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Release Note for Catalyst 1600 Software Release 1.3

April 23, 1996

This Release Note describes important notes and caveats for Catalyst 1600 Software Release 1.3.

Catalyst 1600 Software release 1.3 comprises the following components:

- Catalyst 1600 run-time microcode (SRSW135R.BIN), version 1.35.
- Catalyst 1600 flash boot upgrade (SRSB1305.BIN) version 1.03.05.
- TrueView, version 4.0.
- TrueView Services Manager, version 1.07.
- TrueView Catalyst 1600 Manager, version 2.00.
- TrueView Alert Manager, version 4.05.

Introduction

These release notes discuss the following topics:

- Supported Platforms, page 2
- Important Notes, page 3
- Release 1.3 Caveats, page 4
- Cisco Connection Online, page 8

Supported Platforms

TrueView Catalyst 1600 Manager supports the following platform:

- 80486 series IBM-PC or compatible computer running at 25MHz (80486 at 50MHz recommended)
- 8Mbytes RAM (16Mbytes recommended)
- 510Kbytes of free conventional memory before running Microsoft Windows
- Hard disk space requirements is dependent on the number of management applications that are installed. This is it typical can be 20Mbytes
- VGA graphics card and monitor (SVGA recommended)
- Mouse supported by Microsoft Windows 3.1
- Blank disks on which to make a copy of the distribution disks
- MS-DOS, version 5.0 (or later)
- Microsoft Windows, version 3.1 (or later) running in Enhanced mode, or Windows 95.

Microcode Software

Table 1 lists the microcode version supplied with the Catalyst 1600 Software release 1.3.

Table 1 Microcode files for the Catalyst 1600 Software release 1.3

Module	Version supplied
Run-time microcode SRSW135R.BIN	1.35
Catalyst 1600 flash boot upgrade SRSB13505.BIN	1.03.05

If the Catalyst 1600 you are managing does not have run-time microcode version 1.35 or later, some management features are not available. For information about downloading new run-time microcode to the Catalyst 1600, see the section "Downloading Code to the Catalyst 1600" in Chapter 3, "Managing Devices" of the *TrueView Catalyst 1600 Manager User Guide*.

When you manage a Catalyst 1600 with microcode version 1.35 or later, the following additional management features are available:

- Support for full-duplex connections to other Catalyst 1600s according to draft specification IEEE 802.5r (draft 3). If you connect Catalyst 1600s using full-duplex, the token-passing protocol can be omitted and the connection can operate as a full-duplex serial link running at 16 Mbps in both directions at the same time, providing an effective aggregate throughput of 32 Mbps.
- When source routing is enabled, the Catalyst 1600 can act as a ring parameter server (RPS) and supply information such as the local ring number to other devices. For example, a controlled access unit (CAU) that is on the same ring as a Catalyst 1600 Token Ring port can request information about the ring after it is reset.

The flash boot code stored in read-only memory determines the line cards that are supported by the Ringswitch. If the Catalyst 1600 you are managing does not have flash boot upgrade version 1.03.05 or later, the Ringswitch may not support some replacement or additional Token Ring line cards, or the FDDI line card. To find out whether the boot code stored in read-only memory supports the line cards you install, check the version numbers and refer to the manuals provided with the line card.

Important Notes

This section describes warnings and cautions about using the Catalyst 1600 software. The information in this section supplements that given in the section "Release 1.3 Caveats" later in this document. This section discusses the following topics:

- Managing Catalyst 1600s over a Microsoft DLC Interface, page 3
- Configuring LLC SAPs and Link Stations, page 3
- Running TrueView Applications, page 3

Managing Catalyst 1600s over a Microsoft DLC Interface

Do not run TrueView Catalyst 1600 Manager over a Microsoft DLC (MSDLC) interface. If you do use an MSDLC interface, you may experience problems when managing more than one or two Catalyst 1600s on the network.

Configuring LLC SAPs and Link Stations

If you use an LLC interface to manage Catalyst 1600s over IPX and IP, configure the following parameters on the management station:

- 8 or more SAPs
- 30 or more link stations

If errors occur when you run Catalyst 1600 Manager, increase the available SAPs and link stations.

For information about configuring LLC SAPs and link stations, refer to the documentation supplied with your network adapter card.

Running TrueView Applications

If you attempt to run TrueView Catalyst 1600 Manager or TrueView Alert Manager by running the executable file (RSTV.EXE and ALERTTV.EXE respectively), a warning is displayed.

To make sure an application runs when you start TrueView, use the Setup program to specify that the application is included in TrueView.

For example, use the Setup program to configure TrueView Catalyst 1600 Manager as follows:

- **Step 1** In Program Manager, click on the Setup icon in the TrueView program group. The TrueView Configure dialog box is displayed.
- **Step 2** Click on the Catalyst 1600 Manager for TV entry in the list of modules.
 - The Catalyst 1600 Manager Settings dialog box is displayed.
- Set the Include Catalyst 1600 Manager in TrueView check box to on, so that an 'X' appears in the check box.
- **Step 4** Click on the OK button.
 - The TrueView Configure check box is displayed.
- **Step 5** Click on the Exit button to exit Setup and return to Program Manager.

Release 1.3 Caveats

This section describes possibly unexpected behavior by Catalyst 1600 Software Release 1.3.

Upgrading to a New Software Release

When you upgrade to TrueView Catalyst 1600 Manager Release 1.3 from a previous version, convert the Catalyst 1600 database by using the Catalyst 1600 Import program.

Catalyst 1600 Import enables you to adopt databases created by versions of Catalyst 1600 Manager prior to release 1.3. If you do not adopt databases created by old versions, you can use Auto discovery to add devices on IPX networks to the new database. You need to add devices on IP networks to the database manually.

Note Software release 1.3 and later use database formats that are compatible, so you do not need to use Catalyst 1600 Import.

To import a database:

- 1 In Program Manager, double-click on the Catalyst 1600 Import icon.
 - The Catalyst 1600 Import dialog box is displayed.
- **2** Click on the Import button.
- **3** Locate the database file. Catalyst 1600 database files are located in the DBASE subdirectory of the TrueView directory, and have the name TVSWITCH.
- 4 Click on the OK button.

The devices that have been imported from the database file are listed. If you import further database files, Ringswitch Import checks the devices in the databases and makes sure duplicate devices are not added.

5 Click on the Done button.

Compatibility with IBM Network Adapter Drivers

The following combination of IBM network adapter drivers is not supported by TrueView Catalyst 1600 Manager:

- DXMA0MOD.SYS
- DXME0MOD.SYS
- DXMT0MOD.SYS

Do not run Catalyst 1600 Manager with the above combination of IBM network adapter drivers.

Supported TCP/IP Stacks

TrueView 4.0 supports a range of TCP/IP stacks, including the following:

- Novell LAN Workplace
- NetManage Chameleon
- FTP Software TCP/IP
- Madge Networks' Smart TCP
- Windows 95 TCP/IP

Note The latest releases of Novell LAN Workplace and Madge Networks' Smart TCP are only recommended for small networks comprising up to 15 Catalyst 1600 devices.

The forthcoming release of Madge Networks' Smart TCP will support networks of all sizes.

Compatibility with Integralis' Chameleon

TrueView Catalyst 1600 Manager does not support Integralis' Chameleon TCP/IP applications package for Windows. Do not run Catalyst 1600 Manager with Chameleon.

Byte Counters

To calculate the total number of bytes transmitted by the Catalyst 1600, TrueView Catalyst 1600 Manager and the serial management protocol use proprietary counters that differ from those used in the SNMP MIB.

- The SNMP MIB counters IfInOctets and IfOutOctets are used to calculate the total number of bytes transmitted by the Catalyst 1600. The MIB defines that these are 32-bit counters. The result is that values for the number of bytes transmitted are truncated when they exceed 4296 million.
- TrueView Catalyst 1600 Manager and the serial management protocol use proprietary 48-bit counters. The result is that values for the number of bytes transmitted are truncated when they exceed 256 trillion.

The values for the number of bytes transmitted are truncated at a lower value in the SNMP MIB than in TrueView Catalyst 1600 Manager or the serial interface, so the value for the number of bytes transmitted may differ.

Obtaining the Spanning-Tree Bridge ID

When you manage the Catalyst 1600 using the serial interface, and enter the show bridge status command to obtain the spanning-tree bridge ID, only the MAC address portion of the spanning-tree bridge ID is displayed. The complete spanning-tree bridge ID consists of the MAC address portion and the spanning-tree root priority.

To obtain the spanning-tree root priority, enter the **show bridge characteristics** command.

Line Errors

In certain situations, Token Ring network adapter cards generate aborted frames. A node transmits an aborted frame when it experiences a brief or permanent internal error that interrupts the transmission of the frame. For example, a Token Ring network adapter that operates at a slow bus speed may cause bus timing problems that result in aborted frames. Aborted frames are not visible on the ring.

If the Catalyst 1600 receives aborted frames, it generates a frame with a CRC error on the output port. This is reported as a line error on the ring that is attached to the output port.

If you detect a high frequency of line errors, identify the node that is generating aborted frames.

Beaconing Alerts

If beaconing occurs on a port that is configured for concentrator interface mode, no alert is sent to the network management software. No alert is generated for a beaconing recovered state.

Printing Data from Tables

When you click on the Print button to print information in the Catalyst 1600 Manager table or Alert Manager table, the information may be wider than the width of the page.

To make sure the table information fits onto the page, save the information in ASCII text, Lotus 1-2-3, or dBASE III format and open the file using a word processor or spreadsheet application.

Configuring Tables

In the Table Column Configuration dialog box, which allows you to configure the columns in the Catalyst 1600 Manager table or Alert Manager table, you cannot use keystrokes. Use the mouse to configure the table instead.

Duplicate Bridges

When ports in concentrator interface mode are connected to a device after the bridge test, the Catalyst 1600 may pass the bridge test although another Catalyst 1600 with an identical bridge number exists on the network.

When a port in concentrator interface mode is not connected to a device, a single station message indicates that it is the only node on the ring, and it passes the bridge test. If a wiring concentrator such as a Controlled Access Unit (CAU), that is already connected to another Catalyst 1600, is subsequently connected to the port that is in concentrator interface mode, the result is two parallel Catalyst 1600 devices with identical bridge numbers. The spanning tree continues to operate correctly despite the duplicate bridge condition.

To correct the problem:

- **Step 1** Disable source routing on the Catalyst 1600.
- **Step 2** Enable source routing on the Catalyst 1600.

The bridge test runs, and fails with a duplicate bridge message.

Disabling Ports with TrueView Catalyst 1600 Manager

When you use TrueView Catalyst 1600 Manager to manage a Catalyst 1600, it is possible to disable the Token Ring switch port that connects the management station to the Catalyst 1600. No warning message is displayed by TrueView Catalyst 1600 Manager. Disabling the management connection prevents further management of the Catalyst 1600 from the management station.

To resume management with TrueView Catalyst 1600 Manager, either connect to the serial interface and enable the port using the enable port interface command, or erase the stored configuration by holding the Reset button and releasing it when the LCD displays the appropriate message.



Caution Erasing the stored configuration returns all Catalyst 1600 parameters and the Catalyst 1600 password to the factory default values.

Downloading Code from TrueView Catalyst 1600 Manager

When there are parallel paths from the management station to a Catalyst 1600, and you use TrueView Catalyst 1600 Manager to download to a device, Catalyst 1600 Manager may time out and fail to download code. If Catalyst 1600 Manager times out, the Catalyst 1600 loader program waits for new code from the management station.

While the loader program is running, Catalyst 1600 Manager displays the warning "TV14355: Can't send request; Ringswitch needs new code." You can download code successfully to the Catalyst 1600 when the loader program is running.

For information about downloading code to Catalyst 1600s, see the section "Downloading Code to the Catalyst 1600" in Chapter 3, "Managing Devices" in the TrueView Catalyst 1600 Manager User Guide.

Switched Frame Discards Counter can increase

If you configure a Catalyst 1600 Token Ring port in concentrator mode, and do not insert a node into the port, the Switched Frame Discards counter may increase. To view the Switched Frame Discards counter, connect a terminal to the serial port and enter the show bridge counters command.

Status Message for Concentrator Ports

If you enable a Catalyst 1600 Token Ring port and set the port type to classic concentrator, but do not insert a node into the port, the port status is reported as 'DTR Wait' by the LCD and TrueView Catalyst 1600 Manager.

Inconsistent Spanning Mode Settings

Catalyst 1600 Manager enables you to set the spanning mode to automatic, manual, or disabled. The equivalent settings provided by the serial interface are automatic, forced, and disabled.

Cisco Connection Online

Cisco Connection Online (CCO) 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 (called "CCO Classic") 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 Catalyst 1600 Token Ring Switch User Guide, TrueView Catalyst 1600 Manager User Guide, and TrueView Applications Installation and User Guide publications.

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