Release Notes for Cisco Video Management and Storage System SRE

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These release notes are updated as needed to support the following Cisco Service Module-Services Ready Engine (Cisco SM-SRE) and Network Modules Enhanced (NME) for the Cisco Integrated Services Routers (Cisco ISRs):

- **Cisco Analog Video Gateway** (Cisco NME)— converts analog camera signals into IP-accessible endpoints. The network module receives input from analog video cameras and converts analog signals to IP video streams for IP networks used in closed-circuit IP video surveillance (IPVS) systems
- **Cisco Video Management and Storage System (Cisco SM-SRE)**—provides a method for rapid deployment of highly distributed video surveillance solutions
- **Cisco Integrated Storage System (Cisco NME)**—provides additional local disk storage for video archives within the ISR. The Cisco Integrated Storage System module is supported in the ISR only if there is a Cisco Video Management and Storage System module present within the same ISR.

We recommend that you read the field notices for this version to see if your software or hardware platforms are affected. If you have an account on Cisco.com, you can find field notices at http://www.cisco.com/warp/customer/tech_tips/index/fn.html.

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Feature History

Table 1, Table 2, and Table 3 provide the feature history of the Cisco Video Management and Storage System SRE, Cisco Integrated Storage System NME, and Cisco Analog Video Gateway NME network modules, respectively.

Table 1 Cisco Video Management and Storage System Network Module and Cisco SM-SRE Features

Version	Feature Name	Feature Description
6.2.1	Cisco SM-SRE introduced	Cisco Services Ready Engine (Cisco SRE) service modules installed in one of the service module (SM) slots in the Cisco 2900 Series or 3900 Series Integrated Services Router Generation 2 (Cisco ISR G2) enables the router to host the Cisco Video Management and Storage System application. Cisco ISM-SREs hosted by the Cisco ISR G2 have their own processors, storage, network interfaces, and memory that operate independently of the host router resources. This configuration helps to ensure maximum concurrent routing and application performance. A service-ready deployment model enables branch-office applications to be provisioned remotely on the modules at any time. It also supports Cisco Software Licensing features.
	Support for new VSMS[1] and VSOM[2]	Supports VSOM version 4.2.1 and VSMS version 6.2.1.
	RAID[3] 1, Linear RAID, and RAID 0 support	Support for RAID 1, Linear RAID, or RAID 0 option for the Cisco SM-SRE-900 module at the time the Cisco Video Management and Storage System SRE application is installed
	Cisco Software Licensing for evaluation and permanent licenses	CSL[4] support for Cisco Video Management and Storage System, VSMS, and VSOM
	Feature enhancements	Feature enhancements for better performance and usability
2.2	Removal of licensing requirements	A license is no longer required for the Cisco Video Management and Storage System
	Additional onboard storage	Support for additional onboard storage and role-based stream access
	Enhanced Storage Support	Support of NFS storage with the addition of the Cisco Integrated Storage System network module (for details, see Table 2)
	SNMP management	Support for SNMP[5] management
	Low frame rate support for H.264 and MPEG4	Maps certain predefined bit rates to lower frame rates (1, 2, 3) for MPEG4 and H.264

Table 1 Cisco Video Management and Storage System Network Module and Cisco SM-SRE Features (continued)

Version	Feature Name	Feature Description
	Video signal loss notification	MIB[6] triggered event to notify the system upon reception of video signal loss from Cisco Analog Video Gateway
2.1	Support for VSOM version 4.1 and VSMS version 6.1	Supports: • Batch administration of cameras • Advanced event filtering • Improved motion configuration • Other feature improvements
	Improvements in central management of video surveillance capabilities	Improvements in: • Replicating and updating configuration changes to multiple remote sites • Downloading images to multiple remote sites • Simplifying remote site deployments for iSCSI and end-devices • Stream access control and prioritization for access across the WAN
2.0	Support for new VSOM and VSMS	Supports VSOM version 4.0 and VSMS version 6.0. **Note** A new license is required to support these new versions of VSOM and VSMS.
	Supports additional storage configuration options	Supports the configuration of additional of mass storage devices.
1.1	Changes to iSCSI configuration options	Supports new configuration options for the iSCSI[7] interface.
	IP Camera support	Supports the Cisco 2500 IP Camera.
1.0	Initial Release	Initial release of the Cisco Video Management and Storage System module, which allows the management of video sources through a single converged interface. It supports the Cisco IP Video Surveillance Integrated Analog Video Gateway and most major third-party IP cameras and encoders and decoders. It allows you to view live and archived video through the same Internet Explorer *thin client* interface, store archival video locally with up to 160 GB of local storage, and to expand to external Small Computer System Interface over IP (iSCSI) storage for long-term archives.

1. VSMS = Video Surveillance Management System
2. VSOM = Video Surveillance Operations Manager
3. RAID =Redundant Array of Inexpensive Disks
4. CSL = Cisco Software Licensing
5. SNMP = Simple Network Management Protocol

6. MIB = Management Information Base
7. iSCSI = Internet Small Computer System Interface

Table 2 Cisco Integrated Storage System Network Module NME Features

Version	Feature Name	Feature Description
Cisco Integrated Storage System Network Module		
1.0	Integrated Storage System providing 500 GB of additional archive storage	Initial release of the Cisco Integrated Storage System network module, which allows additional video archive storage when accompanied by the Cisco Video Management and Storage System module within the same Integrated Services Router (ISR).

Table 3 Cisco Analog Video Gateway Network Module NME Features

Version	Feature Name	Feature Description
1.2.2	Improved video port alarm events	• Supports video-loss and video-detect event types as well as “any-port” as a valid event source trigger • New web-based utility introduced to configure video port alarm events
	Fine-tune capability for video port settings	Web-based video viewer utility contains new sliders to fine-tune video port settings, including saturation, sharpness, brightness, contrast, and hue
	PAL channel density at parity with NTSC	The maximum of 12 PAL@4CIF streams limitation has been removed
	Configurable color-bar behavior	Provides a new CLI that allows you to disable or limit the play out time of the color-bar (the color-bar is displayed if no video signal is detected on a video port)
1.2	MJPEG performance	Enhances performance for MJPEG (density).
	Configuration persistence of output ports	Cross-connected port configurations can be saved such that the configurations survive reloads.

Table 3 Cisco Analog Video Gateway Network Module NME Features (continued)

Version	Feature Name	Feature Description
1.1	De-interlacing enable/disable	Supports the enabling and disabling of de-interlacing using the video codec profile.
	MJPEG motion detection support	Supports motion detection for MJPEG.
	Resolution 2CIF support	Supports 2CIF resolution and maximum resolution options.
1.0	Initial Version	Initial version of the Cisco IP Video Surveillance 16-Port Analog Video Gateway Network Module, which provides high-density analog video encoding, up to 30 frames per second (f'/s) per port at up to 4CIF video resolution, support for Motion JPEG (MJPEG) and MPEG4, remote Pan Tilt Zoom (PTZ) camera control, integrated contact closure ports, and embedded motion detection. The analog video gateway for video encoding is integrated with a video management and storage system, a Cisco integrated services router, and additional software from the Cisco Video Surveillance Manager products.

Cisco Analog Video Gateway Performance Optimization

The following tables list the Cisco Analog Video Gateway MPEG4, H.264, and MJPEG video stream performance optimization, respectively, for both the NTSC and PAL video streams at the listed Common Intermediate Format (CIF) resolution and frames per second.

MPEG4 Performance Optimization

NTSC Streams		PAL Streams	
4CIF MPEG4 30 fps	4	4CIF MPEG4 25 fps	4
4CIF MPEG4 15 fps	8	4CIF MPEG4 12.5 fps	8
4CIF MPEG4 10 fps	16	4CIF MPEG4 8.3 fps	16
2CIF MPEG4 30 fps	8	2CIF MPEG4 25 fps	8
2CIF MPEG4 15 fps	16	2CIF MPEG4 12.5 fps	16

H.264 Performance Optimization

NTSC Streams		PAL Streams	
4CIF H.264 7.5 fps	4	4CIF H.264 6.25 fps	4
4CIF H.264 3 fps	8	4CIF H.264 2.5 fps	8
4CIF H.264 1 fps	12	4CIF H.264 1.67 fps	12
2CIF H.264 15 fps	4	2CIF H.264 12.5 fps	4
2CIF H.264 7.5 fps	8	2CIF H.264 6.25 fps	8
2CIF H.264 3 fps	16	2CIF H.264 2.5 fps	16

MJPEG Performance Optimization

NTSC Streams		PAL Streams	
4CIF MJPEG 30 fps	8	4CIF MJPEG 25 fps	8
4CIF MJPEG 15 fps	16	4CIF MJPEG 12.5 fps	16
2CIF MJPEG 30 fps	16	2CIF MJPEG 25 fps	16

System Requirements

Hardware and software requirements for the Cisco Video Management and Storage System are in the following sections:

- Hardware Supported for Cisco Video Management and Storage System SRE, page 6
- Software Licenses, page 6
- Software Upgrade Overview, page 7

Hardware Supported for Cisco Video Management and Storage System SRE

Table 4 lists supported platforms and the minimum Cisco IOS release required to support version 6.2.1 and later versions of the Cisco Video Management and Storage System SRE on both the SM-SRE-700-K9 and SM-SRE-900-K9.

Table 4 Supported Platforms of the Cisco Video Management and Storage System SRE and Minimum Cisco IOS Release Required for Version 2.2 and Later

Cisco Platform	Cisco Video Management and Storage System Services Ready Engine: 1.86 GHz CPU Single Core, 4 GB, 500 GB HDD, CF 2 GB (SM-SRE-700-K9)	Cisco Video Management and Storage System Services Ready Engine: 1.86 GHz CPU dual core, 4 GB, 2 x 500 GB HDD, CF 2 GB (SM-SRE-900-K9)
Cisco 2901	—	15.0(1)M or later release
Cisco 2911 Cisco 2921 Cisco 2951	15.0(1)M or later release	15.0(1)M or later release
Cisco 3925 Cisco 3945	15.0(1)M or later release	15.0(1)M or later release

Software Licenses

The Cisco Video Management and Storage System SRE version 6.2.1, Video Surveillance Management System, and Video Surveillance Operations Manager require Cisco Software Licenses. For information on obtaining software licenses, see the “Software Activation and Licensing” chapter of the *Cisco Video Management and Storage System SRE Installation and Upgrade Guide*.

Software Upgrade Overview

Depending on the network module version you are upgrading from, different software upgrade methods are available. The following methods are supported to upgrade each of the network modules:

- A “clean” installation process upgrade using the online installer with the **software install clean** command.
- Upgrade using the online installer with the **software install upgrade** command.
- A “clean” installation process upgrade using the boot helper.

For detailed software installation and upgrade procedures, see *Cisco Analog Video Gateway Installation and Upgrade Guide*, *Cisco Video Management and Storage System SRE Installation and Upgrade Guide*, and *Cisco Integrated Storage System Installation and Upgrade Guide*, respectively.

Caveats

Caveats describe unexpected behavior in Cisco Analog Video Gateway and Cisco Video Management and Storage System network modules software versions. Severity 1 caveats are the most serious caveats. Severity 2 caveats are less serious. Severity 3 caveats are moderate caveats, and only selected severity 3 caveats are included in the caveats document.

This section contains caveats that were resolved and open in the releases noted.

The following information is provided for each caveat:

- Symptoms—A description of what is observed when the caveat occurs.
- Conditions—The conditions under which the caveat has been known to occur.
- Workaround—Solutions, if available, to counteract the caveat.

Note If you have an account on Cisco.com, you can use Bug Toolkit to find select caveats of any severity. To reach Bug Toolkit, log in to Cisco.com by clicking the Log In button on the right side, go to the drop down menu on the top bar of the page and select Technical Support: Tools & Utilities: Software Bug Toolkit (under Troubleshooting Tools). Another option is to enter the following URL in your web browser: http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl.

To find the latest Cisco Analog Video Gateway or Cisco Video Management and Storage System DDTS information, go to Bug Toolkit and search, by product, for either Cisco Analog Video Gateway or Cisco Video Management and Storage System modules. When logged in to Bug Toolkit, select the option to search for bugs in other Cisco software and hardware products.

- Cisco Analog Video Gateway, page 7
- Cisco Video Management and Storage System, page 11
- Cisco Integrated Storage System, page 28

Cisco Analog Video Gateway

This section describes possibly unexpected behavior by the Cisco Analog Video Gateway module.

Resolved Caveats

The following caveats are resolved as of the Cisco Analog Video Gateway version 1.2.2.

CSCsi61385

Symptom Debug outputs on the Cisco Analog Video Gateway module may be printed even when all traces are disabled.

Conditions When the **trace** command is enabled from the CLI.

Workaround None.

CSCsl02665

Symptom Previously assigned or used channels cannot be selected again to create a new contact closure event. However, selection of assigned or used channels is allowed during the editing of the event.

Workaround Check that the desired channel is not already assigned when configuring a new contact closure event or when editing an existing contact closure event.

CSCsl26561

Symptom Motion detection with MJPEG is not supported.

Workaround There is no workaround, motion detection in not supported for MJPEG.

CSCsl51028

Symptom Video keyword for **video xconn-ppbk...** command is missing.

Conditions The video keyword accessible by using the user or privileged EXEC mode is hidden. When the **help** or **?** command option is used, the video keyword command does not appear.

Workaround The video keyword is hidden, but it exists and is functional. To access the hidden video keyboard, enter the command **video ?** and **xconn-lpbk** command will appear as an option.

CSCsr02487

Symptom CLI commands allow a resolution to be configured that is lower on the port than the resolution configured on the codec for the streams on that port.

Conditions Cross verification should only allow the resolution on the port to be greater than or equal to the resolution configured on the codec.

Workaround None.

CSCsr28670

Symptom MPEG4/H.264 motion detection becomes very insensitive at threshold levels above 30. (The threshold is set in the range of 1 to 100, with 1 being most sensitive and 100 being least sensitive to motion detection.)

Conditions The video codec used is MPEG4 or H.264, motion detection is enabled, and the detection threshold is set to a level above 30.

Workaround Use a threshold value below 30 or use the MJPEG codec.

CSCsy90618

Symptom Terminating the child of a forked video stream causes the Cisco Analog Video Gateway to generate excessive error messages.

Conditions When two identical codec/stream profiles share the same port and the first stream is started from the VLC and the second one is started and the forking takes place, the first stream freezes when the child stream is stopped, resulting in the generation of excessive error messages. With MPEG4 or H.264 using VLC, the results are the same except that video streaming stops.

Workaround None.

CSCsz51331

Symptom The VST total frame always shows 0 in **show video dsp internal** command output.

Conditions The **show video dsp internal** command VST output should display the sum of the VST Processed and Dropped.

Workaround None.

CSCsz73095

Symptom It is necessary to continue sending a motion start request to the Cisco Video Management and Storage System during consistent moves.

Conditions The Cisco Analog Video Gateway does not send a motion stop request to the Cisco Video Management and Storage System after a motion-start request is sent. The Cisco Video Management and Storage System uses a 30-second timer to determine the end of an event. If a motion start request is not sent within 30 seconds, the Cisco Video Management and Storage System automatically generates a motion stop event.

Workaround It is necessary to send a motion start request to reset the Cisco Video Management and Storage System timer during consistent motion, or use a motion-stop request.

CSCta67488

Symptom In the Cisco IPVS Utilities graphical user interface, the contact closure Video Port LED status indicators do not update to reflect the actual video port status.

Conditions The XML application programming interface, receives the request to send the current port status to the IPVS utility GUI but does not respond to the request.None.

Workaround None.

CSCtb15403

Symptom When video streams have alarm events configured on all 16 ports, valid video streams flap between color-bar and video clip.

Conditions Appears when one MJPEG and 16 MPEG4 video streams have alarm events configured on all 16 ports. When one connection out of 17 is configured, the digital signal processor (DSP) runs out of resources and failure occurs as expected. The problem appears when valid connections on the DSP get reset and flapping of video stream occurs between the color-bar and video clip display.

Workaround None.

Open Caveats

The following caveats are open as of the Cisco Analog Video Gateway version 1.2.2.

CSCsq23681

Symptom Malformed packets cause the RTSP server to crash and cause a denial-of-service.

Conditions Test cases with different malformed packets consistently causes the RTSP server to crash and cause denial-of-service.

Workaround None.

CSCsq35319

Symptom The motion regions configured for MJPEG in the VSOM do not match those configured in IPVS.

Conditions The motion regions configured by VSOM are rounded up to an 8 x 8 or 16 x 16 macroblock grid in the IPVS.

Workaround None.

CSCta99501

Symptom When the video port settings are tuned, it results in poor video quality.

Conditions .When video port settings, especially hue settings. are tuned, the video quality is poor when viewed from the Video Viewer.

Workaround None.

Cisco Video Management and Storage System

This section describes possibly unexpected behavior by the Cisco Video Management and Storage System module.

Resolved Caveats

The following Cisco Video Management and Storage System caveats are resolved as of version 2.2.

CSCsj37261

Symptom Supported bit rates on Video Surveillance Management System for MPEG4 currently do not match those on the encoder. If configured with values that do not match, the video encoder refuses to accept the values and proxies fail to start.

Conditions The Cisco Analog Video Gateway module supports rates in the range of only 168 to 2000 kbps, but the Video Surveillance Management System allows values outside of this range.

Workaround When adding proxies in Video Surveillance Management System, make sure the bit rates are configured within the range of 168 to 2000 kbps.

CSCsk37327

Symptom Video image does not load on the upper first pane on various layouts with VMR enabled.

Conditions This appears in both the operator view and administrative view, and also in the live and archive feeds.

Workaround The VMR requires a specific graphic card. Disable VMR mode if this problem occurs.

CSCsk56236

Symptom The VSMS does not clean up proxy files created by unsuccessful camera additions.

Conditions Proxy configurations created in the proxy directory and not cleared after an unsuccessful configuration is attempted.

Workaround None.

CSCsk57074

Symptom Video archives are not removed from the storage server (whether the server is local or remote) after selecting the option to remove archive files from the server.

Conditions This problem appears intermittently.

Workaround Check with “technical support shell—listar -r”.

CSCsk95875

Symptom MJPEG video streams or archives set at 1 frame-per-second frame rate or less on the Video Surveillance Operations Manager do not remain operational.

Workaround Use a frame rate larger than 1 frame-per-second.

CSCsl35524

Symptom When using the **reload** or **shutdown** CLI commands, some iSCSI I/O errors are reported.

Conditions When the **reload** CLI command is issued while the system is in the process of archiving using the iSCSI interface, some I/O errors are reported on the console.

Workaround Stop the VSMS service using the **video-surveillance task stop** command before issuing the **reload** or **shutdown** command.

CSCsq20897

Symptom Deleting the motion region from the VSOM does not delete the same motion region in IPVS.

Conditions When the motion region is deleted from the VSOM, it is supposed to delete the motion region configuration from the IPVS and stop the motion detection. However, if the motion region is being used by motion-detection profile, which in turn is being used by stream profile that is currently streaming, it does not delete the motion-region profile.

Workaround The only way to remove motion region from VSOM is to open the motion window, which activates the stream and makes the removal of the region possible from the GUI.

CSCsq46829

Symptom Reload of the Cisco Video Management and Storage System hangs when the iSCSI target is unreachable.

Workaround None.

CSCsq97641

Symptom The VSMC driver packages do not upload.

Conditions The **Manage Drivers** option of the VSMC console to upload, install, or uninstall individual driver packages is not functional.

Workaround None.

CSCsr09843

Symptom If the iSCSI volume is already discovered, changing the timeout-node-session value has no effect.

Conditions The timeout-node-session value only gets set during iSCSI discovery.

Workaround To change the iSCSI timeout-node-session value, you must first disable the volume before setting the timeout-node-session value.

CSCsr21561

Symptom CLI messages incorrectly indicate successful mounting of an iSCSI device when there is no volume available on the device.

Conditions 1—When attempting to mount to a single, standalone iSCSI device that has no available volume, the CLI incorrectly indicates a successful mount, returning a *succeeded* message, even tough no volume is available.

Conditions 2—When attempting to mount the iSCSI device with no volume available as a second device, the CLI incorrectly indicates that the mounting of the new volume has occurred successfully, returning a *succeeded* message, even though multiple volumes cannot be configured on this device.

Workaround Make a volume available on the iSCSI device before attempting the configuration.

CSCsr23484

Symptom When the iSCSI timeout-node-session value is changed from its default value of 120 and the VSMS is upgraded, the new value does not take effect.

Conditions When the **timeout-node-session** command is used to change the time-out value from its default value of 120 to another value, and then the VSMS is upgraded, the new time-out value does not take effect.

Workaround None.

CSCso41707

Symptom The resolution setting for the Cisco Analog Video Gateway displays incorrectly in the archive view of 2CIF resolution.

Conditions When a 2CIF resolution camera feed from the Cisco Analog Video Gateway is created and then its archive is created, the resolution shows704x288, which is correct. However, from archive view of the same feed, the resolution shows 704x576, which is incorrect.

Workaround None.

CSCso43604

Symptom The Cisco Review player did not compensate for 2CIF resolution and shows the original resolution.

Workaround None.

CSCsq67034

Symptom Removing the iSCSI from CLI does not remove the iSCSI info from the *system.cfg* file.

Conditions Currently, the only way to remove an existing iSCSI configuration and restart the VSMS server is to manually remove the partition information at the end of the *system.cfg* file.

Workaround None.

CSCsr92923

Symptom The media server VSMC window does not display the MAC address of the Cisco Video Management and Storage System module.

Conditions The MAC address field in the media server VSMC window is blank.

Workaround The MAC address of the module is necessary in order to enter the Cisco Video Management and Storage System license key. Open the console Operations Manager window to obtain the MAC address of the module.

CSCsu63586

Symptom The VSOM is unable to detect older versions of Cisco Video Surveillance client.

Conditions After upgrading from version 3.1.1/5.1.1 to version 4.0/6.0, the VSOM is unable to detect the older version of the Cisco Video Surveillance client to replace it with the new client. The VSOM is expected to compare the new client with the older client and automatically install the new client.

Workaround Manually uninstall the older client and install the new client.

CSCsu63606

Symptom The motion configuration that is associated with an event is lost after the upgrade.

Conditions Events configured with a notification URL that creates an association between the soft-trigger event and the motion configuration in older version 3.1.1/5.1.1 is lost after the upgrade.

Workaround Reconfigure the motion configuration to re-associate the soft-trigger event an the motion configuration.

CSCsv35320

Symptom The lower bit rate streams are not configurable in the VSMS.

Conditions The following cannot be configured in the VSMS:

- Five streams of 4CIF@3 f/s, each 128K with GOP 12.
- Two streams of 4CIF@2 f/s, each 56K with GOP 12.
- Two streams of 2CIF@2 f/s, each 56K with GOP 12.

Workaround A special driver package (dp_cisco) must be installed to allow these bit rate streams to be configured. Complete the following steps to install the driver package:

1. In the VSMC, go to Manage Drivers under Configuration.
2. Select the dp_cisco <*version*>*.zip* driver pack from the Uninstall Driver Package.
3. Restart the server to complete the changes.
4. After successfully restarted the Video Surveillance Server, go back to the Manage Drivers window and click the **Browse** tab under the Upload and Install a Driver Package.
5. Choose and upload the dp_cisco driver package.
6. Restart the server to complete the changes.

Note The newly installed driver package must be a different version than the existing driver package; otherwise, the driver will not be installed.

CSCsv43634

Symptom The VSOM Video Tool in the Operator window always displays the play rate as zero (0).

Conditions The VSOM Operator window has a green button on the upper right corner that is displayed when we Video Tool is checked. It is supposed to display the media type and streaming frame rate or bit rate, but displays a play rate of zero (0) instead.

Workaround None.

CSCsv71033

Symptom Video display intermittently flips between two different camera feeds that come from either within the same Cisco Analog Video Gateways or across different ones.

Conditions While video streaming is in progress, if VMSS service is restarted using either CLI command: **video-surveillance task restart** or from the VSMC GUI, it sometimes gets into a state where the video displayed or recorded on the VSM switches back and forth between two different cameras feeds.

Workaround If it is necessary to restart the VSM service while there are video streaming sessions in progress between the VSM and the Cisco Analog Video Gateways, complete the following steps instead of using restart option:

1. Stop the service with CLI command **video-surveillance task stop**.
2. Wait for 60 seconds or until all the existing sessions are terminated (use CLI command **show video session connection** to check the status of the sessions in the Cisco Analog Video Gateway and verify that there are no active sessions).
3. If sessions are not cleared after 60 seconds, use the CLI command **test video sessions clear all** to manually tear down the sessions.
4. If sessions are not cleared after following the previous Step 3, reload the Cisco Analog Video Gateway.
5. Start the service using the CLI command **video surveillance task start**.

CSCta38375

Symptom After execution of the **video-surveillance task archive-stop** command, there is no support to restart the stopped archives.

Conditions The archives sent to the Cisco Integrated Storage System disk drive can be stopped with the **video-surveillance task archive-stop** command, but to restart the archive, the **video-surveillance task restart** command must used. This would interrupt archives to local media, if any exist. Also, from the VSOM page, the stopped archives appear as if in the running state, even after they are stopped.

Workaround Issue the **video-surveillance task restart** command to start the archiving process.

Open Caveats

All the Cisco Video Management and Storage System caveats listed in this section are open. This section describes severity 2 caveats and select severity 3 caveats.

CSCsj46139

Symptom The channel IDs offered in the drop down list of the Video Surveillance Operations Manager do not match those of encoder.

Conditions The Cisco Analog Video Gateway module has only16 channel IDs and the channel IDs must be used within the range of channel 1 to channel 16.

Workaround Make sure the channel selected is within the supported range of the encoder.

CSCsj91135

Symptom The VSOM GUI reports that the archive has been created successfully but it is not running and an error message appears.

Workaround None.

CSCsk03048

Symptom Camera feeds and archives saved to the configuration as PAL show up as NTSC after restoring the configuration from backup files to the Video Surveillance Management System.

Workaround Although feeds are reported as NTSC, they continue to run as PAL.

CSCsk21927

Symptom The PTZ analog device is intermittently unresponsive to joystick movements from the VSOM.

Workaround None. Wait a few seconds, and then retry.

CSCsl29432

Symptom There is no password recovery capability for the Cisco Video Management and Storage System module. There is currently no method to recover the password for root.

Workaround Reinstall the application image.

CSCs156333

Symptom After restoring a configuration that was previously backed up, proxies sometimes do not start, and there is no video streaming.

Conditions If the restored configuration contains an iSCSI partition selected for media repository, but the partition becomes unavailable at the startup (because of a network outage or some other reason), the VSMS service does not start and there is no video streaming.

Workaround Restart the VSMS using either the **video-surveillance task start** CLI command or the VSMS Console. You can also use the Cisco Video Management and Storage System **reload** CLI command to restart the VSMS.

CSCso45416

Symptom Cannot disable the motion detection function in the camera feed.

Conditions Currently, once motion detection is enabled on a camera feed, the check-box that says **Enable Motion Detection** gets locks out and motion detection cannot be disabled.

Workaround The only way to disable motion detection is to delete the camera feed and then re-create it.

CSCso55960

Symptom Motion detection persistence cannot be configured or tuned.

Conditions The VSOM uses persistence value to control how long (in seconds) the motion must persist before generating motion detection event. This value is currently not configurable in IPVS.

Workaround None.

CSCso61125

Symptom When the date is entered in the date widget by typing it in, the widget does not always pick up the correct date.

Conditions The date widget is not always accepted by entering the date by typing it in.

Workaround Rather than entering a date, select the date on the widget itself. This problem can also be fixed by replacing this widget with a third-party widget.

CSCsq47287

Symptom After connectivity to the iSCSI target is lost, the VSOM generates an error but media server starts the archive process even though there is a loss of connectivity.

Conditions When connectivity from Cisco Video Management and Storage System host to the iSCSI storage target is lost and an archive process is started, the underlying repository is not reachable and the error *malformed response* appears. However, despite the message, it actually starts the archive process.

Workaround None.

CSCsq72219

Symptom VSOM should not allow same camera names and feed names to be configured.

Conditions In the VSOM GUI administration configuration window, identical camera names and feed names can be reused, which causes confusion when selecting the camera and feed names for archival purposes.

Workaround You must ensure that you do not use the same names with naming cameras or feeds.

CSCsr07437

Symptom Restarting of VSMS server fails after using the Cisco Video Management and Storage System CLI to remove an iSCSI device.

Conditions After using the Cisco Video Management and Storage System CLI to remove an iSCSI device, the VSMC console removes the corresponding mapped Local Archive Repositories. However, the partition information is still contained in the *system.cfg* file.

Workaround Reconnect an iSCSI device to the system and restart the video surveillance task.

CSCsv05004

Symptom After configuring H.264 video compression, video displays a jerky motion when in operator mode.

Conditions When configuring H.264 video compression with 4cif/4000/NTSC, the video source display is jerky after switching to operator mode.

Workaround None.

CSCsv05235

Symptom Motion events does not get generated consistently

Conditions While the Cisco Analog Video Gateway detects a motion and sends an alarm message to the Cisco Video Management and Storage System, the Cisco Video Management and Storage System does not trigger an event every time a notification is received. When an event is not triggered, the associated motion configuration, such as archiving, alerts, and so on, fails.

Workaround None.

CSCsv46345

Symptom When an attempt is made to edit an event, the window expires and causes a *Page Not Found* error, unless the edits are made using the Motion Configuration window.

Conditions If an attempt is made to edit an event without going to the Motion Configuration window, a *Page Not Found* error appears. If the event is edited by changing the value using the Motion Configuration window, the edit is successfully submitted.

Workaround Edit an event using the Motion Configuration window.

CSCsv57002

Symptom Excessive macro-blocking is seen on the video after restarting the media server.

Conditions If, while video streaming is in progress, the Cisco Video Management and Storage System service is restarted using either the CLI command **video-surveillance task restart** or the VSMC GUI, there can be excessive RTP packet loss recorded in the */usr/BWhttpd/logs/ims.log* file and excessive video macro-blocking.

Workaround If it is necessary to restart the VSM service while there are video streaming sessions in progress between the VSM and the Cisco Analog Video Gateways, complete the following steps instead of using restart option:

1. Stop the service with CLI command **video-surveillance task stop**.
2. Wait for 60 seconds or until all the existing sessions are terminated (use CLI command **show video session connection** to check the status of the sessions in the Cisco Analog Video Gateway and verify that there are no active sessions).
3. If sessions are not cleared after 60 seconds, use the CLI command **test video sessions clear all** to manually tear down the sessions.
4. If sessions are not cleared after following the previous Step 3, reload the Cisco Analog Video Gateway.
5. Start the service using the CLI command **video surveillance task start**.

CSCsv70829

Symptom An archive event marked using the VSOM operator window does not start marking and does not create event clipping.

Conditions This occurs after the first event is deleted and a new one with the same name is added.

Workaround Whenever an event is deleted, make sure that the new event name is not the same as the name of the deleted event.

CSCsw20015

Symptom RTP packets are missed or dropped after the VSM is running for an extended period.

Conditions If the VSM is heavily loaded after running it for extended period of time, the *ims.log file* starts recording RTP packets missed errors for different cameras at random. The packet drops are not excessive and do not have a noticeable effect on the live video being recorded or viewed.

Workaround None

CSCsw15190

Symptom Scheduled archives configured in the Cisco Video Management and Storage System version 1.1 are not preserved after an upgrade to version 2.0. The recurring archives appear as one-time archives after the upgrade.

Conditions Scheduled archives configured in Cisco Video Management and Storage System version 1.1 are not preserved after upgrade to version 2.0.

Workaround Remove the old recurring archives and add the recurring archives from VSOM window.

CSCsw91361

Symptom Alarms Monitor, Destination, and Notifier profile configurations on IPVS might disappear after the Cisco Video Management and Storage System is restarted, causing motion detection failures on cameras with motion detection enabled.

Conditions This condition is likely to occur after a camera without motion detection is added to the existing configurations (that is, cameras with motion detection configurations) and the Cisco Video Management and Storage System restarted.

Workaround Completely remove the camera from the VSOM and then add the camera and its related motion event configurations again.

CSCta02156

Symptom The NFS mount state might become stale on Cisco Video Management and Storage System. If this happens, the reporting a mount on free disk space on all mounted file systems command (“df -k”) will not show the NFS mount point.

Conditions 1. Changing the export mount using the Cisco Integrated Storage System module CLI after the Cisco Video Management and Storage and Cisco Integrated Storage System mounts are completed.

Conditions 2. Installing the Cisco Integrated Storage System software without properly stopping the active archives might cause the NFS to be unmounted when Cisco Integrated Storage System becomes operational again.

Workaround 1. Using the Cisco Video Management and Storage System **storages nfs** subcommand, first disable and then enable the state.

Workaround 2. Stop the currently running archives being sent to Cisco Integrated Storage System before reloading or installing Cisco Integrated Storage System software.

CSCta04265

Symptom When multiple large archives are deleted from the VSOM, the VSOM might get out of sync with VMSC, resulting in some archives appearing in the VSOM but not in the VSMC; or, the archives might not be removed even though the system is still running.

Conditions Large archives, such as 12-hour and 24-hour archives, contain many files. Because it takes a long time to remove those files from the disk drive, errors might occur because of application timeouts. These timeouts, in turn, will cause the VSOM go out of sync with the VMSC.

Workaround Delete the problematic archives in the VSOM again and synchronize the server from VSOM server page by clicking the **Sync** button.

CSCta29008

Symptom SNMP destination configuration is not preserved after restoring backup configuration.

Conditions After the Cisco Video Management and Storage System undergoes a clean install and the configuration is restored, the SNMP configuration is not restored in the VSMC page.

Workaround The SNMP trap destination must be manually added to the VSMC page.

CSCta47474

Symptom The SNMP daemon fails when the SNMP configuration is changed frequently.

Conditions When the SNMP configuration is changed frequently using the SNMP CLIs, SIGHUP is issued repeatedly, causing the SNMP daemon to fail.

Workaround Reduce the frequency of changes to the SNMP configuration.

CSCta59104

Symptom When the Cisco Integrated Storage System is unavailable for more than 10 minutes and then again becomes operational, the Cisco Video Management and Storage System cannot reestablish its NFS connection to it. The “listar” command returns “Null” in the tech support shell.

Conditions This error occurs when:

1. The Cisco Video Management and Storage System uses the Cisco Integrated Storage System as NFS storage with the **switch-on-failed** subcommand enabled.

2. The Cisco Integrated Storage System becomes unavailable for more than 10 minutes because either it crashed or it was shutdown without following the proper shutdown procedures.

Workaround Before shutting down the Cisco Integrated Storage System, use the Cisco Video Management and Storage System **video-surveillance task archive-stop** command to stop the archiving process. If the Cisco Integrated Storage System has crashed, reboot the Cisco Video Management and Storage System to clear the RPC backlog.

CSCta70160

Symptom The VSOM is out of sync and does not show running archives.

Conditions When the Cisco Video Management and Storage System is configured with only the Cisco Integrated Storage System as the archive repository and the Cisco Integrated Storage System is unavailable (because the network is down, the Cisco Integrated Storage System module is reloading, or another reason), the VSOM returns a malformed response after it gets a request to add an archive. The archive is not added in VSOM. If the Cisco Integrated Storage System module becomes available, the archiving process starts automatically; however, the VSOM loses its sync and does not show the running archive process.

Workaround Go to VSOM server page, click the **Sync** button for corresponding server.

CSCtb07311

Symptom The signal-detected alarm is sent to the Cisco Video Management and Storage System, even though there is no signal change on the video port.

Conditions The Cisco Analog Video Gateway is configured to send signal-change event alarms to the Cisco Video Management and Storage System. When the Cisco Video Management and Storage System has camera feeds on the Cisco Analog Video Gateway and is sending streaming video, use the Cisco Analog Video Gateway Video Viewer to view the video stream from the same port. Whenever the Cisco Analog Video Gateway Video Viewer starts the video, a signal-detect alarm is sent, even though to there is no signal change on the Cisco Video Management and Storage System video port.

Workaround None. Ignore the alarm.

CSCtb07923

Symptom The H.264 codec cannot be configured.

Conditions Because of the codec profile default settings (codec = Mpeg4, resolution = 4CIF, and skipFrame < 4), when the codec configuration is changed to H.264 without first changing other parameters, the following error appears:

```
codec=H.264, resolution=4CIF, skipFrame<4 invalid combination
```

Workaround Configure other parameters before configuring codec to H264.

CSCtd64637

Symptom Sometimes, after installing the Cisco Video Management and Storage System version 6.2.1 software, the Cisco Video Management and Storage System application is not automatically started because of a licensing error. The following error message is seen on the CLI console:

```
%Error: Cannot reach license daemon (Specified UDI not found or Daemon is down)
```

Conditions On Cisco SM-SRE modules, a new installation of Cisco Video Management and Storage System version 6.2.1 software is completed and automatically rebooted. After reboot, the application startup fails, resulting in the error message.

Workaround This problem is infrequent. Entering a subsequent **reload** command usually results in a normal startup.

CSCtd78919

Symptom Sometimes during system startup, the message “MONITOR EXITING” appears on the console, and the system startup is incomplete. Then it restarts automatically.

Conditions This typically happens on Cisco Video Management and Storage System image on modules both Cisco SM-SRE-700 and Cisco SM-SRE-900.

None. However, the system heals itself automatically because a subsequent automatic restart after the incomplete startup typically restarts the application in normal state.

CSCte82202

Symptom When viewing multiple video steams from the Operator's page while the system is under a heavy load, a server error appears and video streaming does not work.

Conditions Installed Cisco Video Management and Storage System image on SRE-SM-900K9 with RAID-1 configured. When running 24 MJPEG/4CIF/30fps proxies and 24 archives, system response becomes much slower. On the Operator's page a server error for all feeds appeared when attempting to view 12 video streams in 3x4 panel. If View is clicked again, sometimes the feeds start streaming, but the same server error appears.

Workaround Configure a lower number of proxies when running the RAID-1 option and keep the system under a normal load.

CSCtf42633

Symptom For Cisco Video Management and Storage System version 6.2.1, iSCSI behavior is unpredictable after disconnect.

Conditions CPU utilization remains at 100 percent for several minutes and the system is unresponsive and unpredictable. After stopping the session, the system returned to normal operation.

Workaround None. The iSCSI storage options for Cisco Video Management and Storage System version 6.2.1 are not supported.

CSCtf42610

Symptom The Video Surveillance Management System fails to remove all configurations from system.cfg file.

Conditions For Cisco Video Management and Storage System version 6.2.1, when the iSCSI options configured and attempts are made to disable media0 from the Video Surveillance Management System and enable iSCSI, the PARTITION information for the local drive remains in the system.cfg file. When archiving begins, load balancing occurs between iSCSI and the local drive when it is not intended.

Workaround None. The iSCSI storage options for Cisco Video Management and Storage System version 6.2.1 are not supported.

CSCtf42778

Symptom The event polling interval CLI does NOT have effect on NME/SRE modules.

Conditions Regardless of setting the event polling interval as 2, 10, or 30 seconds, it does not have any effect on the GUI notification window popup.

Workaround None.

CSCtg04677

Symptom When a high-latency, low bandwidth connection is used to download, Cisco IOS is not notified of an abort when there is an RBIP timeout from Linux and hangs in the install state.

Conditions When using high-latency, low bandwidth connection, RBIP times out after multiple attempts but Cisco IOS does not receive abort command.

Workaround Abort the installation process manually.

CSCtf17799

Symptom The Cisco SM-SRE module install command can fail intermittently with a “Corrupted TCL file detected” error.

Conditions Occurs when installing the Cisco SM-SRE module using the install command with an FTP download URL.

Workaround There is no workaround, except to reset the Cisco SM-SRE module and retry.

Cisco Integrated Storage System

This section describes possibly unexpected behavior by the Cisco Integrated Storage System module.

Resolved Caveats

There are no resolved caveats for the Cisco Integrated Storage System.

Open Caveats

All the Cisco Integrated Storage System caveats listed in this section are open. This section describes severity 2 caveats and select severity 3 caveats.

CSCsz78538

Symptom Video archives sent to the Cisco Integrated Storage System module NFS drive might stop archiving data when the system archiving rate exceeds 132 Mb/s.

Conditions When the archive data sent to Cisco Integrated Storage System module NFS drive exceeds the rate of 132Mb/s, the Cisco Video Management and Storage System might experience RPC errors and, subsequently, cause the mount to the Cisco Integrated Storage System module drive to fail. This condition was observed in the MJPEG codec under high stress situations.

Workaround Do not exceed the 132 Mb/s data rate when sending archive data to the Cisco Integrated Storage System module drives.

Obtaining Documentation, Obtaining Support, and Security Guidelines

For information on obtaining documentation, obtaining support, providing documentation feedback, security guidelines, and also recommended aliases and general Cisco documents, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html

Additional References

The following sections provide references related to the Cisco Video Management and Storage System application.

Related Documents

Related Topic	Document Title
Cisco Video Surveillance Solution	• *Installing Cisco Network Modules and Service Modules in Cisco Access Routers* • *Cisco SRE Service Module Configuration and Installation Guide* • *Cisco Video Management and Storage System SRE Installation and Upgrade Guide* • *Cisco Video Management and Storage System SRE CLI Administrator Guide* • *Connecting Cisco Integrated Storage System Enhanced Network Modules to the Network* • *Cisco Integrated Storage System Installation and Upgrade Guide* • *Cisco Integrated Storage System CLI Administrator Guide* • *Connecting Cisco Analog Video Gateway Network Modules to the Network* • *Cisco Analog Video Gateway Installation and Upgrade Guide* • *Cisco Analog Video Gateway CLI Administrator Guide* • *Cisco Analog Video Gateway XML API Guide* • *Open Source License Notice*
Cisco IOS software	*Cisco IOS Software*
Network modules	*Installing Cisco Network Modules in Cisco Access Routers*
Technical documentation, including feedback and assistance	*What's New in Cisco Product Documentation* (including monthly listings of new and revised documents)

Technical Assistance

Description	Link
Cisco Feature Navigator website	http://www.cisco.com/go/cfn Use Cisco Feature Navigator to find information about platform support and Cisco IOS and Catalyst OS software image support. An account on Cisco.com is not required.
Cisco Software Center website	http://www.cisco.com/public/sw-center/

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