

BANDIT II C2C Standard Configuration Guide

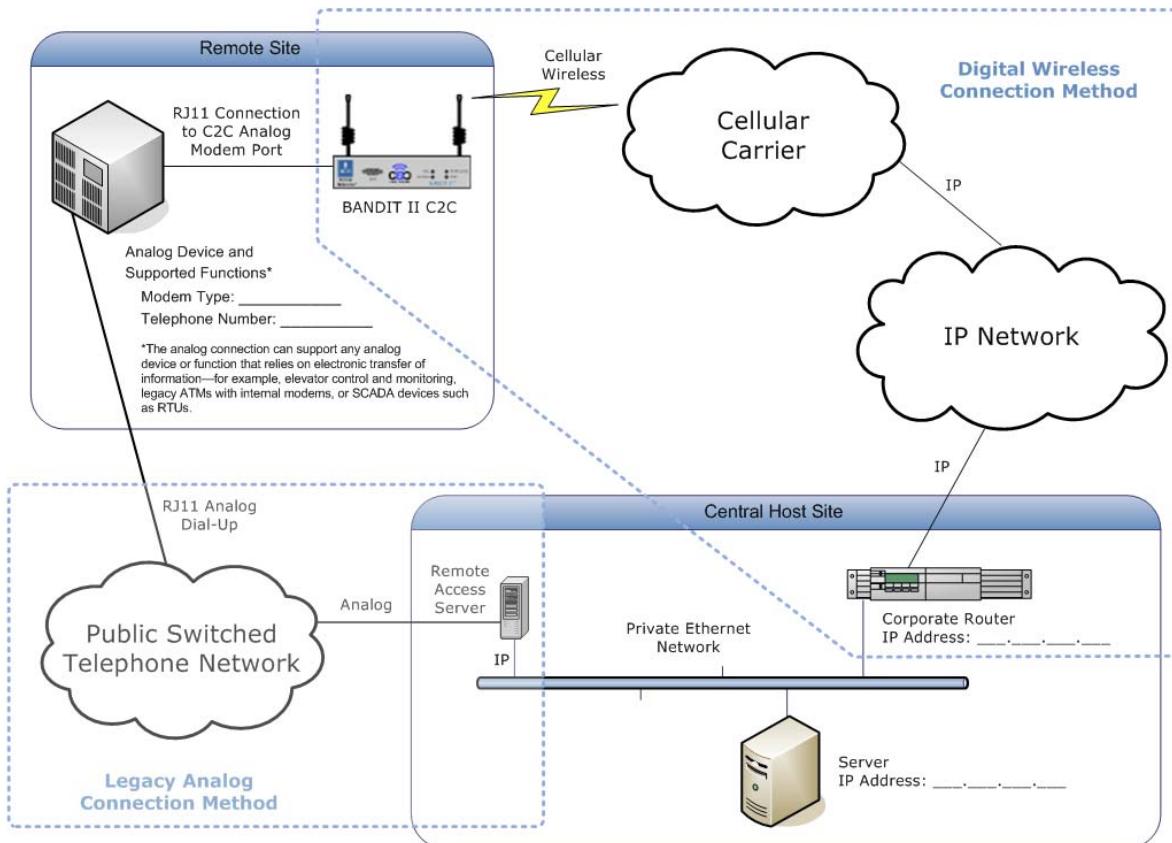
This document provides guidelines for configuring the BANDIT II C2C™ software

Note: For a quick configuration routine, see the *BANDIT II C2C Quick Installation Guide*.

4.1 Planning the Network

Figure 4-1 shows a typical use for the BANDIT II C2C. Your network administrator will plan what the BANDIT II C2C will do in your network. That plan will be used in *Collecting the Information*, *Organizing the Information*, and *Configuring the Software*.

Figure 4-1. Sample Network Placement for BANDIT II C2C



4.2 Collecting the Information

Before you configure the BANDIT II C2C software, do the following:

- Make sure you have installed the BANDIT II C2C chassis as described in *Installing the Hardware* in the *BANDIT II C2C Quick Installation Guide*. Make sure an Ethernet cable connects the BANDIT II C2C to its management terminal (your personal computer).
- Warning:** Always follow safety procedures when working with electrical equipment.¹
- Get the following information from your network administrator:
 - Your user name and password
 - The principal function the BANDIT II C2C will perform
 - The IP addresses for the BANDIT II C2C ports
 - The IP addresses for remote connections
 - The port numbers the BANDIT II C2C will use for its connections
 - The device name in the network
 - The device's VPN information
 - Additional information, such as a telephone number for the BANDIT II C2C's analog modem, that your network administrator deems pertinent to configuration of this BANDIT II C2C

4.3 Organizing the Information

Figure 4-2 lists sample parameter values for two analog devices. (The figure shows devices in separate networks.) Use similar information to fill in the blanks in **Table 2-2** of the *BANDIT II C2C Quick Installation Guide*.

- Analog modem type and settings
- Channel use
- DTMF dial string (**Note:** The DTMF number is a telephone number.)
- VPN settings
- Host IP address

Figure 4-2. Sample Parameters to Support Analog Devices (in Separate IP Networks)

Modem Type Settings	Dialog Channel PPP, Telnet, other	DTMF Number (s)	VPN UID, PSK	Server/Host IP Address
Racal Vadic 9626 9600, V.32	PPP userID = 123 password = 1234	703 555 1212	UID = 123 PSK - 456?A721	4.2.2.2
Hayes xyz MNP 4	9600, 8, N, 1 Telnet	703 555 1000	GW = 8.8.8.8	65.220.x.x

1. Documentation is at the website www.encorenetworks.com/document_catalog.htm. The BANDIT documentation is in the lists of **Broadband Documentation** on the right-hand side of that page. (The website works best with Microsoft's Internet Explorer.)

4.4 Configuring the Software

Note: The details of the configuration screens you see on the BANDIT II C2C may differ slightly from the screens shown in this document. The details displayed depend on the features that you requested on your BANDIT II C2C chassis and on the software version used in your BANDIT II C2C. The software retains the same standard functionality regardless of screen details.

- 1 On the control console, open a terminal emulation routine—for example, ProComm or HyperTerminal—and establish communication with the BANDIT II C2C.
- 2 Start the BANDIT II C2C's software.
 - ❖ After successful log-in, the Main Menu is displayed.

```
Main Menu
-----
1) QuickStart Config Builder
2) Typical Configurations
3) Advanced Configurations
4) Tools

V) View Current Unit Status
F) Cellular Fast Connect
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 :
```

- 3 On the Main Menu, select **QuickStart Config Builder**.
 - ❖ The menu of Startup Config Options is displayed.

```
Startup Config Options
-----
1) GENERIC
2) CDC
3) CELLULAR
4) VOIP
5) FAILOVER
6) C2C Startup Configuration

Enter Choice :
```

- 4 On the Startup Config Options Menu, select **C2C Startup Configuration**.
 - ❖ The C2C QuickStart Config Menu is displayed.

```
C2C Quick Start Config
-----
1) Telnet Terminal Over Wireless Configuration
2) Async Encapsulation Terminal Over Wireless Configuration
3) IP/PPP Over Modem with Wireless Configuration
4) IP Over Ethernet Configuration
```

Enter Choice :

- 5 The C2C Quick Start Config Menu lists options for standard uses of the BANDIT II C2C. Select the option that matches this BANDIT II C2C's principal function in the network.

❖ One of the following menus is displayed:

```
Telnet Terminal On Dialup Modem Over Wireless Configuration
-----
1) System Name :
2) System IP Address      : 0.0.0.0
3) Remote IP Address      : 0.0.0.0
4) Local TCP Port : 0
5) Remote TCP Port : 0
6) Modem Dialup Mode : ANSWER
7) User Name :
8) Password :
9) Wireless IP Type : Dynamic IP Address
A) Wireless IP : N/A
B) Load configuration

V) reView/Modify Loaded Config
R) Reset (Write and Reset)
Z) Clear All Fields
```

Enter Choice :

```
C2C Async Encaps Over Modem and Wireless Quick Start Configuration
-----
1) System Name :
2) System IP Address      : 0.0.0.0
3) Remote IP Address      : 0.0.0.0
4) User Name :
5) Password :
6) Wireless IP Type : Dynamic IP Address
7) Wireless IP : N/A
8) Modem Dialup Mode : ANSWER
9) Load configuration

V) reView/Modify Loaded Config
R) Reset (Write and Reset)
Z) Clear All Fields
```

Enter Choice :

```
IP Router With Modem and Wireless Configuration
-----
1) System Name      :
2) System IP Address : 0.0.0.0
3) Remote IP Address : 0.0.0.0
4) User Name :
5) Password :
6) Wireless IP Type : Dynamic IP Address
7) Wireless IP : N/A
8) Modem Dialup Mode : ANSWER
9) Load configuration

V) reView/Modify Loaded Config
R) Reset (Write and Reset)
Z) Clear All Fields

Enter Choice :
```

```
IP Router with Ethernet And Wireless Configuration
-----
1) System Name      :
2) System IP Address : 0.0.0.0
3) Ethernet IP Address : 0.0.0.0
4) User Name :
5) Password :
6) Load configuration

V) reView/Modify Loaded Config
R) Reset (Write and Reset)
Z) Clear All Fields

Enter Choice :
```

- 6 Using your filled-in column of parameter values in [Table 2-2](#) of the [BANDIT II C2C Quick Installation Guide](#) as a guide, select each parameter on the configuration menu and enter its value.

Note: At this point, do not select **Load Configuration** or anything below that line. However, if you need to start the configuration again, select **Clear All Fields**.
- 7 When all parameter values on the quickstart configuration menu have been assigned, select **Load Configuration**.
❖ The following prompt is displayed.

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

8 Answer y (yes.)

❖ The configuration is loaded into the BANDIT II C2C, and the menu for quick BANDIT II C2C configuration is redisplayed.

9 After the configuration has loaded, select Review/Modify Loaded Config and study the details of the configuration. Confer with your network administrator to make additional changes.

❖ The Typical Configurations Menu is displayed.

```
Typical Configurations Menu
-----
1) System Configuration
2) IP Interfaces
3) IP Static Routes
4) VPN Profiles
5) IP/VPN Policies
6) NAT Profiles
7) OSPF/BGP Configuration
8) DNS/DHCP Servers
9) Configure Firewall
A) IP QoS (Quality of Service)
B) GPS Geo-Fencing

L) LAN      : EtherNet          No DHCP           ETHERNET
W) WAN      : EtherNet          DHCP Client 0.0.0.0    ETHERNET
D) DMZ     : EtherNet          No DHCP           ETHERNET
M) MODEM   : Telnet Terminal   MODEM
S) SERIAL
E) EXPANSION : Point-to-Point   USB WIRELESS
P) More Ports...

Enter Choice :
```

10 Do all of the following:**a On the Typical Configurations Menu, select Modem.**

❖ The Logical Port Attribute Menu for the BANDIT II C2C's analog modem port is displayed. Note that the protocol is **Telnet Terminal**. That protocol was set when you selected a BANDIT II C2C quick configuration.

```
Logical Port Attribute Menu
-----
1) Protocol      : Telnet Terminal
2) Global Paths
3) Dialup Configuration
4) Undefine Current Logical Port

Enter Choice :
```

b On this menu, select Protocol.

❖ The modem port's Menu of Telnet Terminal Parameters is displayed.

```
Telnet Terminal Parameters : MODEM
-----
1) Connection Type : DTR Dial
2) Answer Mode : ON
3) Data Mode : Binary
4) Null Insertion Mode : Disable
5) Exit Session Key : CTRL-X
6) Menu Quiet Mode : ON
7) Local Echo : Disable
8) Store and Forward : Disable
9) Force DTR ON : Yes
A) Force DCD ON : Yes
B) Force DSR ON : Yes
C) Local TCP Port : 258
D) Remote TCP Port : 1001
E) Remote IP Address : 10.1.1.1
F) Generic Logical Port : N/A
G) DTMF Routing: Disabled
```

```
Enter Choice :
```

c On this menu, select **DTMF Routing**.

- ❖ During initial configuration, there is not yet a DTMF Routing Table, so the system asks for the main telephone number.²

```
Enter the digits(0, 1,...,9,#,* , z = any):
```

d Type the main telephone number. (Do not include spaces or hyphens; type only the numerals.) After you type the number, press the **Enter** key.

- ❖ The BANDIT II C2C asks for the remote IP address.

```
Enter Remote IP Address(N.N.N.N):
```

e Type the remote IP address and press **Enter**.

- ❖ The BANDIT II C2C asks for the local IP address.

```
Enter local IP Address(0.0.0.0 for System IP address):
```

f Type **0.0.0.0** to use the BANDIT II C2C's system IP address.

- ❖ The BANDIT II C2C asks for the remote port number.

2. After you create the DTMF Routing Table, that table will be displayed whenever you select the **DTMF Routing** parameter.

Enter remote port[257]:

- g** Type the remote port number and press **Enter**.

❖ The BANDIT II C2C asks for the local port number.

Enter local port[0]:

- h** Type the local port number and press **Enter**.

❖ The BANDIT II C2C asks how to handle a call.

Enter action(A=ALLOW, D=DENY) [A]:

- i** Type **a** (to **Allow** the call).

❖ The BANDIT II C2C's DTMF Routing Table is displayed. You may add a line, delete a line, or modify a line in the table.

ENTRY	PHONE#	REMOTE IP/ LOCAL IP	REMOTE PORT/ LOCAL PORT	ACTION
-----	-----	-----	-----	-----
1)	7035551234	10.1.1.1 0.0.0.0	3000 900	ALLOW

Enter Choice: (A=Add, M= Modify, D=Delete):

- j** When you have finished the table, press the **Escape** key.

❖ The Menu of Telnet Terminal Parameters is redisplayed.

- k** Press the **Escape** key again.

❖ The Logical Port Attribute Menu is redisplayed.

- l** Press **Escape** again.

❖ The Typical Configurations Menu is redisplayed.

- 11** As shown on the Typical Configurations Menu (see page 6), the **Point-to-Point Protocol** (PPP) is the default protocol for the internal wireless card's **Expansion** port. You may need to add information to the port's PPP configuration. Do the following:

- a** On the Typical Configurations Menu, select the **Expansion** Port.

❖ The expansion port's Logical Port Attribute Menu is displayed.

```
Logical Port Attribute Menu
-----
1) Protocol      : Point-to-Point
2) Global Paths
3) Dialup Configuration
4) External Dial Devices : Enabled
5) Undefine Current Logical Port

Enter Choice : 2
```

b On the Logical Port Attribute Menu, select **Global Paths**.

- ❖ The BANDIT device's Global Paths Table is displayed. This example shows the path that was created for PPP when you selected a BANDIT II C2C quick configuration.

```
Entry  Path Name   PathType  Port
-----  -----  -----  -----
1      PRI_CELL    PORT TYPE USB WIRELESS

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

c You do not need to modify this path unless your network administrator indicates that it should be modified. Press the **Escape** key.

- ❖ The following message is displayed.

```
Global Path Table Handling Complete
```

- ❖ Then the Logical Port Attribute Menu is redisplayed.

d On the Logical Port Attribute Menu, select **Dialup Configuration**.

- ❖ The Dialup Configuration Menu for the internal wireless card's USB modem port (the BANDIT II C2C's expansion port) is displayed.

```
Dialup Configuration : USB WIRELESS
-----
1) Dial Mode : DIALOUT
2) Primary Phone Number :
3) Secondary Phone Number :
4) Redial Timer Seconds : 10
5) Number of Redials : 65530
6) Dialup Port Priority : Low
7) Toll Saver : Enabled
8) Toll Saver Timeout : 180
9) Maximum Number of Successful Calls Allowed In a Minute : 3
A) Band Class Mask : (HEX) 34a80000
B) Reset after dis-connection : Disabled
C) CSQ Timeout : 60sec
D) GPRS/EDGE Context AT Command : AT+CGDCONT=1,"IP","xx.yy.com",,0,0
E) Dialout Mode : NORMAL

Enter Choice :
```

- e** On the Dialup Configuration Menu, configure the **Primary Phone Number** for the connection. Ignore the **Secondary Phone Number**.
 - If the wireless card uses CDMA, enter #777 as the **Primary Phone Number**.
 - If the wireless card uses GSM, contact your wireless carrier for the number to enter as the **Primary Phone Number**. An example is ***99***1#**.
- f** When you have finished configuring the Dialup Configuration Menu, press the **Escape** key.
 - ❖ The Logical Port Attribute Menu is redisplayed.
- g** On the Logical Port Attribute Menu, select **External Dial Devices**.
 - ❖ The External Modem Setup Menu is displayed for the USB modem port (on the internal wireless card).

```
External Modem Setup : USB WIRELESS
-----
1) External Modem Status : Enabled
2) External Modem Type : Sierra

Enter Choice :
```

- h** The **External Modem Status** is **Enabled** by default. The **External Modem Type** shows the wireless card you ordered. When you have finished reviewing this menu, press the **Escape** key.
 - ❖ The Logical Port Attribute Menu is redisplayed.
- i** When you have finished configuring the Logical Port Attribute Menu, press **Escape**.
 - ❖ The Typical Configurations Menu is redisplayed.

12 Press **Escape** again.

- ❖ The menu that you selected for quick BANDIT II C2C configuration is redisplayed.

Note: To review the menus for quick BANDIT II configuration, see the menus under **Step 5**, on page 4 and page 5.

13 On this menu, when the configuration is satisfactory, select **Reset (Write and Reset)**.

- ❖ The Menu to Reset the Unit is displayed.

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

Are You Sure? :
```

14 Type **y** (yes).

- ❖ The following prompt is displayed.

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

15 Type **y** (yes).

- ❖ The BANDIT II C2C configuration is saved. When the BANDIT II C2C restarts, it will use the new configuration.

