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Release Notes for CWSI UNIX Version 1.0

This document contains notes for the CiscoWorks for Switched Internetworks (CWSI) product, including CiscoView 3.1, VlanDirector 1.1, and TrafficDirector 3.3.

Release Notes for CWSI Product

With CWSI, CiscoView support has been extended for the CPW16, Catalyst 1200, Catalyst 3000, and Catalyst 5000. Support has also been added for the Catalyst 2900. The following are caveats for these devices in CiscoView:

- Catalyst 3000—Because of a bug in the Catalyst 3000 1.0A software, the ATM Virtual Channel Aging menu always displays default values for all three parameters. The changes you make through this menu take effect correctly, but the values read from the device are always the default values.
- Catalyst 5000/2900—Under a heavy load condition, Catalyst 5000/2900 SNMP responses are slow. You might see an “error, no response since....” message in the CiscoView status window. Select **Options>Properties** and increase the Polling Frequency and Timeout values. [CSCdi57962]
- Catalyst 1200, 5000/2900—When using the Switch Zoom menu from CiscoView to view multiple switch ports, the default configuration for the Catalyst 1200 is to configure Statistics, Short-Term History, Long-Term History, and Host group. For the Catalyst 5000/2900, the default configuration is to configure Statistics only. To see the Short-Term or Long-Term History from traffic monitor, use the Domain Manager to configure the Short-Term and Long-Term groups manually or use Segment Zoom to view the port first.
- Catalyst 1200, 5000/2900—When using the Segment Zoom menu from CiscoView to view the port segment, the default configuration for the Catalyst 1200 is to configure the Statistics, Short-Term History, Long-Term History and Host group. The default configuration for the Catalyst 5000/2900 is Statistics, Short-Term History, and Long-Term History.
- Catalyst 5000/2900—If the number of the embedded RMON agent is over 50, you cannot create any new embedded RMON agent group for the new port. Use the Domain Manager to deinstall the agent group from the unused port to free the memory resource.
- Catalyst 5000/2900—When you select the repeater module port on a Catalyst 5000/2900, it always uses the first port of the selected segment to create the RMON agent group.

- Catalyst 1200—If you see “IP address is not set in sysIpAddr Mib variable,” the Catalyst 1200 SNMP agent did not store the correct IP address in the sysIpAddr MIB variable, so you have to use CiscoView to correct it. Go to **Configure>Device**, enter the correct IP address in the corresponding field, and click **Modify**.
- If CiscoView 3.1.1 is installed on an HP OpenView platform, the CiscoView application will query and use the device’s community name settings from HPOV, whether CiscoView is launched from the command line or from the HPOV main menu. When this is done through HPOV, any further standalone invocation of CiscoView takes the community string from HPOV until the nmcview script exports the platform.
- Do not use the Grapher in the CiscoView Monitor “10BaseT Group Switching Ethernet” window. Use the Monitor or Traffic Director tools to see graphical views of the selected repeater ports.
- The IP Route device configuration window is not scrollable. Use the numbered arrow keys to scroll the window.
- If you get the “Error: Entry or Group not present in Agent” message when invoking Segment Zoom, Switch Zoom, or Data Capture, the write community string might not be matched with the device. If the community string is matched and the problem still occurs, try checking the CiscoView Configure Device menu to verify that the RMON capability is enabled.

Release Notes for CiscoView UNIX Version 3.1

This section discusses the CiscoView 3.1(1) release and includes the following information:

- CiscoView 3.1(1) IOS Information
- Additional Documentation Information
- CiscoView and Device Information
- Incremental Installation Information
- Troubleshooting
- Installation Caveats

CiscoView 3.1(1) IOS Information

This section contains the latest Cisco IOS™ (Internetwork Operating System) software version information at the time of printing. New devices and further specifics on IOS support will be announced following this release. Refer to the online release notes on the Cisco Customer Connection Online (CCO), formerly called Cisco Information Online (CIO), or on the Cisco Connection Documentation, Enterprise Series CD, or Cisco Connection Documentation, CiscoPro Solutions CD, which are both accessible via CCO and are continually updated.

Note The Cisco Connection Documentation, Enterprise Series CD was formerly called UniverCD and the Cisco Connection Documentation, CiscoPro Solutions CD was formerly called UniverCD for CiscoPro.

CiscoView supports Cisco IOS Software Releases 10.0 through 11.1 with the exception of Access Servers, which require a minimum of Cisco IOS Software Release 10.2.

Note CiscoView supports the Qualified Logical Link Control (QLLC) feature in Cisco IOS Software Release 10.3(7) or later and in Cisco IOS Software Release 11.0(2) or later. CiscoView supports the Synchronous Data Link Control (SDLC) feature in Cisco IOS Software Release 10.2 or later. CiscoView supports the CIP card in Cisco IOS Software Release 10.2 or later.

Additional Documentation Information

The documentation for CiscoView 3.1(1) includes this release note, a CD-ROM booklet, incremental installation instructions, and online help. The primary documentation for CiscoView is the online help. If you have documentation feedback, please forward comments to: `cs-ciscoworks@cisco.com`.

You can also refer to the quick reference card for CiscoView for information on adding device support.

CiscoView and Device Information

CiscoView is a GUI (graphical user interface-based) device management software application that provides dynamic status, statistics, and comprehensive configuration information for Cisco Systems' switched and internetworking products. CiscoView allows you to display a graphical representation of each network device, display configuration and performance information, and perform minor troubleshooting tasks.

CiscoView allows you to manage the following Cisco devices:

- Catalyst switch models 1200, 1600, 1700, 2100, 2800, 3000, and 5000 series.
- Cisco ATM LightStream Switch models LightStream 100 (formerly called the Cisco HyperSwitch A100) running RTOS version 3.1(1) and LightStream 2020 running 2.1(2) or later.
- Kalpana switch models EtherSwitch Pro16, EPS-500, EPS-1500, EPS2115, and EPS2015.
- Kalpana EPS2015. Kalpana EtherSwitches EPS-500, EPS-2115, and Pro16 are managed by their CiscoPro equivalents: CPW500, CPW2115, and CPW16 respectively.

Note Refer to the "Switch Firmware" section in "Caveats for Workgroup Products" for firmware versions.

- CiscoPro switch models CPW10-100, CPW16, CPW500, CPW1200, CPW1400, and CPW2115
- Workgroup Concentrators 1000, 1100, and 1400, and Workgroup FDDI/CDDI Adapters
- Cisco 4000 series (includes 4000 and 4500)

Note The Cisco 4700 is not supported by CiscoView 3.1(1) at this time, but support will be provided in the near future. Please check the Cisco World Wide Web site (www.cisco.com) periodically for download information on the latest device support and upgrades.

- Cisco 2501, 2502, 2503, 2505, 2507, 2509, 2510, 2511, 2512, 2513, 2514, 2515, and 2516
- Cisco 7000 series (includes 7000 and 7010) and Cisco 7500 series (includes 7505, 7507, and 7513)
- CiscoView Flash File Application

  These enhancements apply to all high-end business unit devices (Cisco 7000 and Cisco 7500 Series). With this application, CiscoView 3.1(1) is enhanced to extend its capability to provide device management functionalities such as the following:

  — Software and Config files Upload/Download

  — Configuration File Editing

  — Flash Filesystem directory display

Incremental Installation Information

To get more information about the Partner Initiated Customer Accounts (PICA) program before accessing CCO for device package files, use the following URL:

http://www.cisco.com/acs/info/pica.html

You can also refer to the quick reference card for CiscoView for information on adding device support.

Troubleshooting

If you cannot open a device in CiscoView 3.1(1), a message appears indicating that the device is unmanageable. This message indicates one of the following conditions:

- The Simple Network Management Protocol (SNMP) agent is not running in the device. You can still ping the device from the management station.
- You have entered an incorrect community string in the File - Open Device window.
- The management station cannot reach or successfully ping the device. With busy networks or busy devices, an increase in the timeout value or a decrease in the polling rate may allow CiscoView to establish contact with the device.

Installation Caveats

This section lists installation notes and restrictions that apply to the CiscoView 3.1(1) release.

Cvinstall Path Specification

For SUNOS 4.1.x installs, you must define /usr/lib before /lib in LD_LIBRARY_PATH. If LD_LIBARY_PATH has /lib:/usr/lib then cvinstall will fail when trying to run cvtest, and display the following error message:

```
dlopen: stub interception failed

/usr/nms/bin/cvinstall: <pid> Abort - core dumped
```

[CSCdi58364]

HyperHelp Resource File

The CiscoView 3.1(1) installation attempts to put the X resource file for HyperHelp in the */usr/lib/X11/app-defaults* directory. Since different systems have different types of X Windows installations, the HyperHelp application does not always locate this resource file. When the resource file is not read, the HyperHelp viewer text may be unreadable on your screen. Do the following to make sure that this resource file is read:

Choose **Options**>**Set Hyperhelp Defaults** from the CiscoView menu to set resources.

Path Environment Variables

If you get the following error message,

```
couldn't execute "xrdb": no such file or directory
```

this may mean that the missing program (e.g. xrdb) is not in your path. Check your path environment variable. [CSCdi57661]

SNM 2.2.2 Patch Requirement

Make sure you have installed Patch level 4 for SNM 2.2.2 under SunOS in order that snm_discover discovers your devices correctly. If the Grapher does not send more than one request, verify that your snm_cmd has the size 36864 bytes.

Tables Show All Categories

Multiple selections show all categories, whether they apply to a specific group of selections or not. If the category doesn't apply, the config table will show "N/A" in the cells. [CSCdi48854]

Deinstallation Caveats

This section lists deinstallation notes and restrictions that apply to the CiscoView 3.1(1) release.

Upgrading to CiscoView 3.1(1)

If you are upgrading from an existing Ciscoview release to CiscoView 3.1(1), perform an upgrade or a reinstallation. Deinstallation of the product is not recommended. Deinstallation of the existing CiscoView release requires manual changes to the Network Management platform (min), or CiscoView will break.

General Caveats

This section lists general notes and restrictions that apply to the CiscoView 3.1(1) release. They are divided into six sections:

- Caveats for Enterprise Network Management Products (including CiscoView 3.1[1] and other products)
- Caveats for Workgroup Products
- Caveats for Access Products
- Caveats for High-end Business Products (including 7000 and 7500 series and ATM switches)
- Caveats for Online Help

Caveats for Enterprise Network Management Products

General notes and caveats for Enterprise Network Management products are described below.

Dragging Ports

For this release, use the middle mouse button to drag on UNIX. Only certain devices (such as the Catalyst 1200, Catalyst 1600, Catalyst 5000, and CPW16) have defined their ports for dragging across devices.

HP OpenView Discovery Issue

When a switch is configured as two or more domains, HP OpenView discovery may not work properly and may discover only one of the domains. If this occurs, use CiscoView to manage the domain directly rather than launching it from the map.

HP OpenView Error Message

The *xnmloadmib* program in HP OpenView may have problems reloading MIB files into their database. The definition of CiscoNetworkProtocol in *CISCO-TC-V1SMI.my* and OwnerString in *IF-MIB-V1SMI.my* will display an error message similar to the following when you run **cvinstall -f**:

```
Error detected while loading MIB file: /net/cv311/etc/cview/mibs/CISCO-TC-V1SMI.my
This MIB cannot be loaded until the following problem is corrected:
Line 44613: Error defining ASN.1 Type: duplicate type with conflicting definition
‘CiscoNetworkProtocol’
```

The workaround is to invoke *xnmloadmib* manually, select and unload all Cisco-specific MIB files from the list box in *xnmloadmib* GUI, then run the command **cvinstall -f** to load all Cisco specific MIB files. [CSCdi56399]

Loading Correct SNMP Daemon

You may be unable to view a Fiber Distributed Data Interface (FDDI) SBus adapter on a device in CiscoView 3.1(1). Make sure you have the correct SNMP daemon (snmpd) loaded. The default snmpd for SunOS does not allow you to view this adapter. To correct this problem, stop the existing snmpd process and reload the snmp.cfddi daemon, which is generally located in the */etc* directory. Check the *rc.local* file to determine where the snmp.cffdi daemon might be located.

Motif Window Manager (mwm1.x)

Windows cannot correctly resize smaller when running mwm 1.x. Choose the Property dialog option to make CiscoView 3.1(1) circumvent this problem.

Open Look

- In Open Look, popup menus may not be in focus. To gain focus, move your mouse pointer out of the window and back into the menu.
- In Open Look, popup menus occasionally lose events in olwm. The menus always appear, but may not always allow you to select anything. When this occurs, move your mouse pointer out and back into the menu to start tracking the events. [CSCdi50535]

Popup Menu Titles

Popup menu titles are raised; users may mistake them for menu items. [CSCdi53475]

Running CiscoView 3.1(1) with Little Swap Space

If the server or display workstation is running out of swap space, you see a message such as "X error: Couldn't allocate color cell," and CiscoView will core dump. If you are running other applications, you might want to check your swap space occasionally.

To check swap space on a SunOS 4.1.x workstation, enter the following:

```
hostname% pstat -s
```

To check swap space on a Sun Solaris 2.x workstation, enter the following:

```
hostname% swap -l
```

To check swap space on an HP-UX 9.0x system, enter the following:

```
hostname% swapinfo
```

If your system is running out of swap space (for example, only 200 KB of swap space remains), quit some of the other applications you are running, or increase your swap space if possible. [CSCdi37063]

Stripchart and Dials

Stripchart and dials are sometimes not drawn clearly. [CSCdi51621]

SunNet Manager Grapher

The SNM grapher can only graph three or four variables at a time. Selecting more variables will generate a "too long" error message. This will affect Graphing from Monitor dialog boxes. Do not ask SNM's grapher to graph more than four variables at a time. If you need to see more, start two SNM graphs, select SNM graph control box, and combine both graphs into one.[CSCdi51362]

Switching Between Colormaps

Programs such as Netscape take up all the colors on workstations with 8-bit graphics cards (typical for SUN). CiscoView 3.1(1) will dither colors to NetScape's colormap. SunNet Manager will create a private colormap, and the screen will swap colormaps as you switch between applications.

Tables Show All Categories

Multiple selections show all categories, whether they apply to a specific group of selections or not. If the category doesn't apply, the config table will show "N/A" in the cells. [CSCdi48854]

Caveats for Workgroup Products

Following are general notes and caveats for the Cisco Workgroup family of products.

Catalyst 2800, Catalyst 2100, EtherSwitch 1200, and EtherSwitch 1400

Following are general notes and caveats for the above Workgroup products:

- In the front panel display of the Catalyst 2800 and EtherSwitch 1400, the Connect and Disabled LEDs on FDDI modules do not reflect the appropriate status.
- CPW 1200, CPW 1400, Cat 2100, Cat 2800—In the General Bridge Window, the Last Topology Change field does not apply when Spanning Tree is disabled.
- CPW1400, Cat2800—Do not attempt to invoke the Monitoring menu for an FDDI port or a repeater port. There is no monitoring function provided for these ports, although the pull-down menu is enabled when such ports are selected.
- CPW1400, Cat2800—The Configure Module Windows do not work when more than one module type is selected. Select only one module type before opening these windows.
- CPW 1200, CPW 1400, Cat 2100, Cat 2800—The General Bridge window shows the bridge information for VLAN1 only. Bridge information for other VLANs is not available.
- CPW 1200, CPW 1400, Cat 2100, Cat 2800—The Spanning Tree Protocol Window for switched ports is available for ports in VLAN1 only. This window does not show valid information for ports not in VLAN1.
- The WG-Concentrator, CPW10-100, and WG_Adapter do not show version information in the About CiscoView dialog box. In these cases, the CiscoView About dialog box displays the package version only. However, the version information is displayed in the "Packages Installed" list.

Community String Mismatching

When the user enters values for the "read-only," "write-only," and "read-writeId" with the Command Line Interface (CLI) commands, these values must match. A mismatch results in "noSuchName" or "timeout" errors. To avoid these error conditions, use identical community strings in CiscoView and corresponding agents.

Exiting CiscoView 3.1(1) Causes Applications to Close

If you are using the CiscoPro 16/Catalyst 3000 and close the CiscoView window, any application window that was launched from it will automatically close. Remember to close the EtherChannel and Domain Configuration application windows before you open another CiscoView application or exit from the CiscoView application. There is no limitation on the number of CiscoView applications that you can run.

False Error Reported After Setting Parameters

On the CiscoPro (CPW) 16 and Catalyst 3000, when you try to set parameters for the EtherChannel/Domain application under moderate to high traffic situations, the application incorrectly displays an error window indicating that the operation was not successful. In reality, the command was successful, and you should dismiss the error dialog. The application should continue to function properly.

LightStream 100

The LightStream 100 VCTool has support for virtual circuit management of the LS100 and can be invoked from the LS100 CiscoView 3.1(1) application.

The LightStream 100 VCTool is currently supported for SunOS 4.1.X and HPUX 9.X.

Next Button

If you rapidly press the Next button on a Catalyst 5000's port configuration dialog, you may see some category names repeated twice. Redisplay the window to remove the duplicate names. [CSCdi57910]

ProStack Power Supply Link Problem

The rear view of the Prostack matrix power supply does not indicate whether the connector link is up or down (for example, the connector does not come up green if there is a link).

Switch Firmware

The following firmware versions must be used in the switches:

- Catalyst 2100 and 2800—v. 3.63 or higher
- EtherSwitch 1200 and 2800—v. 3.63 or higher
- Grand Junction FastSwitch 2100 and 2800—v. 3.62 or higher

Note The Grand Junction FastSwitch 2100 and 2800 are managed the same as the Catalyst 2100 and 2800 respectively.

- EtherSwitch 10/100—v. 1.38 or higher
- Catalyst 1700—v. 1.38 or higher
- Grand Junction FastSwitch 10/100—v. 1.37 or higher

Switches

If you configure EtherChannel or Virtual Domains in Kalpana switch models EPS2015RS, EPS2115RSM, and Pro16 while running version 9.0 firmware with STP active, the map icons become red, and you receive the following error message:

```
No response from the device
```

After restarting the system, deactivate STP before you attempt to reconfigure. This problem is fixed in version 9.1 of the device firmware. [CSCdi41317]

Caveats for Access Products

Following are general notes and caveats for the Cisco Access family of products.

Card Support for Cisco 4000 and 4500 Series

- npm-4000-fddi-sas(200)
- npm-4000-fddi-das(201)
- npm-4000-1e(202)
- npm-4000-1r(203)
- npm-4000-2s(204)
- npm-4000-2e1(205)
- npm-4000-2e(206)
- npm-4000-2r1(207)
- npm-4000-2r(208)
- npm-4000-4t(209)

FDDI Port Status Functionality

The Cisco 4000 series devices with DAS FDDI ports show status on only the lower one of the two connectors. The status color is determined from the port's administrative status (ifAdminStatus) and operational status (ifOperStatus) values. [CSCdi28566]

Read-Only MIB Variables

The administrative status (ifAdminStatus) value "testing" and the ring speed (dot5RingSpeed) variable are implemented as "read-only" in all Cisco IOS versions and are not settable through popup menus on CiscoView Configure Port screens. However, Configure Port tables (of multiple ports) offer popup menus that permit attempts to set these variables. Such attempts result in "Permission Denied" messages. [CSCdi50635]

Tunnel Interface

A "can't read 'port' : no such variable" message appears at the bottom of the config port dialog when a tunnel interface is encountered while you click up through the ports. This message can be ignored. [CSCdi55765]

Caveats for High-end Business Products

Following are general notes and caveats for the Cisco High-end Business suite of products (including 7000 and 7500 series and ATM switches).

Displayed ATM Connector Type

CiscoView 3.1(1) always displays the multimode fiber SC type of ATM connector on AIPs, even when the media interface is of another type. [CSCdi53420]

FDDI Port Status Functionality

For 7000/7500 series routers running Cisco IOS Release10.2 or earlier, the displayed status color is determined from the port's administrative status (ifAdminStatus) and operational status (ifOperStatus) values. This status color will be the same on each connector. For devices running IOS 10.3 or later, the displayed status color is determined from the Port Connect State (fddimibPORTConnectState) for each connector. The possible values for this status and the corresponding status colors are listed below:

Status	Status color
disabled	brown
standby	brown
connecting	blue
active	green

[CSCdi28566]

High System Availability (HSA)

- On 7513 and 7507 chassis, when the master rsp (route switch processor) is in use, the console port changes color on the CiscoView 3.1(1) display. However, when a slave rsp is installed, its console port mirrors that of the master, regardless of whether or not it is in use. [CSCdi49049]
- In the HSA (dual rsp) configuration, invoking the Admin File Systems function gives an error message caused by a duplicate flash partition name ("slaveslot0") on the router. This error makes the File Systems functionality unavailable. The user should acknowledge the error message and close the "File Systems" window. [CSCdi54831]

LightStream 2020 MIB Support

For the LightStream 2020 there is currently no MIB support for the "LNS OK," "LN FLT," "BITS OK," and "TCS SEL" LEDS on front linecards. These LEDS appear blank. In addition, the "TX" and "RX" LEDS on front linecards blink too rapidly for SNMP polling purposes, and also appear blank.

LightStream 2020 Software Releases Supported

The LightStream 2020 supports Release 2.1(2) or later.

OIR Support

Hotswap is only supported on devices running Cisco IOS Release 11.0 or later. [CSCdi53447]

Power Supply Display

By default, CiscoView 3.1(1) displays two power supplies for a 7000 running Cisco IOS Release10.2 and earlier. With IOS Release 10.3 and later, power supplies are displayed based on ciscoEnvMonSupplyState values (ENVIRONMENTAL MIB).

Read-Only MIB Variables

The administrative status (ifAdminStatus) value “testing” and the ring speed (dot5RingSpeed) variable are implemented as “read-only” in all Cisco IOS versions and are not settable through popup menus on CiscoView Configure Port screens. However, Configure Port tables (of multiple ports) offer popup menus that permit attempts to set these variables. Such attempts result in “Permission Denied” messages. [CSCdi50635]

Caveats for Online Help

Following are caveats for online help.

Glossary Links

Some device-specific help files may not have links to the glossary file. To view the glossary, select **Help>Using CiscoView** in the help window.

Options Menu

The following information was omitted from the online help information for the Options menu:

```
Options>Set HyperHelp Defaults sets the HyperHelp resources so that the HyperHelp viewer
text is readable on the screen.

Options>Debug records trace information into a file located in /tmp/.cvlog.
```

Release Notes for VlanDirector UNIX Version 1.1

VlanDirector works as documented, with the following exceptions and caveats:

Known Defects

VlanDirector version

To find the version of VlanDirector, use the **-V** option instead of **-v**. The **-v** option is no longer available, as it is used internally by the TCL subsystem.

Starting VlanDirector

To save your customized views, you must start VlanDirector from a shell whose current working directory is one for which you have read-write access.

The online help for the VlanDirector Startup dialog box reverses the default values for community strings. It says ‘private’ for Read and ‘public’ for Read/Write, when the reverse is true.

Ports Window Scroll Bar

The Ports window scroll bar does not always operate as expected, as shown in this example:

1. Select a VLAN with at least one port, such as vlanX.
2. Bring up the VLAN Ports window.
3. Select the default VLAN or some other VLAN with many more ports than vlanX.

The scroll bar of the window does not change to reflect the greater number of ports in the newly selected VLAN.

Workaround: Either close the window and reopen it, resize the window, or turn Show: VLAN Ports off, then on again. The scroll bar then correctly reflects the number of objects displayed.

Using Help

The initial size of the Help window is not wide enough to display the **Find** button.

Workaround: Resize the help window at least 0.75 inches wider to display the **Find** button.

The Find window is displayed directly on top of the Help window and completely obscures it. This makes it appear that the **Go To** button in the Find window does not work.

Workaround: Move the Find window away from the Help window.

VLAN Names

VlanDirector allows VLAN names up to 32 characters long, except when there are Catalyst 3000s in the network. (Catalyst 3000s only accept VLAN names up to 16 characters long.) VlanDirector does not take this into consideration when validating the length of a VLAN name.

Workaround: Make sure VLAN names do not exceed 16 characters in length if you have Catalyst 3000s in your network.

Undo

If you are running in a known network and you try to undo an action before a previous undo action is complete, you get this error message:

Immediate Network Operation Failed

If you click **Help** on this message, you get this further explanation:

Operation not the last in the undo list

Further, you can no longer open the undo list.

Workaround: Do not begin a second undo until the first one is complete.

Features that might not exhibit expected behavior

Community Strings

In VlanDirector 1.0, the Read and Write community strings defaulted to ‘public’ and ‘private’ respectively. In VlanDirector 1.1, only the Read community string has a default value (‘public’). Therefore, when you start VlanDirector without specifying a CSF or **-wr**, VlanDirector uses ‘public’ for both the Read and Write community strings.

Forthcoming features

The following features will appear in the 1.2 release, to be used with Catalyst 5000 2.2 and Catalyst 3000 1.3 (projected FCS July 30, 1996):

- FDDI 802.10 support
- FDDI-Ethernet translation bridging

Release Notes for TrafficDirector UNIX Version 3.3

This section describes the features and modifications of TrafficDirector Version 3.3. Refer to the *TrafficDirector UNIX User Guide* for detailed information about the TrafficDirector product.

Product Overview

TrafficDirector is an RMON console software application that lets you monitor, troubleshoot, and record information about your network's operation. TrafficDirector helps you analyze network traffic patterns and identify and isolate a wide variety of fault conditions in data communications networks.

TrafficDirector works as a distributed system. It uses a central management console running TrafficDirector software in conjunction with data-gathering agents located at various points on a network. It can simultaneously collect wide-ranging statistical data, display selectively captured and fully decoded network traffic, set user-defined alarm conditions, and obtain real-time updates from all segments of a widely dispersed internetwork. TrafficDirector accomplishes this from a centralized, SNMP-compatible network management console.

TrafficDirector is based on two standards that enable it to operate in a multi-topology, multi-vendor environment:

- The **Simple Network Management Protocol (SNMP)**, which defines the protocol for all intercommunications between TrafficDirector, SwitchProbe devices, and Cisco Internetwork Operating Systems (IOS™) RMON agents.
- The **Remote Monitoring Management Information Base (RMON-MIB)**, which defines the type of information that is to be gathered and made available to the user for each network segment.

TrafficDirector has four main functions:

- Monitoring network traffic, and measuring the flow of data
- Capturing network traffic and recording it for later examination
- Interpreting raw network data and translating it into a graphic form that you can then view and analyze
- Setting limit conditions on network traffic and generating alarms if those limits are exceeded

TrafficDirector gathers and analyzes network information using SwitchProbes and Cisco IOS RMON agents attached to network segments.

SunOS 4.1.X Patch

If you experience x-server crashes when running TrafficDirector in a SunOS 4.1.X and OpenWindows 3.0 environment, you need to apply patch 100444-xx to your system. Download the patch from the following FTP server or network web site:

- FTP server - ftp://sunsolve1.sun.COM/pub/patches/100444-76.tar2 (~143 MB)
- URL - ftp://sunsolve.Sun.COM/pub/patches.html#1.1patches

After you download the image, perform the following steps:

Step 1 Decompress the file, as follows:

```
# uncompress 100444-76.tar.2
```

A response similar to the following appears:

```
# -rw-rw-rw- 1 username 2631680 May 1 09:32 100444-76.tar
```

Step 2 Obtain the patch files by performing the following:

```
# tar -xvf 100444.76.tar
```

Step 3 Follow the instructions in the README file to apply the patch.

Licensing

TrafficDirector requires a serial number and password to unlock the software for use. A temporary evaluation serial number and password are attached to the shipping box. This serial number allows you to begin using TrafficDirector as soon as you receive it. However, you will need to request a permanent password before the evaluation expiration date. If you change the IP address of the host, or if you move the software to another machine, you must contact Cisco for a new password.

Note The license agreement requires a separate license for each machine on which you intend to use TrafficDirector.

You can obtain a permanent license agreement through the Cisco Connection Online (CCO) Web server or by sending a fax to Cisco Systems.

Getting a License through the CCO Web Server

To obtain a permanent license agreement through the Cisco Connection Online Web server, follow these steps:

Step 1 Access the Cisco Connection Online Web server at http://www.cisco.com.

Step 2 Access the Software Library. Enter the required information to generate your permanent password. Be sure to use the Registration Serial Number and the Registration Password provided.

Getting a License by Fax

To obtain a permanent license agreement by fax send a fax to Cisco Systems at 408 526-8898 addressed to “Attention: Software Licensing.” Include the IP address of the machine on which you will be using TrafficDirector as well as your “Registration Serial Number,” “Registration Password,” and return fax number. You will receive your permanent password within 48 hours.

Configuration Limits

TrafficDirector for UNIX (Solaris, SunOS, HP/UX and IBM-AIX) has the following configuration limitation:

Configuration Parameter	Maximum Number Supported
Agents	1000
Agent groups	100

Configuration Parameter	Maximum Number Supported
Agents per agent group	60
Interface number (ifIndex number)	999

Cisco RMON Agents

The Catalyst 1200 series switch embedded RMON agent and the SwitchProbe agents provide full seven-layer monitoring for all RMON groups. The Catalyst 2900 and 5000 embedded RMON agents provide four groups of RMON (Statistics, History, Alarms and Events) on all Ethernet and Fast Ethernet ports. The 2500 series routers with Cisco IOS v11.1 provide all nine groups of RMON as specified in RFC 1757.

Catalyst 5000 Group Switching Ethernet Module

The Group Switching Ethernet Module of the Catalyst 5000 supports one RMON agent on each of its 12-port segments for a total of four agents. Use only the ifIndex of the first port in each 12-port segment group when configuring the RMON agent from TrafficDirector.

Catalyst 1200 RMON Agent Configuration Guidelines

The Catalyst 1200 DMP and NMP version 3.1 or higher include an embedded EnterpriseRMON agent. You need to purchase an agent license from Cisco before enabling this RMON agent. The embedded RMON agent can NOT be configured to monitor the FDDI interface.

To use RMON within the Catalyst 1200 switch you must first create an agent and install domains for each interface that you wish to monitor. When configuring a new agent be sure to set the Interface Number field to a port number between 3 and 10, indicating which Ethernet port/segment you want to monitor. Also, be sure that the SNMP community strings in the Catalyst 1200 match those configured in TrafficDirector for each agent. Cisco ships the Catalyst 1200 with the following default community strings: Read = *public*, Write = *private*.

The Catalyst 1200 series switch reserves slightly less than 1MB of RAM for use by the embedded RMON agent. Each enabled agent group within an installed domain consumes both memory and CPU cycles on the NMP to monitor that domain. You should remove any unused domains and only install the groups and domains that you plan to monitor. Use the following memory consumption guidelines when configuring groups and domains:

RMON Groups	Memory Used (bytes)	Assumptions
Statistics	100	
Short History	5K	for 50 buckets
Long History	5K	for 50 buckets
Host Table	25K	for fewer than 256 hosts
Conversations (Matrix Table)	30K	for fewer than 1024 conversations
Fully enabled domain	75K	maximum (not including data capture buffer)

Note If you receive the error message "Error: No resources in agent" or experience other problems when using the Catalyst 1200 RMON agent, check to make sure that the above memory guidelines have not been exceeded.
Most customer problems are caused by the installation of too many domains and groups

Cisco Connection Online

Cisco Connection Online (CCO), formerly Cisco Information Online (CIO), is Cisco Systems' primary, real-time support channel. Maintenance customers and partners can self-register on CCO to obtain additional content and services.

Available 24 hours a day, 7 days a week, CCO provides a wealth of standard and value-added services to Cisco's customers and business partners. CCO services include product information, software updates, release notes, technical tips, the Bug Navigator, configuration notes, brochures, descriptions of service offerings, and download access to public and authorized files.

CCO serves a wide variety of users through two interfaces that are updated and enhanced simultaneously—a character-based version and a multimedia version that resides on the World Wide Web (WWW). The character-based CCO supports Zmodem, Kermit, Xmodem, FTP, Internet e-mail, and fax download options, and is excellent for quick access to information over lower bandwidths. The WWW version of CCO provides richly formatted documents with photographs, figures, graphics, and video, as well as hyperlinks to related information.

You can access CCO in the following ways:

- WWW: `http://www.cisco.com`.
- Telnet: `cco.cisco.com`.
- Modem: From North America, 408 526-8070; from Europe, 33 1 64 46 40 82. Use the following terminal settings: VT100 emulation; databits: 8; parity: none; stop bits: 1; and baud rates up to 14.4 kbps.

For a copy of CCO's Frequently Asked Questions (FAQ), contact `cco-help@cisco.com`. For additional information, contact `cco-team@cisco.com`.

Note If you are a network administrator and need personal technical assistance with a Cisco product that is under warranty or covered by a maintenance contract, contact Cisco's Technical Assistance Center (TAC) at 800 553-2447, 408 526-7209, or `tac@cisco.com`. To obtain general information about Cisco Systems, Cisco products, or upgrades, contact 800 553-6387, 408 526-7208, or `cs-rep@cisco.com`.

This document is to be used in conjunction with the *CWSI Installation Guide* publication.