



# Application Manager

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The Application Manager windows let you configure and manage apps for the IP camera. Apps let you extend the functionality of a supported Cisco IP Camera. For related information, see *Cisco IP Camera Apps Reference Guide*.

The following sections describe the Application Manager windows in detail:

- [Configuration Window, page 8-1](#)
- [App License Window, page 8-2](#)
- [App Setup Window, page 8-3](#)
- [Managing Apps, page 8-5](#)



**Note**

IP camera apps can also be managed using Cisco Video Surveillance Manager Release 7.6 and higher. Use VSM to install and manage the apps on multiple cameras and to configure related items.

When camera apps are managed using VSM, you can only configure the app-specific settings through the IP camera web UI described in this guide. You must use VSM to manage licenses, install, uninstall, start or stop the apps. See *Cisco Video Surveillance Operations Manager User Guide* for more information.

If camera apps are managed from VSM and you want to enable apps management from the IP camera web UI, use the Delete All feature to remove the camera from VSM. If an IP camera is removed from VSM without being deleted, perform a factory reset of the camera to enable apps management from the IP camera web UI.

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## Configuration Window

The configuration window provides options enabling Apps on the IP camera, and for enabling audio and video for apps that support these features.

To display the Configuration window, perform the following steps:

### Procedure

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- Step 1** From the IP camera user interface, click the **Setup** link.
- Step 2** Click **Application Manager** to expand the menu.

**Step 3** From the Application Manager menu, click **Configuration**.

The Initialization window appears. If you change any options in this window, you must click the **Save** button to save the changes. If you do not click this button, changes are not retained when you exit the window. The **Save** button appears at the bottom of the window. You might need to scroll down to it.

Table 8-1 describes the options in the Configuration window.

*Table 8-1 Configuration Window Options*

Option	Description
Enable Applications	Check this check box if you want to allow apps to run on the IP camera.
<b>Video Area</b>	
Enable Video	Check this check box to enable video for installed apps that support video. Before you can enable video, Stream 2 and Analog Video must be disabled. For Stream 1, Maximum Frame Rate should be set to a value of 15 fps or less and Video Resolution should be set to a value of 1920x1080 or less, as described in the “ <a href="#">Streaming Window</a> ” section on page 4-1.
Resolution	Select the video resolution for installed apps that support video.
<b>Audio Area</b>	
Enable Audio	Check this check box to enable audio for installed apps that support audio. Before you can enable audio, Stream 2 and audio for Stream 1 must be disabled.
Sampling Frequency	<i>Display only.</i> Sampling frequency of audio from the IP Camera for installed apps that support audio (16 kHz).

## App License Window

The App License window lets you install and uninstall licenses for apps, and provides information about licenses that are installed on the IP camera.

The appropriate license must be installed on an IP camera before an app is installed on the camera. Before you can install a license, obtain a valid license from Cisco and save the license file on your local PC or on a PC that you can access from your local PC.

To display the App License window, perform the following steps:

### Procedure

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- Step 1** From the IP camera user interface, click the **Setup** link.
- Step 2** Click **Application Manager** to expand the menu.
- Step 3** From the Application Manager menu, click **App License**.
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Table 8-2 describes the options in the App License window.

Table 8-2 App License Window Options

Option	Description
<b>License Installation Area</b>	
License File	To install a license file, use the <b>Browse</b> button to navigate to the file, select the file to enter it in the License File field, and then click <b>Install License</b>
<b>Installed License List Area</b>	
License list	Provides this information for each license that is installed on the IP camera: <ul style="list-style-type: none"> <li>• License Type—Name of the license</li> <li>• Total—Number of corresponding license types that are currently installed</li> <li>• Used—Number of corresponding license types that are in use</li> <li>• Free—Number of corresponding license types that are available</li> </ul>
<b>Uninstall License</b> button	To remove all instances of a license, click the radio button that corresponds to the license, click <b>Uninstall License</b> , and then click <b>OK</b> in the confirmation dialog box

## App Setup Window

The App Setup window lets you install, uninstall, configure, start, and stop apps, and perform related operations. You can also export the application configuration for use on another camera, or import the configuration from a camera.

The appropriate license must be installed on an IP camera before you install the app (see the “[App License Window](#)” section on page 8-2).

Some operations that you perform in the App Setup window can take several minutes to complete. Do not turn off or restart the IP camera while an operation is in progress.

To display the App Setup window, perform the following steps:

### Procedure

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- Step 1** From the IP camera user interface, click the **Setup** link.
  - Step 2** Click **Application Manager** to expand the menu.
  - Step 3** From the Application Manager menu, click **App Setup**.
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Table 8-3 describes the options in the App Setup window.

Table 8-3 App License Window Options

Option	Description
<b>Application Installation Area</b>	
Application package	Name of the application to install.

Table 8-3 App License Window Options (continued)

Option	Description
Browse button	Click to display a window that you can use to navigate to and choose the application to install.
Install button	Click to install the application that is specified in the Application package field.
<b>Installed Application List Area</b>	
Application list	Provides this information for each app that is installed on the IP camera: <ul style="list-style-type: none"> <li>• Select—Click the radio button that corresponds to an app to start, stop, configure, or uninstall the app</li> <li>• Application—Name of the app</li> <li>• Version—Version of the app</li> <li>• Vendor—Provider of the app</li> <li>• Status—Operating status of the app (Running or Stopped)</li> <li>• Start on Boot?—To cause an app to run automatically each time the IP camera restarts, click the radio button for the app, check this check box, and then click <b>Run</b></li> <li>• Installed On—Date and time that the app was installed on the IP camera</li> <li>• Started On—Date and time that a running app was last started</li> <li>• Package Detail—Name of the app package that was installed</li> </ul>
<b>Run</b> button	To run an app, click the radio button in the Select column that corresponds to the app, then click <b>Run</b> .  Depending on the complexity of an app, you may be able to run multiple apps simultaneously on an IP camera, but you cannot run two audio apps or two video apps at the same time.
<b>Stop</b> button	To stop an app that is running, click the radio button in the Select column that corresponds to the app, click <b>Stop</b> , and then click <b>OK</b> in the confirmation dialog box.
<b>Configure</b> button	To configure an app, click the radio button in the Select column that corresponds to the app, then click <b>Configure</b> .  The configuration window for the app appears. The options in this window depend on the app. For detailed information, see <i>Cisco IP Camera Apps Reference Guide</i> .  If you configure an app that is running, you must stop and then restart the app before the changes take effect.
<b>Uninstall</b> button	To permanently remove an app from the IP camera, click the radio button in the Select column that corresponds to the app, <b>Uninstall</b> , and then click <b>OK</b> in the confirmation dialog box.  You must stop a running app before you can uninstall it.
<b>Import</b> button	To import an application configuration, use the <b>Browse</b> button to navigate to the file, select the file to enter it in the Application Config field, and then click <b>Import</b> button.

Table 8-3 App License Window Options (continued)

Option	Description
<b>Export</b> button	<p>Click the <b>Export</b> button to save the configuration file of currently selected application.</p> <p>When you click the <b>Export</b> button, the File Download window appears. Use this window to save the configuration file.</p> <p>You can then import this configuration information to other IP camera where the same application is installed. This feature is useful for creating a backup of the application configuration and for configuring same application on other IP camera.</p>
<b>Maintenance Area</b>	
<b>Restore</b> button	<p>Click this button to reset all app manager settings to their factory default values and permanently remove all apps from the IP camera.</p> <p>This button should be used only if the IP camera becomes unstable after an app is installed or run.</p>

## Managing Apps

The following sections provide detailed instructions for managing apps on an IP camera:

- [Installing a License for an App, page 8-5](#)
- [Installing an App, page 8-6](#)
- [Configuring an App, page 8-6](#)
- [Configuring Event Triggering, page 8-7](#)
- [Running an App, page 8-7](#)
- [Stopping an App, page 8-8](#)
- [Uninstalling an App, page 8-8](#)
- [Restoring the Application Manager, page 8-8](#)

## Installing a License for an App

The appropriate license must be installed on a camera before the corresponding app package is installed on the camera.

To install a license on an IP camera, follow these steps:

### Procedure

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- Step 1** Obtain a valid app license from Cisco for the app and save the license file on your local PC or on a PC that you can access from your local PC.
  - Step 2** From the IP camera user interface, click the **Setup** link, click **Application Manager** to expand the menu, then choose **App License**.
  - Step 3** Click **Browse** next to the License file field and navigate to the license file that you saved.

- Step 4** Select the license file and click **Install License**.
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## Installing an App

Before you can run an app on an IP camera, the app must be installed on the IP camera. To install an app, perform the following steps.

### Before You Begin

Install the appropriate license for the app on the IP camera as described in the [“Installing a License for an App”](#) section on page 8-5.

If you are installing an app cpk file that is 2 Mb or larger from the camera web UI or from VSM, stop any video or audio app that is running on the camera. Otherwise, the installation fails.

### Procedure

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- Step 1** From the IP camera user interface, click the **Setup** link, click **Application Manager** to expand the menu, then choose **App Setup**.

If you have not yet enabled app support for the camera, a dialog box appears that says “Application support is not enabled on this camera. You are redirected to Configuration window where you can enable application support on camera.”

- Step 2** If the Application support dialog box appears, take these actions:

- a. Click **OK** to display the Configuration window.
- b. In the Configuration window, check the **Enable Application** check box.
- c. (Optional) Check the **Enable Video** check box and choose a resolution from the Resolution drop-down list if you will run applications that use the video features of the camera.
- d. (Optional) Check the **Enable Audio** check box if you will run applications that use the audio features of the camera.
- e. Click **Save**.
- f. Choose **App Setup** from the Application Manager drawer.

- Step 3** Click **Browse** in the Application Installation area and navigate to the app package that you want to install.

The app file must have the extension .cpk.

- Step 4** Select the app file and click **Open**.

- Step 5** Click the **Install** button in the Application Installation area.

A dialog box informs you when the application is installed.

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## Configuring an App

After you install an app on an IP camera, you must configure its operation.

To configure the operation of an app on an IP camera follow these steps:

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**Procedure**

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- Step 1** From the IP camera user interface, click the **Setup** link, click **Application Manager** to expand the menu, then click **App Setup**.
- Step 2** Click the radio button for the app that you want to configure.
- Step 3** Click the **Configure** button.
- Step 4** In the window that appears, make configuration settings as needed and click the **Save** button.
- For detailed information about configuration settings for a particular app, see *Cisco IP Camera Apps Reference Guide*.
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## Configuring Event Triggering

This section describes how to enable event triggering on an IP camera, which allows apps that support triggers to cause the camera to take certain actions when an event occurs.

To enable the triggering of actions by apps that support triggers, follow these steps:

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- Step 1** From the IP camera user interface, click the **Setup** link, click **Feature Setup** to expand the menu, then choose **Event**.
- Step 2** In the Event Notification window, take these actions:
- Check the **App** check box in the Event Triggering area.
  - Check one or more of the Actions check boxes for the App option in the Event Triggering area to designate the action that the IP camera takes when it receives an event trigger.
  - Click **Set All** in the Event Scheduling area.
  - Click **Save** at the bottom of the window.
- Step 3** From the Setup menu in the web-based interface of the camera, click **Log** to expand the menu, then choose **Setup**.
- Step 4** In the Log Setup window, take these actions:
- Check the **Enable Syslog** check box in the Syslog Settings area.
  - Enter the IP address of the server on which to log events.
  - Click **Save** at the bottom of the window.
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## Running an App

To run an app on an IP camera, follow these steps:

**Procedure**

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- Step 1** From the IP camera user interface, click the **Setup** link, click **Application Manager** to expand the menu, then click **App Setup**.

- Step 2** Click the radio button for the app that you want to run.
  - Step 3** Click the **Run** button.
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## Stopping an App

To stop an app that is running on an IP camera, follow these steps:

### Procedure

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- Step 1** From the IP camera user interface, click the **Setup** link, click **Application Manager** to expand the menu, then click **App Setup**.
  - Step 2** Click the radio button for the app that you want to stop.
  - Step 3** Click the **Stop** button.
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## Uninstalling an App

To uninstall an app from an IP camera, perform the following steps.

If the app is running, you must first stop it as described in the [“Stopping an App” section on page 8-8](#).

### Procedure

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- Step 1** From the IP camera user interface, click the **Setup** link, click **Application Manager** to expand the menu, then click **App Setup**.
  - Step 2** Click the radio button for the app that you want to uninstall.
  - Step 3** Click the **Uninstall** button.
  - Step 4** Click **OK** in the confirmation window that appears.  
If you do not want to uninstall the app, click **Cancel**.
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## Restoring the Application Manager

When you restore the application manager to the factory default condition, all apps that you uploaded to the IP camera are removed from the camera.

This feature should be used only if the IP camera becomes unstable after an app is installed or run.

To restore the application manager on an IP camera, follow these steps:



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**Procedure**

- Step 1** From the IP camera user interface, click the **Setup** link, click **Application Manager** to expand the menu, then click **App Setup**.
- Step 2** Click the **Restore** button in the Maintenance area.
- Step 3** Click **OK** in the confirmation window that appears.  
If you do not want to restore the application manager, click **Cancel**.
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