

Release Notes for Site Manager Software Version 5.0

Router Software Version 11.0
Site Manager Software Version 5.0

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Technical Support and Online Services

To ensure comprehensive network support to our customers and partners worldwide, Bay Networks Customer Service has Technical Response Centers in key locations around the globe:

- Billerica, Massachusetts
- Santa Clara, California
- Sydney, Australia
- Tokyo, Japan
- Valbonne, France

The Technical Response Centers are connected via a redundant Frame Relay Network to a Common Problem Resolution system, enabling them to transmit and share information, and to provide live, around-the-clock support 365 days a year.

Bay Networks Information Services complement the Bay Networks Service program portfolio by giving customers and partners access to the most current technical and support information through a choice of access/retrieval means. These include the World Wide Web, CompuServe, Support Source CD, Customer Support FTP, and InfoFACTS document fax service.

Bay Networks Customer Service

If you purchased your Bay Networks product from a distributor or authorized reseller, contact that distributor's or reseller's technical support staff for assistance with installation, configuration, troubleshooting, or integration issues.

Customers can also purchase direct support from Bay Networks through a variety of service programs. As part of our PhonePlus™ program, Bay Networks Service sets the industry standard, with 24-hour, 7-days-a-week telephone support available worldwide at no extra cost. Our complete range of contract and noncontract services also includes equipment staging and integration, installation support, on-site services, and replacement parts delivery -- within approximately 4 hours.

To purchase any of the Bay Networks support programs, or if you have questions on program features, use the following numbers:

Region	Telephone Number	Fax Number
United States and Canada	1-800-2LANWAN; enter Express Routing Code (ERC) 290 when prompted (508) 436-8880 (direct)	(508) 670-8766
Europe	(33) 92-968-300	(33) 92-968-301
Asia/Pacific Region	(612) 9927-8800	(612) 9927-8811
Latin America	(407) 997-1713	(407) 997-1714

In addition, you can receive information on support programs from your local Bay Networks field sales office, or purchase Bay Networks support directly from your authorized partner.

Bay Networks Information Services

Bay Networks Information Services provide up-to-date support information as a first-line resource for network administration, expansion, and maintenance. This information is available from a variety of sources.

World Wide Web

The Bay Networks Customer Support Web Server offers a diverse library of technical documents, software agents, and other important technical information to Bay Networks customers and partners.

A special benefit for contracted customers and resellers is the ability to access the Web Server to perform Case Management. This feature enables your support staff to interact directly with the network experts in our worldwide Technical Response Centers. A registered contact with a valid Site ID can

- View a listing of support cases and determine the current status of any open case. Case history data includes severity designation, and telephone, e-mail, or other logs associated with the case.
- Customize the listing of cases according to a variety of criteria, including date, severity, status, and case ID.
- Log notes to existing open cases.
- Create new cases for rapid, efficient handling of noncritical network situations.
- Communicate directly via e-mail with the specific technical resources assigned to your case.

The Bay Networks URL is *<http://www.baynetworks.com>*. Customer Service is a menu item on that home page.

Customer Service FTP

Accessible via URL *<ftp://support.baynetworks.com>* (134.177.3.26), this site combines and organizes support files and documentation from across the Bay Networks product suite, including switching products from our Centillion™ and Xylogics® business units. Central management and sponsorship of this FTP site lets you quickly locate information on any of your Bay Networks products.

Support Source CD

This CD-ROM -- sent quarterly to all contracted customers -- is a complete Bay Networks Service troubleshooting knowledge database with an intelligent text search engine.

The Support Source CD contains extracts from our problem-tracking database; information from the Bay Networks Forum on CompuServe; comprehensive technical documentation, such as Customer Support Bulletins, Release Notes, software patches and fixes; and complete information on all Bay Networks Service programs.

You can run a single version on Macintosh Windows 3.1, Windows 95, Windows NT, DOS, or UNIX computing platforms. A Web links feature enables you to go directly from the CD to various Bay Networks Web pages.

CompuServe

For assistance with noncritical network support issues, Bay Networks Information Services maintain an active forum on CompuServe, a global bulletin-board system. This forum provides file services, technology conferences, and a message section to get assistance from other users.

The message section is monitored by Bay Networks engineers, who provide assistance wherever possible. Customers and resellers holding Bay Networks service contracts also have access to special libraries for advanced levels of support documentation and software. To take advantage of CompuServe's recently enhanced menu options, the Bay Networks Forum has been re-engineered to allow links to our Web sites and FTP sites.

We recommend the use of CompuServe Information Manager software to access these Bay Networks Information Services resources. To open an account and receive a local dial-up number in the United States, call CompuServe at 1-800-524-3388. Outside the United States, call 1-614-529-1349, or your nearest CompuServe office. Ask for Representative No. 591. When you are on line with your CompuServe account, you can reach us with the command **GO BAYNET**.

InfoFACTS

InfoFACTS is the Bay Networks free 24-hour fax-on-demand service. This automated system has libraries of technical and product documents designed to help you manage and troubleshoot your Bay Networks products. The system responds to a fax from the caller or to a third party within minutes of being accessed.

To use InfoFACTS in the United States or Canada, call toll-free 1-800-786-3228. Outside North America, toll calls can be made to 1-408-764-1002. In Europe, toll-free numbers are also available for contacting both InfoFACTS and CompuServe. Please check our Web page for the listing in your country.

How to Get Help

Use the following numbers to reach your Bay Networks Technical Response Center:

Technical Response Center	Telephone Number	Fax Number
Billerica, MA	1-800-2LANWAN	(508) 670-8765
Santa Clara, CA	1-800-2LANWAN	(408) 764-1188
Valbonne, France	(33) 92-968-968	(33) 92-966-998
Sydney, Australia	(612) 9927-8800	(612) 9927-8811
Tokyo, Japan	(81) 3-5402-0180	(81) 3-5402-0173

Release Notes for Site Manager Software Version 5.0

Site Manager Version 5.0 lets you manage Bay Networks[™] routers running Router Software Versions 8.10, 8.11, 9.0, and 10.0. These release notes include information on the following topics:

- New features in Version 5.0
- Online Library Version 11.0
- Guidelines for working with Site Manager 5.0
- Amendments to the documentation

New Features in Version 5.0

Version 5.0 of Site Manager supports the new features in Router Software Version 11.0, described in *Release Notes for Router Software Version 11.0*.

Online Library Version 11.0

Version 11.0 is the first Online Library CD that presents the documentation as Portable Document Format (PDF) files, which retain the appearance of the original documents. This format offers clearer reproduction of line drawings and screen shots than previous versions of the library.

In addition, the new format of the Online Library enables you to

- Access related documents on the World Wide Web.
- Copy individual books to your computer.
- Print copies of books that have the same format as the original publications.

To view and search for information in this library, you must use either the Adobe Acrobat Reader on this CD or Adobe Acrobat Exchange.



Note: It is not possible to search for information on this version of the Online Library CD from an IBM RS/6000 workstation. You can, however, view and print PDF files as you would on any other platform.

Accessing the Online Library from Site Manager

You could access previous versions of the Online Library from the main window of Site Manager. You cannot, however, access this version of the Online Library from Version 5.0 of Site Manager.

Guidelines for Working with Site Manager

The sections that follow provide guidelines for working with Site Manager Version 5.0. These guidelines supplement the instructions in the documentation set. Unless otherwise indicated, the guidelines that follow apply to Site Manager software running under all supported operating systems: UNIX on the Sun SPARCstation, HP 9000, IBM RS/6000, and MS Windows on the PC.

Site Manager and Router Software Compatibility

Site Manager 5.0 is supported for use with routers operating the following releases:

- 8.1x (such as 8.12)
- 9.0
- 9.0x (such as 9.01)
- 10.0
- 10.0x (such as 10.01)

Creating Local Site Manager Configurations

You can create a local configuration file with Site Manager Version 5.0 only for Router Software Version 11.0. You cannot use Site Manager Version 5.0 to create local configuration files for previous router software releases. Similarly, you can create a local configuration file with Site Manager Version 4.0 only for Router Software Version 10.0, with Site Manager Version 3.0 for Router Software Version 9.0, and so forth.

Configuring a 5380, 5580, or 5780 Router from a PC

You must use Windows 95 to configure and manage a Model 5380, 5580, or 5780 router from a PC.

Outbound LAN Traffic Filters

When implementing outbound traffic filters for LAN protocols, note that in some configurations the filters may cause a decline in throughput performance. For LAN circuits where the forwarding rate of the router is critical, we suggest that you monitor the throughput performance after configuring outbound LAN filters. If you notice an unacceptable performance degradation, try using inbound traffic filters to accomplish the filtering goal.

Using X11R6 with Site Manager

You must upgrade to fix 12 of X11R6 for Site Manager to operate correctly with that product.

Socket Binding Message with Network Management Systems

Network management systems such as OpenView or SunNet Manager may prevent Site Manager from binding to the SNMP sockets. As a result, you may receive one of the following trap messages:

```
wftraps: : Unable to bind udp/snmp sockets. (C3501)
```

```
wftraps: : Permission to bind a socket is denied. Verify that the  
application is owned by "root", and that the permissions have been  
configured to set the effective user id to that of the owner of the file  
when the file is run. If the permissions are correct, another process may  
have already bound to the udp ports. (C3501)
```

To solve this problem, stop the network management system that is binding to the socket (kill the process ID).

Well-Known Connections List in Site Manager

The router sorts well-known connections by IP address, and displays that list in the Well-Known connections box on the main Site Manager screen.

Using Site Manager with Chameleon

Version 4.01 of the Chameleon stack has a trap feature and if it is enabled, it blocks Site Manager from receiving traps and causes Site Manager to fail. If you are using Version 4.01 Chameleon, you can disable the trap feature by selecting Custom > Services > SNMP > Trap > Disable.

Using a 7.57 Configuration File with a Later Release

You cannot boot a router running Version 7.60 or later with a 7.57 configuration file created with an application other than Site Manager, because the configuration file is missing a component. To work around this limitation, first enter the configuration file into Site Manager and save it. Then you can successfully use the configuration file to start the router.

Effects of Disabling Dial Optimized Routing Dynamically

Dial optimized routing is a new dial-on-demand feature. If you enable or disable dial optimized routing dynamically while your demand connection is active, the router disconnects the connection. If there is still data to send after the call is cleared, the router will place a new call that uses the new configuration with the new value for dial optimized routing.

You configure dial optimized routing in the Demand Circuit configuration window.

Changing Site Manager Fonts and Colors

Refer to the appropriate section to display and change the Site Manager fonts and colors:

- “Changing Fonts and Colors on a PC”
- “Changing Fonts and Colors on a UNIX Workstation”

Changing Fonts and Colors on a PC

This section describes how to change the fonts and colors displayed in the Site Manager windows.

Fonts

To change Site Manager fonts on the PC, open the file *jam.ini* in your MS Windows directory (usually *\windows*). Search for the following line:

```
SystemFont=OEM_FIXED_FONT
```

Change *OEM_FIXED_FONT* to the font you want. The *jam.ini* file provides examples. A sample change follows:

```
SystemFont=SYSTEM_FIXED_FONT
```

Colors

The color scheme of the Microsoft Windows Program Manager determines the colors displayed in Site Manager windows. To change the colors, refer to the Microsoft Windows reference manual.



Caution: We strongly recommend that you do not edit the colors defined in the *jam.ini* file; this may cause problems with Site Manager.

Changing Fonts and Colors on a UNIX Workstation

You can change fonts and colors for your own use of Site Manager or for all users of Site Manager on a workstation.

The *.Xdefaults* file in your home directory determines the fonts and colors for your own use of Site Manager.

The *XJam* file determines the fonts and colors displayed in Site Manager windows for all users of Site Manager. On SPARCstations running OpenWindows, this file is in the *\$OPENWINHOME/lib/app-defaults* directory. On SPARCstations running X11, HP 9000, or RS/6000 workstations, this file is in the */usr/lib/X11/app-defaults* directory.

When changing a font or color, first make sure that your system supports the new font or color. Refer to the documentation that came with your system.

Fonts

To change the font for your own use of Site Manager:

1. **Add the following line to your *.Xdefaults* file, where *font* is the name of the font you want:**

XJam*fontList:*font*

2. **Save your *.Xdefaults* file.**
3. **Enter the following command to reload the contents of the *.Xdefaults* file on the X server:**

xrdb -merge .Xdefaults

To change the font for all users of Site Manager on this workstation:

1. **Open the *XJam* file.**
2. **Search for the following line:**
`XJam*fontList:8x13`
3. **Change 8x13 to the font you want.**
4. **Save the *XJam* file.**

Colors

To change the foreground or background color for your own use of Site Manager:

1. **Add the appropriate line to your *.Xdefaults* file.**

If you want to change the foreground, add the following line, where *color* is the name of the color you want:

XJam*foreground:*color*

If you want to change the background, add the following line, where *color* is the name of the color you want:

XJam*background:*color*

2. **Save your *.Xdefaults* file.**
3. **Enter the following command to reload the contents of the *.Xdefaults* file on the X server:**

xrdb -merge.Xdefaults

To change the foreground or background color for all users of Site Manager on this workstation:

1. **Open the *XJam* file.**
2. **Search for the appropriate line, as follows:**

If you want to change the foreground, search for the following line:

```
XJam*foreground:steelblue3
```

If you want to change the background, search for the following line:

```
XJam*background:chartreuse3
```

3. **Change the color name to the one you want.**
4. **Save the *XJam* file.**

Amendments to the Documentation

The sections that follow describe amendments to the Version 10.0 documentation noted in the following headings.

Configuring Bridging Services

Subject: Priority Parameter

Description: The description of the Priority parameter (which appears in the Spanning Tree Interfaces window) on page 1-31 incorrectly lists the range of values as 0 to 255. The correct range is 1 to 255.

Subject: Bridge Table Size Parameter

The function description of the Bridge Table Size parameter (which appears in the Edit Bridge Global Parameters window) on page 1-21 incorrectly states that if you enter an invalid value, the system rounds up or down from the invalid value to the nearest valid value. You should click on the Values button and select one of the values listed. If you type a value other than one of those listed, the system returns an error message.

Configuring Bisync Over TCP

Subject: **Bisync Over TCP (BOT) Operates on ANs Only**

Description: Bisync over TCP (BOT) continues to operate on the Bay Networks AN[®] routers only. Although *Configuring BSC Transport Services* states otherwise, Release 11.0 does not include support for ASN[™] and BN[®] routers.

Subject: **Peer TCP Listen Port parameter**

Description: The Bisync over TCP (BOT) Peer TCP Listen Port parameter now operates in the port range 1000 to 9999. Previously, you could specify any value for this parameter. This could result in conflicting or invalid ports. The correct parameter description follows:

Parameter: **Peer TCP Listen Port**

Default: None

Range: 1000 to 9999

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

Configuring Dial Services

Subject: **Demand Circuit Configuration**

Description: Configuring Dial Services omits a step for the demand circuit configuration.

When the demand pool is configured, configure the demand circuits. Select Dialup > Demand Circuits from the main menu bar. Site Manager displays the Demand Pools window. Click on Circuits and Site Manager displays the Demand Circuits window.

The Demand Circuits window has a Protocols button in the top left corner. Select Protocols > Add/Delete to configure protocols for the demand circuit. In this example, IP is the only protocol configured.

Path: Protocols > Select Protocols window

Table 1. IP Parameters

Parameter Name	Router 4 (S25)	Router 7 (S23)
IP Address	150.1.1.2	150.1.1.1
Subnet Mask	255.255.255.0	255.255.255.0

Path: IP > IP Adjacent Host window

Table 2. IP Adjacent Host Parameters

Parameter Name	Router 4 (S25)	Router 7 (S23)
IP Adjacent Host	150.1.1.1	150.1.1.2

Path: IP Adjacent Host window > Demand Circuit window

Table 3. Demand Circuit Parameters

Parameter Name	Router 4 (S25)	Router 7 (S23)
CHAP Local Name	BLN [®] -1 (case-sensitive)	BLN-2 (case-sensitive)
CHAP Secret	East (case-sensitive)	East (case-sensitive)
Connection Mode	Default (Collision Master)	Collision Slave

Subject: Range for BOD Recovery Threshold

Description: The range for the bandwidth-on-demand parameter BOD Recovery Threshold is 10 to 400 percent. This parameter is located on the Bandwidth On Demand Monitor Options window.

The manual incorrectly states that the maximum for the range is 100 percent.

Configuring IP

Subject: Opening the IP Accounting Window

Description: Site Manager provides an IP Accounting window that allows you to modify IP Accounting parameters. (The IP Globals window does not include these parameters.)

Beginning at the Configuration Manager, use the following path to open the IP Accounting window.

Protocols > IP > Accounting

Subject: Controlling Notification of a Full IP Accounting Table

Description: By default, IP Accounting sends a log message when the active IP Accounting table is 80 percent full. You must configure a trap to be sent. Use Site Manager to configure a trap exception for Entity 6 and event 99.

You can use Site Manager to specify a value from 1 to 100 (indicating the percentage of the maximum size) that causes IP Accounting to send a trap message.

Once IP Accounting has generated an event message indicating that the IP Accounting table has been filled to the percentage that you have specified, IP Accounting continues to send a message for every percent above the configured value until you copy the active table to the checkpoint table or until the active table is 100 percent full.

For example, if you use the default (80 percent), IP Accounting sends a log message when the active is 80 percent full, 81 percent full, 82 percent full, and so on until you copy the table or until the active table is 100 percent full.

Configuring IPX

Subject: Configuring Max Path and Max Path Splits for IPX

Description: Prior to Version 11.0, configuring the Max Path parameter in the IPX global record enabled IPX to store and load balance over multiple equal cost paths. This function is now two separate parameters in the IPX global record, *Max Path* and *Max Path Splits*. The Max Path parameter now sets the number of paths IPX can store to each individual destination network. For IPX to function correctly, set the Max Path parameter to the highest number of paths that exist from the router to any destination network, regardless of cost. The Max Path Splits parameter determines whether IPX should load balance. If you enable Max Path Splits, IPX uses up to Max Path equal cost paths that are equal to the lowest cost path. If you disable Max Path Splits, IPX uses only the lowest cost path to send data to a destination network.

Configuring Line Services

Subject: Setting the Asynchronous Baud Rate

You control the baud rate for Asynchronous PPP using the Async Baud Rate parameter on the Edit Sync Parameters window. The baud rate is the transmission speed (in bits per second) between the router and the modem. To set the baud rate for the asynchronous interface, you must first set the WAN Serial Interface Type parameter to Async.

By default, the asynchronous baud rate is 9600. Set this parameter to a value that is greater than or equal to the speed at which the modem connects, but is independent of that speed. For example, you set a V.34 modem to its maximum modular connection speed of 28800 Kb/s or higher. However, you could set the baud rate for a V.42 bis or MNP 5 data compression modem with a high (4 to 1) compression ratio to 115200 baud.

You can select one of the following valid baud rates:

1200	38400
2400	57600
4800	64000
9600	76800
14400	96000
19200	115200
28800	

Subject: Setting the Synchronous IFTF Pattern

Description: The router transmits an interframe time fill (IFTF) pattern when there is no data to transmit on a synchronous line. There are two IFTF patterns:

- *HDLC Flags*, an 0x7E pattern (0 1 1 1 1 1 1 0)
- *Idles*, an 0xFF pattern (1 1 1 1 1 1 1 1)

HDLC Flags is the default IFTF pattern for all synchronous media types except ISDN BRI. For ISDN BRI, the default pattern is Idles. To use these defaults, leave the Force IFTF parameter set to Default. Or, you can override the defaults by setting the Force IFTF parameter to *Force Flags* or *Force Idles*.

For a dial-on-demand interface, set the Force IFTF parameter to *Force Idles*.

Subject: Setting the HSSI Carrier Loss Timeout

Description: You can determine how many seconds the HSSI line driver waits after losing the Carrier Signal before changing to the Carrier Lost state. If the Carrier Signal returns prior to reaching this threshold, the driver never enters Carrier Lost.

For most HSSI lines, keep the default value of zero (0) seconds; the driver immediately transitions to Carrier Lost state upon detecting carrier loss. For a problem line, enter the number of seconds (0 to 2147483647) that you want the router to detect Carrier Loss before entering a Loss state.

Subject: Setting the Synchronous Hold Down Time

Description: The description in *Configuring Line Services* for the Synchronous Hold Down Time parameter is incorrect. The correct description follows.

On a synchronous interface that is configured for dial services, you can specify a time period (0 to 9999 seconds) for the router to wait before bringing down a backup line. This delay allows time for the primary line to fully recover before de-activating the backup line.

For a dial-on-demand interface, the Sync Hold Down Time parameter is set to 3 seconds by default.

Using Technician Interface Scripts

The following is an amendment to the *Using Technician Interface Scripts* manual (the section that describes the **show ipx** commands).

Subject: show IPX script changes

Description: You can now include a slot mask to examine routes and services on a specific slot. Use the following format:

To display a list of all Dial Optimized Routing (DOR) circuits, use the following command:

show ipx dor

Example:

show ipx dor

This command displays the following fields:

- Circuit
- Circuit index
- IPX interface
- RIP update interval
- SAP update interval
- Stabilization timer
- Watchdog Spoof count
- SPX Spoof count