# Configuring BSC Transport Services

Router Software Version 10.0
Site Manager Software Version 4.0

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Bay Networks

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# About This Guide

This guide describes how to configure router software to transport Binary Synchronous Communication (BSC) data over a multi-protocol backbone network. The text provides the following information for BSC Transport Services (BTS):

- An overview of the protocol (Chapter 1)
- Issues to consider when implementing the protocol (Chapter 2)
- How to enable the protocol on a Bay Networks router (Chapter 3)
- How to tailor parameters to your specific requirements (Chapter 4)

## Audience

This guide addresses system and network managers who have used Site Manager software to configure Bay Networks routers. If you have not used Site Manager software to configure Bay Networks routers, read *Using Site Manager Software* and *Configuring Routers* before you use this guide.

## Before You Begin

Before using this guide, you must complete the following procedures:

1. Open a configuration file.
2. Specify router hardware if this is a local-mode configuration file.

   Only Access Node (AN™) routers support BTS at present.
3. Choose a link module.
4. Select the net module connector on which you want to use BTS.

   You can enable BTS only on COM1 or COM2 connectors.

Refer to *Configuring Routers* for instructions on these procedures.

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## Conventions

This section describes the conventions used in this guide.

| | |
|---|---|
| arrow character (➔) | Separates menu and option names in instructions. Example: Protocols➔AppleTalk identifies the AppleTalk option in the Protocols menu. |
| **bold text** | Indicates text that you need to enter and command names in text. Example: Use the **dinfo** command. |
| *italic text* | Indicates variable values in command syntax descriptions, new terms, file and directory names, and book titles. |
| quotation marks (“ ”) | Indicate the title of a chapter or section within a book. |
| `screen text` | Indicates data that appears on the screen. Example: `Set Bay Networks Trap Monitor Filters` |
| vertical line (\|) | Indicates that you enter only one of the parts of the command. The vertical line separates choices. Do not type the vertical line when entering the command.<br><br>Example: If the command syntax is<br><br>**show at routes** \| **nets**, you enter either **show at routes** or **show at nets**, but not both. |

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## Acronyms

| | |
|---|---|
| Bisync | Binary Synchronous Communication |
| BOT | Binary Synchronous Communication (BSC) over TCP/IP |
| BSC | Binary Synchronous Communication |
| BTS | BSC Transport Services |
| CTS | clear to send |
| CU | control unit |
| FEP | front end processor |
| RTS | request to send |

# Chapter 1
# Overview of BSC Transport Services

Bay Networks BSC Transport Services (BTS) support the transmission of binary synchronous communication (BSC) data over a multiprotocol backbone network. BTS operates on the Bay Networks AN, running Software Version 9.00 or later.

IBM introduced the BSC protocol for the transmission of data between mainframes and remote devices in the 1960s. Since then, IBM and many other vendors have implemented the BSC protocol on many types of computer and devices. Using BTS, users of BSC equipment can improve their networks by

- Integrating BSC devices into an existing network of newer client/server services
- Eliminating direct BSC lines, which are expensive and often underused
- Ensuring an extremely reliable and resilient method of data transmission via TCP/IP

## BSC Protocol

BSC is a synchronous link level protocol that typically operates over low-speed lines up to 19.2 Kb/s. This protocol is character-oriented and assumes 8-bit characters. It uses EBCDIC or, less commonly, ASCII and other code sets for data transmission.

There are two versions of the BSC protocol:

- BSC3, Interactive (BSC 3270)

  This version has a primary-secondary architecture, which specifies that the primary device is responsible for initiating connections and transmitting data.

- BSC1, Batch (BSC 2780/3780)

  This version allows either side to initiate the connection and transfer data.

Bay Networks currently supports the BSC3 protocol.

## Hosts and Control Units

A BSC *host* is typically a mainframe computer running the BSC protocol. BSC devices communicate with hosts via *control units.* A control unit (CU) manages the BSC devices that connect to it.

## Transmission of BSC Frames over TCP

Using BTS, data travels from one BSC device to the other via two routers. The *primary* router connects to the host, and the *secondary* router connects to the control units. Figure 1-1 illustrates how a BSC device uses BTS to transmit data to a BSC host.

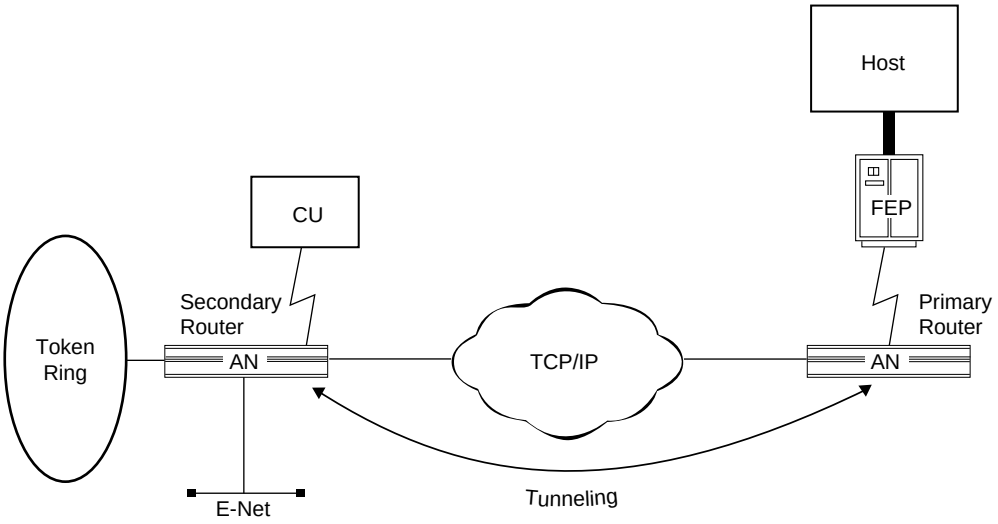


**Figure 1-1. Tunneling of BSC Frames**

The transfer process involves the following steps:

1. A BSC device transmits data to a secondary router.
2. The secondary router encapsulates the BSC data in a TCP/IP packet.
3. The secondary router transmits the packet over the IP network to the primary router.
4. The primary router extracts the BSC data from the TCP/IP packet.
5. The primary router transmits the BSC data to the BSC host via a front-end processor (FEP).

The process by which BSC data travels between the two routers is called *tunneling*. Tunneling is independent of protocol differences between BSC devices and hosts.

## Point-to-Point and Multipoint Configurations

You can use BTS with point-to-point, multipoint, and virtual multipoint configurations.

## Point-to-Point Configuration

In a BTS point-to-point configuration, one control unit and one host connect via one pair of routers (Figure 1-2).

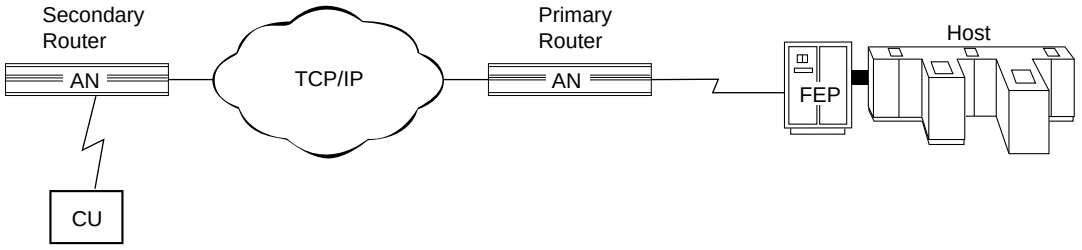


**Figure 1-2. BTS Point-to-Point Configuration**

## Multipoint Configuration

In a BTS multipoint configuration, up to 32 control units on the same line connect to one host via one pair of routers (Figure 1-3).

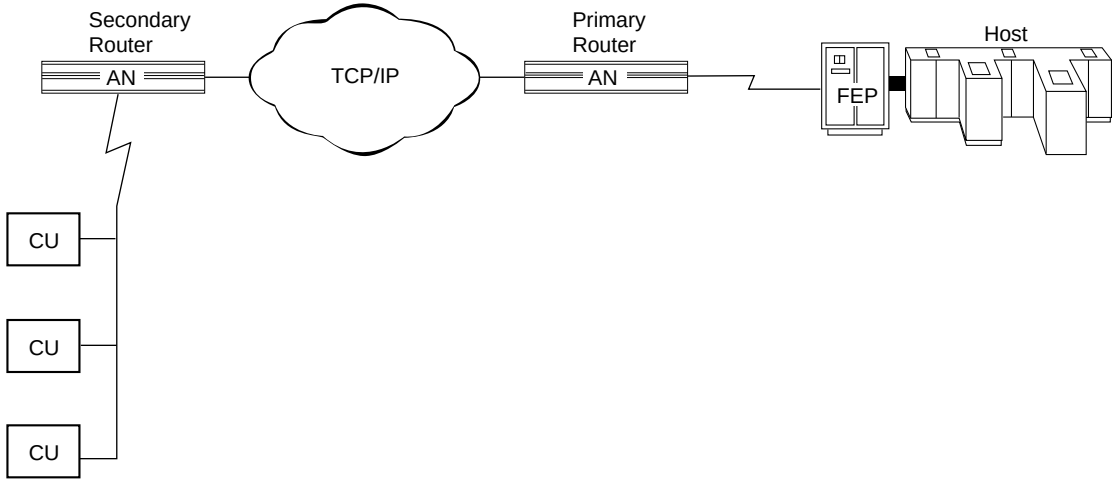


**Figure 1-3. BTS Multipoint Configuration**

## Virtual Multipoint Configuration

In a virtual BTS multipoint configuration, control units connect to secondary routers, which link to the host via the primary router (Figure 1-4). Up to 32 control units can connect to the synchronous ports on each secondary router. Using a virtual multipoint configuration, control units at different sites can communicate with the host via the same line.

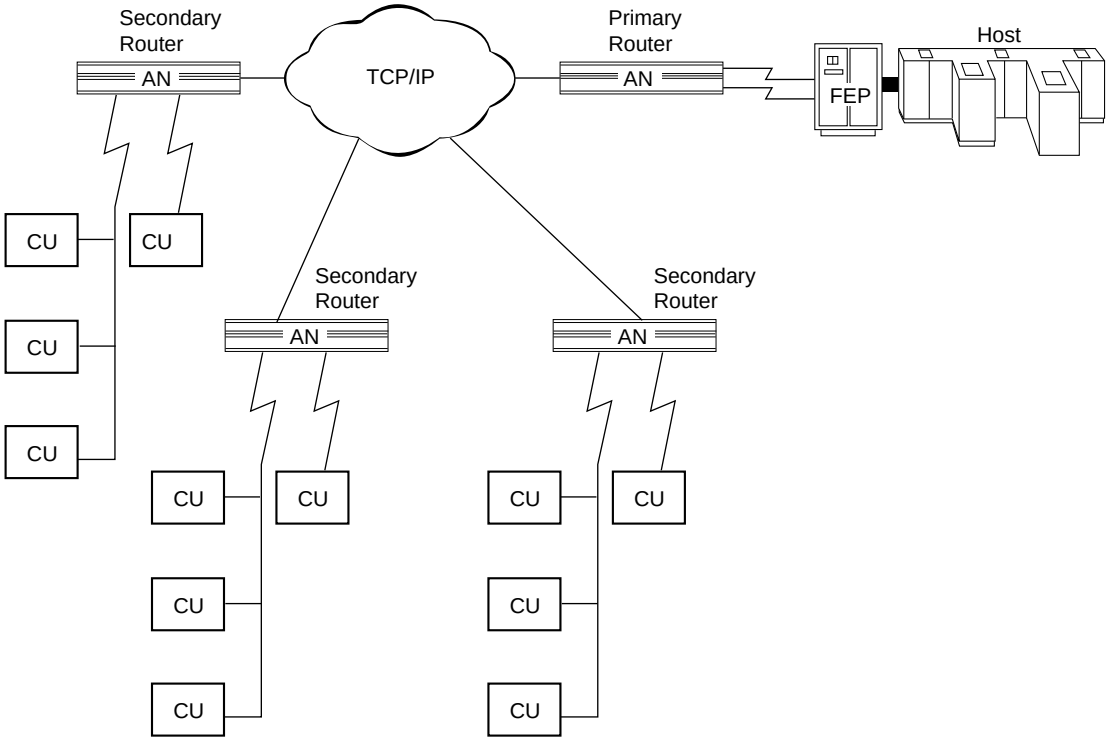


**Figure 1-4. BTS Virtual Multipoint Configuration**

# Chapter 2
# Implementation Notes

This chapter contains basic guidelines for configuring BTS interfaces.

## BTS Interfaces

You can enable BTS only on COM1 or COM2 interfaces. When you enable BTS on an interface, you must specify whether the interface

- Connects to a host (primary connection) or a control unit (secondary connection)
- Uses one (point-to-point) or many (multipoint) TCP connections

  Only a primary interface can have many TCP connections.

Refer to Chapter 3 for information about enabling BTS.

## Peer Routers

When you enable BTS, you must assign at least one peer router. If you set up a point-to-point BTS interface, you can assign only one peer router. If, however, you set up a multipoint BTS interface, you can assign multiple peer routers, either when you enable BTS or later.

When you assign a peer router, you must specify

- The IP address of the peer router
- Which of the two routers initiates the TCP connection
- The TCP ports the routers use for BTS

**Caution:** *Do not specify a TCP port that you have assigned to another application (such as telnet or ftp).*

You must also configure the peer router so that the information for the router pair matches.

Refer to Chapter 4 for information about assigning peer routers.

## Connections to Control Units

You can connect up to 32 control units on the same line that links to a secondary router. The more control units you connect to a line, the slower the performance of BTS services.

In a multipoint or virtual multipoint configuration, you must configure the BOT CU table on the primary router. This table contains the addresses of each control unit that the host can access.

You cannot configure the BOT CU table if the interface

- Connects to a control unit
- Is a point-to-point connection

For a virtual multipoint configuration, the primary router can have more than one peer router. For each peer router, you must specify the control units that the host can access.

## Line Details

Configuring line details for a Bisynchronous line is similar to configuring line details for a synchronous line. In particular, you need to specify the following information:

- Maximum frame size the router can transmit on this line
- Clock source for the timing signals
- Speed of the clock source
- Control character mode (EBCDIC or ASCII)

Refer to Chapter 4 for information about configuring line details.

# Chapter 3
# Enabling BTS

This chapter describes how to enable BTS. It assumes you have read the *Configuring Routers* documentation and:

1. Opened a configuration file.
2. Specified router hardware, if this is a local-mode configuration file.

   Only Access Node (AN) routers support BTS at present.
3. Chosen a link module.
4. Selected the net module connector on which you are enabling BTS.

   You can enable BTS only on COM1 or COM2 connectors.

For each BTS parameter that you configure, Chapters 3 and 4 give the default setting, all valid parameter options, the parameter function, instructions for setting the parameter, and the Management Information Base (MIB) object ID.

The Technician Interface allows you to modify parameters by issuing **set** and **commit** commands with the MIB object ID. This process is equivalent to modifying parameters using Site Manager. For more information about using the Technician Interface to access the MIB, refer to *Using Technician Interface Software*.

**Caution:** *The Technician Interface does not verify that the value you enter for a parameter is valid. Entering an invalid value can corrupt your configuration.*

## Enabling BTS on the Router

When you select the net module connector on which you want to enable BTS, the WAN protocols menu appears. To enable BTS on the router:

1. **Select BOT from the WAN Protocols menu.**
2. **Click on OK.**

   The Edit BOT Interface window appears (Figure 3-1).

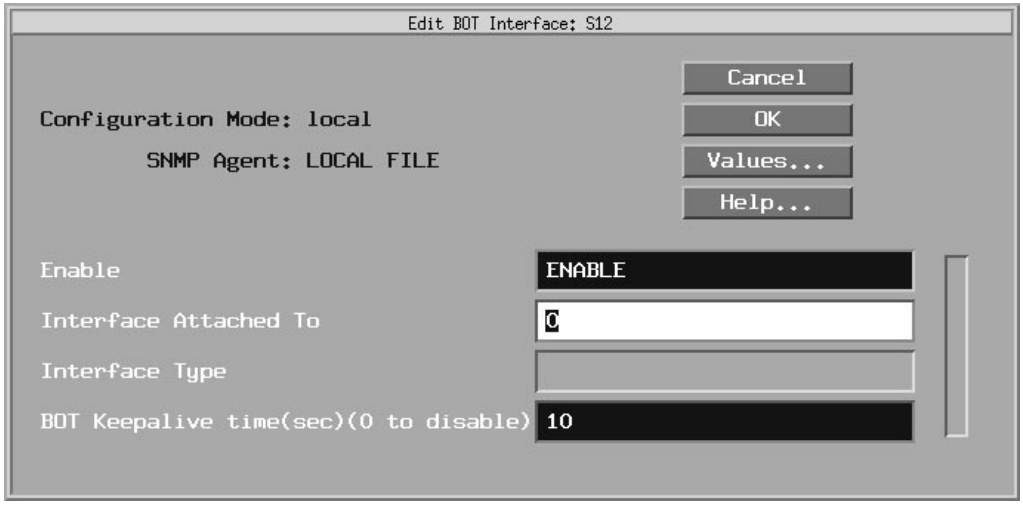


**Figure 3-1. Edit BOT Interface Window**

3. **Configure the parameters in this window.**

   Use the descriptions that follow as a guide.
4. **Click on OK.**

   The BOT Peer Table Configuration window appears.
5. **Proceed to "Assigning Peer Routers" in Chapter 4.**

| | |
|---|---|
| **Parameter:** | **Enable** |
| Default: | Enable |
| Options: | Enable \| Disable |
| Function: | Enables or disables BTS on this interface. |
| Instructions: | Select Enable or Disable. |
| MIB Object ID: | 1.3.6.1.4.1.18.3.5.18.2.1.2 |

| | |
|---|---|
| **Parameter:** | **Interface Attached To** |
| Default: | None |
| Options: | Primary \| Secondary |
| Function: | Specifies whether this interface connects to a host (primary connection) or a control unit (secondary connection).<br>One router can have both primary and secondary interfaces. |
| Instructions: | Select Primary or Secondary. |
| MIB Object ID: | 1.3.6.1.4.1.18.3.5.18.2.1.7 |

| | |
|---|---|
| **Parameter:** | **Interface Type** |
| Default: | Point to Point |
| Options: | Point to Point \| Multipoint |
| Function: | Specifies whether the interface has one or many TCP connections. Point-to-point provides one TCP connection to the peer router. Multipoint provides many TCP connections to one or more peer routers. A primary interface can have either a point-to-point or multipoint connection. A secondary interface can have only a point-to-point connection. |
| Instructions: | If this is a primary connection, select point-to-point or multipoint; if this is a secondary connection, accept point-to-point. |
| MIB Object ID: | 1.3.6.1.4.1.18.3.5.18.2.1.6 |

| | |
|---|---|
| **Parameter:** | **BOT Keepalive time (sec)** |
| Default: | 10 seconds |
| Range: | 0 to 2147483647 seconds |
| Function: | Specifies how often the router sends a signal to the peer router to check that the peer router is working correctly and can receive messages. |
| Instructions: | Enter a value appropriate for the network. We recommend that you<br>– Set this parameter to the same value on the peer router to maintain synchronization<br>– Use a value up to 50 seconds |
| MIB Object ID: | 1.3.6.1.4.1.18.3.5.18.2.1.9 |

# Chapter 4
# Editing BTS Parameters

This chapter provides information on how you can edit the parameters for the BTS interfaces that you configure on the router.

For each BTS parameter that you configure, Chapters 3 and 4 give the default setting, all valid parameter options, the parameter function, instructions for setting the parameter, and the Management Information Base (MIB) object ID.

The Technician Interface allows you to modify parameters by issuing **set** and **commit** commands with the MIB object ID. This process is equivalent to modifying parameters using Site Manager. For more information about using the Technician Interface to access the MIB, refer to *Using Technician Interface Software*.

**Caution:** *The Technician Interface does not verify that the value you enter for a parameter is valid. Entering an invalid value can corrupt your configuration.*

After you enable BTS, you can edit all BTS parameters from the Configuration Manager window (Figure 4-1). Refer to *Configuring Routers* for instructions on accessing this window.


**Figure 4-1. Configuration Manager Window**

## Editing the BTS Interface Parameters

When you enable BTS, you must configure the BTS interface parameters (refer to Chapter 3). You can, however, edit these parameters later.

To edit the BTS interface parameters:

1. **Start at the Configuration Manager window (Figure 4-1).**
2. **Select Protocols→BOT→Interfaces.**

   The BOT Interfaces window (Figure 4-2) appears.

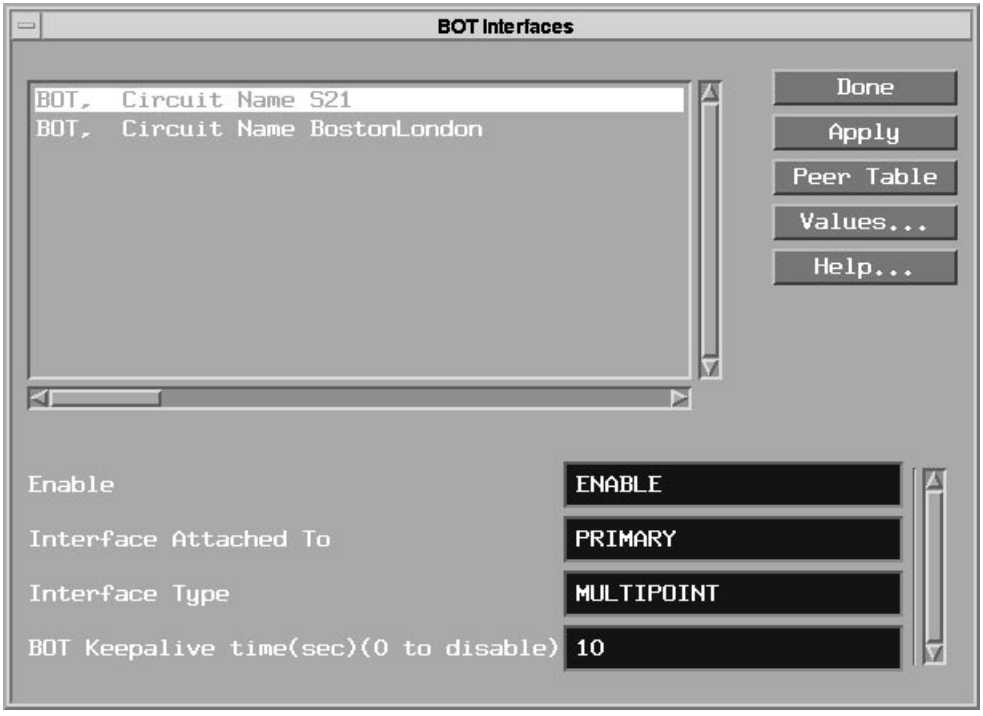


**Figure 4-2. BOT Interfaces Window**

3. **Select an entry in this window.**
4. **Edit the parameters in this window.**

   Refer to the descriptions in Chapter 3 for guidelines.
5. **Click on Apply.**
6. **Click on Done.**

   The Configuration Manager window returns (refer to Figure 4-1).

## Assigning Peer Routers

When you enable BTS on a router, you must assign at least one peer router. If you set up a point-to-point BTS interface, you can assign only one peer router. If, however, you set up a multipoint BTS interface, you can assign multiple peer routers, either when you enable BTS or later.

Before you assign peer routers, access the BOT Peer Table Configuration window (Figure 4-3). When you enable BTS, and click on OK to exit the Edit BOT interface window (refer to Figure 3-1), the BOT Peer Table Configuration window (Figure 4-3) appears automatically.

To access this window when you want to assign additional peer routers:

1. **Start at the Configuration Manager window (Figure 4-1).**
2. **Select Protocols→BOT→Interfaces.**

   The BOT Interfaces window appears (Figure 4-2).
3. **Click on Peer Table.**

   The BOT Peer Table Configuration window appears (Figure 4-3).

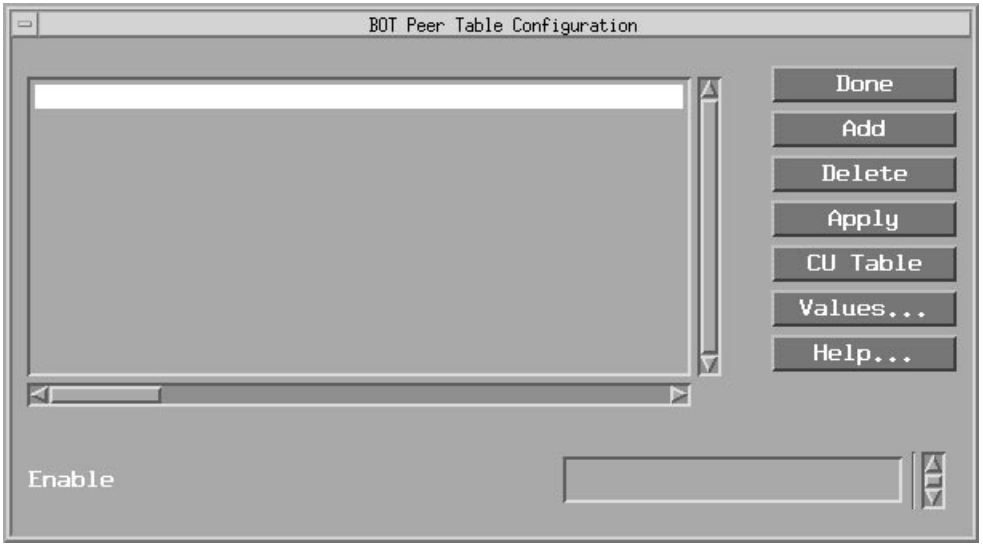


**Figure 4-3. BOT Peer Table Configuration Window**

To assign a peer router:

1. **Click on Add.**

   The Add BOT Peer Entry window appears.

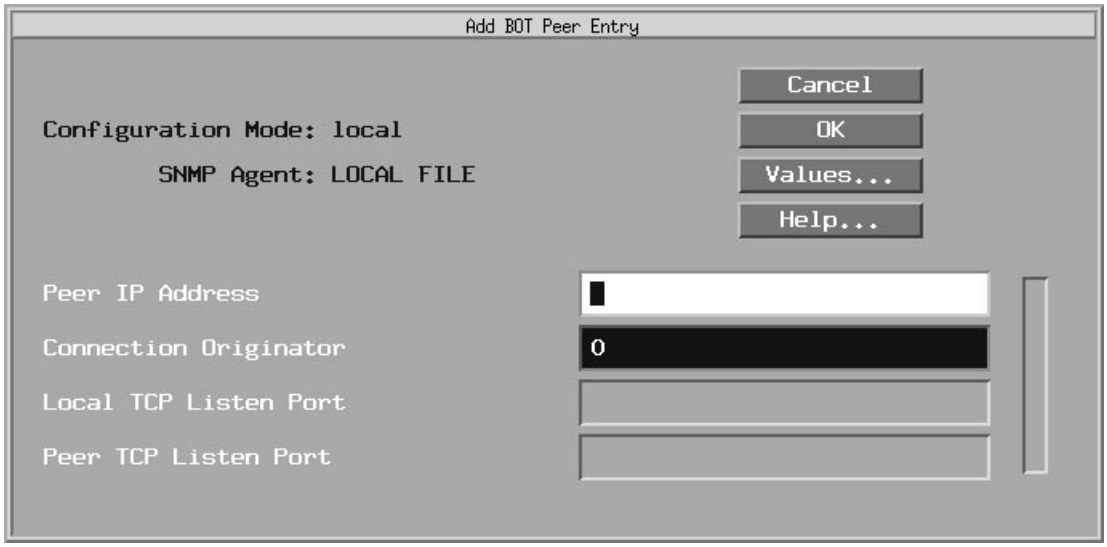


**Figure 4-4. Add BOT Peer Entry Window**

2. **Configure the parameters in this window.**

   Use the descriptions that follow as a guide.

3. **Click on OK.**

   The BOT Peer Table Configuration window returns (Figure 4-3), displaying the peer entry you added. When you configure a peer router, Site Manager automatically enables the TCP connection to that router. To disable a connection to a peer router later, refer to "Enabling or Disabling BTS Peer Routers," later in this chapter.

4. **Click on Apply.**

5. **Click on Done to exit this window or click on CU Table to specify a connection to a control unit.**

**Note:** *The CU Table button does not appear when you are configuring a point-to-point circuit.*

For information about specifying connections to control units, refer to "Specifying Connections to Control Units," later in this chapter.

| | |
|---|---|
| **Parameter:** | **Peer IP Address** |
| Default: | None |
| Options: | Any valid IP address |
| Function: | Specifies the IP address of the peer router. |
| Instructions: | Enter the peer router's IP address in dotted decimal notation. |
| MIB Object ID: | 1.3.6.1.4.1.18.3.5.18.3.1.5 |

| | |
|---|---|
| **Parameter:** | **Connection Originator** |
| Default: | None |
| Options: | Self \| Partner |
| Function: | Determines whether this router (Self) or the peer router (Partner) initiates the TCP connection. |
| Instructions: | Select Self or Partner. Be sure to set this parameter on the peer router to the other value. |
| MIB Object ID: | 1.3.6.1.4.1.18.3.5.18.3.1.6 |

| | |
|---|---|
| **Parameter:** | **Local TCP Listen Port** |
| Default: | None |
| Options: | Any valid port number |
| Function: | Specifies the TCP port number that this router uses for BTS. This parameter is active only when you set the Connection Originator parameter to Partner. |
| Instructions: | Enter a valid, available port number for this router. Be sure to use the same value for the Peer TCP Listen Port parameter on the peer router. |
| MIB Object ID: | 1.3.6.1.4.1.18.3.5.18.3.1.7 |

| | |
|---|---|
| **Parameter:** | **Peer TCP Listen Port** |
| Default: | None |
| Options: | Any valid port number |
| Function: | Specifies the TCP port that the peer router uses for BTS. This parameter is active only when you set the Connection Originator parameter to Self. |
| Instructions: | Enter a valid, available port number for the peer router. Be sure to use the same value for the Local TCP Listen Port parameter on the peer router. |
| MIB Object ID: | 1.3.6.1.4.1.18.3.5.18.3.1.8 |

## Enabling or Disabling BTS Peer Routers

When you configure a peer router, the local router automatically enables the TCP connection to the peer. To disable or re-enable the connection to a peer router:

1. **Start at the Configuration Manager window (refer to Figure 4-1).**
2. **Select Protocols→BOT→Interfaces.**

   The BOT Interfaces window appears (refer to Figure 4-2).
3. **Select an entry in this window.**
4. **Click on Peer Table.**

   The BOT Peer Table Configuration window appears (refer to Figure 4-3).
5. **Set the Enable parameter to Enable or Disable.**
6. **Click on Apply.**

7. **Click on Done in each window to return to the Configuration Manager.**

| | |
|---|---|
| **Parameter:** | **Enable** |
| Default: | Enable |
| Options: | Enable \| Disable |
| Function: | Enables or disables the TCP connection to this peer router. |
| Instructions: | Select Enable or Disable. |
| MIB Object ID: | 1.3.6.1.4.1.18.3.5.18.3.1.2 |

## Specifying Connections to Control Units

In a multipoint or virtual multipoint configuration, you must configure the BOT CU table on the primary router. This table contains the addresses of each control unit that the host can access.

You cannot configure the BOT CU table if the interface

- Connects to a control unit
- Is a point-to-point connection

In a virtual multipoint configuration, the primary router can have more than one peer router. Each peer router has a corresponding entry in the BOT Peer Table Configuration window (refer to Figure 4-3). For each entry, you must specify the control units that the host can access.

To specify connections to control units:

1. **Start at the BOT Peer Table Configuration window (refer to Figure 4-3).**
2. **Select a peer entry in the window.**
3. **Click on CU Table.**

   The BOT CU Table Configuration window appears (Figure 4-5).

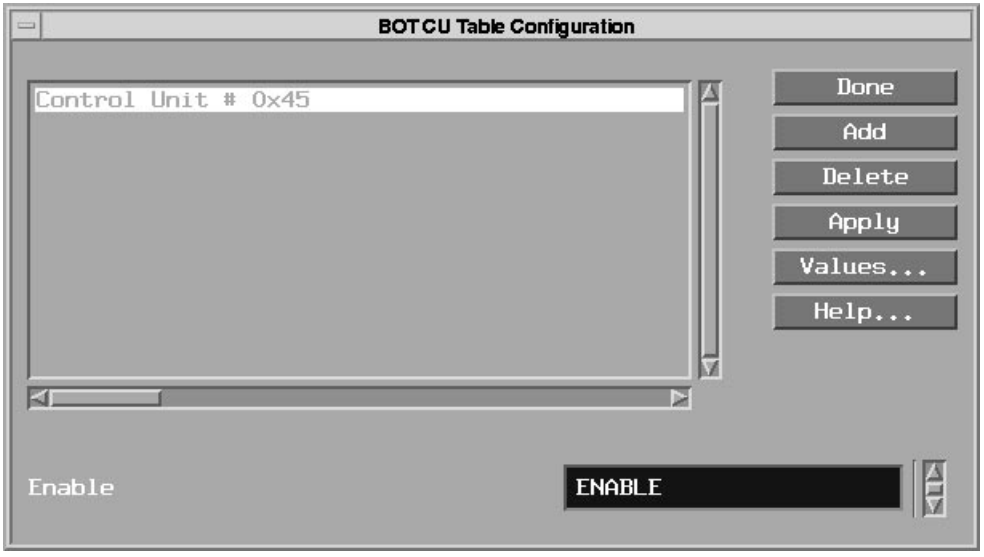


**Figure 4-5. BOT CU Table Configuration Window**

4. **Click on Add.**

   The Add BOT CU Entry window appears (Figure 4-6).

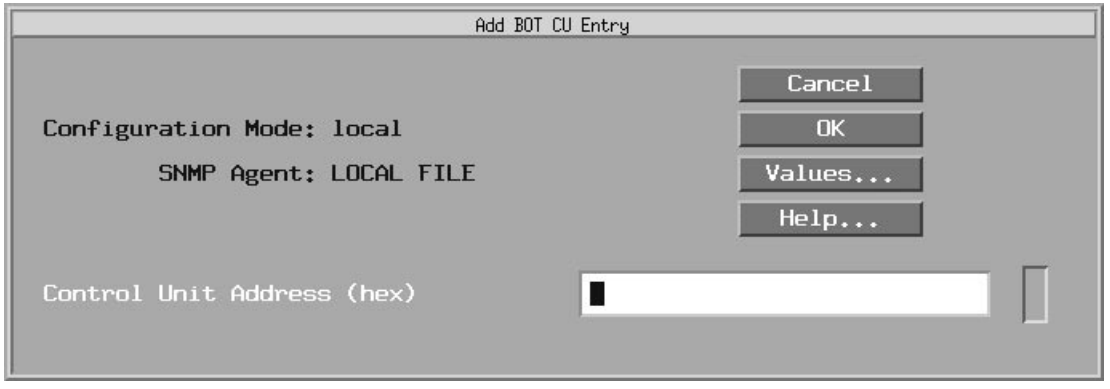


**Figure 4-6. Add BOT CU Entry Window**

5. **Enter the address of the control unit.**

   Refer to the following description and Appendix B for guidelines.

6. **Click on OK.**

   The BOT CU Table Configuration window returns (refer to Figure 4-5). When you add an entry to the BOT CU Table, Site Manager automatically enables the TCP connection to that control unit. To disable the connection later, refer to "Enabling or Disabling a Connection to a Control Unit," later in this chapter.

7. **Click on Apply.**

8. **Click on Done.**

| | |
|---|---|
| **Parameter:** | **Control Unit Address** |
| Default: | None |
| Range: | 0x40 to 0xfe |
| Function: | Specifies the address of the control unit. |
| Instructions: | Enter the address of the control unit, in hexadecimal format. |
| MIB Object ID: | 1.3.6.1.4.1.18.3.5.18.3.1.8 |

## Enabling or Disabling a Connection to a Control Unit

When you add an entry to the BOT CU Table, the router automatically enables the TCP connection to that control unit. To disable or re-enable the connection to a control unit:

1. **Start at the BOT Peer Table Configuration window (refer to Figure 4-3).**

2. **Select the appropriate peer entry for the control unit.**

3. **Click on CU Table.**

   The BOT CU Table Configuration window appears (refer to Figure 4-5).

4. **Select a control unit from the list of entries.**

5. **Set the Enable parameter to Enable or Disable.**

   Refer to the following description for guidelines.

6. **Click on Apply to save your change.**

7. **Click on Done.**

| | |
|---|---|
| **Parameter:** | **Enable** |
| Default: | Enable |
| Options: | Enable \| Disable |
| Function: | Specifies whether or not the TCP connection to this control unit is active. |
| Instructions: | Select Enable or Disable. |
| MIB Object ID: | 1.3.6.1.4.1.18.3.5.18.3.1.2 |

## Editing Line Parameters

To edit the line-specific parameters:

1. **Start at the Configuration Manager window (refer to Figure 4-1).**
2. **Click on the appropriate connector.**

   The Edit Connector window appears.
3. **Click Edit Line.**

   The Edit Bisync Parameters window appears (Figure 4-7).


**Figure 4-7. Edit Bisync Parameters Window**

4. **Configure the line parameters.**

   Refer to the following descriptions for guidelines.

5. **Click on OK to save your changes.**

   The Edit Connector window returns.

6. **Click on Done.**

| | |
|---|---|
| **Parameter:** | **Enable** |
| Default: | Enable |
| Options: | Enable \| Disable |
| Function: | Enables or disables this line. |
| Instructions: | Select Enable or Disable. |
| MIB Object ID: | 1.3.6.1.4.1.18.3.4.27.1.1.2 |

| | |
|---|---|
| **Parameter:** | **MTU Size** |
| Default: | 1580 |
| Range: | 1 to 4568 bytes |
| Function: | Specifies the largest frame that the router can transmit across this Bisynchronous line. |
| Instructions: | Specify a value appropriate for the network. |
| MIB Object ID: | 1.3.6.1.4.1.18.3.4.27.1.1.4 |

| | |
|---|---|
| **Parameter:** | **Clock Source** |
| Default: | External |
| Options: | External \| Internal |
| Function: | Specifies the origin of the Bisynchronous timing signals. If you set this parameter to Internal, this router supplies the required timing signals. If you set this parameter to External, an external network device supplies the required timing signals. |
| Instructions: | Select the clocking mode, as appropriate for the network. Be sure to attach the appropriate cable to your router for an internal or external clocking source (see *Cable Guide for Routers and BNX Platforms*). |
| MIB Object ID: | 1.3.6.1.4.1.18.3.4.27.1.1.7 |

| | |
|---|---|
| **Parameter:** | **Clock Speed** |
| Default: | 9600 |
| Options: | 1200 B \| 2400 B \| 4800 B \| 7200 B \| 9600 B \| 19200 B |
| Function: | Sets the clock speed when you use the router to supply clocking signals. Depending on the protocols you configured on this interface, this value may control internal decision making within the router. In some cases, the router uses this value for selecting routes. |
| Instructions: | Set the clock speed to the desired data transmission rate across the Bisynchronous line, and set the Clock Source parameter to Internal. |
| MIB Object ID: | 1.3.6.1.4.1.18.3.4.27.1.1.8 |

| | |
|---|---|
| **Parameter:** | **Configured Transmit Q Length** |
| Default: | 0 |
| Range: | 0 to 255 |
| Function: | Specifies the length of the transmit queue. If you set this parameter to zero, the router selects an appropriate value; otherwise, the router uses the length you specify. If you enter a value that is larger than the number of buffers the router reserves for transmitting data (the compiled ring size), the router reduces the value to the compiled ring size. |
| Instructions: | Accept the default or enter a value that is appropriate for this line. |
| MIB Object ID: | 1.3.6.1.4.1.18.3.4.27.1.1.10 |

| | |
|---|---|
| **Parameter:** | **Configured Receive Q Length** |
| Default: | 0 |
| Range: | 0 to 255 |
| Function: | Specifies the length of the receive queue. If you set this parameter to zero, the router selects an appropriate value; otherwise, the router uses the length you specify. If you enter a value that is larger than the number of buffers the router reserves for receiving data (the compiled ring size), the router reduces the value to the compiled ring size. |
| Instructions: | Accept the default or enter a value that is appropriate for this line. |
| MIB Object ID: | 1.3.6.1.4.1.18.3.4.27.1.1.11 |

| | |
|---|---|
| **Parameter:** | **Control Character Mode** |
| Default: | EBCDIC |
| Options: | EBCDIC \| ASCII |
| Function: | Specifies the code set that the Bisynchronous Communication Protocol uses. The Bisync link layers use control characters to identify frames. EBCDIC is more common than ASCII. |
| Instructions: | Select EBCDIC or ASCII. |
| MIB Object ID: | 1.3.6.1.4.1.18.3.4.27.1.1.12 |

| | |
|---|---|
| **Parameter:** | **RTS Enable** |
| Default: | Disabled |
| Options: | Enabled \| Disabled |
| Function: | Enables or disables the detection of request to send (RTS) and clear to send (CTS) signals on this interface. |
| Instructions: | Set this parameter to Enable if the connected device (for example, a modem) uses RTS/CTS flow control. |
| MIB Object ID: | 1.3.6.1.4.1.18.3.4.27.1.1.14 |

| | |
|---|---|
| **Parameter:** | **External Clock Speed** |
| Range: | 9600 |
| Options: | 1200 to 19200 bits/s |
| Function: | Sets the clock speed when you use an external source to supply clocking signals. Depending on the protocols you configured on this interface, this value may control internal decision making within the router. In some cases, the router uses this value for selecting routes. |
| Instructions: | Enter the value that most closely corresponds to the speed of the external clock, and set the Clock Source parameter to External. |
| MIB Object ID: | 1.3.6.1.4.1.18.3.4.27.1.1.15 |

## Disabling BTS

To disable BTS globally without deleting it from the router:

1. **Start at the Configuration Manager window (Figure 4-1).**
2. **Select Protocols→BOT→Global.**

   The Edit BOT Global Parameters window appears.
3. **Set the Enable parameter to Disable.**
4. **Click on OK.**

## Deleting BTS from the Router

To delete BTS from the router:

1. **From the Configuration Manager window (Figure 4-1), select Protocols→BOT→Delete BOT.**

   A window appears, displaying the message:

   ```
   Do you REALLY want to delete BOT?
   ```
2. **Click on OK.**

   The Configuration Manager window returns (Figure 4-1). BTS is no longer operating on the router.

## Deleting BTS Interfaces

To delete a specific BTS interface:

1. **Start at the Configuration Manager window (refer to Figure 4-1).**
2. **Select Circuits→Delete Circuit.**

   The Circuit List window appears.
3. **Select the interface you want to delete.**
4. **Click on Delete.**

   The Delete circuit window appears.
5. **Click on Delete.**

# Appendix A
# Default Values for BTS Parameters

Tables A-1 through A-4 list the Site Manager default parameter settings for BTS.

**Table A-1. Interface Parameters**

| Parameter | Default |
|---|---|
| Enable | Enable |
| Interface Attached To | None |
| Interface Type | Point-to-Point |
| BOT Keepalive time (sec) | 10 seconds |

**Table A-2. Peer Entry Parameters**

| Parameter | Default |
|---|---|
| Peer IP Address | None |
| Connection Originator | None |
| Local TCP Listen Port | None |
| Peer TCP Listen Port | None |
| Enable | Enable |

**Table A-3. Control Unit Parameters**

| Parameter | Default |
|---|---|
| Control Unit Address | None |
| Enable | Enable |

**Table A-4. Line Parameters**

| Parameter | Default |
|---|---|
| Enable | Enable |
| MTU Size | 1580 |
| Clock Source | External |
| Clock Speed | 9600 |
| Configured Transmit Q Length | 0 |
| Configured Receive Q Length | 0 |
| Control Character Mode | EBCDIC |
| RTS Enable | Disabled |
| External Clock Speed | 9600 |

# Appendix B
# Control Unit Addresses

When you specify connections to control units (refer to Chapter 4), you must supply the appropriate address of the control unit. Table B-1 shows the addresses you should use for BSC3.

**Table B-1. Device Address Table for BSC3**

| Control Unit or Device Position | Control Unit Address |
|---|---|
| 0 | 0x40 |
| 1 | 0xC1 |
| 2 | 0xC2 |
| 3 | 0xC3 |
| 4 | 0xC4 |
| 5 | 0xC5 |
| 6 | 0xC6 |
| 7 | 0xC7 |
| 8 | 0xC8 |
| 9 | 0xC9 |
| 10 | 0x4A |
| 11 | 0x4B |
| 12 | 0x4C |
| 13 | 0x4D |
| 14 | 0x4E |
| 15 | 0x4F |

*(continued)*

**Table B-1. Device Address Table for BSC3**

| Control Unit or Device Position | Control Unit Address |
|---|---|
| 16 | 0x50 |
| 17 | 0xD1 |
| 18 | 0xD2 |
| 19 | 0xD3 |
| 20 | 0xD4 |
| 21 | 0xD5 |
| 22 | 0xD6 |
| 23 | 0xD7 |
| 24 | 0xD8 |
| 25 | 0xD9 |
| 26 | 0x5A |
| 27 | 0x5B |
| 28 | 0x5C |
| 29 | 0x5D |
| 30 | 0x5E |
| 31 | 0x5F |

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## S



## T



## V



## W