Release Notes for Cisco Video Surveillance PTZ IP Camera, Release 1.4.1

September 2013

These release notes provide important information for the Cisco Video Surveillance pan, tilt, and zoom (PTZ) IP camera, Release 1.4.1, which applies to the following Cisco PTZ IP camera models:

- Cisco Video Surveillance SD Outdoor PTZ IP Camera, NTSC (CIVS-IPC-2830)
- Cisco Video Surveillance SD Outdoor PTZ IP Camera, PAL (CIVS-IPC-2835)
- Cisco Video Surveillance HD Outdoor PTZ IP Camera (CIVS-IPC-6930)

This firmware is compatible with Cisco Video Surveillance Manager (VSM) 7.0.1 and later releases and Driver Pack Release 2.0-27d and later releases.

Some new features in this release might require Cisco VSM 7.2. For more information, see the "What's New in this Release" section of these release notes. Also, refer to the *Release Notes for Cisco Video Surveillance Manager Release 7.2* at:

http://www.cisco.com/en/US/products/ps10818/prod_release_notes_list.html

Contents

This document includes the following sections:

Americas Headquarters:
Cisco Systems, Inc., 170 West Tasman Drive, San Jose, CA 95134-1706 USA

What's New in this Release

Cisco Video Surveillance IP camera firmware release 1.4.1 provides fixes for caveats (see the "Caveats" section on page 10) and supports the following news features:

Medianet

The Media Services Interface (MSI) is a software component that is embedded in video endpoints and collaboration applications. MSI ties the network to user devices and applications that enables an end-to-end architecture called Cisco Medianet.

The Medianet window on the IP cameras contains the Enable Flow Metadata option. By default this setting is enabled to allow metadata about the camera to be sent across the network and to the network elements in the media path.

This window is available under the Network Setup menu of the camera's interface (**Setup > Network Setup> Medianet**).

For more information about Medianet, refer to the *Cisco Video Surveillance Operations Manager User Guide* at the following URL:

http://www.cisco.com/en/US/products/ps10818/products_user_guide_list.html

LLDP Support for Power Negotiation

The 2800 series and 6930 PTZ IP cameras require PoE+ to receive sufficient power for operation. 802.3af PoE power is insufficient for proper operation. To obtain sufficient power with PoE+, the switch providing the power must have Link Layer Discovery Protocol (LLDP) and LLDP-MED power management features turned ON.

When LLDP is used and the PTZ IP camera cannot negotiate enough power (18W for 28xx series cameras and 20W for 6930 cameras), the following message is displayed as a text overlay on the View Video window: "Insufficient Power. PTZ Functions Disabled."

This message indicates that the current power source is not enough for full operation of the camera.

Joystick Support

You can enable the use of a USB joystick through the camera interface.

Check the Enable Joystick check box in the Pan Tilt Zoom area of the Camera Video & Control window.

For information about setting up and using the USB joystick, refer to the *Cisco Video Surveillance Operations Manager User Guide* at the following URL:

http://www.cisco.com/en/US/products/ps10818/products_user_guide_list.html

Open Network Video Interface Forum (ONVIF) 2.0

ONVIF is an open industry forum for the development of a global standard for the interface of IP-based physical security products. The following features are supported in this release.

- Device Discovery Service
- Device Service
- Media Service

This mode is available from the Basic Operations section of the Basic window area of the camera's interface (**Setup > Network Setup> Basic**).

Note Do not enable ONVIF when using with Cisco VSM to avoid conflicts with configurations.

Local Storage

The Local Storage window allows you to enable storing video on a local storage device in case of a network loss. This window is available under the Feature Setup menu of the camera's interface (**Setup > Feature Setup> Local Storage**).

Use the latest version of the SD Card Utility for downloading and decrypting files. Obtain the SD Card Installer from the Download Software page.

Procedure

Step 1 Go to the following URL:

http://www.cisco.com/cisco/software/navigator.html

Step 2 Choose **Product > Physical Security > Connected Physical Security > Video Surveillance IP Cameras > Cisco Video Surveillance** *serial_num* **Series IP Cameras > Cisco Video Surveillance** *model_num* **IP Camera**, where *serial_num* is the IP camera series number and *model_num* is the IP camera model number.

Step 3 From the navigation pane on the left, choose the **1.2.1** release.

Step 4 Download the CiscoSDUtilityInstallerV1.0.0.zip file.

802.1x

The 802.1x window provides options for configuring 802.1x authentication for the IP camera. These settings require that RADIUS be configured on your network to provide the client authentication.

This window is available under the Network Setup menu of the camera's interface (**Setup > Network Setup> 802.1**).

SNMP

The SNMP window provides options for configuring Simple Network Management Protocol (SNMP) settings for the IP camera. These settings can help you manage complex networks by sending messages to different devices on the network.

This window is available under the Network Setup menu of the camera's interface (**Setup > Network Setup> SNMP**).

Custom Option for Constant Bit Rate

The new option allows you to select a custom rate within the valid range, depending on resolution and frame rate.

You can select the constant bit rate from the Video Quality Control area of the Streaming window.

Note This feature is available only through the camera interface.

MJPEG Support on the Primary Stream

The MJPEG codec is supported on the primary stream.

This feature is supported in Cisco VSM 7.2. Ensure you validate the supported configurations through VSM. For more information, refer to the *Cisco Video Surveillance Operations Manager User Guide* at the following URL:

http://www.cisco.com/en/US/products/ps10818/products_user_guide_list.html

New Event Actions

The following new event actions are supported on the PTZ IP cameras:

- FTP
- Attach Snapshot—Secondary video stream (H.264/MJPEG) must be enabled.
- Attach Video Clip—Secondary video stream (H.264 only) must be enabled.

Table 1 describes the new options in the Events Notification window.

Table 1 Events Notification Window Additions

Option	Description
Event Triggering Area	
Actions	Check the desired check boxes to designate the actions that the IP camera takes when the corresponding trigger occurs. • **Email**—Sends information about the event in an e-mail message to the designated recipient. You designate the recipient and configure e-mail options in other fields in this window. • **Output 1**—Changes the state of the output 1 port on the IP camera as defined in the Port window. • **Syslog**—Sends information about the event to a designated Syslog server. • **HTTP**—Sends information about the event as an HTTP stream to a remote system. • **FTP**—Uploads a snapshot or video clip of the event to an FTP server.
Email Notification Area	
Attach Video Clip	Check this check box and enter the following values to include with the e-mail message a video clip of the event: • **Pre-Capture Length**—Enter the amount of video (in seconds) before the event to include in the video clip. **Note** The maximum pre-capture length is 5 seconds. • **Post-Capture Length**—Enter the amount of video (in seconds) after the event to include in the video clip. **Note** The maximum combined pre-capture and post-capture length is 10 seconds. This video clip is stored on the IP camera until the message is sent.
FTP Notification Area	
Primary FTP Server	Identify the primary FTP server to which snapshots or video clips are uploaded by choosing **IP Address** or **Hostname** from the drop-down list and entering the IP address or host name in the corresponding field.
Primary FTP Port	Enter the port number that receives messages on the primary FTP server. The default FTP port number is 21.
User Name	Enter the primary FTP server login user name.
Password	Enter the primary FTP server login password.
Enable Passive Mode	Check this check box to enable the passive mode feature of the primary FTP server.
Secondary FTP Server	Identify an optional secondary FTP server to which snapshots or video clips are uploaded by choosing **IP Address** or **Hostname** from the drop-down list and entering the IP address or host name in the corresponding field.
Secondary FTP Port	Enter the port number that receives messages on the secondary FTP server. The default FTP port number is 21.

Table 1 Events Notification Window Additions (continued)

Option	Description
User Name	Enter the secondary FTP server login user name.
Password	Enter the secondary FTP server login password.
Enable Passive Mode	Check this check box to enable the passive mode feature of the secondary FTP server.
Upload Snapshot	Check this check box to upload a snapshot of the activity that triggered the event. This functionality is available only when the secondary video stream is enabled.
Upload Video Clip	Check this check box and enter the following values to upload a video clip of the activity that triggered the event: • **Pre-Capture Length**—Enter the amount of video (in seconds) before the event to include in the video clip. The default pre-capture length is 5 seconds. **Note** The maximum pre-capture length is 5 seconds. • **Post-Capture Length**—Enter the amount of video (in seconds) after the event to include in the video clip. The default post-capture length is 5 seconds. **Note** The maximum combined pre-capture and post-capture length is 10 seconds.

New Resolutions

The following new 16:9 resolutions are supported on the Cisco 6930 PTZ IP camera with this release:

- 1536 x 864
- 1472 x 832
- 768 x 432
- 704 x 400
- 352 x 208
- 320 x 192
- 192 x 112
- 160 x 96

These new resolutions are supported with Cisco VSM 7.2. For more information, refer to the *Release Notes for Cisco Video Surveillance Manager Release 7.2* at:

http://www.cisco.com/en/US/products/ps10818/prod_release_notes_list.html

Increased Preset Support

The PTZ IP cameras support a maximum of 16 presets.

Important Notes

- To ensure that the new features display, clear the browser cache and reload the web page.
- If ActiveX is not working properly after installation, close the browser and restart the machine.
- The following 802.1x authentication options are not supported:
  - PEAP authentication with Validate Server Certificate
  - EAP-FAST authentication with uploaded PAC files
- SRTP is not supported on the PTZ IP cameras.
- General PTZ Camera Notes
  - When a Cisco 6930, 2830, or 2835 camera is managed by VSM, HTTP is automatically enabled on the camera by VSM to optimize PTZ performance. Login and management of the cameras are still performed using HTTPS. Only PTZ uses HTTP.
  - With PTZ presets, the configured dwell time includes the time that the camera takes to move from one preset position to the next preset position in addition to the time that the camera is expected to stay in the preset position. The time that the camera takes to go from one preset to another preset depends on the configured pan and tilt speeds. When configuring the dwell time, ensure you factor in the time moving between presets.
  - A camera reset or reboot returns the PTZ settings to the default Home position. If the user has configured a custom Home position, the PTZ settings return to the user defined Home position.
  - Changing the video standard from NTSC to PAL resets the zoom to the default position.
  - Changing the video standard from NTSC to PAL results in a blue screen for 5-6 seconds before streaming starts again. This is normal and expected behavior.
- Privacy Region Notes
  - Limitation—The image sensor of the camera has a limitation with where privacy cannot be drawn. After you add and save the privacy region, ensure that the mask of the region appears in the video. If the masked region does not appear, use the pan and tilt controls to set the camera to a slightly different angle and save the new angle.
  - To ensure the privacy region is saved correctly, wait for the region to appear on the video before using the pan and tilt controls to set another privacy region.
  - You cannot modify the size of an existing privacy region. If you want to change area of a privacy region, delete that region. Add and save a new privacy region with the desired area.
  - When you select the color from the Region Color pull-down menu for one region, all privacy regions turn the same color.
  - Changing the video standard from NTSC to PAL removes existing privacy regions.

Upgrading to Release 1.4.1

If your PTZ IP camera has an earlier firmware release, you can upgrade it to firmware release 1.4.1 by using the Camera Firmware Upgrade feature in the VSM Management Console. For instructions, see the "Using the VSM Management Console" chapter in *Cisco Video Surveillance Manager User Guide*.

Alternatively, you can upgrade your PTZ IP camera to firmware release 1.4.1 by performing the following steps.

Procedure

Step 1 Take these actions to obtain the release 1.4.1 firmware:

a. Go to the following URL:

http://www.cisco.com/cisco/software/navigator.html

b. Choose **Product > Physical Security > Connected Physical Security > Video Surveillance IP Cameras > Cisco Video Surveillance** *serial_num* **Series IP Cameras > Cisco Video Surveillance** *model_num* **IP Camera**, where *serial_num* is the PTZ IP camera series number and *model_num* is the PTZ IP camera model number.

c. From the navigation pane on the left, choose the **1.4.1** release.

d. Download the 1.4.1 firmware with the file name that applies to your IP camera:

- For 2830 and 2835 PTZ IP cameras: CIVS-IPC-283x-V1.4.1-97.bin
- For 6930 PTZ IP camera: CIVS-IPC-6930-V1.4.1-97.bin

e. Log in and follow the on-screen prompts to download it to your PC.

Step 2 Take these actions to display the Firmware window in the web interface for your IP camera:

a. Start Internet Explorer and enter the following in the address field:

protocol://*ip_address*:*port_number*

where:

- *protocol* is the connection that you use for your IP camera (either HTTPS or HTTP).
- *ip_address* is the IP address of your IP camera.
- *port_number* is the port number that is used for HTTPS or HTTP connections to the IP camera. You do not need to enter a port number if you are connecting through the default HTTPS port 443 or the default HTTP port 80.

b. Enter your IP camera user name and password when prompted, then click **OK**.

The IP Camera Main window appears.

c. Click the **Setup** link to access configuration menus for the camera.

d. Click **Administration**, then click **Firmware**.

The Firmware Settings window appears.

Step 3 In the Firmware Maintenance area, click **Browse**, choose the upgrade file, and then click **Open**.

The upgrade file may be stored on another PC.

Step 4 Click **Upgrade**.

Do not power down the IP camera during the upgrade procedure.

After upgrading to the 1.4.1 firmware, clear the browser cache, close and reopen the browser to ensure the changes from the new firmware are reflected correctly.

After you upgrade the firmware, the IP camera automatically restarts. It retains all configuration information.

Installing ActiveX Client

Minimum Installation Requirements

- Windows 7 with Standard User Rights

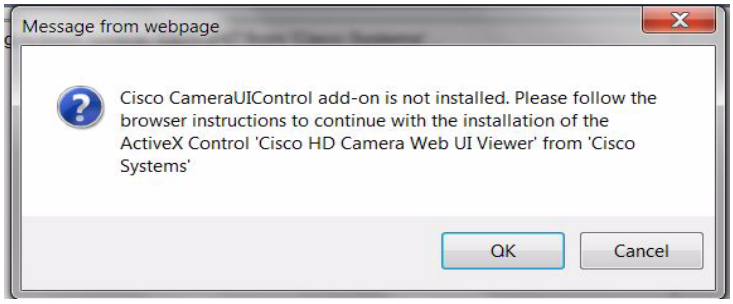
  Windows XP with Admin Rights
- DirectX End-User Runtime (DirectX 9.0 or higher)
  - DirectX 9.0 installed with Windows XP
  - DirectX 11 installed with Windows 7
- .Net Framework 2.0 SP 1 or higher
  - Installed with Windows 7 by default
  - Needs to be installed on Windows XP
- Computer Display drivers installed properly
- Support for the 32-bit version of Internet Explorer 8, 9, and 10

Installation Procedure

Step 1 Log in to the Cisco IP camera with appropriate credentials.

Step 2 Click on **View Video**.

The following message dialog box appears:



Step 3 Click **OK** on the dialog box.

Step 4 For Internet Explorer 9, click **Install** at the bottom of browser.

For Internet Explorer 8, right click on the upper yellow strip on the browser. Click **Install**.

The page reloads and displays the dialogue box to install ActiveX.

Step 5 Click **Install**, and wait for installation to complete.

After the installation is complete, the View Video page shows stream from the IP camera.

Backward Compatibility

Downgrading the firmware (from Release 1.4.1 to a previous version) resets the camera to factory reset mode (user and network settings are preserved) in the following cases:

- The device is currently configured with the following new resolutions for either primary or secondary stream:
  - 1536 x 864
  - 1472 x 832
  - 768 x 432
  - 704 x 400
  - 352 x 208
  - 320 x 192
  - 192 x 112
  - 160 x 96
- Primary MJPEG codec is configured on the primary stream.

Note If the configured number of presets is greater than 8, all preset configurations are cleared. The camera does not reset.

To avoid the camera reset, change the settings before you downgrade.

Caveats

Table 2 describes the caveats that are resolved in this release.

Table 2 Caveats Resolved in this Release

Identifier	Description
CSCuf52652	6930/283x: Auto Patrol does not restart after power cycle.
CSCug60062	6930: Exposure time option may get disabled sometimes.

Table 3 describes the caveats that are open in this release.

Table 3 Caveats Open in this Release

Identifier	Description
CSCue99434	MJPEG configuration change may take up to 5 minutes before streaming starts.
CSCui23498	283x/3xxx/6xxx/6930/7xxx: Camera does not send Cold Start SNMP trap.
CSCui95069	283x/3xxx/6xxx/6930/7xxx: 802.1x does not work after certificate change.

You can use the Bug Toolkit to find information about caveats (bugs) for this release, including a description of the problems and available workarounds. The Bug Toolkit lists open and resolved caveats.

To access Bug Toolkit, you need an Internet connection and a Cisco.com user ID and password.

To use the Bug Toolkit, follow these steps:

Procedure

Step 1 To access the Bug Toolkit, go to http://tools.cisco.com/Support/BugToolKit/action.do?hdnAction=searchBugs.

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 bug ID** field, then click **Go**.

Step 4 To look for information if you do not know the bug ID number:

a. Choose **Security** from the Select Product Category menu.

b. Choose the desired product from the Select Product menu.

c. Choose the version number from the Software Version menu.

d. Under Advanced Options, choose **Use default settings** or **Use custom settings**. The default settings search for severity 1, 2 and 3 bugs, open and fixed bugs, and only bugs containing bug details. Use the custom settings to change the severity and status parameters, or to search for keywords within the bug headline and description.

Troubleshooting

Symptom View Video page does not show the video stream after the installation is complete.

Recommended Action Reset Internet Explorer to its default settings.

- Under the Tools menu, select Internet Options.
- Click on the Advance Tab.
- In the Reset Internet Explorer settings section, click **Reset**.

Symptom Unable to install ActiveX or view streaming video because of firewall settings.

Recommended Action To ensure the firewall is not blocking the installation of ActiveX or preventing streaming video, adjust your firewall settings accordingly.

Symptom Unable to view streaming video because of the firewall on the ports.

Recommended Action Check with your network administrator to ensure the following ports are open for streaming:

- Primary Stream—1024 (video), 1026 (audio)
- Secondary Stream—1032 (video), 1034 (audio)

Symptom Unable to install ActiveX or view streaming video because of an existing version.

Recommended Action To uninstall older versions of ActiveX:

- Go to Control Panel from the Start menu.
- Select Programs and Features.
- Search for Cisco Camera UI Control v.X.XX.X.XX.
- Right click and click on Uninstall to remove ActiveX.

MIB Support

SNMP Versions 2c and 3 are supported in Release 1.4.1.

Table 4 shows the supported and unsupported MIBs.

Table 4 MIB Support in Release 1.4.1

MIBs	RFC	Support
RFC1213-MIB	RFC1213	
system		Yes
interface		Yes
at		No
ip		Yes
icmp		Yes
tcp		No
udp		No
snmp		Yes
ENTITY-MIB		
Host-Resource-MIB	RFC1514	Yes
SNMP Trap (Ver 1)		
cold start, warm start		Yes
reconfigure		No
link up/down		link up (yes), link down (no)
SNMP Trap (Ver 3)		
authentication failure		Yes
Wireless LAN MIBs - IEEE802dot11-MIB		No
CISCO-CDP-CAPABILITY.MIB.my		No
CISCO-CDP-MIB.my		No

Related Documentation

For additional information about the Cisco Video Surveillance PTZ IP cameras, refer to the following documents:

- *Cisco Video Surveillance PTZ IP Camera Installation Guide*
- *Cisco Video Surveillance PTZ IP Camera Configuration Guide*

The documentation is available at this URL:

http://www.cisco.com/en/US/products/ps12999/tsd_products_support_series_home.html

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation:

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

Subscribe to the *What's New in Cisco Product Documentation* as an RSS feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service. Cisco currently supports RSS Version 2.0.