

Actions Menu

The Actions menu in the Cisco IP Camera Setup Software provides access to features that you use to view live video from a camera and perform a variety of configuration and management tasks.

This chapter includes the following sections, which describe these options in detail:

- Viewing Live Video and Configuring Viewing Options, page 3-1
- Performing Settings and Maintenance Tasks, page 3-7
- Performing a Firmware Upgrade, page 3-15
- Managing Users, page 3-16
- Importing and Exporting Camera Configuration Information, page 3-18
- Initialization, page 3-20

Viewing Live Video and Configuring Viewing Options

The Live View tab lets you view live streaming video from a selected camera. This tab also provides options for configuring the video display, preset positions, and focus and zoom, and for controlling certain IP camera functions. Available options and controls depend on the camera model and on the privilege level of the user.

The following sections describe how to view a live video stream and how to configure video options:

- Viewing Live Video, page 3-1
- Configuring the Video Control, page 3-2
- Configuring the Display Mode Control, page 3-2
- Configuring Camera Settings, page 3-3
- Configuring Focus and Zoom, page 3-5

Viewing Live Video

You can view a live video stream from any camera that has been added to the Cisco IP Camera Setup Software and that is operating.

To view a live video stream, follow these steps:

Procedure

- Step 1 In the Added Cameras list, click the camera whose live video stream you want to view.
- Step 2 Choose Actions > Camera Settings or click the Live Streaming button



The Live View tab displays.

The left area of this tab displays the video stream from the camera.

Configuring the Video Control

The Video Control option in the Live View tab lets you configure the codec for video transmission from a selected camera. You can set the codec to Pri. H.264 or MJPEG.

To configure the video control, follow these steps:

Procedure

- **Step 1** In the Added Cameras list, click the camera whose video control you want to configure.
- Step 2 Choose Actions > Camera Settings or click the Live Streaming button



The Live View tab displays.

Step 3 From the Video Control drop-down list, choose the codec that you want.

Configuring the Display Mode Control

The Display Mode option in the Live View tab lets you configure the display mode for live video from a camera model that includes a fish eye lens. You can set the codec to any of the following values:

- 10—1 original fisheye view
- 1P— 1 panoramic view
- **2P**—2 panoramic views
- 1R—1 regional view
- 4R—4 regional views
- 103R—1 original fisheye view and 3 regional views
- 108R—1 original fisheye view and 8 regional views

To configure the display mode, follow these steps:

Procedure

- Step 1 In the Added Cameras list, click the camera whose display mode you want to configure.
- Step 2 Choose Actions > Camera Settings or click the Live Streaming button



The Live View tab displays.

Step 3 From the Display Mode drop-down list, choose the display mode that you want.

Configuring Camera Settings

The Camera Settings options in the Live View tab lets you the adjust the video picture and configure exposure settings and various advanced setting for video transmission from a selected camera.

To configure camera settings for a video stream, follow these steps:

Procedure

- Step 1 In the Added Cameras list, click the camera whose video settings you want to configure.
- Step 2 Choose Actions > Camera Settings or click the Live Streaming button



- The Live View tab displays.
- Step 3 Click the Camera Settings radio button near the top of the tab.
- **Step 4** Take one or more of the following actions:
 - To configure brightness, contrast, sharpness, saturation, and white balance mode, click the **Picture Adjustments** button.
 - To configure exposure level, exposure mode, and the iris mode, click the Exposure Control button
 - To configure low light compensation, DRX, and the gamma curve, and to flip or mirror the video image, click the **Advance Settings** tab

Table 3-1 describes the cameras settings configuration options in detail.

Step 5 Click the Save button to save the updates that you make.

Table 3-1 Camera Settings Options

Option	Description
Picture Adjustments	
Brightness slider	To control the brightness of the video image, drag the slider to select a value from 1 through 10. A higher value increases the brightness and a lower value decreases the brightness. For example, if the IP camera is facing a bright light and the video appears too dark, you can increase the brightness. The default value is 5.
Contrast slider	To control contrast of the video image, drag the slider to select a value from 1 through 10. A higher value increases the contrast and a lower value decreases the contrast. The default value is 5.

Table 3-1 Camera Settings Options (continued)

Option	Description
Sharpness slider	To control the sharpness of the video from the IP camera, drag the slider to select a value from 1 through 100. A higher value increases the sharpness and a lower value decreases the sharpness.
	The default value is 50.
Saturation slider	To control the saturation of the video from the IP camera, drag the slider to select a value from 1 through 100. A higher value increases the saturation and a lower value decreases the saturation.
	High saturation provides a vivid, intense color for a video image. With less saturation, the video image appears more muted and gray.
	The default value is 50.
Restore button	Resets brightness, contrast, sharpness, and saturation to their default values.
White Balance Mode	Choose one the following white balance modes:
drop-down menu	• Auto—White balance automatically set by camera and suitable for most conditions.
	• Manual—Choose this option if you want to set the white balance by setting RGain (Red Gain) and BGain (Blue Gain) manually.
	The default setting is Auto.
Exposure Control	
Exposure level	Choose a value to increase or decrease the exposure level of the video image.
drop-down menu	The default value is 0.0.
Exposure mode	Choose one of these options:
drop-down menu	• Manual—Choose this option if you want to set Exposure time and Gain control manually.
	• Auto —Suitable for most conditions.
	The default setting is Auto.
Flickerless check box	Appears when you choose Manual from the Exposure mode drop-down menu.
	Flickering can occur when a combination of indoor and outdoor light get to the IP camera, due to a difference in capture frequency and actual indoor lighting frequency. Check this check box to limit the range of exposure time, which prevents flickering.
Min Exposure Time	Appear when you choose Manual from the Exposure mode drop-down menu.
slider Max Exposure Time slider	To control the minimum length of time in seconds that the IP camera keeps its iris open for each frame, drag the Min Exposure Time slider box. To control the maximum length of time in seconds that the IP camera keeps its iris open for each frame, drag the Max Exposure Time slider box.
	When capturing video, the IP camera automatically selects the optimum value between the minimum and maximum values that you configure.
	If the Flickerless check box is not checked, the minimum exposure value is 1/32000 and the maximum value is 1/5. If the Flickerless check box is checked, the minimum exposure value is 1/5 and the maximum value is 1/5.

Table 3-1 Camera Settings Options (continued)

Option	Description
Min Gain Control	Appear when you choose Manual from the Exposure mode drop-down menu.
slider Max Gain Control slider	To control the minimum gain of the IP camera, drag the Min Gain Control slider box. To control the maximum gain, drag the Max Gain Control slider box. A value of 0 does not boost the gain, so the image may appear darker in a darker environment. A higher value increases the exposure of the image, which can cause the image to look brighter, but can also cause the image to appear more noisy.
	When capturing video, the IP camera automatically selects the optimum value between the minimum and maximum values that you configure.
Iris mode drop down menu	Appears only when you choose Auto from the Exposure mode drop-down menu. Choose one of these options for the IP camera iris:
	Indoor—Suitable for indoor conditions
	Outdoor—Suitable for outdoor conditions
Advanced Settings	
Enable Low Light Compensation check box	In a low-light environment, check this check box to reduce noise in the video image.
Enable DRX check box	In situations in which there is significant contrast between light and dark parts of an image, check this check box to cause the IP camera to continually adjust the image for optimal appearance.
Sensitivity drop-down	Appears when you check the Enable DRX check box.
menu	Choose Low or High to specify how quickly the IP camera adjusts the image for optimal appearance.
Strength drop-down	Appears when you check the Enable DRX check box.
menu	Choose Low , Medium , or High to specify the relative adjustment that the IP camera makes between the light and dark parts of an image.
Gamma Curve	Select a gamma curve value to adjust the monitor gray-scale for video from the IP camera.
Flip button	Rotates the video image that appears in your browser by 180 degrees and retains the flipped image on the camera.
Mirror button	Reverses the video image that appears in your browser and retains the reversed image on the camera.

Configuring Focus and Zoom

The Focus/Zoom options in the Live view tab lets you perform various focus and zoom operations with a camera.

These options are available only for camera models that have motorized focus and zoom capabilities.

To configure focus and zoom, follow these steps:

Procedure

- **Step 1** In the Added Cameras list, click the camera for which you want to configure focus and zoom.
- Step 2 Choose Actions > Camera Settings or click the Live Streaming button
 The Live View tab displays.
- Step 3 Click the Focus/Zoom radio button near the top of the tab.
- **Step 4** Perform the desired tasks as described in the following table:

Task	Description and Procedure
Configure the zoom level.	Drag the Zoom slider to the right to increase the zoom level of the video image (tele) and drag to the left to decrease the zoom level (wide).
	You also can use these buttons to adjust the zoom level:
	• -10—Decreases the zoom level by 10 steps
	• -1—Decreases the zoom level by 1 step
	• +1—Increases the zoom level by 1 step
	• +10 —Increases the zoom level by 10 steps
Configure the focus.	Drag the Focus slider to the right sharpen the focus on objects at are farther away from the camera and drag to the left to sharpen the focus on objects that are nearer.
	You also can use these buttons to adjust the focus:
	• -10—Decreases the focus by 10 steps
	• -1—Decreases the focus by 1 step
	• +1—Increases the focus by 1 step
	• +10 —Increases the focus by 10 steps
Quick Focus button	Click to cause the IP camera to adjust its focus automatically by using the quick focus process. This adjustment uses larger steps and takes less time to complete than the full auto focus process.
	The Quick focus process can take a few seconds to complete, and the Focus/Zoom controls are dimmed during this process. When the process completes, click OK in the dialog box that displays the message "Set Quick Focus successfully."

Task	Description and Procedure
Execute auto focus.	Auto focus causes the camera to adjusts its focus, with priority given to a designated region in the camera field of view. If you do not designate a region, the camera adjusts its focus based on the entire field of view.
	To execute the auto focus process without specifying a region, click the Auto Focus button.
	To execute the auto focus process for a region, take these actions:
	1. Check the Specify Region check box.
	2. Right-click the video image and choose Draw Region .
	3. Hold down the left mouse button and draw the region, which is indicated by a green rectangle.
	To move a region, left-click in the window and drag it to the to the desired area.
	To resize a region, drag an edge or corner of the region.
	4. Click the Auto Focus button.
Reset zoom and focus settings.	Click the Reset button to set the zoom and focus settings to their default values.
Execute full auto focus.	Full auto focus process causes the camera to adjust its focus automatically. This adjustment uses smaller steps and takes more time to complete than quick focus process, but can result in a sharper focus. Performing a full auto focus has the same effect as performing an auto focus with no region selected.
	To execute the full auto focus process, click the Full Auto Focus button.
	This process can take some time to complete, and the Focus/Zoom controls are dimmed during this process. If you see a dialog box with the message "Operation still in progress," click OK to complete process. Click OK in the dialog box that displays the message "Set Full Auto Focus successfully."

Performing Settings and Maintenance Tasks

The Settings & Maintenance choice on the Actions menu provide access to tabs that let you perform a variety of configuration tasks for a camer.a. The following sections describe these tasks:

- Viewing and Configuring Basic Setup Options, page 3-8
- Configuring IP Addressing, page 3-9
- Configuring Time Options, page 3-11
- Configuring Discovery Options, page 3-12
- Restoring, Resetting, Rebooting, and Managing Logs, page 3-13
- Configuring Overlay Information, page 3-14

Viewing and Configuring Basic Setup Options

Basic setup options for a camera include identification and location information and operational functions. You configure basic setup options on the Basic Setup tab.

To configure basic setup options, follow these steps:

Procedure

- **Step 1** In the Added Cameras list, click the camera for which you want view or configure base setup options.
- **Step 2** Take either of these actions:
 - Choose Actions > Settings & Maintenance, choose any option that displays, and then choose the Basic Setup tab.
 - Click the Settings & Maintenance button
- **Step 3** Review or update the options in the Basic Setup tab.

Table 3-2 describes the options on this tab.

If you make updates on this tab, click the **Save** button that appears at the bottom of the tab to save your changes.

Table 3-2 Basic Setup Tab

Option	Description
Basic Settings Area	
ID	Unique identification number for the camera, which is used to identify the IP camera to various external applications.
	The ID can be 0 through 9999.
Name	Name for the camera. This name appears in the camera log file for information that is associated with this camera.
	The name can contain up to 64 characters, which can include letters, numbers, and these characters: ~. Do not use spaces. We recommend that you give a camera a unique name so that you can identify it easily.
Serial Number	Display only. Serial number of the camera.
Firmware Version	Display only. Version of the firmware that is installed on the camera.
Mac Address	Display only. MAC address of the camera.
Descriptions	Description of the camera. For example, enter the camera location, such as "North Entrance Camera 1."
	The description can contain up to 128 characters, which can include letters, numbers, spaces, and these characters: $! \# \% \& () * + , / : ; <>= ? @ [] ^ _ ` { } ~.$

Table 3-2 Basic Setup Tab (continued)

Option	Description
Contact	Contact information for someone such as the system administrator. For example, enter the email address of the system administrator.
	The contact can contain up to 64 characters, which can include letters, numbers, and these characters: $! \% () + , / = @ ^ _ ` { } \sim.$ Do not use spaces.
Basic Operations Area	
Enable LED	Check this check box if you want the Power LED on the back of the camera to light.
	If you do not check this check box, this LED does not light.
Disable Session ID	The following camera API mechanisms are available:
	SessionID—Tracks each client session. Session IDs are required by Cisco Video Surveillance Media Server (VSMS).
	Basic Authentication—Requires a user ID and password to be passed with every API command.
	SessionID is enabled by default. To disable SessionID, and enable Basic authentication, check this option.
Enable ONVIF	Check this check box if you want the camera to work in Open Network Video Interface Forum (ONVIF) mode.
	The following features are supported when ONVIF is enabled:
	Device Discovery Service
	Device Service
	Media Service
	Enabling ONVIF disables Session ID as indicated by the dialog box that displays if the Disable Session ID check box is not checked. If you see this dialog box, click OK to enable ONVIF and disable session ID.
	By default, ONVIF is disabled.
	Note We recommend that you do not enable ONVIF when using Cisco VSM to avoid conflicts with configuration.

Configuring IP Addressing

You can configure IP addresses and related options for a camera, gateway, and DNS. You configure these options on the IP Addressing tab.

To configure basic setup options, follow these steps:

Procedure

- **Step 1** In the Added Cameras list, click the camera for which you want configure IP addressing options.
- **Step 2** Take either of these actions:
 - Choose Actions > Settings & Maintenance > Assign IP Addresses.

The IP Addressing tab displays.

• Click the **Settings & Maintenance** button



and then choose the IP Addressing tab.

Step 3 Review or update the options in the IP Addressing tab.

Table 3-3 describes the options on this tab.

If you make updates on this tab, click the **Save** button that appears at the bottom of the tab to save your changes.

Table 3-3 IP Addressing Tab

Option	Description		
IP Addressing Area			
IP Version	IP version used by the camera on your network.		
Configuration type	Method by which the camera obtains its IP address:		
	• Dynamic —If your network includes a DHCP server for dynamic allocation of IP addresses, choose this option if you want DHCP to assign an IP address and subnet mask to the IP camera. Depending on your router, the default gateway, primary DNS server, and secondary DNS server may also be assigned. The DHCP server must be configured to allocate static IP addresses based on MAC addresses so that the camera always receives the same address.		
	• Static—Choose this option if you want to manually enter an IP address, subnet mask, default gateway, and DNS server IP addresses for the camera.		
IP Address	If you configured the camera for a static IP address, enter that address.		
Subnet Mask	If you configured the camera for a static IP address, enter the subnet mask for the IP camera.		
Gateway Address	If you configured the IP camera for a static IP address, enter the gateway for the camera.		
Primary DNS	Optional. Enter the IP address of the primary DNS server that is used in your network. Typically, your ISP provides this address.		
Secondary DNS	Optional. Enter the IP address of a secondary (backup) DNS server to use if the primary DNS server is unavailable.		
Network Transmission	Network Transmission Unit Area		
MTU	Maximum transmission unit size in bytes for packets that the network transmits. We recommend that you use the default value of 1500 unless there are special requirements for your network. If you experience operational issues after changing this value, set this value back to 1500.		
	If you change this value, restart the camera after saving the change.		
	Valid values are 600 through 1500. The value 1500.		

Configuring Time Options

The Cisco IP Camera Setup Software provides options for setting and maintaining the time of a camera. You configure these options on the Time tab.

To configure time options, follow these steps:

Procedure

- Step 1 In the Added Cameras list, click the camera for which you want configure time options.
- **Step 2** Take either of these actions:
 - Choose Actions > Settings & Maintenance > Set Date & Time.
 The Time tab displays.
 - Click the **Settings & Maintenance** button



and then choose the Time tab.

Step 3 Review or update the options in the Time tab.

Table 3-4 describes the options on this tab.

If you make updates on this tab, click the **Save** button that appears at the bottom of the tab to save your changes.

Table 3-4 Time Tab

Option	Description
Set Time Mode Area	
Use NTP Server to Update Time	Click this radio button if you want the camera to obtain its time from a Network Time Protocol (NTP) server.
	If you check this check box, the camera contacts the designated NTP server every 64 seconds and synchronizes its internal clock with the time of that server.
Manually Configure Time	Click this radio button if you want to set the time for the camera manually.
NTP Server Settings A	rea
Note These options do	not apply if you choose the Manually Configure Time option.
Primary NTP Server	If you configured the camera to obtain its time from an NTP server, identify the primary NTP server by choosing IP Address or Hostname from the drop-down list and entering the IP address or host name in the corresponding field.
Primary NTP Server Port	If you configured the camera to obtain its time from an NTP server, enter the primary NTP server port number.
	Valid values are 123 and 1024 through 65535. The default port is 123.
Secondary NTP Server	If you configured the IP camera to obtain its time from an NTP server, identify the secondary NTP server by choosing IP Address or Hostname from the drop-down list and entering the IP address or host name in the corresponding field.

Table 3-4 Time Tab (continued)

Option	Description
Secondary NTP Server Port	If you configured the IP camera to obtain its time from an NTP server, enter the optional secondary NTP server port number.
	Valid values are 123 and 1024 through 65535. The default port is 123.
Local Time Area	
Note These options do	not apply if you choose the Use NTP Server to Update Time option.
Local Date	Enter a date for the camera.
Local Time	Enter a time for the camera.
Clone PC Time button	Click this button to update the camera date and time with the date and time of the PC that you are using.
Time Zone and Dayligh	at Saving Area
Time Zone	Choose the time zone in which the camera is located.
	The time that appears when you view video from this camera reflects this time zone.
Adjust for Daylight Saving Time	Check this check box if you want the time of the camera to adjust automatically for daylight saving time.
Edit Default Daylight Saving Configuration for Time Zone	Check this check box if you want the daylight saving time adjustment of the IP camera to be different than the default adjustment for the selected time zone.
Time Offset	If you choose to edit default daylight saving configuration, enter the number of minutes that the time of the camera adjusts when daylight saving time starts.
	The camera automatically adjusts its time back by this number of minutes when daylight saving time ends.
Start Date	If you choose to edit default daylight saving configuration, choose the day, seek, and month on which daylight saving time begins. A the Start Time on this day, the time of the camera adjusts by the value in the Time Offset field.
Start Time	If you choose to edit default daylight saving configuration, enter the hour (in 24 hour format) and minute at which daylight saving time begins. At time on the Start Date, the time of the camera adjusts by the value in the Time Offset field.
End Date	If you choose to edit default daylight saving configuration, choose the day, seek, and month on which daylight saving time ends. A the End Time on this day, the time of the camera adjusts to the non-daylight saving time.
End Time	If you choose to edit default daylight saving configuration, enter the hour (in 24 hour format) and minute at which daylight saving time ends. At time on the Start Date, the time of the camera adjusts to the non-daylight saving time.

Configuring Discovery Options

The Cisco IP Camera Setup Software provides options for configuring the camera to work with Bonjour and to send discovery messages to a Cisco Video Server Media Server (VSMS). You configure these options on the Discovery tab.

To configure discovery options, follow these steps:

Procedure

- **Step 1** In the Added Cameras list, click the camera for which you want configure discovery options.
- **Step 2** Take either of these actions:
 - Choose Actions > Settings & Maintenance > Discovery.
 The Discovery tab displays.
 - Click the **Settings & Maintenance** button and then choose the **Discovery** tab.
- Step 3 Review or update the options in the Discovery tab.

Table 3-5 describes the options on this tab.

If you make updates on this tab, click the **Save** button that appears at the bottom of the tab to save your changes.

Table 3-5 Discovery Tab Options

Option	Description	
Bonjour Area		
Enable Bonjour	Check this check box if Bonjour is enabled in your network and you want the camera to broadcast Bonjour discovery messages.	
Cisco Video Surveillance Media Server (VSMS) Area		
Enable Preferred Media Server List	Check this check box if you want the camera to send discovery messages to Cisco VSMS.	
Media Server IP address	Enter the IP addresses of up to 4 Cisco VSMS servers, in order of preference, to which the camera sends discovery messages.	
	The camera sends messages to the servers in this list in the order that they appear until a server responds and the camera is registered.	

Restoring, Resetting, Rebooting, and Managing Logs

The Cisco IP Camera Setup Software provides options for performing the following operations for a camera:

- Restore—Resets all camera settings to their factory default values.
 - This action has the same effect as pressing and holding the **Reset** button on the camera for at least 15 seconds. After you perform this procedure, perform an initial set up of the camera as described in the "Initialization" section on page 3-20.
- Reset—Reset all IP camera settings except the static IP address, gateway IP address, and log in credentials (user name and password) to their factory default values.
- Reboot—Reboots the firmware on the camera.

This action has the same effect as pressing and immediately releasing the **Reset** button on the camera, or powering the camera down and then powering it up.

- Export log—Saves current log information from the camera in a .tar.gz file.
- Clear log—Deletes log information from the camera

To restore, reset, or reboot a camera, or to manage its logs, follow these steps:

Procedure

- Step 1 In the Added Cameras list, click the camera that you want to restore, reset, or reboot, or whose logs you want to manage.
- **Step 2** Take either of these actions:
 - Choose Actions > Settings & Maintenance > Maintenance.
 The Maintenance tab displays.
 - Click the Settings & Maintenance button



and then choose the Maintenance tab.

- **Step 3** Take the desired action:
 - Restore the camera—Click the **Restore** button. To continue, click **OK** in the confirmation pop-up window, or click **Cancel** if you do not want to perform the restore.
 - Reset the camera—Click the **Reset** button. To continue, click **OK** in the confirmation pop-up window, or click **Cancel** if you do not want to perform the reset.
 - Reboot the camera—Click the **Reboot** button. To continue, click **OK** in the confirmation pop-up window, or click **Cancel** if you do not want to perform the reboot.
 - Export log information from the camera—Click the **Export Logs from Camera** button. To continue, click **OK** in the confirmation pop-up window, or click **Cancel** if you do not want to perform the export. Use the window that appears to save the file in the location of your choice. Depending on the size of the logs, it can take some time for this window to appear.
 - Clear log information from the camera—Click the **Clear** button. In the dialog box that indicates that the operation was successful, click **OK**.

Configuring Overlay Information

The Cisco IP Camera Setup Software provides options for configuring a date and time stamp and text that can appear as overlays on the video image that streams from a camera. You configure these options on the Video Overlay tab.

To configure video overlay options, follow these steps:

Procedure

- **Step 1** In the Added Cameras list, click the camera for which you want configure video overlay options.
- **Step 2** Take either of these actions:
 - Choose Actions > Settings & Maintenance > Video Overlay.
 The Video Overlay tab displays.
 - Click the **Settings & Maintenance** button and then choose the **Video Overlay** tab.
- Step 3 Review or update the options in the Video Overlay tab.

Table 3-6 describes the options on this tab.

If you make updates on this tab, click the **Save** button that appears at the bottom of the tab to save your changes.

Table 3-6 Video Overlay Tab

Option	Description
Overlay Placement	Choose whether the text overlay appears at the Top of Image or Bottom of Image .
	If you configure a placement that overlaps a privacy region, the part of the text that overlaps the privacy region does not appear on the video image.
Enable date/time display	Check this check box to display the time from the internal clock of the IP camera as an overlay on the video image from the IP camera.
Date/Time Alignment in Overlay	Appears if you enable date/time display. Choose whether the Date/Time is aligned to the Left , Center , or Right .
	If you configure a placement that overlaps a privacy region, the part of the text that overlaps the privacy region does not appear on the video image.
Enable text display	Check this check box to display the text that you enter in the Display Text field as an overlay on the video image from the IP camera.
	This option can be useful for identifying this IP camera in an installation with several IP cameras.
Text Alignment in Overlay	Appears if you enable text display. Choose whether the text is aligned to the Left, Center , or Right .
	If you configure a placement that overlaps a privacy region, the part of the text that overlaps the privacy region does not appear on the video image.
Text Format	Appears if you enable text display. Specifies the text format to use for the text overlay. Currently, English (ASCII) is the only available text format.
Display Text	Appears if you enable text display. If you check the Enable Text Display check box, the text that you enter in this field appears as an overlay on the video image from the IP camera.
	The text can contain up to 26 characters, which can include letters, numbers, spaces, and these characters: $\$\%() + , / := @ ^_ ` \{ \} \sim$

Performing a Firmware Upgrade

The Cisco IP Camera Setup Software lets you upgrade the firmware on any camera, or on any group of cameras in the same series, that has been added to the software.

Before you upgrade firmware, download the firmware file to the PC from which you are running the Cisco IP Camera Setup Software and unzip the file if it is zipped. To download firmware, go to this web page:

http://www.cisco.com/en/US/products/ps6918/Products_Sub_Category_Home.html

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

To upgrade firmware, follow these steps:

Procedure

Step 1 Choose Actions > Firmware Upgrade or click the Firmware Upgrade button



- The Firmware Upgrade tab displays.
- Step 2 Click the **Browse** button to the right of the Firmware Upgrade field, and then use the window that displays to navigate to and select the firmware file to install.
- Step 3 From the Camera Model drop-down list, choose the IP camera series of the camera or cameras on which you want to update the firmware.

Cameras in the series that you choose and that have been added to Cisco IP Camera Setup Software appear in the camera list in the middle of the Firmware Upgrade tab. You can upgrade firmware one or more cameras that appear in this list.

Step 4 (Optional) To find in the camera list a camera or cameras whose name, model, IP address, MAC address, or firmware versions contains a specific non case-sensitive character string, enter the string in the Search field.

The camera list updates to display only cameras that match the search criteria as you type.

To clear the Search field, click the clear button in this field.

- Step 5 In the camera list, check the check box in the Select field that corresponds to each camera that you want to upgrade.
- **Step 6** Click the **Upgrade** button near the bottom of the Firmware Upgrade tab.
- **Step 7** In the Notice dialog box that provides additional information about the upgrade, click **Yes**.

The firmware upgrade process executes. This process can take some time. The Upgrade Status field in the camera list displays the status of the upgrade process. When the upgrade is complete on a camera, the Status field for the camera displays "Firmware Upgrade Done" and the camera restarts.

Managing Users

The Cisco IP Camera Setup Software provides options for adding and deleting users, and for changing user information. A user is someone who is assigned a user name, password, and privilege level and can log in to a camera.

A camera can have up to five users. One user must be the admin user, which cannot be deleted.

You manage users by using the Users tab.

The following sections describe how to manage users:

- Adding Users, page 3-16
- Changing User Information, page 3-17
- Deleting a User, page 3-18

Adding Users

A camera can have up to five users, including the admin user.

To add users who can log in to a camera, follow these steps:

- Step 1 In the Added Cameras list, click the camera for which you want add users.
- Step 2 Choose Actions > Users or click the Manage Users button



The Users tab displays.

- Step 3 For each user that you want to add, take these actions in a User # row.
 - a. In the User Name field, Enter a unique name for the user.

- **b.** In the Password field, Enter a password for the user.
 - The password is case sensitive and must contain from 8 to 32 characters, which can be letters, numbers, and special characters, but no spaces. Special characters are: $! \ () . @ ^_ \] \sim$
- c. In the Confirm Password field, re-enter the password for the user.
- **d.** From the Privilege Level drop-down list, choose one of these options for the privilege level of the user:
 - Administrator—Can access all IP camera windows, features, and functions.
 - Viewer—Can access the Camera Video & Control window with limited controls, and can access
 the Refresh, Logout, About, and Help links from that window.
- e. Click the **Add** button.

If the user is not added, look at the message at the bottom of the Users tab for information.

Changing User Information

You can change the password for any camera user, and you can change the user name and privilege level for any camera user except the admin user.

You cannot change information for a camera user who is logged in to the camera.

To change information for a camera user, follow these steps:

- **Step 1** In the Added Cameras list, click the camera for which you want add users.
- Step 2 Choose Actions > Users or click the Manage Users button



The Users tab displays.

- Step 3 For the user whose information you want to change, take these actions in a User # row as needed.
 - a. In the User Name field, Enter a new unique name for the user.

You cannot change the user name for the admin user.

b. In the Password field, Enter a new password for the user.

The password is case sensitive and must contain from 8 to 32 characters, which can be letters, numbers, and special characters, but no spaces. Special characters are: ! \$ () - . @ ^ _ ` { } ~

- c. In the Confirm Password field, re-enter the password for the user.
- **d.** From the Privilege Level drop-down list, choose one of these options for the privilege level of the user:
 - Administrator—Can access all IP camera windows, features, and functions.
 - Viewer—Can access the Camera Video & Control window with limited controls, and can access
 the Refresh, Logout, About, and Help links from that window.

You cannot change the privilege level for the admin user.

e. Click the Change button.

If the user information is not changed, look at the message at the bottom of the Users tab for information.

Deleting a User

You can delete any camera user except the admin user. When you delete a user, that user can no longer log in to the camera

You cannot delete a user who is logged in to the camera.

To delete a camera user, follow these steps:

- **Step 1** In the Added Cameras list, click the camera for which you want add users.
- Step 2 Choose Actions > Users or click the Manage Users button
 The Users tab displays.



Step 3 Click the **Delete** button in the User # row for the user who you want to delete.

Importing and Exporting Camera Configuration Information

The Cisco IP Camera Setup Software provides options for importing and exporting camera configuration information. These operations are useful if you want to create a backup of configuration information from a camera or copy configuration settings from one camera to another.

The following sections describe these operations:

- Importing Configuration Information, page 3-18
- Exporting Configuration Information, page 3-20

Importing Configuration Information

Importing configuration lets you import to one or more cameras a configuration file that you exported from another camera. or to restore configuration information to a camera. A configuration file includes all camera settings.

Each camera to which you import a configuration file must appear in the Added Camera list. If you import a configuration file to multiple cameras at the same time, the cameras must be the same model series.

If you import a configuration file from another IP camera that is active in your network, configure each camera to which you import the file with a name, description, and unique IP address (if not obtained through DHCP). To configure the camera name or description, see the "Viewing and Configuring Basic Setup Options" section on page 3-8. To configure the IP address, see the "Configuring IP Addressing" section on page 3-9.

A configuration file that you import includes the passwords that are configured for the administrator and for users. If you change any passwords after saving the configuration file, be aware that importing the file overwrites the new passwords with the saved ones.

You import configuration information by using the Import Configuration tab.

To import to one or more cameras a configuration file that you exported from another camera, follow these steps:

Step 1 Choose Actions > Camera Configuration > Import Configuration or click the Import/Export Configuration button ...

The Import Configuration tab displays.

Step 2 From the Camera Model drop-down list, choose the model series of the camera or cameras to which to import a configuration file.

A list of cameras that have been added to the Cisco IP Camera Setup Software and to which you can import a configuration file in one operation appears. This list provides the following information for each camera:

- · Camera name
- · Camera model
- IP address
- Mac address
- Firmware version
- Import status

You can click any column title repeatedly to display the list of cameras in ascending or descending alphanumeric order by the information in that column. An up arrow in a column indicates that the camera list is displayed in ascending alphanumeric order by that column, and a down arrow indicates that the camera list is displayed in descending order alphanumeric order by that column.0

You can display in the cameras list only discovered cameras that include a designated string of characters in any camera information column. To do so, enter that string in the Search field. The list of discovered cameras updates as you enter characters. To clear the Search field and display all cameras that match the selected camera model, click the **Clear Search** button , which appears when at least one character is in the Search field.

You can drag the border of a column heading to resize the column width.

Step 3 In the list of cameras, check the check box for each camera to which you want to import the configuration file.

You can use the **Select / Deselect All** check box to quickly check or uncheck the check boxes for all cameras. If this check box is unchecked, check it to check the check boxes for all cameras in the camera list. If it is checked, check it to uncheck the check boxes for all cameras in the camera list.

Step 4 Click the Choose File button that appears near the bottom of the Import Configuration tab and use the window that displays to navigate to and select the configuration file to import.

The configuration file name appears in the Import Configuration from Camera field.

Step 5 Click the **Import** button, which appears near the bottom of the Import Configuration tab.

After you upload a configuration file to a camera, the camera restarts automatically. When it comes back up, it has the new configuration.

Exporting Configuration Information

You can export configuration information from a camera. This process saves the configuration information of that camera to a binary file. You can then import this file to other cameras of the same model series to update those cameras with the configuration information in the file. You also can use the file as a backup so that you can restore configuration information to a camera if needed.

You export information by using the Export Configuration tab.

To export configuration information from a camera to a configuration file, follow these steps:

- **Step 1** In the Added Cameras list, click the camera from which you want to export configuration information.
- **Step 2** Take either of these actions:
 - Choose Actions > Camera Configuration > Export Configuration,.
 The Export Configuration tab displays.
 - Click the Import/Export Configuration button and then choose the Export Configuration tab.
- Step 3 (Optional) Check the Exclude Network Basic and IP Addressing Setting check box if you do not want the configuration file to contain network basic configuration information and the IP address of the camera.
- **Step 4** Click the **Export** button to save the current IP camera configuration information to a binary file.

Initialization

After you install a camera, or after you perform a restore procedure, you should make initial configuration settings. These settings include administrator and root passwords, and whether the camera can be accessed through an HTTP connection in addition to the default HTTPS (HTTP secure)

The following sections describe how to make initial configuration setting for cameras:

- Making Initial Configuration Settings for Cameras other than 8000 Series Models, page 3-21
- Making Initial Configuration Settings for 8000 Series Camera Models, page 3-22

Making Initial Configuration Settings for Cameras other than 8000 Series Models

By default, when the IP camera powers on, it attempts to obtain an IP address from a DHCP server in your network. If the camera cannot obtain an IP address through DCHP within 90 seconds, it uses a default IP address of 192.168.0.100. The default login credentials (Username/Password) are admin/admin.

You can add the camera to the Cisco IP Camera Setup Software by using these login credentials.

To make initial configuration settings for a camera, perform the following steps. You can change these configuration settings in the future, if needed.

- Step 1 In the Added Cameras list, click the camera for which you want to make initial configuration settings.

 The Initialization page displays with options for configuring administrative account log in credentials and access protocols.
- **Step 2** In the Initialization page, take these actions:
 - **a.** In the Password and Confirm Password fields of the HTTP(S) row in the Administrative Accounts area, enter a password for the camera admin user.
 - The password is case sensitive and must contain at least eight characters, which can be letters, numbers, and special characters, but no spaces. Special characters are: ! \$ () . @ ^ _ ` { } ~.
 - **b.** In the Password and Confirm Password fields of the SSH row in the Administrative Accounts area, enter a password for the camera root user.
 - The password is case sensitive and must contain at least eight characters, which can be letters, numbers, and special characters, but no spaces. Special characters are: $! \ () . @ ^_ \] \sim .$
 - c. In the Access Protocols area, check the Enable HTTP check box if you want to allow HTTP connections to the camera.
 - If you check this check box, in the HTTP Port field, enter the port that is used for HTTP connections to the camera. You can enter a value of 80 (default) or a value from 1024 through 32767.
 - **d.** In the Access Protocols area, check the **Enable HTTPS** check box if you want to allow HTTPS connections to the camera.
 - If you check this check box, in the HTTPS Port field, enter the port that is used for HTTPS connections to the camera. You can enter a value of 443 (default) or a value from 1024 through 65535.
 - e. In the Access Protocols area, check the **Enable SSH** check box if you want to allow SSH connections to the camera.
 - If you check this check box, in the SSH Port field, enter the port that is used for SSH connections to the camera. You can enter a value of 22 (default) or a value from 1024 through 65535.
 - f. Click the Save button.

The initial configuration process executes. The Initialization Status field in the camera list displays the status of the configuration process.

Making Initial Configuration Settings for 8000 Series Camera Models

By default, when the IP camera powers on, it attempts to obtain an IP address from a DHCP server in your network. If the camera cannot obtain an IP address through DCHP, an IP address is assigned using the Link-Local address scheme. The camera acquires an IP address by inserting part of its MAC address into the 169.254.x.x IP address. To do so, the camera converts the hex digits of the MAC address to decimal values and then applies them to create an IP address in the following format:

169.254.MAC:9-10.MAC:11-12

where MAC:9-10 are the 9th and 10th digits in the MAC address, and MAC:11-12 are the 11th and 12th digits.

For example, using this method, camera with a MAC address of 00-11-22-33-44-55 acquires an IP address of 169.254.68.85, given that hex 44 = 68 decimal and hex 55 = 85 decimal.

The default login credentials (Username/Password) are admin/admin. You can add the camera to the Cisco IP Camera Setup Software by using these login credentials.

To make initial configuration settings, perform the following steps. You can change these configuration settings in the future, if needed.

- Step 1 In the Added Cameras list, click the camera for which you want to make initial configuration settings.

 The Initialization paged displays with options for configuring administrative account log in credentials and access protocols.
- **Step 2** In the Initialization page, take these actions:
 - a. In the Password and Confirm Password fields of the HTTP(S) row in the Administrative Accounts area, enter a password for the camera root user.
 - The password is case sensitive and must contain at least eight characters, which can be letters, numbers, and special characters, but no spaces. Special characters are: ! \$ () . @ ^ _ ` { } ~.
 - b. In the Access Protocols area, check the Enable HTTPS check box if you want to allow HTTPS connections to the camera.
 - If you check this check box, in the HTTPS Port field, enter the port that is used for HTTPS connections to the camera. You can enter a value of 443 (default) or a value from 1024 through 65535.
 - **c.** In the Access Protocols area, check the **Enable SSH** check box if you want to allow SSH connections to the camera.
 - If you check this check box, in the SSH Port field, enter the port that is used for SSH connections to the camera. You can enter a value of 22 (default) or a value from 1024 through 65535.

Click the Save button.

The initial configuration process executes. The Initialization Status field in the camera list displays the status of the configuration process.