

Cisco VCO/4K System Software Version 5.2(1) Release Notes

August 2001

These release notes describe new features and caveats in system software Version 5.2(1) for the Cisco Systems VCO/4K switch. Use these release notes in conjunction with the *Cisco VCO/4K Software Installation Guide*, the *Cisco VCO/4K System Administrator's Guide*, and *Cisco VCO/4K System Messages*.

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System Requirements

This section provides system requirements for operating VCO/4K system software. These requirements are categorized by hardware, firmware, and software. Contact Cisco Systems Technical Assistance Center (TAC) for any site-specific information.



Hardware Requirements

To operate VCO/4K system software Version 5.2(1), make sure your Cisco VCO/4K switch is equipped with the following minimum components and revisions:

- System Controller
 - Combined Controller (16-MB 68030-based CPU)

Refer to the *Cisco VCO/4K CPU Upgrade Procedure* if you need to replace a 25-MHz/8-MB CPU with a 33-MHz/16-MB CPU.

- Storage/control I/O module
- Storage Subsystem
 - SCSI interface hard drive, 42 MB or larger
 - 3.5-inch SCSI interface floppy drive
- Control Circuit Cards
 - NBC3 card, rev E0AR

Two NBC3 cards are required for redundant systems.

- Alarm Arbiter Card (AAC), rev COUR
- Service Circuit Cards
 - DTG2 or DTG (Digital Tone Generator)—not used with the multiple tone plan feature or
 - SPC-TONE and SPC-OUTPULSE—mandatory if using the multiple tone plan feature
- Network Circuit Cards
 - ICC, rev C09P
 - 16-span ICC-E1 I/O module, rev A15P
 - 16-span ICC-T1 I/O module, rev A16P

Note

Use the I/O module specific to your needs. You do not need all of the I/O modules listed above to meet the hardware minimum requirements.

Firmware Requirements

Table 1 lists the VCO/4K system software Version 5.2(1) firmware requirements. Refer to the *Cisco VCO/4K Card Technical Descriptions* for firmware locations for each card.

For tone plan-specific firmware requirements (which affect DTG2 or DTG cards), refer to the *Cisco VCO/4K Tone Plan Release Notes*.



The firmware label applied by Cisco Systems may list only the last four digits of the checksum. The checksum for the NBC3 LP125 is not listed because the programming for this item is part of the NBC3 download file.

Card	Firmware	Checksum	Versions	Location	Changed Since V5.2(0)
CPU	Boot EVEN	006E691D	5.00	U1	N
	Boot ODD	00866CBF	5.00	U15	
	MVME147-023	5741B41F	2.44	U30	
	MVME147-023	5741B42F	2.44	U22	
D+I	D+I	00003158	2.02	U9	N
ICC I/O	Comm Bus	00299FE4	8.01	U48	N
Module	J3	00275397	8.01	U76	
	CS	002A9F8A	8.01	U12	
	5x7, Rev B	000B5C9A	8.01	U11	
	PCM Interface	00257696	8.02	U41	
IPRC-8	IPRC 8-PORT	00220D75	1.03	U2	N
IPRC-64	IPRC 64-PORT	00220DC1	1.03	U2	N
IPRC-128	IPRC 128-PORT	00220E0A	1.03	U2	N
NBC3 Card	LP141 SWI	0019204D	LP141A	U31	N
Rev E	LP140 Counter	0015E220	LP140H	U73	
	LP139 Chip Select	000D4209	LP139A	U30	
	LP125 Com Bus FPGA	_	LP125C	U53	
	Boot PROM	00F597BE 00F5D06E	1.02 or 1.03	U1	
SSC	Com Bus Control	00186169	LP101A	U24	N
	PCM Interface	00185A34	LP130B	U76	
	Quad 9 to 1	0017878C	LP129A	U71/U70	
	Redundancy Control	0017F249	LP128A	U100	
	Subrate Matrix Control	000BB573	LP131	U31	
	Boot PROM	00400736	1.02	U10	

Table 1 Firmware Requirements

Software Requirements

Table 2 lists valid software checksums and versions for the VCO/4K system software Version 5.2(1) and optional software products.

Use the Software/Firmware Configuration utility to identify the version and checksum of each software file after Version 5.2(1) has been installed on the system (refer to the *Cisco VCO/4K System Administrator's Guide* for more information). System software files are distributed across the installation floppy diskettes. Optional software products are contained on two floppy diskettes.

VCO/4K System Software	Filename	Checksum	File Version ¹	Changed Since V5.2(0)
Executable Files	GLOBALS.EXE	01541E36	_	Y
	HOSTMGR.EXE	04CFC7BA	_	Y
	SYSWD.EXE	01A28F50		Y
	REDMGR.EXE	0100D029		Y
	PERMGR.EXE	0000000		N
	NETMGR.EXE	0338B433		Y
	SNMP.EXE	033E66D0		Y
	INSTALL.EXE	02323BEC		Y
	TELERTE.EXE	00007ADA	4.00	N
	NFAS.EXE	00007B0C	6.48	N
	NI2.EXE	00007B0C	6.48	N
	ETHERMGR.EXE	00007B0C		N
Download Files	NBC.DWN	01095D96	1.09	N
	DNI.DWN	006F3224	1.03	N
	SSC.DWN	006C84CB	1.00	N
	IPRC.DWN	0023113E	1.05	N
	SPC.DWN	06500216	5.11	Y
	ICC.DWN	06377F71	5.14	Y
	DVC.DWN	005ADA02	1.08	N
	DTMF.DWN	00053D1A	2.02	N
	CPA.DWN	003079F3	8.09	N
	4XT1.DWN	0037015B	1.55	N
	4XE1.DWN	0037A584	1.45	N
	MVDCT1.DWN	00F2D33A	1.08	N
	PRI.DWN	0091BB77	8.04	N
	PRIN.DWN	009665C2	9.00	N
	NTTPRI.DWN	008DF385	1.09	N
	NTDASS2.DWN	009F44C9	3.08	N
	DPNSS.DWN	00AB15B6	3.12	N
	NET5.DWN	008774E7	1.29	N

 Table 2
 VCO/4K System Software Version 5.2(1) Checksum Values

VCO/4K System Software	Filename	Checksum	File Version ¹	Changed Since V5.2(0)
Protocol Files ²	ICCCASR2.UPG	000007B4		N
	ICCCCS31.UPG	0000012D		N
	ICCCLEAR.UPG	0000012D		N
	ICCEM.UPG	00000666		N
	ICC01.UPG	00000666		N
	ICC02.UPG	0000077A		N
	ICCFXOGS.UPG	000007C2		N
	ICCFXOLS.UPG	00000773		N
	ICCFXSGS.UPG	000007F4		N
	ICCFXSLS.UPG	00000699		N
Operating System	VRTX OS		1.08	N
Files	IFX		1.11	N
	TNX		1.45	N
SNMP				
Management Information Base	VCO.MIB ³	_	2.2.8	Y

Table 2 VCO/4K System Software Version 5.2(1) Checksum Values (continued)

1. The software no longer lists the individual executable file (.EXE) version numbers in the Software/Firmware Configuration screen. A "—" character in the File Version column signifies that the file version matches the system software release, for example, Version 5.2. If a version number appears in the File Version column for an .EXE file, it is strictly for reference purposes; it does not appear in the Software/Firmware Configuration screen.

 The checksum values for .upg files (protocol files) are displayed by accessing the Display File screen. Go to Maintenance Menu > Disk Utilities > Display File, and type: c:boot/<filename>. The .upg file checksum value is displayed in the first four bytes of the second row.

3. The VCO.MIB file is not installed on the switch; it is intended for the SNMP host system.

New and Changed Information

VCO/4K system software Version 5.2(1) is a maintenance release which includes several caveat resolutions and the following improvements:

- "Changeable SNMP Community Strings" section on page 5
- "Secondary NMS Configuration" section on page 6
- "Improved Error Messages" section on page 7
- "Limitations and Restrictions" section on page 8

Refer to the "Caveats" section on page 13 for more information on resolved caveats.

Changeable SNMP Community Strings

The Password Configuration screen allows you to change SNMP read and write community strings with the VCO/4K system software Version 5.2(1) release.

Complete the following steps to configure SNMP community strings:

- Step 1 Access the Password Configuration screen. Refer to the *Cisco VCO/4K System Administrator's Guide* for more information on the Password Configuration screen.
- **Step 2** Add and save the following two usernames:
 - snmpget
 - snmpset

The password of the snmpget serves as the SNMP GET community string, and the password of the snmpset serves as the SNMP SET community string.

Step 3 Establish passwords for the usernames added in Step 2. Refer to the *Cisco VCO/4K System* Administrator's Guide for instructions.



Note Passwords must consist of exactly eight uppercase and/or lowercase alphanumeric characters. Follow all existing user password restrictions described in the *Cisco VCO/4K System Administrator's Guide*.

The passwords are displayed as asterisks (*) on your screen.

Step 4 Change your passwords as often as necessary.

The SNMP community string configuration is complete. The VCO/4K system compares the passwords of the snmpget and snmpset usernames with the community strings given by incoming SNMP request messages—community strings used by the network management station (NMS) for GET and SET commands.

Changeable SNMP Community Strings Restrictions and Limitations

- The snmpget and snmpset usernames must be added and not removed from your system.
- In prior releases of the VCO/4K product, you can configure sixteen users on one system with the Password Configuration screen; however, due to the implementation of changeable SNMP community strings, you can configure a maximum of fourteen users on one system in addition to the snmpget and snmpset usernames.
- Passwords must consist of exactly eight uppercase and/or lowercase alphanumeric characters.

Secondary NMS Configuration

The Ethernet/NFS/SNMP Configuration screen allows you to configure an optional secondary network management station (NMS) with the VCO/4K system software Version 5.2(1) release. This configuration allows you to receive traps from a VCO/4K system to a primary and a secondary NMS.

Complete the following steps to configure a secondary NMS.

Step 1 Access the Ethernet/NFS/SNMP Configuration screen (see Figure 1).

Figure 1 Ethernet/NFS/SNMP Configuration Screen

Current System Internet Address	=	10.3.1.12
New System Internet Address On Reboot	; =	10.3.1.12
Enable NFS File Access	=	N
NFS Server Internet Address	=	192.9.202.1
NFS Server Name	=	summa4
NFS Mount Directory Point	=	
Target System Name	=	sit8vcoa
Target System User Id	=	189
Target System Group Id	=	30
Target System Umask	=	0
System Subnet Mask	=	255.0.0.0
Gateway Routing Configuration	=	_
SNMP Management Station IP Address 1	=	
SNMP Management Station IP Address 2	=	

Step 2 Enter the primary NMS Internet Protocol (IP) address in the SNMP Management Station IP Address 1 field if a valid primary NMS IP address does not already indicated.

Note

An NMS IP address may exist in this field. You can overwrite this address if necessary. Refer to the *Cisco VCO/4K System Administrator's Guide* for more information.

Step 3 Enter the secondary NMS IP address in the SNMP Management Station IP Address 2 field.



The secondary NMS IP address configuration is optional; leave this field empty to receive SNMP traps at the primary NMS.

The secondary NMS configuration is complete. If you have a primary and a secondary NMS configured in your system, both NMSs receive SNMP traps from the VCO/4K.

Secondary NMS Configuration Restrictions and Limitations

There are no restrictions or limitations associated with the configuration of a secondary NMS.

Improved Error Messages

The amount of logical interfaces supported by a fully licensed VCO/4K differs from the amount of timeslot interfaces supported—a configuration limit that is consistent with previous releases. VCO/4K system software Version 5.2(1) generates the following error messages in the log file, to assist your configuration efforts.

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No available Card Memory

Explanation You have exceeded the logical memory. There is a maximum of 240 logical numbers (0 to 239). A logical number is defined as one interface or card number. For example, a fully configured ICC will occupy 16 logical numbers.

No Available Port Memory

Explanation This prompt appears when you reach the maximum number of timeslots in the system. There are 4000 listen-only timeslots and 4088 other timeslots available in a fully licensed VCO/4K. No additional timeslots of any type can be added.

No more available Listen-Only Ports

Explanation You have exceeded the maximum 4000 listen-only timeslots available in a fully licensed VCO/4K, which indicates that you have added too many SPC listen-only type timeslots.

No more available TimeSlot Ports

Explanation You have exceeded the maximum 4088 timeslots available in a fully licensed VCO/4K. Do not include the SPC-CPA, SPC-DTMF, SPC-MFCR2, and SPC-MFRC types in your calculations for this limitation.

Limitations and Restrictions

Table 3 lists the design constraints which have been identified in VCO/4K system software and related software. Unless noted, these limitations and restrictions apply to all Cisco VCO/4K releases up to and including 5.2(1). Cisco Systems currently has no plans to address the following known design constraints.

DDTs Issue	Description
_	Do not pull the active side NBC3 on an operating production switch. If you pull an active NBC3, it can impact traffic and the system will generate errors. If you suspect a problem with an NBC3 card and you wish to remove it, first switch sides to make it the standby side.
_	The ICC and SPC automatically reset after downloads. After a download to the ICC or the SPC, the card resets itself for the new download to take effect.
	The system does not allow the operational mode to be set back to standard once it has been set to extended. This is due to larger values which could be set in extended mode and are not valid in standard mode.
	The mode is stored in one of the database files. If you must return to standard mode during testing, do so by reverting to the saved database files which were copied before you set the extended mode.

 Table 3
 Known Design Constraints up to and Including Version 5.2(1)

DDTs Issue	Description
CSCdm18135	If a resource group contains SPC-CONF, the system hunts by means of the Rotary method only (regardless of whether you select Rotary or Cyclic in the Hunt Type field from the Resource Group Summary screen).
CSCdm45047	The Disk Utilities screen option I, Format Disk, is unavailable for users of system software V5.x and higher. If you attempt to format a floppy disk in the A:/ drive, the "Formatting A Drive Is Not Permitted" message appears.
CSCdp49217	FTP hangs while running ftp scripts to the VCO.
CSCdp78129	ICC quiet tone: the administration diagnostic screen indicates that the port is attached/listening to 4C0, when it is actually generating the quiet tone itself and is not attached to 4C0.
CSCdp84909	The VCO receives alarms FRM506/FRM531 under the rare circumstances of the SWI buffer not being allocated for sending messages to the NBC, during very high volume traffic. Loss of traffic may result.
CSCsf31137	After a warm start, the system sends a \$DC report to start call processing before IPRC prompt downloading is complete.
CSCsf41717	Avoid using the Software/Firmware Configuration screen to view the contents of floppy diskettes (device A:).
CSCsf51960	If you use an Ethernet system host interface with up to four hosts and high loads, the system may fail. Higher loads may support even fewer host connections. Use minimum host connections for high load switches.
CSCsf52581	Aux1 alarms triggered by the hardware (power supply, fan unit, or ring voltage failure) are not displayed on the System Alarms Display screen. Therefore, remote users cannot determine if a major hardware alarm is set.
CSCsf62790	A load seize on inpulse rules with record and speak tokens at 22 seizures causes IPRC cards to go OOS.
CSCsf62917	There is a mismatch between the online and diskette disk utilities. Underscores and special characters are not supported in directory and file names.
CSCsf62982	You do not get major alarm ALM011: No Hosts Available when all hosts connections are lost if TeleRouter is enabled. TeleRouter causes this problem. If TeleRouter is disabled and all host connections are lost, the alarm appears.
CSCsf63022	Telerouter Routing Action (\$D5) reports do not appear in the system trace file, but they are sent to the host.
CSCsf63245	If you attempt to update the gateway routing tables before you install and enable Ethernet, the gateway routing tables get corrupted.
CSCsf63261	If you use SNMP to configure resource groups on redundant systems, the port.tbl file gets corrupted and ports are missing from the resource groups.
CSCsf63398	If you add or delete a tone generator card while another tone generator is outpulsing, the switch may be unable to do further outpulsing and may even fail.
CSCsf84601	Can't delete large files from administration console.

 Table 3
 Known Design Constraints up to and Including Version 5.2(1) (continued)

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DDTs Issue	Description
CSCsf84771	A shutdown to the system results in a reboot. If you need to prevent a reboot, you must follow one of the following workaround procedures:
	Remove the Combined Controller on a VCO/4K. Rebooting attempts are prevented.
	• Reboot the system from a floppy disk. The system enters and remains in the installation state, and prevents further reboots.
CSCsf84962	All inpulse rules are aborting on port \$47F, when using the physical address \$47F as a trunk resource. Inpulse rule aborting occurs because \$47F is adjacent to the tone card. Do not use physical address \$47F.
CSCsf85137	If a DSP SRM is not physically installed on the SPC, but the DSPs are configured in the database, the system displays the SPC with a status of M (maintenance) rather than the expected O (out of service) status.
CSCsf85214	Spans that have been taken OOS before a reboot must be manually taken OOS after the reboot is complete. It is also recommended that the system is not run with cards defined and OOS; remove cards from the database. This workaround will improve overall performance.

 Table 3
 Known Design Constraints up to and Including Version 5.2(1) (continued)

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Important Notes

This section contains important information for operating the VCO/4K system efficiently. The following sections are included to enhance configuration and performance:

- "Mandatory Database Conversion for Upgrade from Version 5.1(4) and Lower" section on page 11
- "Live Upgrade" section on page 11
- "ICC-T1 ISDN Span as Primary Timing Source" section on page 12

Mandatory Database Conversion for Upgrade from Version 5.1(4) and Lower

If you are upgrading from VCO/4K system software Version 5.1(4) or lower, you must complete a database conversion immediately after upgrading to VCO/4K system software Version 5.2(0) and higher. Refer to the *Cisco VCO/4K Software Installation Guide* for database conversion procedures.

Note

The database conversion is performed by the system without the usual advisory system messages.

Live Upgrade

You can use Live Upgrade to upgrade to system software Version 5.2(1); however, refer to the following two sections for version-specific workaround procedures.

Caution

Do not operate conferences on the VCO/4K system while performing a Live Upgrade. Failure to follow this guideline may result in loss of calls. Ensure that the host is not sending Conference Control (\$6D) commands to the VCO/4K system during the system reset/file synchronization phase of the Live Upgrade procedure. Refer to Step 5 through Step 11 in the "Perform a Live Upgrade" section of the *Cisco VCO/4K Software Installation Guide* for more information.

Live Upgrade Procedures from Version 4.2 and Higher

Complete the following steps to use Live Upgrade if you are using system software Version 4.2 and higher. This procedure is a workaround for DDTs issue CSCdp23217—Live Upgrade failure with a Process Event Handler.

Caution

If you are using system software from Version 5.0.0.25 through Version 5.1.0.26, you must complete the following steps, and the steps in the "Live Upgrade Procedures from Version 5.0.(0.25) through Version 5.1.(0.26) with SPCs" section on page 12, so that you do not lose all calls.

Caution

Do not access the Software/Firmware Configuration screen at any time during Live Upgrade procedures. Failure to follow this instruction results in Live Upgrade failure. Proceed to Step 1; do not deviate from these procedures.

- **Step 1** Boot the standby side of the switch.
- **Step 2** Wait for file synchronization and perform a switchover.
- Step 3 Boot the new standby side and wait for file synchronization.
- Step 4 Follow the Live Upgrade procedures in the Cisco VCO/4K Software Installation Guide.

Live Upgrade Procedures from Version 5.0.(0.25) through Version 5.1.(0.26) with SPCs

Complete the following steps to use Live Upgrade from system software Version 5.0.(0.25) through Version 5.1.(0.26). This procedure prevents DSP failure on switchover and is a workaround for DDTs issue CSCdm22671.



Follow this workaround procedure when using Live Upgrade from Version 5.0.(0.25) through Version 5.1.(0.26). Failure to do so will result in the loss of all calls that require SPC resources. Use this procedure to minimize the volume of lost calls, limiting them to calls that are active on the SPC and that are taken out of service in order to reflash.

- Step 1 Load the new SPC.DWN on the active side of the system.
- Step 2 Take one SPC out of service (OOS).
- Step 3 Place the same SPC in the active state.
- Step 4 Wait for the download to complete and all DSPs to become active on the SPC.
- Step 5 Repeat Step 2 through Step 4 for all other SPCs, one at a time.
- Step 6 Follow the Live Upgrade procedures in the Cisco VCO/4K Software Installation Guide.

ICC-T1 ISDN Span as Primary Timing Source

When an ICC-T1 ISDN span is configured as the primary timing source, the incoming clock on the ICC-T1 ISDN fails to synchronize if you are upgrading from an existing database—prior to system software Version 5.1(1)—to a new database in VCO/4K system software Version 5.2(1).

To utilize your existing ICC-T1 ISDN (NI2, 4ESS, 5ESS, NTI, NTT) span as the primary timing source, complete the following steps when you upgrade to 5.2(1).



You do not need to perform the following procedure if you are adding a new T1 span as the primary timing source to the database or if you are currently running system software Version 5.1(1), and higher.



When you upgrade your software to 5.2(1), Cisco Systems recommends that you perform this procedure on the ICC-T1 ISDN spans configured as the primary and secondary timing source.

Step 1	Take the existing ICC-T1 ISDN span, configured as the primary timing source, out of service (OOS).		
Step 2	From the ICC ISDN Span Configuration screen, perform the following steps:		
	a. Change the REF CLOCK field parameter from LOOP to 1544.		
	b. Press Enter.		
	c. Change the REF CLOCK field parameter from 1544 to LOOP.		
	d. Press Enter.		
Step 3	Return the ICC-T1 ISDN span (from Step 1) back in service.		

Caveats

This section contains resolved and open software caveats for this release of the Cisco VCO/4K. Caveats describe unexpected behavior or defects in Cisco VCO/4K system software or related hardware. Complete the following steps to access detailed information on resolved and open caveats:

- **Step 1** Open an Internet browser application.
- Step 2 Go to http://www.cisco.com.
- **Step 3** Click on the site menu's Login hypertext.

The Username and Password Required dialog box is displayed.

Step 4 Enter your username and password.



If you do not have a valid username and password, contact your Cisco Systems representative.

Step 5 Click OK.

A Cisco Systems Web page is displayed.

- Step 6 Click on the Technical Support Help--Cisco TAC hypertext, which is located beneath the Service & Support section.
- Step 7 Scroll down the page and click on the Software Bug Toolkit hypertext, which is located beneath the Tools Index.
- Step 8 Click on the Search by ID button on the left of the page.

The Search for Bug by ID Number tool is displayed.

Step 9 Use the Search for Bug by ID Number search tool to find detailed information on caveats for the VCO/4K product.

Resolved Caveats

Table 4 lists the caveats issued against VCO/4K system software, and related optional software applications, that have been resolved in system software Version 5.2(1).

DDTs Issue	Description
CSCdp56114	France SPC-CPA detects the reorder tone as the busy tone.
CSCdp56847	No alarm message exists for the loss or clearing of conference ports.
CSCdr28154	ALM015 and ALM016 do not appear, as they should, when 75% of a resource group is out of service.
CSCdr30997	SPC-CPA diagnostics fail on Netherlands and Spain tone plans.
CSCdr80380	Cannot administratively propagate first port change to all other ports for ISDN spans.
CSCdr90718	The number of logical interfaces supported is inconsistent with the amount of timeslot interfaces.
CSCdr90718	The amount of logical interfaces needs to be defined.
CSCds52062	VCO with more than 58 ICC-T1/PRI spans experiences D-channel failures.
CSCds85078	Completing a card cut-over as part of a live upgrade and forcefully taking the card OOS results in a console lock up. Access the system administration Card Maintenance screen to download the new software to the VCO/4K system cards.
CSCds85102	Information on the Card Cut-Over screen disappears after the SPC and ICC card ports are cut over during Live Upgrade procedures under conference load.
CSCdt14634	FRM504: Major Alarm Set For - ALM065: Subrate Timeslot Threshold is set incorrectly. This is only related to Subrate switched calls that use an SSC (Subrate Switching Card). This Alarm does not affect the Subrate calls, it is just set at the wrong time. All Subrate calls will be processed until there are no more Subrate Timeslots available.
CSCdt18528	Cannot add a multiple toneplan to the 20th field in the Multiple Tone Plan Configuration screen.
CSCdt23584	When using the TONEPLAN token in an inpulse or outpulse rule, the default tone plan MFCR2 protocol is used instead of the specified token country ID. Multiple tone plans that employ MFCR2 tones can be used as default tone plans only, which limits the number of MFCR2 tone plans in a multiple tone plan configuration to one.
CSCdt23788	The disconnect sequence in NET5 with the icc.dwn from 5.1.4 (icc.dwn 5.12) is incorrect. At times, the originating party hangs up first, and the card may not send a release.
CSCdt26023	In system software V5.1.4 several customers have seen the error "Host Manager Failure" followed by a core. The core is caused by a watchdog timer firing.
	VCO/4K system software V5.1.4 and V5.2 is configured with the Host socket as blocking. This may affect call processing when using the system at high busy hour call rates. With this fix, the socket will be partially blocking. The socket bandwidth is found to be lesser than found in V5.2.0; however, it is comparatively higher than V5.1.3 when the socket was made blocking. Actual Host-VCO socket through-put depends on the size of Input receiving buffers and CPU speeds on the Host machine.
CSCdt28292	The Netherlands SPC tone plan detects the SIT tone as busy, and the pager cue tone as voice.
CSCdt28335	The Germany SPC tone plan does not detect the SIT tone and times out waiting for an Outgoing Port Change of State (\$DA) report, which is never sent.
CSCdt44271	Finland multiple tone plan feature tone plan SPC-CPA detects SIT as voice.

Table 4Resolved Caveats for Version 5.2(1)

DDTs Issue	Description
CSCdt44288	Singapore MTP SPC-CPA fails to detect tones.
CSCdt47918	Cannot manage VCO from multiple NMSs due to the VCO's inability to send SNMP traps to multiple destinations.
CSCdt50558	When configuring an E1-ICC for T1, and the PRI spans become active with the D-channel established, ensure that the correct hardware configuration exists by referring to the system administration System and Card Alarm Display screens—other configurations are not supported.
CSCdt58087	VCO4K SPC-MFRC does not time out when no digits are sent. When a SPC-MF resource is attached due to an inpulse rule with an MF token being executed, and no digits are ever sent, the SPC-MF resource will stay attached to the inbound call as long as the port is seized.
CSCdt68574	Sending commands from the SPC front panel causes it to reset.
CSCdt69945	If one of two conference calls is torn down, the remaining conference call loses the voice path.
CSCdt71198	Cross-talk occurs between two conference calls when using the enhanced conferencing feature.
CSCdt88605	If you configure ICC E1 hardware spans as ICC T1, the spans are put in the M state due to the presence of wrong hardware, interface hardware, and modified hardware alarms on the card, which is appropriate. If you try to force the spans to the A state with the Card Maintenance screen, the spans will be shown to turn to A regardless of the hardware alarms.
CSCdt91420	When the Beep tone is configured to play in a DTMF Collection Control (\$67) command on an ICC-ISDN span, it does not play and cannot be heard. The Beep tone is configured to play in the \$67 command in the Enabling Options Segment when the receiver is enabled.
CSCdu00716	Second enhanced conference loses voice path.
CSCdu41275	When using PRI/N card software version 8.03, certain spans are in OOS-FE (service messages disabled). In this state, VCO/4K system software rejects all incoming calls.
CSCsf85140	SPC F.P. 5x7-LED display is incorrect—not fully implemented. The SPC-CONF DSP type does not indicate any activity in the LED display.

 Table 4
 Resolved Caveats for Version 5.2(1) (continued)

Open Caveats

Table 5 describes possible unexpected behavior by Cisco VCO/4K Version 5.2(1). Unless noted, these caveats apply to all Cisco VCO/4K system software releases up to and including 5.2(1).

Table 5Open Caveats up to and Including Version 5.2(1)

DDTs Issue	Description
CSCdm94205	SPC does not know when DSPs are dead when using MRC.
CSCdp64900	The SPC-OUTP fails to work the first time after defining in the database.
CSCdr39175	Single power supply causes Major alarm on fully populated switch.

DDTs Issue	Description
CSCdr49239	Adding 8 SPC-DTMF, SPC-CPA, or SPC-MFRC types to a resource group will produce the Alarm Set For Loss Of ALL message for that type of resource. Workaround: Add 7 or 9 DSPs to service circuit resource groups.
CSCdr98769	VCO shows incorrect Alarm Occurrences MIB value (systemAlarmOccur).
CSCds21994	OID incorrect for VCO/4K.
CSCds24360	Changing protocol to Foreign Exchange Office Loop Start (FXOLS) on a span basis is not possible.
CSCds45890	When using an inpulse rule with the token TONE ENAB 3, there are intermittently inpulse rule aborts due to the generic not responding to a \$4B command with a \$4D report. When this happens, there is no dial tone played through the port.
CSCds89831	T309 Timer does not stop after D-Channel is reestablished following a reboot.
CSCdt05993	ICC-E1/NET5-UK goes out of service under load. This event is preceded by an ICC Congestion Alarm Clear message.
CSCdt41477	If SPC-CONF resources are used to set up a conference, voice path problems and voice quality degradation occurs after multiple switchovers. Use SPC-ENHCNF instead of SPC-CONF or reseat the SPC as a workaround for this issue.
CSCdt51511	ICC revision level COAR drops all the existing calls when the card is set to maintenance.
CSCdt83631	The Subrate Connection Display screen fields are not large enough to enter the rack, level, slot, group, and span of ICC cards. The Display Filter field, and when the command ADD is selected, the Source and Dest Fields are affected—the Slot field is not large enough to enter the group and span of an ICC card.
CSCdu28879	The Card Alarm Display screen shows Remote Alarm and D channel Failure on normal ICC-E1 CAS spans that have carrier failure and OOF. On ICC-T1 CAS spans, the Card Alarm Display screen shows Remote Alarm, D channel Failure, and Card Failure when it should show Carrier Failure and OOF. Carrier failure and OOF are shown in the Display Card Data screen under the Diagnostics menu and these same alarms should show in the Card Alarm Display screen under the Maintenance menu.
CSCdu34234	When a Voice Port Control (\$6C) command is issued to play a voice prompt, in conjunction with an outbound ISDN port, and before the voice prompt stops playing—no Voice Port Status (\$DE) report sent—and another \$6C command is issued to stop the voice prompt, the voice prompt will stop but will leave the ISDN port in the CP_ATT state instead of returning it to the CP_SETUP state. Both the ISDN Port Control (\$49) command issued to cross connect this port to another port or a Conference Control (\$6D) command issued to add it to conference are rejected. The VCO/4K system returns the network status byte \$20 or \$1E.
CSCdu38965	Adding and deleting an IPRC to a Version 5.2 VCO/4K system database causes the following errors: FRM340, FRM503, and FRM510.
CSCdu48116	If a NOTIFY message from the network is received by the VCO/4K system and the ISDN state is active (10), the system passes the NOTIFY message to the host in bytes 26 through n of an ISDN Port Change of State (\$EA) report. In all other states, the system ignores the NOTIFY message from the network.

 Table 5
 Open Caveats up to and Including Version 5.2(1) (continued)

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Description
You may encounter a call chain corruption on the standby side while running a call transfer load on the VCO/4K. This has the potential to reset the standby side. The active side is not affected. A call transfer load consists of a complex call scenario where two calls (a call started by using a virtual incoming port and an incoming call from the network) are interchanged using the Change Incoming Port (\$6B) command on the VCO/4K.
The RELEASE DTG token does not work: The RELEASE outpulse rule token does not release the DTG/DTG2 and causes the system to log an error during inpulse rule execution.
Subrate error during Live Upgrade—from 4.2.0.23 to 5.0.51.24 a "Subrate RS ack numbers: expected == $0x2$, got== $0x1$ " error message was printed to the log.
Standby crash when SPCs added and modified using SNMP.
When the system is running in extended mode, the api_stat.c routine to format the rack, level, and slot in the \$83 command from tokens does not work correctly.
Problem:
When the host sends a \$69 or \$49 command with an empty IP field and the SPC-outpulse is used to complete the outpulsing, calls fail.
Workaround:
Avoid having the host outpulse an empty field the using the SPC-outpulse or direct the host to use a different outpulse rule to outpulse an empty field.

 Table 5
 Open Caveats up to and Including Version 5.2(1) (continued)

Related Documentation

The following documents contain information that may be useful to system software Version 5.2(1) users.

- Cisco VCO/4K Software Installation Guide
- Cisco VCO/4K System Administrator's Guide
- Cisco VCO/4K Card Technical Descriptions
- Cisco VCO/4K System Messages
- Product supplements for optional software, including:
 - Cisco VCO/4K Management Information Base (MIB) Reference Guide
 - Cisco VCO/4K Standard Programming Reference
 - Cisco VCO/4K Extended Programming Reference
 - Cisco VCO/4K ASIST Programming Reference
 - Cisco VCO/4K TeleRouter Reference Guide
 - Cisco VCO/4K ISDN Supplement
 - Cisco VCO/4K Ethernet Guide
 - Cisco VCO/4K Tone Plan Release Notes
 - Applicable tone plan supplements

Obtaining Documentation

The following sections provide sources for obtaining documentation from Cisco Systems.

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You can access the most current Cisco documentation on the World Wide Web at the following sites:

- http://www.cisco.com
- http://www-china.cisco.com
- http://www-europe.cisco.com

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The Cisco TAC website is available to all customers who need technical assistance with a Cisco product or technology that is under warranty or covered by a maintenance contract.

Contacting TAC by Using the Cisco TAC Website

If you have a priority level 3 (P3) or priority level 4 (P4) problem, contact TAC by going to the TAC website:

http://www.cisco.com/tac

P3 and P4 level problems are defined as follows:

- P3—Your network performance is degraded. Network functionality is noticeably impaired, but most business operations continue.
- P4—You need information or assistance on Cisco product capabilities, product installation, or basic
 product configuration.

In each of the above cases, use the Cisco TAC website to quickly find answers to your questions.

To register for Cisco.com, go to the following website:

http://www.cisco.com/register/

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http://www.cisco.com/tac/caseopen

Contacting TAC by Telephone

If you have a priority level 1 (P1) or priority level 2 (P2) problem, contact TAC by telephone and immediately open a case. To obtain a directory of toll-free numbers for your country, go to the following website:

http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml

P1 and P2 level problems are defined as follows:

- P1—Your production network is down, causing a critical impact to business operations if service is not restored quickly. No workaround is available.
- P2—Your production network is severely degraded, affecting significant aspects of your business operations. No workaround is available.

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