



Release Notes for Cisco Video Surveillance Manager, Release 7.7.1

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This document provides important information for Release 7.7.1 of the Cisco Video Surveillance Manager (Cisco VSM).

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What's New in Release 7.7.1

Cisco VSM Release 7.7.1 is a maintenance release that includes the following enhancements:

- [Resolved Caveats, page 30](#)

Getting Started

Cisco VSM Release 7.7.1 is offered as an upgrade to existing deployments. See the following summary for more information.

Table 1 *Cisco VSM Installation and Upgrade Options*

Option	Description	Notes
Pre-installed	Release 7.7.0 is pre-installed in new installations on the Cisco Connected Safety and Security UCS Platform Series servers CPS-UCS-1RU-K9 and CPS-UCS-2RU-K9. Upgrade to Release 7.7.1, as described in Upgrading from Previous Cisco VSM Releases .	See Cisco Connected Safety and Security UCS Platform Series Servers (Release 7.2 and Higher), page 3 for more information.
Upgrade from Release 7.7.0	Upgrades can be performed on Cisco VSM virtual machines (VMs) and on Cisco Video Surveillance servers.	See Upgrading from Previous Cisco VSM Releases, page 3 for more information.
Upgrade from Release 7.5 or 7.6	Upgrades can be performed on Cisco VSM virtual machines (VMs) and on Cisco Video Surveillance servers. Supported servers include: <ul style="list-style-type: none"> • Cisco Physical Security Platform (CPS-MSP-1RU-K9 & CPS-MSP-2RU-K9) • Cisco Connected Safety and Security UCS Platform Series (CPS-UCS-1RU-K9 & CPS-UCS-2RU-K9) Note The CIVS platform is not supported and cannot be upgraded to VSM 7.7	For previous releases, upgrade to 7.5 or 7.6 first, and then upgrade to the latest release. See Upgrading from Previous Cisco VSM Releases, page 3 for more information.
Virtual Machine (OVA templates)	An .OVA template file is used to install a new virtual machine (VM) instance of the server.	After an .OVA virtual machine is installed, you can use the Cisco VSM Management Console to perform future upgrades of the system software. See Cisco Video Surveillance Virtual Machine Deployment and Recovery Guide for UCS Platforms for more information.

See the following for more information:

- [Cisco Video Surveillance Manager: Install and Upgrade Guide](#)
- [Cisco Connected Safety and Security UCS Platform Series Servers \(Release 7.2 and Higher\), page 3](#)

- [Upgrading from Previous Cisco VSM Releases](#), page 3
- [Recovery/Factory Image](#), page 4

Cisco Connected Safety and Security UCS Platform Series Servers (Release 7.2 and Higher)

Cisco VSM Release 7.7.0 is pre-installed on new installations of the Cisco Connected Safety and Security UCS Platform Series (CPS-UCS-1RU-K9 and CPS-UCS-2RU-K9) when ordered with the Cisco VSM software installed.

- See [Upgrading from Previous Cisco VSM Releases](#) for information to upgrade to Release 7.7.1.
- See the [Cisco Physical Security UCS Platform Series User Guide](#) for supported features, installation and setup instructions.
- After the server appliance is installed, see the [Cisco Video Surveillance Management Console Administration Guide](#) to perform the initial Cisco VSM setup.
- For additional server hardware documentation, see the [Cisco UCS C-Series Server Documentation \(Roadmap\)](#).

Upgrading from Previous Cisco VSM Releases

Cisco VSM can be upgraded using a `.zip` upgrade file that includes all required software packages. Installing the `.zip` file upgrades all components and ensures that all packages are running the required versions.

For complete instructions, see the [Cisco Video Surveillance Manager: Install and Upgrade Guide](#).

Upgrade Notes

- Release 7.5 and later—Use the Software Management page on the browser-based Operations Manager to upgrade all of the servers in your deployment.
- Release 7.2 and earlier—Upgrades to release 7.7 are supported only from releases 7.5.x and 7.6. To upgrade from an earlier release, you must first upgrade to 7.5 or 7.6, and then upgrade to 7.7.



Note Upgrades from Release 7.2 and earlier are performed using the Management Console. See [Cisco Video Surveillance Management Console Administration Guide](#) for your release.

- Clear the cache in each user's web browser after upgrading Cisco VSM. If not cleared, the browser may attempt to use outdated content and display the error message "Operation failed: Authentication failed, this request is not allowed" until the page is refreshed.
- Always upgrade using the Cisco VSM user-interfaces. Do not perform the upgrade using the Linux CLI.

Platform Notes

- Release 7.0 was pre-installed on the Cisco Multiservices Platform (Cisco MSP) servers, including the CPS-MSP-1RU-K9, CPS-MSP-2RU-K9.
- Release 7.2 to Release 7.7 is pre-installed on the Cisco Connected Safety and Security UCS Platform Series (CPS-UCS-1RU-K9 and CPS-UCS-2RU-K9).

- Release 7.7—The CIVS platform is not supported and cannot be upgraded to VSM 7.7
- Virtual Machine (VM) installations can also be upgraded using the Cisco VSM Management Console.

Recovery/Factory Image

You can also create a bootable USB flash drive that can be used to recover an installation or perform a factory installation of Cisco VSM 7 on a supported physical server that shipped with Cisco VSM 7 pre-installed. This includes:

- Release 7.7.0 and higher—Cisco Connected Safety and Security UCS series servers (CPS-UCSM4-1RU-K9 and CPS-UCSM4-2RU-K9).
- Release 7.2.0 and higher—Cisco Connected Safety and Security UCS series servers (CPS-UCS-1RU-K9 and CPS-UCS-2RU-K9).
- Release 7.0.0—Cisco Physical Security Multiservices platform servers (CPS-MSP-1RU-K9, CPS-MSP-2RU-K9) shipped with Cisco VSM 7.0.
- Release 6.3.2—Cisco Physical Security Multiservices platform servers (CIVS-MSP-1RU, CIVS-MSP-2RU and CIVS-MSP-4RU)

Related Recovery Documentation

For more information, see the following documents:

Release 7.6 and higher

[Cisco Video Surveillance Manager: Install and Upgrade Guide](#)

Release 7.5 and lower

- [Cisco Video Surveillance Manager Recovery Guide \(Cisco Connected Safety and Security UCS Platform Series\)](#)
- [Cisco Video Surveillance Manager Recovery Guide \(Cisco MSP Platform\)](#)

Released Versions

Cisco VSM Release 7.7.1 is released with 7.7.1-19i. The component package versions are:

- Cisco_AMQBroker-7.7.1-1.noarch.rpm
- Cisco_CDAF-7.7.1-26.noarch.rpm
- Cisco_GeoServer-7.7.1-1.noarch.rpm
- Cisco_MetaDataService-7.7.1-008d-rhel5.8.rpm
- Cisco_MPClient-7.7.0-85.noarch.rpm
- Cisco_SASD-7.7.0-85.noarch.rpm
- Cisco_Tomcat-7.0.55-3.noarch.rpm
- Cisco_VSBase-7.7.1-008d-rhel5.8.rpm
- Cisco_VSDrivers-7.7.1-008d-rhel5.8.rpm

- Cisco_VSF-7.7.1-26.noarch.rpm
- Cisco_VSMS-7.7.1-008d-rhel5.8.rpm
- Cisco_VSMUpgrade-7.7.1-008d-rhel5.8.rpm
- Cisco_VSOM-7.7.1-26-rhel5.8.i386.rpm
- Cisco_VSRecorder-7.7.1-008d-rhel5.8.rpm
- Cisco_VSTools-7.7.1-008d-rhel5.8.rpm

Supported Devices

The following sections provide information about the devices that this version of Cisco VSM supports:

- [Supported Devices: Cisco, page 6](#)
- [Supported Devices: Arecont, page 11](#)
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- [Supported Devices: Generic IP Cameras, page 18](#)
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- [Device Models Validated in Cisco VSM as Generic IP Cameras, page 22](#)

Supported Devices: Cisco

Table 2 through Table 7 provide information about Cisco devices supported in this release:

- [Cisco 2400/2500, 2600, 2800, and 2900 Series](#)
- [Cisco 3000 Series](#)
- [Cisco 4000 Series and 5000 Series](#)
- [Cisco 6000 Series](#)
- [Cisco 7000 Series](#)
- [Cisco CIVS-SENC-4P and CIVS-SENC-8P](#)

Table 2 *Cisco 2400/2500, 2600, 2800, and 2900 Series*

Model	FW Version for Release 7.7 Compatibility ¹	Video Format	Media Types	Audio	Dual Stream	Motion Detection	Firmware Upgrade	Privacy Mask	Edge Storage	Camera App Min. FW Version	Medianet Support
2400 Series	Minimum: 2.5.2.2	NTSC / PAL	MPEG-4 MJPEG	NA	Yes	Yes	Yes	No	No	N/A	No
2500 Series	Minimum: 2.5.2.2	NTSC / PAL	MPEG-4 MJPEG	Yes	Yes	Yes	Yes	No	No	N/A	No
2600 Series	Minimum: 4.4.2	NTSC / PAL	H.264 MPEG-4 MJPEG	Yes	Yes	Yes	Yes	No	No	N/A	Partial ²
2830	Minimum: 2.0.3 Latest: 2.7.0	NTSC	H.264 MJPEG	Yes	Yes	Yes	Yes	Yes	Yes	2.5.0	Yes ³

Table 2 Cisco 2400/2500, 2600, 2800, and 2900 Series (continued)

Model	FW Version for Release 7.7 Compatibility ¹	Video Format	Media Types	Audio	Dual Stream	Motion Detection	Firmware Upgrade	Privacy Mask	Edge Storage	Camera App Min. FW Version	Medianet Support
2835	Minimum: 2.0.3 Latest: 2.7.0	PAL	H.264 MJPEG	Yes	Yes	Yes	Yes	Yes	Yes	2.5.0	Yes
2900 Series	Minimum: 1.6.18	NTSC / PAL	H.264 MJPEG	Yes	Yes	Yes	Yes	No	No	N/A	No

1. The **minimum firmware** is required for video streaming and recording functionality. The **latest firmware** may be required to support new features, as indicated in the feature columns or descriptions. For more information, including caveats and supported features, see the release notes for the camera model and firmware version.
2. Phase 1 only
3. Phases 1 - 3 (Phase 3 requires firmware 2.0.0-175)

Table 3 Cisco 3000 Series

Model	FW Version for Release 7.7 Compatibility ¹	Video Format	Media Types	Audio	Dual Stream	Motion Detection	Firmware Upgrade	Privacy Mask	Edge Storage	Camera App Min. FW Version	Medianet Support ²
3050	Minimum: 2.6.0 Latest: 2.7.0	NTSC / PAL	H.264 MJPEG	Yes	Yes	Yes	Yes	Yes	Yes	2.7.0	Yes
3421V	Minimum: 2.0.3 Latest: 2.7.0	NTSC / PAL	H.264 MJPEG	No	Yes	Yes	Yes	Yes	Yes	2.5.0	Yes
3520	Minimum: 2.0.3 Latest: 2.7.0	NTSC / PAL	H.264 MJPEG	Yes	Yes	Yes	Yes	Yes	Yes	2.5.0	Yes
3530	Minimum: 2.0.3 Latest: 2.7.0	NTSC / PAL	H.264 MJPEG	Yes	Yes	Yes	Yes	Yes	Yes	2.5.0	Yes
3535	Minimum: 2.0.3 Latest: 2.7.0	NTSC / PAL	H.264 MJPEG	Yes	Yes	Yes	Yes	Yes	Yes	2.5.0	Yes
3620	Minimum: 2.7.1 Latest: 2.7.1	NTSC / PAL	H.264 MJPEG	Yes	Yes	Yes	Yes	Yes	Yes	2.7.0	Yes
3630	Minimum: 2.7.1 Latest: 2.7.1	NTSC / PAL	H.264 MJPEG	Yes	Yes	Yes	Yes	Yes	Yes	2.7.0	Yes

1. The **minimum firmware** is required for video streaming and recording functionality. The **latest firmware** may be required to support new features, as indicated in the feature columns or descriptions. For more information, including caveats and supported features, see the release notes for the camera model and firmware version.
2. Phases 1 - 3 (Phase 3 requires firmware 2.0.0-175)

Table 4 Cisco 4000 Series and 5000 Series

Model	FW Version for Release 7.7 Compatibility ¹	Video Format	Media Types	Audio	Dual Stream	Motion Detection	Firmware Upgrade	Privacy Mask	Edge Storage	Camera App Min. FW Version	Medianet Support ²
4300	Minimum: 2.4.2-289	NTSC / PAL	H.264 MJPEG	Yes	Yes	Yes	Yes	No	No	N/A	Partial
4300E	Minimum: 3.2.3-218	NTSC / PAL	H.264 MJPEG	Yes	Yes	Yes	Yes	No	No	N/A	Partial
4500	Minimum: 2.4.2-289	NTSC / PAL	H.264 MJPEG	Yes	Yes	Yes	Yes	No	No	N/A	Partial
4500E	Minimum: 3.2.3-218	NTSC / PAL	H.264 MJPEG	Yes	Yes	Yes	Yes	No	No	N/A	Partial
5000 Series	Minimum: 1.6.17	NTSC	H.264 MJPEG	NA	Yes	Yes	Yes	No	Yes	N/A	No

1. The **minimum firmware** is required for video streaming and recording functionality. The **latest firmware** may be required to support new features, as indicated in the feature columns or descriptions. For more information, including caveats and supported features, see the release notes for the camera model and firmware version.
2. Phase 1 only

Table 5 Cisco 6000 Series

Model	FW Version for Release 7.7 Compatibility ¹	Video Format	Media Types	Audio	Dual Stream	Motion Detection	Firmware Upgrade	Privacy Mask	Edge Storage	Camera App Min. FW Version	Medianet Support ²
6000P	Minimum: 2.0.3 Latest: 2.7.0	NTSC / PAL	H.264 MJPEG	Yes	Yes	Yes	Yes	Yes	Yes	2.5.0	Yes
6020	Minimum: 2.0.3 Latest: 2.7.0	NTSC / PAL	H.264 MJPEG	Yes	Yes	Yes	Yes	Yes	Yes	2.5.0	Yes
6030	Minimum: 2.0.3 Latest: 2.7.0	NTSC / PAL	H.264 MJPEG	Yes	Yes	Yes	Yes	Yes	Yes	2.5.0	Yes
6050	Minimum: 2.0.3 Latest: 2.7.0	NTSC / PAL	H.264 MJPEG	No	Yes	Yes	Yes	Yes	Yes	2.5.0	Yes

Table 5 Cisco 6000 Series (continued)

Model	FW Version for Release 7.7 Compatibility ¹	Video Format	Media Types	Audio	Dual Stream	Motion Detection	Firmware Upgrade	Privacy Mask	Edge Storage	Camera App Min. FW Version	Medianet Support ²
6400	Minimum: 2.0.3 Latest: 2.7.0	NTSC / PAL	H.264 MJPEG	Yes	Yes	Yes	Yes	Yes	Yes	2.5.0	Yes
6400E	Minimum: 2.0.3 Latest: 2.7.0	NTSC / PAL	H.264 MJPEG	Yes	Yes	Yes	Yes	Yes	Yes	2.5.0	Yes
6500PD	Minimum: 2.5.1 Latest: 2.7.0	NTSC / PAL	H.264 MJPEG	Yes	Yes	Yes	Yes	Yes	Yes	2.5.1	Yes
6620	Minimum: 2.7.1 Latest: 2.7.1	NTSC / PAL	H.264 MJPEG	Yes	Yes	Yes	Yes	Yes	Yes	2.7.0	Yes
6630	Minimum: 2.7.1 Latest: 2.7.1	NTSC / PAL	H.264 MJPEG	Yes	Yes	Yes	Yes	Yes	Yes	2.7.0	Yes
6930	Minimum: 2.0.3 Latest: 2.7.0	NTSC / PAL	H.264 MJPEG	Yes	Yes	Yes	Yes	Yes	Yes	2.5.0	Yes

1. The **minimum firmware** is required for video streaming and recording functionality. The **latest firmware** may be required to support new features, as indicated in the feature columns or descriptions. For more information, including caveats and supported features, see the release notes for the camera model and firmware version.

2. Phases 1 - 3 (Phase 3 requires firmware 2.0.0-175)

Table 6 Cisco 7000 Series

Model	FW Version for Release 7.7 Compatibility ¹	Video Format	Media Types	Audio	Dual Stream	Motion Detection	Firmware Upgrade	Privacy Mask	Edge Storage	Camera App Min. FW Version	Medianet Support ²
7030	Minimum: 2.0.3 Latest: 2.7.0	NTSC / PAL	H.264 MJPEG	Yes	Yes	Yes	Yes	Yes	Yes	2.5.0	Yes
7030E	Minimum: 2.0.3 Latest: 2.7.0	NTSC / PAL	H.264 MJPEG	Yes	Yes	Yes	Yes	Yes	Yes	2.5.0	Yes

Table 6 Cisco 7000 Series (continued)

Model	FW Version for Release 7.7 Compatibility ¹	Video Format	Media Types	Audio	Dual Stream	Motion Detection	Firmware Upgrade	Privacy Mask	Edge Storage	Camera App Min. FW Version	Medianet Support ²
7070	Minimum: 2.6.0 Latest: 2.7.0	NTSC/ PAL	H.264 MJPEG	Yes	Yes	Yes	Yes	Yes	Yes	2.7.0	Yes
7530PD	Minimum: 2.5.1 Latest: 2.7.0	NTSC/ PAL	H.264 MJPEG	Yes	Yes	Yes	Yes	Yes	Yes	2.5.1	Yes

- The **minimum firmware** is required for video streaming and recording functionality. The **latest firmware** may be required to support new features, as indicated in the feature columns or descriptions. For more information, including caveats and supported features, see the release notes for the camera model and firmware version.
- Phases 1 - 3 (Phase 3 requires firmware 2.0.0-175)

Table 7 Cisco CIVS-SENC-4P and CIVS-SENC-8P

Model	FW Version for Release 7.7 Compatibility ¹	Video Format	Media Types	Audio	Dual Stream	Motion Detection	Firmware Upgrade	Privacy Mask	Edge Storage	Camera App Support	Medianet Support
CIVS-SENC-4P (encoder)	Minimum: V1.2.0-4	NTSC/ PAL	H.264 MPEG-4 MJPEG	Yes	Yes	Yes	Yes	No	No	No	No
CIVS-SENC-8P (encoder)	Minimum: V1.2.0-4	NTSC/ PAL	H.264 MPEG-4 MJPEG	Yes	NA	Yes	Yes	No	No	No	No

- The **minimum firmware** is required for video streaming and recording functionality. The **latest firmware** may be required to support new features, as indicated in the feature columns or descriptions. For more information, including caveats and supported features, see the release notes for the camera model and firmware version.

Additional Notes on Cisco Devices

- Cisco 4500 and 4500E support video analytics.
- Redundancy is supported for all Cisco devices some exceptions for the 2400, 2500, 2900 and 5000 series. The 2400, 2500, 2900 and 5000 series do not support sending events to the redundant server such motion detection and contact closure events.
- Cisco 5000 series does not support motion detection at video bit-rates above 4,000 (4 Mbps). The “H” video preset in Templates has been chosen to not exceed this, so motion detection will work.
- The Cisco 5000 and 2900 camera series do not allow changes to the authentication settings (username/password) or networking settings (DHCP/Static, DNS, etc.) through Cisco VSM. These values can only be changed using the camera web interfaces.
- Focus, Auto Focus and Zoom support are not available for Cisco 6000P, 3421V, 3520, 3530, 3535, and 3050 camera models.
- When Cisco VSM manages a Cisco 6930, 2830, or 2835 camera, it automatically enables the HTTP protocol on the camera and uses this protocol to send PTZ commands to the camera. Other configuration commands continue to use the HTTPS protocol.

- The Cisco 2830, 2835, 3000 series, 6000 series and 7030 cameras now support MJPEG primary streams.
- Cisco 3421V and 6050 cameras does not support Contact Closure, Cisco 7030 camera supports 3 input ports. All other Cisco 3000, 6000 series cameras support 1 input port.
- In PTZ Tour Configuration, the configured transition time configured includes the time that it takes the camera to move from the one preset position to the next preset position in addition to the time that the camera is expected to stay in the preset position. If the transition time is configured to a value that is less than the time that it takes the camera to move from one preset position to the next, the camera moves between the first and second presets positions only, instead of touring between all preset positions that are configured in the tour.
- The minimum firmware version required to support camera applications is 2.5.0-10.
- The minimum firmware version required to support connected edge storage is 2.0.

Supported Devices: Arecont

Table 8 provides information about Arecont devices that this Cisco VSM release supports.

Table 8 Supported Arecont Cameras

Model	Type	Supported FW Version	Media Types	Dual Stream	Motion Detection	Firmware Upgrade
AV2115	2MP IP Camera	65218	H.264 MJPEG	Yes	Yes	No
AV5155	5MP IP Camera	65152	H.264 MJPEG	Yes	Yes	No
AV5115	5MP IP Camera	65220	H.264 MJPEG	Yes	Yes	No
AV10XX5	10MP IP Camera	65218, 65202	H.264 MJPEG	Yes	Yes	No
AV8185DN	4 Sensor 2MP Panoramic IP Camera	65187	H.264 MJPEG	Yes	Yes	No
AV8365DN	4 Sensor 2MP Panoramic IP Camera	65170	H.264 MJPEG	Yes	Yes	No
AV12186DN	4 Sensor 3MP Panoramic IP Camera	65184	H.264 MJPEG	Yes	Yes	No
AV20365DN	4 Sensor 5MP Panoramic Camera	65170	H.264 MJPEG	Yes	Yes	No
AV20185DN	4 Sensor 5MP Panoramic Camera	65183	H.264 MJPEG	Yes	Yes	No

Additional Notes on Arecont Devices

- AV20185, AV20365, AV12186, AV8365 and AV8185 are 4-channel IP cameras. In order to support multiple video channels from a single device, Cisco VSM 7 models these devices as “Encoders”.
- Arecont devices have not yet been qualified to support redundancy in Cisco VSM 7.
- Secondary streams are not supported in H, M, L template settings for Arecont Devices. However secondary stream can be configured using Custom templates.

- Arecont cameras divide the Maximum FPS the camera supports by the number of streams. This could result in lower FPS when both primary and secondary streams are configured for these cameras.
- Arecont AV10XX5, AV5115, AV2115 support VBR and multicast streaming.
- There is a restriction with motion detection for Arecont multi-sensor cameras. False motion events are generated if both half and full resolution size images are requested simultaneously using Cisco VSM or Arecont Camera Web Interface or a third party Media Player.

Supported Devices: Axis

Table 9 provides information about Axis devices that this Cisco VSM release supports.

Table 9 Supported Axis Devices

Model	Type	Supported FW Version	Video Format	Media Types	Audio	Dual Stream	Stream Mirroring	Motion Detection	Firmware Upgrade	Zoom to Region
233D	IP Camera	4.48.4	NTSC / PAL	MPEG-4 MJPEG	Yes	Yes	Yes	Yes	Yes	No
243SA	Encoder	4.45	NTSC / PAL	MPEG-4 MJPEG	Yes	Yes	Yes	Yes	Yes	No
241Q	Encoder	4.47.5	NTSC PAL	MPEG-4 MJPEG	No	Yes	Yes	Yes	Yes	No
241S	Encoder	4.40	NTSC PAL	MPEG-4 MJPEG	No	Yes	Yes	Yes	Yes	No
243QBlade	Encoder	4.46.1	NTSC / PAL	MPEG-4 MJPEG	NA	Yes	Yes	Yes	Yes	No
247S	Encoder	4.42	NTSC / PAL	MPEG-4 MJPEG	Yes	Yes	Yes	Yes	Yes	No
M3006	IP Camera	5.55.1.2	NTSC	H.264 MJPEG	No	Yes	Yes	Yes	Yes	No
M3007	Panoramic Camera	5.40.13.2	NTSC	H.264 MJPEG	No	Yes	Yes	Yes	Yes	No
P1214	IP Camera	5.40.12.3	NTSC	H.264 MJPEG	No	Yes	Yes	Yes	Yes	No
P1353	IP Camera	5.40.19.1	NTSC	H.264 MJPEG	Yes	Yes	Yes	Yes	Yes	No
P3301	IP Camera	5.40.92	NTSC	H.264 MJPEG	Yes	Yes	Yes	Yes	Yes	No
P3364	IP Camera	5.40.17.1	NTSC	H.264 MJPEG	Yes	Yes	Yes	Yes	Yes	No
P3367	IP Camera	5.50.3	NTSC	H.264 MJPEG	Yes	Yes	Yes	Yes	Yes	No
P3915	IP Camera	5.55.3	NTSC	H.264 MJPEG	Yes	Yes	Yes	Yes	Yes	No

Table 9 Supported Axis Devices (continued)

Model	Type	Supported FW Version	Video Format	Media Types	Audio	Dual Stream	Stream Mirroring	Motion Detection	Firmware Upgrade	Zoom to Region
P7214	Encoder	5.50.2	NTSC / PAL	H.264 MJPEG	Yes	Yes	Yes	Yes	Yes	No
Q1604	IP Camera	5.50.3	NTSC	H.264 MJPEG	Yes	Yes	Yes	Yes	Yes	No
Q6045	IP Camera	5.55.11	NTSC	H.264 MJPEG	Yes	Yes	Yes	Yes	Yes	Yes
Q7401	Encoder	5.50.2	NTSC / PAL	H.264 MJPEG	Yes	Yes	Yes	Yes	Yes	No
Q7404	Encoder	5.20	NTSC / PAL	H.264 MJPEG	Yes	Yes	Yes	Yes	Yes	Yes
Q7406	Encoder	5.11.1	NTSC / PAL	H.264 MJPEG	N/A	Yes	Yes	Yes	Yes	Yes
Q7424	Encoder	5.50.02	NTSC / PAL	H.264 MJPEG	Yes	Yes	Yes	Yes	Yes	Yes

Additional Notes on Axis Devices

- Axis P3301 IP camera and Q7401, Q7404, and Q7406 encoders have been qualified to support redundancy in Cisco VSM 7.0.1.
- Axis 233D supports contact closure configuration and events.
- Support for 0.1fps MJPEG stream for all supported Axis models.

The following table documents the various Field-Of-Views supported for the Axis M3007 panoramic cameras and support for PTZ and Motion Detection for these Field-Of-Views.

Table 10 Axis M3007 Options

Model	Field Of View	PTZ	Motion Detection
Axis M3007	360° view	No	Yes
	Panoramic view (180 degree view)	No	No
	Double Panoramic view(2 panoramic view of 180 degree)	No	No
	Quad view (view area 1,2,3,4)	No	No
	View Area 1	Yes	No
	View Area 2	Yes	No
	View Area 3	Yes	No
	View Area 4	Yes	No

The Axis M3007 camera allows the user to configure various mounting options directly in the camera web interface that affects the possible values for Field-Of-Views that can be configured on the camera. The table below provides this mapping:

Table 11 *Axis M3007 Field-Of-View Options*

Field of View / Mount Point	Wall	Ceiling	Desktop
360 Degree View	Yes	Yes	Yes
Panoramic View	Yes	Yes	Yes
Double Panoramic View	No	Yes	Yes
Quad View	No	Yes	Yes
View Area 1/2/3/4	Yes	Yes	Yes

Supported Devices: IQinVision

Table 12 provides information about IQinVision devices that this Cisco VSM release supports.

Table 12 *Supported IQinVision Devices*

Model	Type	Supported FW Version	Video Format	Media Types	Audio	Dual Stream	Stream Mirroring	Motion Detection	Firmware Upgrade
IQ032SI-V11	IP Camera	V3.4/5	NTSC	H.264	No	No	No	Yes	Yes
IQM32NE-B5	IP Camera	V3.4/5	NTSC	H.264	No	No	No	Yes	Yes
IqeyeA35N	IP Camera	V3.4/5	NTSC	H264	No	No	No	Yes	Yes
Iqeye765N	IP Camera	V3.4/5	NTSC	H264	No	No	No	Yes	Yes
Iqeye755	IP Camera	V3.1/2	NTSC	MJPEG	No	No	No	Yes	Yes

Additional Notes on IQinVision Devices

- IQinVision devices have not yet been qualified to support redundancy in Cisco VSM 7.
- Support configuring NTP on the IQinVision cameras to synchronize with their Cisco VSM Media Server.
- Added support for Firmware upgrade for all supported models.
- Added support for Camera Discovery for H.264 models.

Supported Devices: Mobotix

Table 13 provides information about Mobotix devices that this Cisco VSM release supports.

Table 13 *Supported Mobotix Devices*

Model	Type	Supported FW Version	Video Format	Media Types	Audio	Dual Stream	Motion Detection	Firmware Upgrade
x10	IP Camera	M10 v.2.0	NTSC	MPEG-4 MJPEG	No	No	No	No

Additional Notes on Mobotix Devices

- Mobotix M10 and D10 IP cameras running with M10 series firmware work with the x10 Model.
- Mobotix devices are not qualified to support redundancy in Cisco VSM 7.

Supported Devices: Panasonic

Table 14 provides information about Panasonic devices that this Cisco VSM release supports.

Table 14 *Supported Panasonic Devices*

Model	Type	Supported FW Version	Video Formats	Media Types	Audio	Dual Stream	Motion Detection	Firmware Upgrade
NP 244	IP Camera	1.80 E4	NTSC	MPEG-4 MJPEG	NA	No	Yes	No
NS 202A	IP Camera	2.74P0	NTSC	MPEG-4 MJPEG	No	No	Yes	No
NP 304	IP Camera	1.64E0_1.06	NTSC	MPEG-4 MJPEG	No	No	Yes	No
SW 458	Panoramic Camera	1.42	NTSC	H.264, MJPEG	No	Yes	Yes	No
SF 438	Panoramic Camera	1.42	NTSC	H.264, MJPEG	No	Yes	Yes	No
NF 302	IP Camera	1.64E0_1.06	NTSC	MPEG-4 MJPEG	No	No	Yes	No

Additional Notes on Panasonic Devices

- Panasonic devices have not yet been qualified to support redundancy in Cisco VSM 7.
- Only same field of views can be configured on primary and secondary streams on Panasonic cameras SW458/SF438.

- The following table documents the various Field-Of-Views supported for the Panasonic SF 458 and SF 438 panoramic cameras and support for PTZ and Motion Detection for these Field-Of-Views.

Table 15 Panasonic SF 458 and SF 438 Field-Of-Views Support

Model	Field Of View	PTZ	Motion Detection
Panasonic SW458 and SF438	Panoramic 360 degree view	No	Yes
	Double Panorama view(2 panoramic view of 180 degree)	No	Yes
	Panorama view (180 degree view)	No	Yes
	Quad view	No	No
	Single view	Only with View Area 1	No

Supported Devices: Pelco

Table 16 provides information about Pelco devices that this release supports.

Table 16 Supported Pelco Devices

Model	Type	Supported FW Version	Video Formats	Media Types	Audio	Dual Stream	Motion Detection	Firmware Upgrade
Pelco ExSite	IP Camera	TXB-N-1.9.2.12-20131118-1.2084-O1.10263	NTSC, PAL	H.264, MJPEG	No	Yes	Yes	Yes
Pelco Spectra IV TXB IP (MPEG4)	IP Camera	01.02.0018	NTSC	MPEG4, MJPEG	No	Yes	No	No
Pelco NET5404T	Encoder	1.8.2.18-20121109-1.3081-O3.8503	NTSC, PAL	H.264, MJPEG	Yes	Yes	Yes	No
Pelco NET5401T	Encoder	1.9.2.1-20130619-3.3081-O3.9819	NTSC, PAL	H.264, MJPEG	Yes	Yes	Yes	No

Additional Notes on Pelco Devices

- Pelco devices have not yet been qualified to support Redundancy in Cisco VSM 7.
- Audio volume controls are not supported for NET540XT
- For Pelco NET540xT PTZ to work, the analog camera should be chosen as Pelco Analog Camera (pelco_sarix) in Operations Manager and not as Pelco D.
- The user needs to directly configure the Serial protocol on the Pelco NET540XT encoder outside of Cisco VSM.
- The Pelco Spectra IV TXB-N (H.264 capable model) run Pelco Sarix firmware and can be supported in Cisco VSM as a Pelco Sarix Generic IP camera (additional details in the Generic IP camera section).

Supported Devices: Sony

Table 17 provides information about Sony devices that this release supports.

Table 17 Supported Sony Devices

Model	Type	Supported FW Version	Video Formats	Media Types	Audio	Dual Stream	Motion Detection	Firmware Upgrade
HM662	Panoramic Camera	1.1.1	NTSC / PAL	H.264 MJPEG	No	Yes	No	No
RX 530	IP Camera	3.15	NTSC / PAL	H.264 MPEG-4 MJPEG	Yes	No	Yes	No
RX 570	IP Camera	3.15	NTSC / PAL	H.264 MPEG-4 MJPEG	Yes	No	Yes	No
RX 550	IP Camera	3.14	NTSC / PAL	H.264 MPEG-4 MJPEG	Yes	No	Yes	No

Additional Notes on Sony Devices

- Sony devices have not yet been qualified to support redundancy in Cisco VSM 7.
- These Sony devices do not support motion detection with the H.264 media type.
- The Sony SNC-RX5x0 cameras stop streaming video when the Object Detection window is opened in the camera's web interface.
- For Sony HM662 Panoramic camera, only the 360 degree view is supported. De-warped views are not supported.

Supported Devices: Generic IP Cameras

Cisco VSM Release 7.7.1 provides the following device drivers to support IP cameras from various vendors. The functionality they support will depend on the particular device that they are used with. They are intended to provide a quick and easy way to support devices for which there isn't yet a specific driver available for Cisco VSM. Since these drivers may not be tested with a specific device, some issues may be encountered. When using these drivers with a device, failover and redundancy are not supported.


Note

The vendor specific generic driver should always be used before a non-vendor specific driver such as ONVIF.

Table 18 **Supported Generic Devices**

Type	Supported Version	Video Formats	Media Types	Audio	Dual Stream	PTZ	Motion Detection	Firmware Upgrade
ONVIF	2.2	NTSC / PAL	H.264 MPEG-4 MJPEG	Yes	Yes	Yes	No	No
Generic Axis	3.0 / Firmware 5.x	NTSC / PAL	H.264 MJPEG	Yes	Yes	Yes	Yes	No
Generic Axis	2.0 / Firmware 4.3	NTSC / PAL	MPEG4 MJPEG	Yes	Yes	Yes	Yes	No
Arecont	Arecont Non Panoramic Models	NTSC	H.264 MJPEG	No	Yes	No	Yes	No
IQEye JPEG	V3.1/2	NTSC	MJPEG	No	No	No	Yes	Yes
IQEye H264	V3.4/5	NTSC	H264 MJPEG	No	Yes	No	Yes	Yes
Mobotix	MX Series	NTSC / PAL	MJPEG	No	No	No	Yes	No
Panasonic	-	NTSC / PAL	H.264 MPEG-4 MJPEG	No	Yes	Yes	Yes	No
Pelco Sarix	Only IP cameras with Sarix Firmware	NTSC / PAL	H.264 MJPEG	No	Yes	Yes	Yes	No

Table 18 Supported Generic Devices (continued)

Type	Supported Version	Video Formats	Media Types	Audio	Dual Stream	PTZ	Motion Detection	Firmware Upgrade
Sony	6 th Generation IP cameras VMxxx and VBxxx	NTSC / PAL	H.264 MJPEG	Yes	Yes	Yes	Yes	No
Sony	2 nd , 3 rd , 4 th and 5 th generation Sony IP cameras	NTSC / PAL	H.264, MPEG-4, MJPEG	Yes	Yes	Yes	Yes	No

Known Limitations

- Supports only IP Cameras, no support for Encoders
- No Motion Detection support
- No contact closure support
- Multicast streaming is supported only for the primary stream
- Multicast port must be an even number within the range 16000:19999
- Audio Multicast issues are observed on most of the ONVIF cameras. Hence do not enable audio when multicast is enabled for video.
- Capture Mode on the camera cannot be changed using ONVIF APIs. So, it is assumed that the camera is in the desired capture mode before adding it to VSOM using ONVIF

Device Specific Limitations

- This ONVIF driver has been tested with a limited number of camera models from Axis, Sony, Panasonic, Bosch, Pelco, Samsung, J2000IP, Hikvision and Cohu. We have found that these cameras have some variations in how they have implemented the ONVIF specification. Hence there may be compatibility issues when using this ONVIF driver with a particular device that is ONVIF compliant.
- Some of the known caveats are listed below:

AXIS

- ONVIF user account—Some Axis cameras require a special ONVIF user account, which can be created on the camera's web interface before adding an AXIS ONVIF camera to the VSOM. This page is at **Setup --> System Options --> Security --> ONVIF --> Add**
- Camera and VSMS (Media Server) Time Synchronization—ONVIF camera and VSMS server to which ONVIF camera is being added should have their time synchronized ideally using NTP.

HIKVISION

- Codec Change through VSOM—Hikvision camera requires a reboot after the codec is changed from VSOM.

SAMSUNG

- Megapixel Mode setting on the camera SND-7080

- To support the resolutions (1600*1200) and (2048*1536), change the Megapixel Mode to 3-Megapixel in the following page on the camera browser: **Settings -> Audio & Video -> video profile -> Megapixel mode**

COHU

- Enable Authentication on the camera before adding it to VSOM In the camera browser, go to **Camera Setup -> Configuration -> User Settings**. Select **User** and enable “Require Password” field.
- Media Transport Type— Only UDP is supported. Streaming fails if TCP is selected.
- Unsupported Resolutions —Streaming fails for the resolutions 176*144, 176*120, 160*120
- Codec Change through VSOM— Switching from H264 to JPEG or vice-versa requires a camera reboot. And camera needs to be deleted and added in VSOM after camera is up.
- Support for Audio— Camera does not support ONVIF Audio

BOSCH

- Frame rate— Only Framerate 30 is supported
- Dual Streaming— Secondary configuration overwrites the primary configuration. So, dual streaming is not supported on Bosch cameras using ONVIF.

PANASONIC

- Capture Mode Setting— If the camera is added in VSOM using Multicast, changing the capture mode on the camera browser manually causes the streaming to fail. After this, only the unicast streaming works
- User Authentication— User Authentication should be enabled in the camera browser as follows - **Setup -> User mng -> User auth**. Choose **ON** for User auth.

SONY

- Media Transport Type— Only UDP is supported. Streaming fails if TCP is selected
- Support for Audio— Camera does not support ONVIF Audio
- Set Configuration Issues — Camera returns success even if one or more of the parameters are not valid for that camera/video stream. ONVIF profile gets updated with values but Camera still uses the previous correct value. Recommend to configure only the values as allowed in the camera browser.
- Support for Password change on the camera— Camera does not support password change for the administrator users using ONVIF API.

Supported Devices: Analog Cameras

This Cisco VSM release provides support for the following analog cameras.

Table 19 **Supported Devices: Analog Cameras**

Type	Video Formats	Serial Protocol Support
Generic	NTSC / PAL	No
Bosch	NTSC / PAL	Yes
Panasonic	NTSC / PAL	Yes
Generic Pelco-D	NTSC / PAL	Pelco-D
Generic Pelco P	NTSC / PAL	Pelco P
Pelco Min-Spectra	NTSC / PAL	Pelco-D
Pelco Analog Camera	NTSC / PAL	Encoder Dependent (for use with only PelcoNET540xT encoders)
Cyberdome I	NTSC	Yes
Cyberdome II	NTSC	Yes

Notes on Cyberdome devices

- The Cyberdome I and Cyberdome II devices also have On Screen Display Menu support.

Device Models Validated in Cisco VSM as Generic IP Cameras

The camera models listed in [Table 20](#) have been tested with VSM 7.7 as generic IP cameras.

Table 20 Supported Generic IP Cameras

Model	Type	Firmware	Format	Media Types	Audio	Dual Stream	PTZ	Motion Detection	Firmware Upgrade
Arecont AV1355	Arecont	65151	NTSC / PAL	H.264	No	Yes	No	Yes	No
Arecont AV3115	Arecont	65218	NTSC / PAL	H.264	No	Yes	No	Yes	No
Axis 215	Axis VAPIX 2.0/Firmware 4.3	4.48.4	NTSC / PAL	MPEG4, MJPEG	Yes	Yes	Yes	Yes	No
Axis 3301	Axis VAPIX 3.0/Firmware 5.x	5.41.2	NTSC / PAL	H.264, MJPEG	Yes	Yes	Yes	Yes	No
Axis 3367	Axis VAPIX 3.0/Firmware 5.x	5.50.3	NTSC / PAL	H.264, MJPEG	Yes	Yes	Yes	Yes	No
Axis Q6034	Axis VAPIX 3.0/Firmware 5.x	5.41.1.2	NTSC / PAL	H.264, MJPEG	Yes	Yes	Yes	Yes	No
Axis Q6034-E	ONVIF 2.0	5.41.1.2	NTSC	H.264, MJPEG	Yes	Yes	Yes	No	No
Axis Q6045	ONVIF 2.2	5.55.1.1	NTSC	H.264, MJPEG	No	Yes	Yes	No	No
IQinVision IQ755	IQEye JPEG	V3.1/2	NTSC	MJPEG	No	No	No	Yes	Yes
IQinVision IQ853	IQEye Jpeg	V3.1/2	NTSC	MJPEG	No	No	No	Yes	Yes
IQinVision IQA35N	IQEye H264	V3.4/6	NTSC	H.264, MJPEG	No	Yes	No	Yes	Yes
IQinVision IQM32N	IQEye H264	V3.4/6	NTSC	H.264, MJPEG	No	Yes	No	Yes	Yes
Panasonic NP-502S	Panasonic	1.81	NTSC / PAL	H.264, MPEG4, MJPEG	No	Yes	Yes	Yes	No
Panasonic SC384	Panasonic	1.44	NTSC / PAL	H.264, MJPEG	No	Yes	Yes	Yes	No
Panasonic SF538	ONVIF 2.1.1	1.31	NTSC	H.264, MJPEG	No	Yes	No	No	No
Panasonic SW458	ONVIF 2.0	1.42	NTSC	H.264, MJPEG	Yes	Yes	No	No	No
Panasonic SW458	Panasonic	1.42	NTSC / PAL	H.264, MJPEG	No	Yes	Yes	Yes	No

Table 20 Supported Generic IP Cameras (continued)

Pelco IDS0DN-AD AURX7	Pelco	1.8.2.20-2 0130211-2 .9110-03.9 240	NTSC	H.264, MJPEG	No	Yes	No	Yes	No
Pelco ISXOC	Pelco	1.9.2.2-20 130717-1. 9080-A1.9 926	NTSC	H.264, MJPEG	No	Yes	No	Yes	No
Samsung SND-7080	ONVIF 2.1.0	1.10_1108 19	NTSC	H.264, MJPEG	No	Yes	No	No	No
Samsung SND-7080	ONVIF 2.0	2.00_1210 04	NTSC	H.264, MJPEG	No	Yes	No	No	No
Sony CH 240	Sony 2nd, 3rd, 4th and 5th generation Sony IP cameras	1.79.00	NTSC / PAL	H.264, MPEG4, MJPEG	Yes	Yes	Yes	Yes	No
Sony CH180	ONVIF 2.2	1.34.00	NTSC	H.264, MJPEG	Yes	Yes	No	No	No
Sony VM 631	Sony 6th Generation IP cameras VMxxx and VBxxx	1.3.0	NTSC / PAL	H.264, MJPEG	Yes	Yes	No	No	No

Clipping Support By Application

You can create and view video clips using the following Cisco VSM applications:

Table 21 Video Clip Support

Application	Create MP4 Clips	Create CVA Clips	Create Virtual Clips	View MP4 Clips ¹	View CVA Clips	View Virtual Clips	Clip Search Feature
Cisco VSM Operations Manager	Yes	Yes	Yes	Yes	No	Yes	Yes
Cisco VSM Federator	Yes ²	Yes	No	Yes ³	No	Yes ⁴	Yes
Cisco SASD	Yes	Yes ⁵	Yes ⁶	Yes	No	Yes	Yes
Cisco SASD Federator	Yes	Yes	Yes ⁷	Yes	No	Yes	Yes
Cisco VSM Review Player	No	No	No	Yes	Yes ⁸	No	No

1. MP4 clips are saved to the Media Server and play immediately after being downloaded to the monitoring PC. Third-party video players (such as VLC media player™) can also be used to view MP4 clips.
2. Create MP4 clips using the Federator Thumbnail Search.
3. Federator clips must be downloaded and played using either Cisco Review Player or VLC.
4. Double-click the virtual clip in Federator Clip Search to launch the player.
5. SASD allows CVA clipping for multi-pane in Sync Mode only.
6. Thumbnail Search supports MP4 clip creation only.
7. Thumbnail Search supports MP4 clip creation only.
8. Cisco video archive (CVA) files can only be opened in applications that support the CVA format (such as the Cisco Review Player).



Note

When converting a virtual clip to an MP4 file, only the entire duration of the virtual clip can be saved, not a segment.

Obtaining and Installing Licenses

To install a license, purchase the license and obtain the license file, then upload the file to the Operations Manager.

Table 22 lists the part numbers for the Cisco VSM licenses. Multiple camera and VSMS licenses can be included in a single license file. For example, a single license file might include support for 25 additional cameras and two additional VSMS devices.

Table 22 License Part Numbers

Part	Description
Physical Server Licenses (for Server Services)	
FL-CPS-MS-SW7	License for 1 Media Server on a physical server (Cisco UCS or MSP)
FL-CPS-OM-SW7	License for 1 Operations Manager on a physical server (Cisco UCS or MSP)
L-CPS-MS-SW7=	eDelivery license for 1 Media Server on a physical server (Cisco UCS or MSP)
Virtual Machine (VM) Licenses (for Server Services)	
L-CPS-VSMS7-B-VM=	eDelivery license for one Media Server on a VM running on a Cisco UCS B Series
L-CPS-VSOM7-B-VM=	eDelivery license for one Operations Manager on a VM running on a Cisco UCS B Series
L-CPS-VSMS7-C-VM=	eDelivery license for one Media Server on a VM running on a Cisco UCS C Series
L-CPS-VSOM7-C-VM=	eDelivery license for one Operations Manager on a VM running on a Cisco UCS C Series
L-CPS-VSMS7-E-VM=	eDelivery license for one Media Server on a VM running on a Cisco UCS E-Series
L-CPS-VSOM7-E-VM=	eDelivery license for one Operations Manager on a VM running on a Cisco UCS E-Series
Cisco VSM Federator Licenses	
L-CPS-VSM7-FD=	eDelivery license for one base Cisco VSM 7 Federator
L-CPS-FD-VSOM=	eDelivery license for one Operations Manager in Federator
L-CPS-FD-VSOM-X=	eDelivery license for one Operations Manager Express in Federator
Cisco SASD Licenses	
L-CPS-SASD-7=	eDelivery license for 1 SASD with Cisco VSM 7
Camera Licenses	
L-CPS-VSM7-1CAM=	eDelivery license for 1 camera connection with Cisco VSM 7
Camera App Licenses	
Note	The following licenses are used when managing Camera Apps using Cisco VSM Operations Manager. These licenses are different than those used when installing and managing the Camera Apps directly on the device (using the device UI).
L-FL-AA-CA-VSM=	Car Alarm Detection Application for Cisco IP Cameras for VSM
L-FL-AA-GB-VSM=	Glass Break Detection App for Cisco IP Cameras for VSM

Table 22 License Part Numbers (continued)

Part	Description
L-FL-AA-GS-VSM=	Gun Shot Detection Application for Cisco IP Cameras for VSM
L-FL-C-AP1-VSM=	Tier 1 Cisco Application for Cisco IP Cameras for VSM
L-FL-C-AP2-VSM=	Tier 2 Cisco Application for Cisco IP Cameras for VSM
L-FL-IVVA-T1-VSM=	Tier 1 Cisco IP Camera Intuvision Video Analytic App for VSM

Notes

- A license for 10,000 Cisco cameras is included by default (you do not need to purchase and install an additional license for Cisco cameras).
- You can add 1 Media Server and 10 non-Cisco cameras without a license for initial setup purposes only. This feature is removed when you add any permanent license.

Procedure

-
- Step 1** Purchase additional licenses:
- Determine the part number for the license you want to purchase (see [Table 22](#)).
 - Purchase the license by contacting your Cisco sales representative or any Cisco reseller. For more information, visit <http://www.cisco.com/en/US/ordering/index.shtml>.
 - When the purchase is complete, you are issued a Product Authorization Key (PAK) in paper form, or in an e-mail message.
- Step 2** Obtain the license file:
- Locate the Product Authorization Key (PAK) that was created with the purchase.
 - In a web browser, open the Cisco Product License Registration web page.
<http://www.cisco.com/go/license/>
 - Follow the on-screen instructions to complete the form and enter the Product Authorization Key (PAK). When you are done, a license file with the extension `.lic` is sent to your e-mail address.
 - Transfer the file to the drive of the PC used for the configuration.
- Step 3** Install the license file in Cisco VSM:
- Log in to the Operations Manager.
 - Select **System Settings > Software Licensing**.
 - Click **Add** and select the license file located on your local drive.
 - Click **Save** to install the file and activate the additional capacity.
- The additional capacity is available immediately. You do not need to restart the server or take additional steps.
- See the [Cisco Video Surveillance Operations Manager User Guide](#) for more information.
-

Understanding the Cisco VSM Software Types

Table 23 describes the different types of software and firmware that are installed on servers, cameras, and encoders.

Table 23 Cisco VSM Software Types

Software Type	Description
System software	<p>System software denotes the Cisco VSM software, including Media Server, Operations Manager, Cisco VSM Management Console, Safety and Security Desktop and Multipane clients. All servers running the Operations Manager and associated Media Server services must run the same software version.</p> <p>Use the Operations Manager to update the <i>System Software</i> on all servers (such as Media Servers) associated with the Operations Manager. See the Cisco Video Surveillance Operations Manager User Guide for instructions.</p> <p>Notes:</p> <ul style="list-style-type: none"> • The Operations Manager and all associated servers must run the same system software version. • To update a Federator server, log in to the Federator server Management Console. See the Cisco Video Surveillance Operations Manager User Guide for instructions. • To repair or restore the Cisco VSM system software, see the Cisco Video Surveillance Manager Recovery Guide for your hardware platform. For VM installations, see the Cisco Video Surveillance Virtual Machine Deployment and Recovery Guide for UCS Platforms.
OVA image (for VM installations)	<p>OVF template files are used to install the system software as a virtual machine (VM) on a supported Cisco Unified Computing System (UCS) platform.</p> <ul style="list-style-type: none"> • OVA template files are downloaded from the Cisco website. • The file format is <code>.ova</code>. For example: <code>Cisco_VSM-7.2.0-331d_ucs-bc.ova</code> • See the Cisco Video Surveillance Virtual Machine Deployment and Recovery Guide for UCS Platforms for instructions to install the <code>.ova</code> image and perform the initial VM setup. • After the VM setup is complete, use the Management Console to complete the configuration.
USB Recovery Disk image	<p>Use the USB Recovery Disk image to create a Cisco VSM 7 Recovery Flash Drive (for example, on a USB stick). The recovery disk can be used do the following:</p> <ul style="list-style-type: none"> • Repair: reinstalls the Operating System files and partitions without erasing video files stored on the server. You must backup the Cisco VSM database before using the recovery image, and then restore the database after the recovery process is complete. This action also preserves the RAID configuration. • Factory Restore: Restores the server to its factory default settings, reinstalls the operating system, and clears and reconfigures the RAID. This action deletes all data, configurations, software and video files from the appliance, and then reinstalls the operating system and Cisco VSM software. Perform this procedure only if necessary. <p>See the Cisco Video Surveillance Manager Recovery Guide (Cisco Connected Safety and Security UCS Platform Series) for more information.</p>

Table 23 Cisco VSM Software Types (continued)

Software Type	Description
Device <i>firmware</i>	<p>Device <i>firmware</i> is provided by the device manufacturer. The firmware for Cisco devices can be upgraded using Operations Manager. Firmware for other manufacturers is upgraded using a direct connection.</p> <p>See the “Upgrading Camera and Encoder Driver Firmware” section of the Cisco Video Surveillance Operations Manager User Guide for instructions to upgrade Cisco device firmware, or refer to the device documentation.</p>
Device <i>driver packs</i>	<p>Device <i>driver packs</i> are the software packages used by Media Servers and the Operations Manager to interoperate with video devices, such as cameras. Driver packs are included with the Cisco VSM software, or may be added to a server at a later time to add support for new devices or features.</p> <ul style="list-style-type: none"> • Install new driver packs to add support for additional devices. • Upgrade existing driver packs to enable support for new features. <p>Note We strongly recommend upgrading driver packs using the Operations Manager interface (see the “Driver Pack Management” section of the Cisco Video Surveillance Operations Manager User Guide). This allows you to upgrade multiple servers at once. Driver packs must be upgraded to the same version on each server where the Media Server and Operations Manager services are enabled or a driver pack mismatch error occurs. Templates cannot be revised when a driver pack mismatch error is present.</p>
Language Packs	<p>Language packs can be added to display the Cisco VSM user interfaces in non-English languages.</p> <p>Language packs are added using the Operations Manager (release 7.6 and higher). See the Cisco Video Surveillance Operations Manager User Guide for instructions.</p>

Obtaining Cisco VSM Software

Complete the following procedure to obtain software and other information for the Cisco VSM products and components:

Procedure

-
- Step 1** Go to the [Cisco Video Surveillance Manager product page](#).
 - Step 2** Click [Download Software](#).
 - Step 3** Select a product category. For example:
 - **Video Surveillance Device Driver**
 - **Video Surveillance Manager Stand-alone Tools**
 - **Video Surveillance Media Server Software** (including system software)
 - Step 4** Select the release for your server, device, or deployment ([Figure 1](#)).
 - Step 5** Click **Download** or **Add to Cart** and follow the onscreen instructions.

Figure 1 Download Software Page

The screenshot shows the Cisco Download Software page for Cisco Video Surveillance Manager 7.5.1. The page features a navigation menu at the top with links for Products & Services, Support, How to Buy, Training & Events, and Partners. Below the navigation, the page title is "Download Software" and there is a "Download Cart (0 items)" link. The breadcrumb trail indicates the path: Downloads Home > Products > Connected Safety and Security > IP Video Surveillance > Cisco Video Surveillance Manager > Video Surveillance Media Server Software-7.5.1. The main content area is titled "Cisco Video Surveillance Manager" and displays a table of software releases for version 7.5.1. The table has columns for File Information, Release Date, and Size. Each row represents a different software package with corresponding "Download", "Add to cart", and "Publish" buttons.

File Information	Release Date	Size
Cisco Video Surveillance Manager 7.5.1 Client application software. Cisco_VSM-7.5.1-0071-clients.zip	02-JUL-2014	68.02 MB
Cisco Video Surveillance Manager 7.5.1 upgrade software for Red Hat Enterprise Linux Server release 5.8 Cisco_VSM-7.5.1-0071-rhel5.zip	02-JUL-2014	843.95 MB
Cisco Video Surveillance Manager 7.5.1 upgrade software for Red Hat Enterprise Linux Server release 6.4 Cisco_VSM-7.5.1-0071-rhel6.zip	02-JUL-2014	827.54 MB
Cisco Video Surveillance Manager 7.5.1 upgrade software for SUSE Linux Enterprise Server 10 SP1 (i586) Cisco_VSM-7.5.1-0071-sles10.zip	02-JUL-2014	839.75 MB

Alternate Procedure

You can also navigate the Cisco Physical Security product pages to download software updates and other information:

- Step 1** Go to the following URL.
<http://www.cisco.com/go/physicalsecurity>
- Step 2** Click **View All Physical Security Products**.
- Step 3** Click **IP Video Surveillance**.
- Step 4** Click **Cisco Video Surveillance Manager**.
- Step 5** Click **Download Software for this Product**.
- Step 6** Click a Software Type and follow the onscreen instructions.
For example: **Video Surveillance Media Server Software** (Figure 1).
- Step 7** Select the release for your server, device, or deployment.
- Step 8** Click **Download** or **Add to Cart** and follow the onscreen instructions.

Caveats

This section includes the following topics:

- [Using the Software Bug Search Tool, page 30](#)
- [Resolved Caveats, page 30](#)

Using the Software Bug Search Tool

You can use the Bug Search Tool to find information about most caveats for Cisco VSM releases, including a description of the problems and available workarounds. The Bug Search Tool lists both open and resolved caveats.

To access Bug Search Tool, you need the following items:

- Internet connection
- Web browser
- Cisco.com user ID and password

To use the Software Bug Search Tool, follow these steps:

Procedure

-
- Step 1** To access the Bug Search Tool, go to <https://tools.cisco.com/bugsearch/>
- Step 2** Log in with your Cisco.com user ID and password.
- Step 3** To look for information about a specific problem, enter the bug ID number in the **Search for** field.
- Step 4** For more information, go to the [Bug Search interactive tour](#).
-

Resolved Caveats

Table 24 *Resolved Caveats*

Caveat	Description
CSCum83947	Virtual Clip Http error
CSCus96863	ONVIF: Core in camctrldriver in 7.6 fcs build
CSCut07779	umsdevice running high cpu usage in case of hwid mismatch
CSCut90713	Cisco: support for 3050 IP camera
CSCuu28987	ONVIF driver pack fails configuring multicast settings
CSCuu32392	Support for 6620, 6630, 3620, 3630 cameras
CSCuv25350	3xxx/6xxx/6930- Audio may go out of sync relative to video
CSCuv86367	Non-ASCII Characters in Camera Fields cause parsing errors on VSM Proxy
CSCuv97893	getStreamingDetails call takes long time to return and causes slowness
CSCuv98269	Frames having same time-stamps in smd/mp4 recorded files

Table 24 **Resolved Caveats (continued)**

Caveat	Description
CSCUw08024	Users in multiple User Groups with Cameras cannot login
CSCUw30267	VSM 7.6.0 H264 parser crashes parsing incomplete H264 header
CSCUw49615	No video in VSM client using IQeye Camera
CSCUw65291	Max possible retention event recordings removed on camera replacement
CSCUw82625	PTZ Preset buttons do not work for controlling PTZ cameras
CSCUx11091	Creating mp4 clips from virtual clips results in wrong clip duration
CSCUx28121	Axis P3364 model doesn't stream audio
CSCUx29652	VSMS configuration lost due to VSM upgrade error
CSCUx39170	Camera update fails when LTS server is older version than primary server
CSCUx44727	Cannot Add Axis Encoder configured by DHCP
CSCUx58355	Too many open files when streams gets disconnected
CSCUy03932	SASD 0.1fps JPEG video displays intermittently with Live Buffering
CSCUy14898	Unable to view video from VSF7.7 to lower vsom7.6
CSCUy16142	SASD stops responding using digital zoom
CSCUy27524	Enable Role permissions for secondary stream with PTZ control.
CSCUz01908	Upgrade status not shown in service job
CSCUy69939	ONVIF: Add new resolution 320x258
CSCUz16133	PTZ and presets not working after server restart for Hikvision camera
CSCUy48082	unable to upgrade from 7.7 to 7.8 on Vitruvius
CSCUy58439	VSMupgrade core file seen in Media Server after upgrade
CSCUu25882	IQeye: Bitrate mode setting is not reflected in UI for IQeye032s
CSCUv68905	IQeye: 1080p support is required in VBR bitrate mode
CSCUx09920	ONVIF: Issues with Vivotek cameras
CSCUy39031	Identity collisions with Axis devices on DHCP
CSCUv92140	Cannot access VSM web interface after upgrade errors
CSCUw07685	Default Grooming causes improper DB inconsistent error
CSCUw24651	MediaOut crashes with RTSP OPTION request
CSCUw30239	Umsdevice crashes processing SOAP response
CSCUw32038	Video Wall does not display camera name when camera unavailable
CSCUw40326	Umsdevices crashing initializing PTZ control with ONVIF devices
CSCUx00799	Unable to change IP address of existing camera reference on VSOM GUI
CSCUx53772	PTZ does not work after ONVIF camera is reset

Related Documentation

See the following locations for the most current information and documentation:

Cisco Video Surveillance 7 Documentation Roadmap

Descriptions and links to Cisco Video Surveillance documentation, server and storage platform documentation, and other related documentation.

<http://www.cisco.com/go/physicalsecurity/vsm/roadmap>

Cisco Physical Security Product Information:

www.cisco.com/go/physicalsecurity/

Cisco Video Surveillance Manager Documentation Website

www.cisco.com/go/physicalsecurity/vsm/docs

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