.174.250.1	255 255 255 255	0.0.0.0	þ	1500		E Delete
lan	10 200 200 0	255.255.255.0	10.100.100.2	p	1500		× Delete
lan	10.80.1.0	255.255.255.0	10.100.100.2	0	1500		Delete
lan	▼ 10.4.2.0	255.255.255.0	10.100.100.2	0	1500		E Delete
Add							
Static IPv6 R	outes						
Inte	rface 🖻	Target IPv6-Address or Network	x (CIDR)	19	vő-Gateway	Metric	MTU
Add			This section contains no values y	e			

- 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.

- 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

encor <mark>e n</mark> etworks	EN1000 LTE Router Phone/MTN#: Device Mode: Cell Failover Cell Signal - 125dBm Operation Status: Online using WAN   Auto Refresh: on							Unse	aved Char	iges:
Status System Network Interfaces Hostnames Static Interfaces	Logout Quickstart Routes Failover Firewall Diagnostics QoS VPN VRR	P DMNR								
Interface Overview	Status Uptime: 0h 0m 0s				A	ctions				
CELL eth2	MAC-Address: 94:B9:B4:18:BF:21 Protocol: dhcp RX: 433.58 KB (8338 Pkts.) TX: 68.48 MB (174248 Pkts.)	2	Connect		Stop		Edit	×	Delete	
LAN 影(金型) brian	Uptime: 6d ih 21m 32s PAC-Address: 00:A0:E8:03:00:55 Protocol: static RX: 23:02 4H 6 (972564 Pkts.) TX: 2.44 GB (1739562 Pkts.) IPv4: 152:168:10.1724	8	Connect	8	Stop		Edit		Delete	
WAN E eth1	Uptime: 6d 1h 21m 20s MAC-Address: 00:A0:E8:03:00:56 Protoci: drap RX: 2:45 GB (1901726 Pkts.) TX: 2:45:47 MB (1055812 Pkts.) IPv4: 192.165.1.204/24	ø	Connect	0	Stop		Edit	×	Delete	
Add new interface										

- **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.

	Router Phone/MTN#: :: Cell Failover		Changes:
ancore notworks Cell Signal:-			
Status System Network Logout Qui			
Interfaces Hostnames Static Routes Failow		RP DMNR	
	a meana pagnostes quo ama and		
Interfaces - CELL			
Common Configuration			
General Setup Advanced Settings			
Status	Uptime: 0h 0m 0s MAC-Address: 94:B9:B4:18:BF:	21	
	eth2 RX: 66.14 KB (1272 Pkts.) TX: 10.42 MB (26531 Pkts.)		
Protocol	DHCP client	•	
Hostname to send when requesting DHCP	EN1000		
APN			
Accept router advertisements			
		🥲 Reset 🛛 Save 🛄	Save & Apply

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.