
BANDIT II and BANDIT III Expanded Configuration Guide

The BANDIT II™ and the BANDIT III™ are ROHS-compliant devices in the BANDIT™ product family. The BANDIT II and the BANDIT III include chassis models that have been hardened for performance in environmentally harsh conditions. This guide presents information and procedures for configuration of the BANDIT II and BANDIT III software.

Before configuration, make sure you have followed the steps in the [BANDIT II Hardware Installation Guide](#) or the [BANDIT III Hardware Installation Guide](#).

After you have installed the BANDIT™ device and have connected it to telephony equipment and a power source, you can connect the device to a control console and configure its software.

3.1 Preparing Configuration Information

The BANDIT™ products use the Encore Legacy-to-IP Operating System™ (ELIOS™) software. (You might wish to review the information in [Using the ELIOS Software](#).)

- !** **Caution:** If you want the BANDIT device to be configured automatically, do not use the menus. Before opening the ELIOS™ software, read [Using FastCONNECT](#). (If you wish to use FastCONNECT™, you must do so before using the device's configuration menus.)

Note: If you wish to use a streamlined installation and configuration, see the [BANDIT II and BANDIT III Quick Configuration Guide](#).

Gather all required information. Before you start these procedures, consult your network administrator to determine the information required to set the BANDIT device up for use in your network. Use the [Site Planning Worksheets](#) as checklists for this information. Necessary information includes the following:

- The device's IP address
- The device's site name
- The device's passwords
- The device's VPN configuration
- Interface types (for example, DTE or DCE), protocols, and other requirements for the device's ports

- Network and routing functions the device will perform
- Other pertinent network information

For further discussion and to use the BANDIT's ELIOS™ software to configure your BANDIT device, see the following:

- [Section 3.3, *The BANDIT's Plug-and-Play Mode*](#), on page 3
- [Section 3.2, *Connecting a Supervisory Terminal and Logging in to the BANDIT*](#), on page 2
- [Section 3.4, *Using the Main Menu*](#), on page 5
- [Section 3.5, *Configuring the Software*](#), on page 6

For more information about configuring other features or configuring specific protocols, see one of the following documents:

- [Logical Ports](#)
- [Protocols Module](#)
- [Routing with SNA](#)
- [The BANDIT Products in Virtual Private Networks \(VPNs\)](#)

For configuration of software management features, including SNMP, Port Data Capture, and statistics, see [System Management](#).

For information on upgrading the software, see [Loading Operating Software into a BANDIT Product](#).

If you have questions or concerns after you have followed these procedures, contact Encore Networks, Inc., at support@encorenetworks.com, 703-787-4625 (fax), or 703-318-4350 (voice).

3.2 Connecting a Supervisory Terminal and Logging in to the BANDIT

How to Connect the Supervisory Terminal and Log In

- 1 Use the appropriate cable to connect the Supervisory port to your supervisory equipment (such as a PC).

Note: You can use a DB9 cable to connect the Supervisory port of a BANDIT II or a BANDIT III to the DB9 serial port (the COM port) of a management terminal (such as a PC) that you plan to use. Contact Encore Networks, Inc., if you need this cable.

See [DB9 Supervisory Port](#) for the Supervisory port's pinouts.

- 2 On the PC or terminal, open a telnet session to the device or open a terminal-emulation routine (such as HyperTerminal) to the device.

If you are connecting through the BANDIT's Supervisory port, use the settings in [Table 3-1](#) to establish communication between the terminal console and the BANDIT device.

Table 3-1. Supervisory Port Connection Settings

Parameter	Value
Bits per second	9600
Data bits	8
Parity	None
Stop bit	1
Flow control	Hardware

Note: If you are connecting to one of the BANDIT's Ethernet ports, and if you have programmed the terminal port as TCP/IP, you are using IP routing to connect to the BANDIT as a remote user.

- 3 Press **Enter** on the terminal console's keyboard to autoconnect to the attached device.
 - ❖ After successful log-in, the program information and copyright information appear.

```

WELCOME TO BANDIT --15535.0208
Copyright ENCORE NETWORKS Inc., 2002-2003.
```

❖ Then the Main Menu appears.

- 4 Continue to [Section 3.4, Using the Main Menu](#), on page 5.

 **Caution:** After the unit has been configured, save (**Write**) the configuration. Then select **Exit Session** before disconnecting the terminal, so that communication is not disrupted.

3.3 The BANDIT's Plug-and-Play Mode

Note: All current BANDIT products ship with the plug-and-play feature disabled unless your order requested the plug-and-play feature.

A BANDIT device can be shipped as a plug-and-play device so that it can be up and running quickly in standard installations. (In general, only the BANDIT IP is shipped as plug-and-play; the other products in the BANDIT family come with factory defaults. You can change any unit's configuration to plug-and-play, save the configuration, and reset the unit.)

In plug-and-play mode, the BANDIT device is a DHCP client on the WAN (internet) port, and is a DHCP server on the LAN (intranet) port. When the BANDIT powers up in plug-and-play mode, it is assigned its public IP address by the WAN's DHCP server. (Typically, the WAN's DHCP server is a device maintained by your internet service provider, or ISP.) Then the BANDIT, as the local DHCP server, assigns private IP addresses to DHCP clients on the local network. (The BANDIT's DHCP server has a default IP address pool, which can be changed.)

 **Warning:** If your network already has a DHCP server, disable the BANDIT IP's plug-and-play mode before you connect the BANDIT IP to the network. Otherwise, there will be contention between the DHCP servers.

3.3.1 Using Plug-and-Play Mode

To use the BANDIT IP's plug-and-play features, do the following:

- 1 Follow the instructions for installing the hardware, as described in the [BANDIT II Hardware Installation Guide](#) or the [BANDIT III Hardware Installation Guide](#).
- 2 Boot up the BANDIT, as described in [Section 3.2, Connecting a Supervisory Terminal and Logging in to the BANDIT](#), on page 2.

Note: After logging in, you may wish to review the LAN port's DHCP settings. See [Primary and Secondary BootP/DHCP Addresses \(DHCP Settings\)](#), in [IP Routing in the BANDIT Products](#).

3.3.2 Disabling Plug-and-Play Mode

To disable the BANDIT IP's plug-and-play features, do the following:

- 1 Follow the instructions for installing the hardware (but do not connect the BANDIT ports to the network devices). See one of the following:
 - [Setting Up the Hardware](#) in the [BANDIT II Hardware Installation Guide](#)
 - [Setting Up the Hardware](#) in the [BANDIT III Hardware Installation Guide](#)
- 2 Then boot up the BANDIT. See [Section 3.2, Connecting a Supervisory Terminal and Logging in to the BANDIT](#), on page 2.
- 3 In the Main Menu, select **Load Factory Defaults**. See Step 1a in [Section 3.5.2, Configuring Individual Parameters](#), on page 9.
- 4 Then select **Write**, then **Reset**. See the following sections:
 - [Section 3.6, Write Configuration](#), on page 23
 - [Section 3.7, Reset Unit](#), on page 25
- 5 After the BANDIT restarts, select **Typical Configurations**. See [Section 3.5.3, The Typical Configurations Menu](#), on page 11.
- 6 In the Typical Configurations menu, select the **LAN** port and review its settings. See [Port Data Configuration](#).
- 7 When you have verified that the BANDIT's default factory configuration matches your needs (or when you have changed the configuration as needed), save the configuration. See the following sections:
 - [Section 3.5.1, Start-Up Configurations](#), on page 6
 - [Section 3.5.2, Configuring Individual Parameters](#), on page 9
 - [Section 3.5.3, The Typical Configurations Menu](#), on page 11
 - [Section 3.5.4, The Advanced Configurations Menu](#), on page 15
 - [Section 3.6, Write Configuration](#), on page 23
- 8 Connect the BANDIT's WAN and LAN ports to the networks.
- 9 Then connect the BANDIT's modem port, serial port, and expansion port to the devices the BANDIT will use.

- 10 Reset the BANDIT, as described in [Section 3.7, Reset Unit](#), on page 25.
- 11 If you wish to exit the BANDIT session, see [Section 3.9, Exiting the BANDIT Session](#), on page 36.

3.4 Using the Main Menu

The Main Menu is displayed when you log onto the BANDIT's ELIOS software. From the Main Menu, you can configure and operate the BANDIT device.

Note: The screens shown in this document are examples; the choices shown on your BANDIT device's menus depend on the software version installed in the device.

For figures, tables, and configurations not addressed in this document, see the [BANDIT II Hardware Installation Guide](#) or the [BANDIT III Hardware Installation Guide](#).

- 1 To get to the Main Menu, connect a control terminal to the supervisory port and log in. For details, see [Connecting a Supervisory Terminal and Logging in to the BANDIT](#).
 - ❖ After you have logged in, the Main Menu appears.

Note: The device name appears at the top of all menus. To change the device name, see [Identifying the BANDIT Device in the Network](#).

```
BANDIT
Main Menu
-----
1) QuickStart Config Builder

2) Typical Configurations
3) Advanced Configurations
4) Tools

V) View Current Unit Status
L) Load Factory Defaults
P) Load Plug and Play Defaults
W) Write Configuration
R) Reset Unit
X) eXit Session
S) Statistics
Y) sYstem Administration

Enter Choice :
```

Note: Whenever you wish to return to a higher level in the BANDIT menus, press **Escape**. To reach the Main Menu from any other menu, press **Ctrl Z**.

Note: If you leave the console idle for five minutes, the connection will time out. One minute before the time-out is to occur, the BANDIT sends you the following message.

```
Warning! Inactivity Timeout Pending!
Connection will be broken in 1 minute unless activity resumes.
This will cause any unsaved configuration changes to be lost!
Press any key to prevent immediate timeout.
```

Note: To maintain the connection, press any key. The menu you were using will re-display. If you do not respond within one minute, the connection times out.

Connection Timed Out

- ! **Caution:** The Supervisory connection to the BANDIT device times out after five (5) minutes of console inactivity. If you have changed the device's configuration and wish to use the new configuration, save (write) the configuration before you leave the console. See [Write Configuration](#), on page 23.

3.5 Configuring the Software

See the following discussions:

- [Section 3.5.1, Start-Up Configurations](#), on page 6
- [Section 3.5.2, Configuring Individual Parameters](#), on page 9
- [Section 3.5.3, The Typical Configurations Menu](#), on page 11
- [Section 3.5.4, The Advanced Configurations Menu](#), on page 15
- [Section 3.5.5, Device Addresses](#), on page 17
- [Port Configuration Module](#)
- [Section 3.5.7, Virtual Private Network Connections](#), on page 23

Note: Encore Networks, Inc., recommends that the BANDIT device's configuration be generated by following the procedures in [Section 3.5.1, Start-Up Configurations](#) (on page 6), to ensure integrity of the configuration. In addition, modifications to the configuration should be performed only by an experienced user, preferably in consultation with an Encore Networks representative.

3.5.1 Start-Up Configurations

The BANDIT menu provides several templates for configurations that your network may use. You can select a template (also known as a start-up scenario), change the scenario's IP addresses and related information to reflect the values in your network, and load the scenario into the BANDIT device.

The following procedure provides guidelines for using a configuration template.

Note: If you want the BANDIT device to keep the configuration, be sure to save (write) the configuration and reset the device. This is discussed in [Step 6](#) and [Step 7](#) of the procedure.

How to Use a Configuration Template

- 1 Log in to the BANDIT.

- 2 When the Main Menu appears, select **Quickstart Config Builder**. (For details, see [Section 3.4, Using the Main Menu](#), on page 5.)

❖ The Startup Config Options menu is displayed. The options shown depend on the BANDIT model you are using.

```
Startup Config Options
-----
1) GENERIC

Enter Choice :
```

- 3 On the Startup Config Options menu, select a set of configuration templates—for example, **Generic**.

❖ The menu for Startup Configuration Scenarios appears. This menu reflects the set of scenarios you selected.

- **Generic** start-up options:

```
Startup Configuration Scenarios
-----
1) PPPoE WAN Router
2) PPPoE WAN VPN Gateway(Initiator)
3) PPPoE WAN VPN Gateway(Initiator) With Dial Backup
4) PPPoE WAN VPN Gateway(Terminator)
5) PPPoE WAN VPN Gateway(Terminator) With Dial Backup
6) Ethernet WAN Router
7) Ethernet WAN VPN Gateway(Initiator)
8) Ethernet WAN VPN Gateway(Initiator) With Dial Backup
9) Ethernet WAN VPN Gateway(Terminator)
A) Ethernet WAN VPN Gateway(Terminator) With Dial Backup

Enter Choice :
```

- 4 Select one of the listed set-ups.

❖ The menu for the selected set-up (scenario) is displayed. (The menu shown below is for a **PPPoE WAN VPN Gateway, Initiator**.)

Note: At this point, all IP addresses, etc., have null values. Before you can load the configuration into the BANDIT, you must enter values that reflect your network's settings.

```
Startup Configuration Parameters
-----
1) System Name      :
2) LAN Interface IP : 0.0.0.0      /0.0.0.0
3) LAN Private NAT IP : 0.0.0.0      /0.0.0.0      masq:0.0.0.0
4) WAN Interface IP : Dynamic
5) PPPoE User Name  :
6) PPPoE Password   :
7) Primary DNS Server : 0.0.0.0
8) VPN Gateway      :
9) VPN User ID      :
A) VPN Pre-Shared Key :
B) Remote Subnet    : 0.0.0.0/0.0.0.0

L) Load Above Config
R) Reset (Load, Write and Reset)
Z) Clear All Fields

Enter Choice :
```

At any point, if you need to delete the configuration and start over, select **Clear All Fields**. (This is described in Step 6c of this procedure.)

Note: When the **WAN Interface IP** is **Dynamic**, the WAN interface is a DHCP client. When the BANDIT starts up, the WAN's DHCP server will assign the BANDIT a WAN IP address. For more information on DHCP, see [DHCP Settings](#).

5 For each item (parameter) in the menu, do the following:

a Select the item (for example, **LAN Interface IP**).

❖ A prompt requests the parameter's value.

```
Enter IP Address :
```

b Type a value for the item, and press **Enter**.

c If the item requests additional information, enter that information.

❖ When the item has been configured, the scenario's menu is displayed again.

6 After you have performed [Step 5](#) for each item (parameter) in the menu, do one of the following:

a Select **Load Above Config**.

❖ The following prompt asks for confirmation. Go to [Step 7](#).

```
Caution: Existing configurations will be over written
Do you want to Continue?(Y/N)[N]:
```

b Select Reset (Load, Write and Reset).

- ❖ The following prompt asks for confirmation. Go to [Step 7](#).

```
Caution: Existing configurations will be over written
Do you want to Continue?(Y/N)[N]:
```

c Select Clear All Fields.

- ❖ The following prompt asks for confirmation.

```
This Clears All the above Fields, Continue?(Y/N)[N]:
```

- Do one of the following:
 - ◆ If you wish to reconfigure, enter **Y**.
 - ❖ All fields in the menu are reset to null values. Go to [Step 5](#).
 - ◆ If you do not wish to reconfigure, enter **N** or press **Escape** to return to the Startup Configuration Scenarios menu.
 - ❖ The configuration retains the settings you have entered, but they are not yet permanent. Go to [Step 5](#).
- 7** To load the new configuration, enter **y**.
- ❖ The configuration is loaded into the BANDIT.
- Note:** When you write (save) a configuration entered on the Quickstart menu, other required settings are updated automatically. For example, when you enter the device's IP address, a path is automatically set up in the IP routing table to direct this IP address to the device's LAN port.
- ❖ If you selected **Reset (Load, Write, and Reset)**, the configuration is also saved. This makes the configuration permanent (unless you change it again). Then the BANDIT resets.
- 8** When the configuration has finished loading, press **Escape** until you return to the Main Menu. (Go to [Section 3.4, Using the Main Menu](#), on page 5.)
- 9** To save the configured scenario (if it has not already been saved), do the following:
- a Write** the configuration. (See [Section 3.6, Write Configuration](#), on page 23.)
 - b Reset** the BANDIT. (See [Section 3.7, Reset Unit](#), on page 25.)

3.5.2 Configuring Individual Parameters

- 1 From the Main Menu, select the item you would like to use. (If you type a character that is not a valid selection, the menu in use re-displays.) Study the following examples:

- a** To disable the BANDIT IP's plug-and-play features (or to restore the default configuration for the original BANDIT or the BANDIT Plus), select **Load Factory Defaults**.
- ❖ The Default Configuration menu appears. Go to [Section 3.8.5, Load Factory Defaults](#), on page 35.
- After you load the factory default configuration, the BANDIT's settings for plug-and-play mode are replaced by a configuration that you can customize for your site. Perform the procedures in [Section 3.6, Write Configuration](#) (on page 23), and [Section 3.7, Reset Unit](#) (on page 25). Then return to this section, [Section 3.4, Using the Main Menu](#) (on page 5).
- b** To use the BANDIT's plug-and-play features, select **Load Plug and Play Defaults**.
- ❖ The menu for Factory Defaults with DHCP Server and Client appears. Select **Yes** or **No**.

```
Factory Defaults with DHCP Server and Client
-----
Y) Yes
N) No

Are You Sure? :
```

If you load the plug-and-play default configuration, perform the procedures in [Section 3.6, Write Configuration](#) (on page 23), and [Section 3.7, Reset Unit](#) (on page 25). Then see [Section 3.3, The BANDIT's Plug-and-Play Mode](#) (on page 3).

- c** To configure the system settings, including passwords, select **System Administration**.
- ❖ The password entry screen for System Administration appears. Go to [Section 3.8.4, The System Administration Menu](#), on page 30.
- Note:** Default passwords are listed in [Default Passwords](#).
- d** To view and to set up standard configurations, select **Quickstart Config Builder**.
- ❖ The Startup Config Options menu appears. Go to [Section 3.5.1, Start-Up Configurations](#), on page 6.
- e** To view and to set up a typical configuration, select **Typical Configurations**.
- ❖ The Typical Configurations menu appears. Go to [Section 3.5.3, The Typical Configurations Menu](#), on page 11.
- f** To view and to set up advanced features of configurations, select **Advanced Configurations**.
- ❖ The Advanced Configurations menu appears. Go to [Section 3.5.4, The Advanced Configurations Menu](#), on page 15.
- g** To use system tools such as ping, select **Tools**.
- ❖ The System Tools menu appears. Go to [System Tools](#) in [System Management](#).

h To monitor the BANDIT's status, select **View Current Unit Status**.

❖ The Current Status menu appears. Go to [Section 3.8.3, View Current Unit Status](#), on page 29.

i To save the BANDIT's new configuration, select **Write Configuration**.

❖ The Write Configuration menu appears. Go to [Section 3.6, Write Configuration](#), on page 23.

j To reset the BANDIT, select **Reset Unit**.

Note: Resetting loads the saved configuration. If you wish to use the settings you have just configured, make sure you select **Write Configuration** before you select **Reset Unit**.

❖ The Reset Unit menu appears. Go to [Section 3.7, Reset Unit](#), on page 25.

k To view the BANDIT's current statistics, select **Statistics**.

❖ The Statistics menu appears. Go to [Section 3.8.2, Statistics](#), on page 27.

2 To configure the BANDIT's Virtual Private Network (VPN) connections, you must go through the Advanced Configurations menu or the Typical Configurations menu. See [Configuring a BANDIT Product for Virtual Private Networks](#).

Note: For more information about VPNs, see [The BANDIT Products in Virtual Private Networks](#).

3 To end communication with the BANDIT, select **Exit Session**. Go to [Section 3.9, Exiting the BANDIT Session](#), on page 36.

Note: When you are using the menu, you can press the **Escape** key to return to the menu for the previous (higher) level.

If you wish to return to the Main Menu from any point in the menu structure, you can hold down the **Control** key and press **Z**.

3.5.3 The Typical Configurations Menu

1 To see the Typical Configurations menu, log in to the BANDIT. (For details, see [Section 3.4, Using the Main Menu](#), on page 5.)

2 When the Main Menu appears, select **Typical Configurations**.

❖ The Typical Configurations menu appears.

```

Typical Configurations Menu
-----
1) System Configuration
2) IP Interfaces
3) IP Static Routes
4) VPN Profiles
5) IP/VPN Policies
6) NAT Profiles
7) DNS/DHCP Servers
8) Configure Firewall

L) LAN      : EtherNet          DHCP Server 192.168.101.1  ETHERNET
W) WAN      : EtherNet          DHCP Client 0.0.0.0        ETHERNET
M) MODEM    : Point-to-Point    MODEM                INTERNAL
S) SERIAL   : Frame Relay       SERIAL                NO CABLE

Enter Choice :

```

3 To configure the BANDIT's IP address and local device name, select **System Configuration.**

❖ The Configure System Parameters menu appears. See [Identifying the BANDIT Device in the Network](#).

```

Configure System Parameters
-----
1) System IP Address : 192.168.101.1
2) System Name      : BANDIT

Enter Choice :

```

4 To configure the BANDIT's IP Interface Table (also called the RIP Routing Table), select **IP Interfaces.**

❖ If the RIP Routing Table contains any records, the table appears. Otherwise, the BANDIT asks for information for the first record in the table. Go to [Step 6 in Section 2.1.2.3, Configuring RIP Routing](#), in [IP Routing in the BANDIT Products](#).

Entry	IP Address	Net Mask	Gpt Name	Next Router	Mode	MTU
1	Unnumbered	N/A	WAN	N/A	Off	1500
2	192.168.1.1	255.255.255.0	MODEM	0.0.0.0	Off	1500
3	192.168.101.1	255.255.255.0	LAN	0.0.0.0	Off	1500

Add, Modify, or Delete an Entry? (Enter A, M, or D):

5 To configure the BANDIT's RIP Static Routing Table, select **IP Static Routes.**

❖ If the RIP Static Routing Table has any records, the table appears. Otherwise, the BANDIT asks for information for the first record in the table. Go to [Step 6 in Section 2.1.2.3.3, RIP Static Routing Table](#), in [IP Routing in the BANDIT Products](#).

Entry	IP Address	Net Mask	Next Router	Path Name	Hops
1	0.0.0.0	0.0.0.0	14.15.16.1	n/a	2
2	0.0.0.1	0.0.0.0	Unnumbered	MODEM	2

Add, Modify, or Delete an Entry? (Enter A, M, or D):

Note: The RIP Static Routing Table differs from the IP Static Routing Table. For information on the latter (the IP Static Routing Table), see [Section 2.1.3, Static Routing](#), in *IP Routing in the BANDIT Products*.

6 To configure the BANDIT's VPN Profile Table, select **VPN Profiles**.

❖ The VPN Profile Table appears. See [Section 3.3, Adding or Reconfiguring VPN Profiles](#), in *Configuring a BANDIT Product for Virtual Private Networks*.

VPN Profile Table					
No.	Name	Mode	VPN Gateway	Phase1 Proposal#1	Ping User ID
1)	AGGR_G2	AGGR	None	psk-g2-3des-sha1	OFF
2)	AGGR_G1	AGGR	None	psk-g1-des-md5	OFF
3)	MAIN_G2	MAIN	None	psk-g2-des-md5	OFF
4)	MAIN_G5	MAIN	None	psk-g5-des-md5	OFF

Enter 'm' to modify, 'd' to delete, 'c' to copy or <ESC> to exit:

7 To configure the BANDIT's IP/VPN Policy Table, select **IP/VPN Policies**.

❖ The IP/VPN Policy Menu appears. For details, see [IP/VPN Policy](#).

IP Policy	
1)	Status : Disabled
2)	Policy Table
3)	Remote Logging : Disabled

Enter Choice :

8 To configure the BANDIT's Network Address Translation (NAT), select **NAT Profiles**.

❖ The Network Address Translation menu appears. For details, see [Configuring Address Translation](#).

Network Address Translation (NAT)	
1)	NAT Configuration 1
2)	NAT Configuration 2
3)	NAT Configuration 3

Enter Choice :

9 To configure DNS or DHCP parameters, select **DNS/DHCP Servers**.

❖ The Configure DNS/DHCP Parameters menu is displayed.

```
Configure DNS/DHCP Parameters
-----
1) Primary DNS Server      : 0.0.0.0
2) Secondary DNS Server   : 0.0.0.0
3) Primary BOOTP/DHCP Server : No BOOTP/DHCP Server Configured
4) Secondary BOOTP/DHCP Server : No BOOTP/DHCP Server Configured

Enter Choice :
```

a Select a server and configure its IP address. (For more information, see [Primary and Secondary BootP/DHCP Addresses \(DHCP Settings\)](#).)

Note: Get all IP addresses from your network administrator.

10 To configure the BANDIT's firewall, select **Configure Firewall**.

❖ The Configure Firewall menu is displayed. See [The BANDIT Device as Firewall](#).

```
Configure Firewall
-----
1) NAT Profiles
2) Policy Table
3) IP Interfaces

Enter Choice :
```

11 To configure one of the BANDIT's ports, select **LAN** port, **WAN** port, **Modem** port, or **Serial** port.

Note: In the example shown on the Typical Configurations menu, the serial port is using the **Frame Relay** protocol.

❖ The selected port's Logical Port Attribute menu appears (shown here for the WAN port). Go to [Step 7](#) in [Port Data Configuration](#).

```
Logical Port Attribute Menu
-----
1) Protocol      : EtherNet
2) DHCP Status  : DHCP Client
3) Undefine Current Logical Port

Enter Choice :
```

12 When you have finished configuring parameters on the Typical Configurations menu, press **Escape** to return to the Main Menu. (See [Section 3.4, Using the Main Menu](#), on page 5.)

3.5.4 The Advanced Configurations Menu

- 1 To see the Advanced Configurations menu, log in to the BANDIT. (For details, see [Section 3.4, Using the Main Menu](#), on page 5.)
- 2 When the Main Menu appears, select **Advanced Configurations**.
 - ❖ The Advanced Configurations menu appears.

```

Advanced Configurations
-----
1) Physical Configurations
2) Data Configurations
3) Local Address
4) Routing
5) Global Paths

Enter Choice :
  
```

- 3 To examine or modify the connections for the modem or for the serial port, select **Physical Configurations**.

❖ The Port Interfaces menu appears. For information on using this menu, see [Physical Port Configuration](#).

```

Port Interfaces
-----
M) MODEM      : INTERNAL
S) SERIAL     : NO CABLE

Enter Choice :
  
```

- 4 To examine or modify the software configurations for any of the BANDIT's ports, select **Data Configurations**.

❖ The Logical Port Protocol Interfaces menu appears. For information on using this menu, see [Port Data Configuration](#).

```

Logical Port Statistics  Attached To  DHCP Address  Port Interfaces
-----
C) Comm/Supervisor      Comm/Sup      DCE
M) Point-to-Point       MODEM         INTERNAL
L) EtherNet             DHCP Server   192.168.101.1  ETHERNET
W) EtherNet             DHCP Client   0.0.0.0         ETHERNET
S) Frame Relay          SERIAL        NO CABLE

Enter Port :
  
```

- 5 To configure the BANDIT's device addresses, select **Local Address**.

❖ The Configure Local Addresses menu appears. For information on using this menu, see [Identifying the BANDIT Device in the Network](#).

```

Configure Local Addresses
-----
1) IP Address : 192.168.101.1
2) BANDIT Name : BANDIT

Enter Choice :

```

6 To configure routing for the BANDIT, select **Routing**.

- ❖ The Configure Routing menu appears.

```

Configure Routing
-----
1) IP Routing
2) Frame Relay Routing
3) X.25 Routing
4) SNA Routing

Enter Choice :

```

a On the Configure Routing menu, select the routing you wish to configure.

- ❖ The *x* Routing Configuration menu appears, where *x* is the type of routing you selected. See the following, as appropriate:

- [IP Routing in the BANDIT Products](#) (Select this item if you wish to configure IP/VPN routing or IP/VPN policy.)
- [Routing with Frame Relay](#)
- [X.25 Routing](#)
- [Routing with SNA](#)

b When you have finished configuring routing, press **Escape**.

- ❖ The Advanced Configurations menu reappears. (See [Section 3.5.4, The Advanced Configurations Menu](#), on page 15.)

7 To configure paths for the BANDIT, select **Global Paths**.

- ❖ If the Global Paths Table has any records, the table is displayed. Otherwise, you are prompted to enter information for the first record. For information on using this table, see [Defining Global Paths](#).

Entry	Path Name	PathType	Port	DLCI
1	LAN	PORT TYPE	LAN	
2	WAN	PORT TYPE	WAN	
3	MODEM	PORT TYPE	MODEM	
4	FR16	FR PVC	SERIAL	16

Add, Modify, or Delete an Entry? (Enter A, M, or D):

- 8 When you have finished configuring parameters on the Advanced Configurations menu, press **Escape** to return to the Main Menu. (See [Section 3.4, Using the Main Menu](#), on page 5.)

3.5.5 Device Addresses

To configure the device's addresses, do the following:

- 1 On the Advanced Configurations menu, select **Local Addresses**.

```

BANDIT III
Configure Local Addresses
-----
1) IP Address : 192.168.101.241
2) BANDIT Name : BANDIT III

Enter Choice :

```

- 2 On the Configure Local Addresses menu, select **IP Address**.
- 3 Enter the device's IP address and press **Enter**. (Get the device's IP address from your network administrator.)
- 4 Select **BANDIT Name**.
- 5 Enter a unique name to identify this device in your network, and press **Enter**.

3.5.6 Ports

To configure software for the device's ports, do the following:

- 1 On the Advanced Configurations menu, select **Data Configuration**.

❖ The Logical Port Protocol menu is displayed, similar to the following. ([Table 3-2](#) lists the Line IDs for the ports.)

Note: The display you see may not show all the ports shown here. The context-sensitive menu will display only the ports actually in the BANDIT chassis.

Logical Port Protocol	Attached To	Port Interfaces
C) Comm/Supervisor	Comm/Sup	DCE
M) Point-to-Point	MODEM	INTERNAL
L) EtherNet	No DHCP	ETHERNET
W) EtherNet	No DHCP	ETHERNET
S) Frame Relay	SERIAL	NO CABLE
E) Frame Relay	EXPANSION	Dual T1/E1
B) RDU Ports...		
P) More Ports...		

```

Enter Port :

```

Table 3-2. BANDIT II and BANDIT III Port Identifiers

Line ID ^a	Physical (Hardware) Port	Default Software Configuration
C	COM/Supervisor port	Comm/Supervisor ^b
M	Modem port	Point to Point
L	Ethernet LAN port	Ethernet
W	Ethernet WAN port	Ethernet
S	Serial port 1	Frame Relay
O	Wireless port (internal)	Point to Point
E	Expansion port	Frame Relay
B	RDU ports ^c	(See Step 2.)
P	More ports ^d	(See Step 2.)

a. The menu will display only the ports in your BANDIT's chassis. The Line IDs may vary from the letters shown here.

b. Do not change the configuration for the Comm/Supervisor port.

c. RDU ports 1–4 correspond to physical serial ports 2–5 (the IDU ports) on the BANDIT III expanded chassis.

d. These are virtual Logical Ports. A protocol configured on a Logical Port can be associated with a global path, which in turn is associated with a physical port. See [Section 3.5.6.2, Protocols](#), on page 20. (For information on global paths, see [Defining Global Paths.](#))

- 2 On the Logical Port Protocol menu, select the physical port whose software configuration you wish to modify.

❖ One of the following occurs:

- If you are configuring a physical port on the chassis, the Logical Port Attribute menu appears. Go to [Step 4.](#)
- If you are configuring a physical port on an RDU (or on the BANDIT III's IDU), the RDU Logical Port Menu is displayed. Continue to [Step 3.](#)

Note: RDU Ports 1–4 on the BANDIT III's Logical Port Protocol menu correspond to physical Serial Ports 2–5 (the IDU ports) on the BANDIT III expanded chassis.

BANDIT III		
Logical Port Protocol	Attached To	Port Interfaces

1) UNDEFINED	RDU Port 1	
2) UNDEFINED	RDU Port 2	
3) UNDEFINED	RDU Port 3	
4) UNDEFINED	RDU Port 4	
Enter Port :		

- If you are configuring a virtual Logical Port, the Virtual Logical Port menu is displayed. Continue to [Step 3.](#)

```

BANDIT III
Logical Port Protocol      Mapped To      Port Interfaces
-----
1) UNDEFINED              Port 1
2) UNDEFINED
3) UNDEFINED
4) UNDEFINED
5) UNDEFINED
6) UNDEFINED
7) UNDEFINED
8) UNDEFINED
9) UNDEFINED
10) UNDEFINED
11) UNDEFINED
12) UNDEFINED
13) UNDEFINED
14) UNDEFINED
15) UNDEFINED
16) UNDEFINED
17) UNDEFINED
P) More Ports...

Enter Port :

```

- 3 On the RDU Port menu or the Virtual Logical Port menu, select the port to configure.
 - ❖ The Logical Port Attribute menu appears (shown here for the WAN port).

```

Logical Port Attribute Menu
-----
1) Protocol      : EtherNet
2) DHCP Status  : DHCP Client
3) Undefine Current Logical Port

Enter Choice :

```

- 4 To modify the port's default settings, see the following:
 - [Section 3.5.6.1, *Preparing the BANDIT for Wireless Support*](#), on page 19
 - [Section 3.5.6.2, *Protocols*](#), on page 20
 - [Section 3.5.6.3, *DHCP Settings*](#) (only for the WAN and LAN ports), on page 20
 - [Section 3.5.6.4, *Dial Backup Settings*](#), on page 22

3.5.6.1 **Preparing the BANDIT for Wireless Support**

You can select a CDMA, EVDO, or GSM internal wireless card when you order a BANDIT product. If you wish, the BANDIT III's expansion port can hold a second wireless card. The two wireless cards in a BANDIT III can use the same technology or can use different technologies. (When you order a GSM card, you specify whether it will use GPRS or EDGE technology. A CDMA card or an EVDO card uses CDMA technology.)

Each wireless card must be activated for use in its carrier network. (Your network administrator can determine whether your organization asked for the card to be activated before shipment.) If you need to activate a BANDIT device's wireless card, see [Activating a](#)

Wireless Card in a Cellular Carrier Network. And, if you wish to change the card's settings for wireless access—for example, to reconfigure its wireless port, see [Section 7.2, Reviewing a Wireless Port's Configuration](#), in that document.

3.5.6.2 Protocols

To change the protocol that a port uses, or to modify attributes of a port's protocol, do the following on the Logical Port Attribute menu:

Note: The Logical Port Attribute Menu follows [Step 3](#), on page 19 of [Section 3.5.6, Ports](#).

- 1 If you wish to change the protocol the port uses, do all of the following. Otherwise, see [Step 2](#), below.

a Select **Undefine Current Logical Port**.

Note: The menu for the Modem port does not offer this selection.

b Select **Protocol**.

- c** On the Logical Port Protocol Selection menu, select the protocol you want this port to use. Go to [Step 2a](#).

- 2 To modify parameters in the port's protocol, select **Protocol**.

❖ The protocols available for the port are displayed. (This example shows protocols for a serial port.)

```
BANDIT III
Logical Port Protocol Selection Menu
-----
1) Frame Relay
2) Point-to-Point (PPP)
3) MultiLink PPP
4) X.25+
5) Bit Sync Encapsulation
6) Asynchronous Encapsulation
7) Serial Line IP (SLIP)
8) Telnet Terminal
9) XXX PAD
A) X.42 Spoofing

Enter Choice :
```

- a** On the protocol configuration menu, select and change parameters to work in your network.

- b** When you have finished configuring the protocol, press **Escape** to return to the Logical Port Attribute menu.

Note: For more information on specific protocols, see the [Protocols](#) Module.

3.5.6.3 DHCP Settings

To review settings that the WAN or LAN port uses for DHCP, or to modify or disable DHCP on a port, do the following on the port's Logical Port Attribute menu (see [Section 3.5.6, Ports](#), on page 17).

Note: The WAN and LAN ports use different settings. Typically, a BANDIT device is a DHCP client on the WAN port and is a DHCP server on the LAN port. You may enable, modify, or disable use of DHCP on one port or on both ports.

1 Select **DHCP Type**.

- ❖ The DHCP Type menu appears.

```
BANDIT III
DHCP Type
-----
1) Server
2) Client
3) None

Enter Choice :
```

2 Select the option you want this port to use.

- ❖ If you select **None**, the device does not use this port for DHCP. Press **Escape** until you return to the port's Logical Port Attribute menu. Go to [Step 5](#).
- ❖ If you select **Client**, the device uses this port to request its IP address. (On the WAN port, the device requests its *public* IP address.) No further configuration is required for the DHCP client role. Press **Escape** until you return to the port's Logical Port Attribute menu. Go to [Step 5](#).
- ❖ If you select **Server**, the device uses this port to assign IP addresses. (On the LAN port, the device assigns *private* IP addresses.) The Logical Port Attribute menu is redisplayed, with a menu item for configuring the DHCP server.

```
BANDIT III
Logical Port Attribute Menu
-----
1) Protocol           : EtherNet
2) DHCP Type          : DHCP Server
3) DHCP Server Parameters
4) VLAN Tagging Parameters : No VLAN Tagging
5) MAC Filters
6) Undefine Current Logical Port

Enter Choice :
```

3 Select **DHCP Server Parameters**.

- ❖ The DHCP Server Parameters menu appears.

```

DHCP SERVER PARAMETERS
-----

1) Local DHCP Server IP Address (N.N.N.N):0.0.0.0
2) DHCP Pool IP Address Low (N.N.N.N) :0.0.0.0
3) DHCP Pool IP Address High (N.N.N.N) :0.0.0.0
4) DHCP Network Mask (N.N.N.N) :255.255.255.0
5) DHCP Lease Time (minutes) : 1440
6) Domain Name for DHCP clients:
7) Primary Router (N.N.N.N) :0.0.0.0
8) NETBIOS Server (N.N.N.N) :0.0.0.0
Enter the number of the item to change:

```

- 4 Select and configure each parameter the device will use as the local (intranet) DHCP server. When you have finished configuring the DHCP server, press **Escape** until you return to the port's Logical Port Attribute menu.
- 5 When you have finished configuring the port, press **Escape** until you return to the Main Menu.
- 6 Save the configuration and reset the device. See [Saving \(Writing\) a Configuration](#) and [Resetting the Device](#).

Note: For more information, see [Primary and Secondary BootP/DHCP Addresses \(DHCP Settings\)](#).

3.5.6.4 Dial Backup Settings

- 1 To configure a port for dial backup, select **Dialup Configuration** on the Logical Port Attribute menu (see [Section 3.5.6, Ports](#)).

Note: A port can be configured for dial backup only if its protocol supports dial backup. The port's Logical Port Attribute menu will not allow this option unless the protocol supports it. To select a protocol that supports dial backup, see [Section 3.5.6.2, Protocols](#), on page 20.

```

BANDIT III
Dialup Configuration : MODEM
-----

1) Dial Mode : ANSWER
2) Primary Phone Number :
3) Secondary Phone Number :
4) Redial Timer Seconds : 10
5) Number of Redials : 200
6) Dialup Port Priority : Low
7) Toll Saver : Disabled
8) Toll Saver Timeout : 180
9) Maximum Number of Successful Calls Allowed In a Minute : 3

Enter Choice :

```

- 2 Configure the parameters for the dialup. When you have finished, press **Escape** to return to the Logical Port Attribute menu.

3.5.7 Virtual Private Network Connections

To configure virtual private networks, see [Configuring a BANDIT Product for Virtual Private Networks](#). (You might also wish to review the entire [VPN Configuration](#) module.)

3.6 Write Configuration

- 1 To save the settings you have configured for the BANDIT, do the following:
 - a Log in to the BANDIT. (For details, see [Section 3.4, Using the Main Menu](#), on page 5.)
 - b When the Main Menu appears, select **Write Configuration**.
 - ❖ The following menu is displayed.

```
Write New Configuration to Memory
-----
Y) Yes
N) No

Are You Sure? :
```

- 2 Do one of the following:
 - a To refrain from saving the new configuration, press **n**.
 - ❖ The current configuration remains. The Main Menu appears. (See [Section 3.4, Using the Main Menu](#), on page 5.)
 - b To save the new configuration, press **y**.
 - ❖ A verification list, similar to the following, appears.

```
Copyright Encore Networks, Inc., 2002-2003.

Verifying Configuration, WAIT ...

Verifying Customization Records...
Verifying Frame Relay Routing Table...
Verifying Bit Sync Encapsulation Ports...
Verifying ALC Ports...
Verifying IP Static Routing Table...
Verifying IP RIP Interface Table...
Invalid MTU for IP Routing Entry
Verifying IP RIP Static Routing Table...
Verifying Filtering/Prioritization Tables ...
Verifying Remote IP Logging Configuration...
Verifying BootP/DHCP Configuration...
Verifying Local DHCP Server Configuration...
Verifying NAT Configuration ...
Verifying PPP Configuration ...
Verifying Dialup Configuration ...
Verifying Global Paths Configuration...
Global Paths Entry #2: Port SERIAL is not defined
with valid protocol
Verifying Asynchronous Encapsulation Ports...
Verifying Byte Sync Encapsulation Ports...
Verifying SDLC Routing Ports...
Verifying SNA 1490 Configuration...
Verifying X.25 Configuration...
Verifying XXX PAD Configuration...
Verifying TINTERM Configuration...
Verifying Physical Ports Mapping...
Verifying Dynamic Memory Requirements...
Dynamic Memory Requirements: 3682712
Verifying Required EEPROM Space(Maximum 28672 bytes)...
EEPROM Utilization: 23%
```

❖ If the BANDIT detects a problem with the configuration, you will see a message similar to the following.

```
2 Error(s) Detected. Configuration will NOT be Saved ... ERRORS
Press Any Key to Continue ERRORS
```

c In this case, check the verification list for error messages about the configuration (shown in bold in the verification list, above). Then revise the configuration as needed, and save the corrected configuration.

❖ A verification list is displayed while the corrected configuration is being saved.

```
Copyright Encore Networks, 2002-2003.

Verifying Configuration, WAIT ...

Verifying Customization Records...
Verifying Frame Relay Routing Table...
Verifying Bit Sync Encapsulation Ports...
Verifying ALC Ports...
Verifying IP Static Routing Table...
Verifying IP RIP Interface Table...
Verifying IP RIP Static Routing Table...
Verifying Filtering/Prioritization Tables ...
Verifying Remote IP Logging Configuration...
Verifying BootP/DHCP Configuration...
Verifying Local DHCP Server Configuration...
Verifying NAT Configuration ...
Verifying PPP Configuration ...
Verifying Dialup Configuration ...
Verifying Global Paths Configuration...
Verifying Asynchronous Encapsulation Ports...
Verifying Byte Sync Encapsulation Ports...
Verifying SDLC Routing Ports...
Verifying SNA 1490 Configuration...
Verifying X.25 Configuration...
Verifying XXX PAD Configuration...
Verifying TINTERM Configuration...
Verifying Physical Ports Mapping...
Verifying Dynamic Memory Requirements...
    Dynamic Memory Requirements: 3682712
Verifying Required EEPROM Space(Maximum 28672 bytes)...
    EEPROM Utilization: 23%
Saving Config, WAIT ...
    EEPROM Write Time : 2 seconds
```

❖ When the corrected configuration has been saved, the following message appears.

```
Configuration SAVED
Press Any Key to Continue
```

3 Press any key.

❖ The message repeats that the configuration has been saved. Then the Main Menu appears. (See [Section 3.4, Using the Main Menu](#), on page 5.)

```
Configuration SAVED
```

3.7 Reset Unit

1 To restart the BANDIT, do the following:

- a** Log in to the BANDIT. (For details, see [Section 3.4, Using the Main Menu](#), on page 5.)
- b** When the Main Menu appears, select **Reset Unit**.

Note: Restarting resets the unit to the last saved configuration. If you wish to save your configuration, see [Section 3.6, Write Configuration](#) (on page 23), before resetting the unit.

❖ The following menu is displayed.

```
Reset Unit
-----
Y) Yes
N) No

Are You Sure? :
```

2 Do one of the following:

a To leave the unit running, without restarting it, press **n**.

❖ The unit remains running with the current configuration. The Main Menu appears. (See [Section 3.4, Using the Main Menu](#), on page 5.)

b To restart the unit, press **y**.

❖ If you have made configuration changes but have not saved them, the BANDIT asks whether you wish to save the new configuration.

```
Save New Configuration? (Enter Y (Yes) or N (No)) :
```

3 Do one of the following:

a If you wish to save the new configuration, enter **y**.

b If you do not wish to save the new configuration, enter **n**.

❖ The unit restarts. The following message appears.

```
Resetting this Unit, Wait for few Seconds, Press ENTER to
Continue
```

❖ Do not type anything until you see the following banner and login prompt.

```
*****
          BANDIT, ENCORE NETWORKS INC
*****
Press <ENTER> to login
```

- 4 After you see the banner and login prompt, press **Enter**.
 - ❖ The terminal displays the Main Menu. (See [Section 3.4, Using the Main Menu](#), on page 5.)

3.8 Monitoring and Management

See the following:

- [Section 3.8.1, Simple Network Management Protocol](#), on page 27
- [Section 3.8.2, Statistics](#), on page 27
- [Section 3.8.4, The System Administration Menu](#), on page 30
- [Section 3.8.3, View Current Unit Status](#), on page 29
- [Section 3.8.5, Load Factory Defaults](#), on page 35

3.8.1 Simple Network Management Protocol

If you wish, you can configure the BANDIT device for management from a remote location. To use the Simple Network Management Protocol (SNMP) with the BANDIT, see the document [Using SNMP in the BANDIT Products](#).

3.8.2 Statistics

- 1 To see statistics for the BANDIT, do the following:
 - a Log in to the BANDIT. (For details, see [Section 3.4, Using the Main Menu](#), on page 5.)
 - b When the Main Menu appears, select **Statistics**.
 - ❖ The Statistics menu appears, similar to the following.

```
Statistics
-----
1) Logical Ports

I) IP
P) ICMP
U) UDP
C) TCP
L) Loader
S) SNMP
B) BANDIT Triggers
O) MODEM
V) VPN Statistics
Z) Clear All Statistics
D) Display All Statistics
M) Dump All Statistics

Enter Choice :
```

- 2 Select a category of statistics you wish to view. (In this example, we select **IP**.)
 - ❖ A menu appears for the selected category's items.

Note: Some categories do not display menus; these categories display the statistics immediately. In this case, go to [Step 4](#).

```

IP Statistics
-----
1) Filtered Packets
2) Filter Log
3) Local IP Statistics
4) IP Router Statistics

R) IP RIP Table
V) IP RIP Statistics
N) Network Address Translation (NAT) Statistics
D) Domain Name Table (DNS)
B) DHCP/BOOTP Statistics

Enter Choice :

```

- 3** Select the item whose statistics you wish to view. (In this example, we select **IP Router Statistics**.)

❖ The selected item's statistics display.

Note: If no statistics have accumulated for the item, you may see the prompt after [Step 4](#). In this case, go to [Step 5](#).

```

IP Router Statistics.

Async PPP Interfaces.
Port/Path  Tx Pkts  Tx Frags  Rx Pkts  Pkts Dscd  NonRoutable
MODEM      0         0         0         0         0
Ethernet Interface.
Port/Path  Tx Pkts  Tx Frags  Rx Pkts  Pkts Dscd  NonRoutable
WAN        10        0         0         0         0
LAN        41        0         0         0         0

Press Any Key to Continue ...

```

- 4** When you have finished viewing the item's statistics, press any key.

❖ The following prompt appears.

```

Enter "C" to Clear Statistics, "ESC" to Return
And Any Other Key to Refresh Statistics

```

- 5** Do one of the following:

a To see updated statistics, press any key other than **C** or **Escape**.

❖ The statistics update. Repeat [Step 4](#).

- b** To clear the statistics, press **C**.
 - ❖ The statistics for this item clear (that is, they are reset to zero). Repeat [Step 4](#).
 - c** To return to the menu for the category, press **Escape**.
 - ❖ The menu for the category reappears.
 - 6** To see statistics for another item in this category, select that item, as described in [Step 3](#).
 - 7** When you have finished viewing statistics for items in this category, press **Escape**.
 - ❖ The Statistics menu reappears.
 - 8** Do one of the following:
 - a** If you wish to clear all statistics (that is, if you wish to reset all statistical counters to zero), select **Clear All Statistics**.
 - ❖ All statistical counters are set to zero, and the Statistics menu re-displays.
 - b** If you wish to view statistics for another category, select that category from the menu, as described in [Step 2](#).
 - c** Press the **Escape** key to return to the Main Menu. (See [Section 3.4, Using the Main Menu](#), on page 5.)
- Note:** For more information about the BANDIT's statistics, see [Monitoring Statistics for a BANDIT Product](#).

3.8.3 View Current Unit Status

- 1** To view the BANDIT's status, log in to the BANDIT. (For details, see [Section 3.4, Using the Main Menu](#), on page 5.)
- 2** When the Main Menu appears, select **View Current Unit Status**.
 - ❖ Information similar to the following is displayed.

```
View Current Unit Status
-----
Active Code Region      : 1
Active Database         : 1
Board ID                : 0
Software Version        : 15535.0208
Build Date              : 18:13:38 06/25/03
Snmp Mib Version        : 5.0.6
WAN MAC Address         : 00A0EB987654
LAN MAC Address         : 00A0EB987655

Memory Utilization
Buffer Utilization      : 6%
EEPROM Utilization      : 18%

Last EEPROM Write Time : 0 seconds

CPU Utilization Factor : 0

Time Since Last Reset/Powerup : 0 days 1 hours 16 minutes 12 seconds

Press Any Key to Continue ...
```

- 3 When you have finished viewing the unit's status, press Escape to return to the Main Menu. (See [Section 3.4, Using the Main Menu](#), on page 5.)

3.8.4 The System Administration Menu

- 1 To see the System Administration menu, log in to the BANDIT. (For details, see [Section 3.4, Using the Main Menu](#), on page 5.)
- 2 When the Main Menu appears, select **System Administration**.
 - ❖ One of the following occurs.
 - The System Administration menu is displayed. If you see that menu, go to [Step 3](#).

```
System Administration
-----
1) Passwords
2) SNMP Configuration
3) Database Management
4) Telnet Terminal
5) Port Data Capture
6) SNMP Triggered TRAPs

C) Copy Configuration
N) Network Download
V) VPN Commands

Enter Choice :
```

- The following prompt might be displayed, depending on the version of ELIOS™ software in the BANDIT chassis. If you see that prompt, type the System Administration password and press **Enter**.

```
Enter System Admin Password:
```

Note: Default passwords are listed in [Default Passwords](#). You may change the system administration password on the Password menu.

❖ If the password is not valid, the following message is displayed, followed by the Main Menu. Select **System Administration** again and type the valid password.

```
Password Incorrect
```

❖ If the password is valid, the following message appears. Then the System Administration menu is displayed.

```
System remembers this password until user exits or times out
```

3 On the System Administration menu, select the item you would like to configure.

a If you select **Passwords**, the Password Menu appears. See [Changing a Password](#).

b If you select **SNMP Configuration**, the SNMP Configuration Menu appears.

Note: For information on the Simple Network Management Protocol, see [Using SNMP in the BANDIT Products](#).

- Select the line for the item you would like to change (or press **Escape** to return to the System Administration menu).

```
1) SNMP Get Community String : public
2) SNMP Set Community String : encset
3) SNMP Trap Default Addr : 0.0.0.0
4) SNMP Trap Table

Enter Choice:
```

c If you select **Database Management**, the Database Administration menu appears. Go to [Section 3.8.4.1, The Database Administration Menu](#), on page 33.

d To use the console as a telnet terminal, select **Telnet Terminal**.

❖ The BANDIT menu is suspended, and the console functions as a telnet terminal, using telnet commands.

```
Entering Telnet Terminal.
Press Cntrl-E to exit and return to BANDIT Menus.
```

- Enter telnet commands for the functions you wish to execute.

Note: To exit telnet mode and return to the BANDIT's System Administration menu, hold down the **Control** key and press **E**.

- e** If you select **Port Data Capture**, the Port Data Capture menu appears. See [Port Data Capture](#).

```
Data Capture - Port selection and status
-----
M) MODEM   : OFF
L) LAN     : OFF
W) WAN     : OFF
S) SERIAL  : OFF

Enter Choice :
```

- f** If you select **SNMP Triggered TRAPs**, the BANDIT Triggers menu appears.

- Select the line for the item you would like to change (or press **Escape** to return to the System Administration menu).

```
BANDIT Triggers
-----
1) Trigger Table
2) Change Trigger Status

Enter Choice :
```

- g** If you select **Copy Configuration**, the Copy Configuration menu appears.

Note: For information on using this menu, see [Copying the BANDIT Configuration](#).

- When you have finished using this menu, press the **Escape** key to return to the System Administration menu.

```
Copy Configuration
-----
1) Initiate Copy from A to B
2) Initiate Copy from B to A

A) Location A : RAM DATABASE (Current Configuration Scratch Pad)
B) Location B : EEPROM DATABASE #2

Enter Choice :
```

- h** If you select **Network Download**, the Network Download menu appears.

- Select the line for the item you would like to change (or press **Escape** to return to the System Administration menu).
- For more information on using the Network Download menu, see [Downloading BANDIT Operating Software \(via TFTP\) across the Network](#).

```
Network Download
-----
1) TFTP Host IP Address : 0.0.0.0
2) Code File Name :
3) TFTP Time-out : 4

R) Erase Inactive Code Region
I) Initiate Network Download
S) Status
P) Code Region Priority

Enter Choice :
```

- i To start or track Virtual Private Network (VPN) connections for the BANDIT, select **VPN Commands**.

❖ The VPN Commands menu appears. See *Testing and Tracking VPN Connections*.

```
VPN Commands
-----
1) Establish VPN Tunnel
2) Conclude VPN Tunnel
3) VPN Trace Level - current value : None
4) Show VPN Trace
5) Clear VPN Trace Log

Enter Choice :
```

Note: Before you can use or track VPN connections, you must set the BANDIT up for VPN. See *Configuring a BANDIT Product for Virtual Private Networks*.

- j To return to the menu for the previous (higher) level, press the **Escape** key.

Note: In this example, we press the **Escape** key to move from the System Administration menu back to the higher-level Main Menu. Go to *Section 3.4, Using the Main Menu*, on page 5.

3.8.4.1 The Database Administration Menu

- 1 To see the Database Administration menu, log in to the BANDIT. (For details, see *Section 3.4, Using the Main Menu*, on page 5.)

- 2 When the Main Menu appears, select **System Administration**.

- 3 If the system requests a password, type the password and press **Enter**.

Note: Default passwords are listed in *Default Passwords*.

❖ The System Administration menu appears.

- 4 On the System Administration menu, select **Database Management**.

❖ The Database Administration menu appears.

```
Database Administration
-----
1) Flash Memory Management
2) BANDIT Database Management
3) Code Region Priority

Enter Choice :
```

Note: The Database Administration menu is used mainly to manage or update the BANDIT software. See *Loading Operating Software into a BANDIT Product* for procedures demonstrating use of this menu and its submenus.

- 5 If you select **Flash Memory Management**, the Flash Memory Management menu appears.
 - a Select the line for the item you would like to change (or press **Escape** to return to the Database Administration menu).

```
Flash Memory Management
-----
1) FLASH Sector Use Report
2) FLASH Memory Map Report

R) Erase Inactive Code Region
S) Erase Flash Sector

Enter Choice :
```

- 6 If you select **BANDIT Database Management**, the BANDIT Database Management menu appears.
 - a Select the line for the item you would like to change (or press **Escape** to return to the Database Administration menu).

```
BANDIT Database Management
-----
Active Database : 2
1) Database To Use : 2
2) Clear Database

Enter Choice :
```

- 7 If you select **Code Region Priority**, the Code Region Priority menu appears.
 - a Select the line for the item you would like to change (or press **Escape** to return to the Database Administration menu).

```
Code Region Priority
-----
1) Region #1 : Primary(Active)
2) Region #2 : Secondary

Enter Choice :
```

- 8 When you have finished configuring the databases, press **Enter** to return to the System Administration menu. (See [Section 3.8.4, The System Administration Menu](#), on page 30.)

3.8.5 Load Factory Defaults

- 1 To load the default configuration into the BANDIT, do the following:
- a Log in to the BANDIT. (For details, see [Section 3.4, Using the Main Menu](#), on page 5.)
 - b When the Main Menu appears, select **Load Factory Defaults**.
 - ❖ The following menu is displayed.

```
Load Factory Defaults
-----
Y) Yes
N) No

Are You Sure? :
```

- 2 Do one of the following:
- a To leave the current configuration as it is, press **n**.
 - ❖ The current configuration remains. The Main Menu appears. (See [Section 3.4, Using the Main Menu](#), on page 5.)
 - b To load the default configuration, press **y**.
 - ❖ The following message appears.

```
Load Factory Defaults, WAIT ...
```

- ❖ The message indicates when the configuration has loaded. Then the Main Menu appears. (See [Section 3.4, Using the Main Menu](#), on page 5.)

```
Load Factory Defaults, WAIT ... LOADED
```

3.9 Exiting the BANDIT Session

- 1 On the BANDIT's Main Menu, select **Exit Session**. (For details, see [Section 3.4, Using the Main Menu](#), on page 5.)
 - ❖ The following message appears.

```
Exit Session
-----
Y) Yes
N) No

Are You Sure? :
```

- 2 Do one of the following:
 - a To keep the session active, type **n**.
 - ❖ The Main Menu is redisplayed. See [Section 3.4, Using the Main Menu](#), on page 5.
 - b To end the session, type **y**.
 - ❖ If you have changed any of the BANDIT's configuration since the last time you saved it, the following message appears.

```
Save New Configuration? (Enter Y (Yes) or N (No)) :
```

- 3 Do one of the following:
 - a Type **n** to abandon the changes.
 - ❖ The following message appears, and the session closes.

```
Old Configuration Restored!
Ending Session...
```

- b Type **y** to save the configuration.
 - ❖ Information similar to the following appears.

```
Copyright Encore Networks, Inc., 1993-2002.

Verifying Configuration, WAIT ...

Verifying Customization Records...
Verifying Frame Relay Routing Table...
Verifying Bit Sync Encapsulation Ports...
Verifying ALC Ports...
Verifying IP Static Routing Table...
Verifying IP RIP Interface Table...
Verifying IP RIP Static Routing Table...
Verifying Filtering/Prioritization Tables ...
Verifying Remote IP Logging Configuration...
Verifying BootP/DHCP Configuration...
Verifying NAT Configuration ...
Verifying PPP Configuration ...
Verifying Dialup Configuration ...
Verifying Global Paths Configuration...
Verifying Asynchronous Encapsulation Ports...
Verifying Byte Sync Encapsulation Ports...
Verifying SDLC Routing Ports...
Verifying Physical Ports Mapping...
Verifying Dynamic Memory Requirements...
    Dynamic Memory Requirements: 792576
Verifying Required EEPROM Space(Maximum 3568 bytes)...
    EEPROM Utilization: 26%
Saving Config, WAIT ...
    EEPROM Write Time : 4 seconds
```

❖ When the save routine has finished, the following message appears:

```
Configuration SAVED
Press Any Key to Continue
```

4 Press a key to continue.

❖ The following message appears, and the session closes.

```
Configuration SAVED
Ending Session...
```

