



CHAPTER 8

Using the VSOM Operator Pages

The VSOM Operator Pages provide access to features that video surveillance operators can use to view, record, search, and control video. This chapter describes the Operator Pages in detail. It includes these topics:

- [Understanding the Operator Window, page 8-2](#)
- [Understanding and Defining the Default View, page 8-5](#)
- [Setting Operator Preferences, page 8-7](#)
- [Using Predefined Views, page 8-7](#)
- [Viewing Live and Archived Video, page 8-12](#)
- [Searching a Thumbnail Summary of Video Archives, page 8-30](#)
- [Understanding the Toolbars, page 8-36](#)
- [Using the Playback Controls, page 8-38](#)
- [Using the Camera PTZ Controls, page 8-53](#)
- [Viewing Video Events, page 8-56](#)
- [Health Dashboard, page 8-61](#)

Understanding the Operator Window

The Operator window allows operators to view live and archived video, search for video events and motion, and control pan/tilt/zoom (PTZ) cameras. To access the Operator window, take either of these actions:

- Start VSOM and display the Operator pages, as described in the [“Accessing VSOM” section on page 1-5](#).
- If you are viewing a VSOM Administrator page, click the **Ops** link, which appears near the top left of the page.

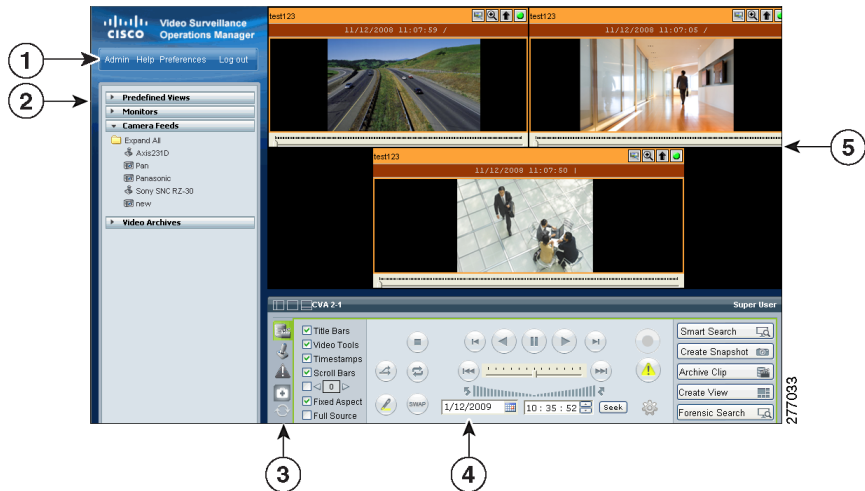
If you have defined a default view, this view appears when you access the Operator page. See the [“Understanding and Defining the Default View” section on page 8-5](#) for more information.

**Tip**






You can mouse over most icons in the Operator pages to see a short description.

[Figure 8-1](#) shows the main elements of the Operator page.

Figure 8-1 Operator Window Overview



- 1 Control links. Includes these links:
 - Admin**—Opens the VSM Administrator pages. When you are viewing an Administrator page, this link changes to Ops. Clicking the Ops link displays the Operator pages.
 - Note** The Admin link appears only if you are assigned the Administrator role. See [Chapter 7, “Managing Accounts”](#) for more information.
 - Help**—Displays a new window with access to information about VSM and its features.
 - Preferences**—Displays your user name, and provides access to options for entering your name and changing your password. Also provides options for your default view and your PTZ and joystick settings.
 - Log out**—Logs you out of VSM.

2	<p>Side menu. Includes these drawers:</p> <ul style="list-style-type: none"> • Predefined View—Choose a predefined view to display a set of video panes from live or archived sources. See the “Using Predefined Views” section on page 8-7 for more information. • Monitors—Allows you to transfer video playing in a video pane to a physical monitor, or to view the video from a physical monitor in a selected pane. See Sending Video to a Monitor or Viewing Video from a Monitor, page 8-20 for more information. • Camera Feeds—Choose a feed to view live video from a camera. • Video Archives—Choose an archive to view recorded video. Video archives mirror the cameras listed under Camera Feeds.
3	<p>Toolbar icons. Click an icon to display any of these toolbars:</p> <ul style="list-style-type: none"> •  Feed/Archive Controls—See the “Understanding the Toolbars” section on page 8-36. •  PTZ Camera Controls—See the “Using the Camera PTZ Controls” section on page 8-53. •  Events—See the “Viewing Video Events” section on page 8-56. •  System Health—See the “Using the Health Dashboard” section on page 6-32. •  Refresh—Refreshes the items in the left side menu, including predefined views, monitors, camera feeds and video archives. The icon appears highlighted when any of the lists have changed. For example, it appears highlighted when you modify a view or save a video clip.
4	<p>Toolbars. Controls and options for the selected toolbar. Click an icon to display the controls (see row 3 in this table)</p>
5	<p>Video panes. Displays video from the selected live or archive sources. Panes display according to the selected predefined view. See the “Using Predefined Views” section on page 8-7 and “Viewing Live and Archived Video” section on page 8-12.</p>

Understanding and Defining the Default View

The default view defines the video pane layout that appears when you log in to VSOM. This default view can display video from one or more live or archived sources, and is selected from the list of predefined views (see the [“Using Predefined Views” section on page 8-7](#) to create views).

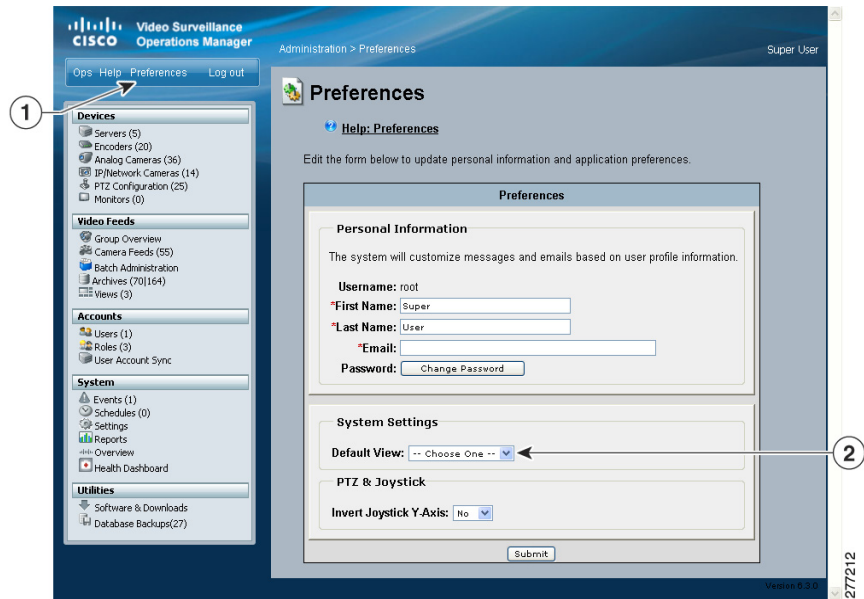
**Tip**

The Administrator pages can also be assigned as the default view.

To assign a default view for your account, follow these steps:

Procedure

-
- Step 1** Click the **Preferences** button (see [Figure 8-2](#)).
- Step 2** Choose a **Default View** (under System Settings).
-

Figure 8-2 Preferences

- | | |
|---|--------------------|
| 1 | Preferences button |
| 2 | Default View menu |

Administrators can assign a default view in the Users configuration page. See the [“Adding a User” section on page 7-8](#) for more information.

**Note**

If a default view is not configured, the following message appears: “The application has not been configured to display a default operator view.” Click the links below this message to continue to the Administration pages or to the Preferences page to define a default view.

Setting Operator Preferences

Click the **Preferences** button shown in [Figure 8-2](#), and choose the following options:

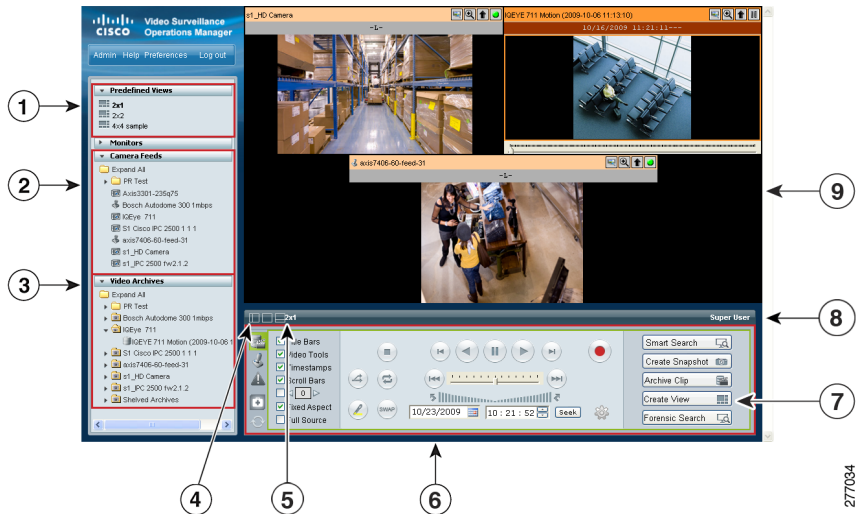
- Personal Information
 - Enter the First Name and Last Name that appears in the upper right of the window for the current account.
 - Enter the Email address that receives system messages for the current account.
 - Click the **Change Password** button to enter a new password.
- System Settings:
 - Select the Default View that will appear when you first log in. See the [“Understanding and Defining the Default View”](#) section on page 8-5.
- PTZ & JoyStick
 - Select **No** to accept the default Joystick y axis.
 - Select **Yes** to invert the joystick y-axis.

Using Predefined Views

Predefined Views provide an optional way to save and display one or more video panes from live or archived sources. For example, a predefined view might display four video panes, each with video from a different live or archived source. Another view might display video from three different sources.

In [Figure 8-3](#), the predefined views are listed in the top left. To choose a predefined view, click the arrow next to **Predefined Views** and choose a view name. The icon for each view represents the number of panes in the view. When selected, the video panes on the right display the live and archived video for that view. All available video sources are listed under **Camera Feeds** (live video) and **Video Archives** (saved video).

Figure 8-3 Predefined Views



1	Predefined Views	6	Video control toolbar
2	Camera Feeds (live video)	7	Create View button
3	Video Archives (saved video)	8	User name
4	Collapse/Expand the left side menu and bottom Toolbar	9	Video panes
5	Selected predefined view		

To change the video that a pane displays, click a pane to make it active and then choose a new video source from the **Camera Feed** or **Video Archives** list.

See the [“Understanding the Toolbars”](#) section on page 8-36 for information about controlling playback, searching for video, and viewing information about the video source.

Administrator-Defined Views

Administrators can create views that rotate video from multiple sources or are available to specific user roles. For more information,

- See the [“Understanding Rotating Views”](#) section on page 8-9

- See the “[Managing Predefined Views](#)” section on page 5-36 for information about creating views.

Operator-Defined Views

Operators can create views that are available to other users with the same role as the operator. See the “[Creating Predefined Views](#)” section on page 8-10 for instructions.



Note

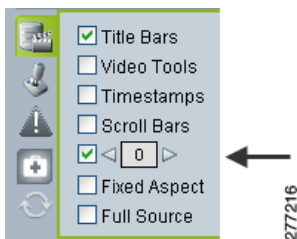
Only an administrator can delete views. See the “[Managing Predefined Views](#)” section on page 5-36.

Understanding Rotating Views

Administrators can create predefined views that rotate live video from a pool of cameras. Rotating video cycles through a series of views. For example, a view might include four video panes that rotate video from a pool of 10 cameras. Administrators can also *fix* specific panes so the pane only shows the video from a single live source (and is not included in the rotation).

An optional *dwell time* also can be configured to define how long the video from a source appears before video from the next source displays. You also can modify the dwell time by checking the dwell time check box and entering the number of seconds. See [Figure 8-4](#).

Figure 8-4 **Setting Dwell Time**



See the “[Understanding View Option Check Boxes](#)” section on page 8-46 for more information.

**Tip**

When a video pane is active, the video source remains fixed and does not rotate to the next video source. To begin rotating the video again, deactivate the pane by clicking on another pane or on the black background.

**Note**

Only live camera feeds can be included in rotating views.

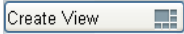

Creating Predefined Views

Predefined views can be created by either an administrator or by an operator.

- Operators can define views if they have permission to manage views. Operator-created views can be used by other operators with the same role as the operator who created it. For more information about roles and permissions, see [Chapter 7, “Managing Accounts.”](#)
- Administrators can assign access rights, define the default view, and create rotating views (see the [“Understanding Rotating Views”](#) section on page 8-9). To create administrator-defined views, see the [“Managing Predefined Views”](#) section on page 5-36.

To create an operator defined view, follow these steps:

Procedure

- Step 1** Start VSOM and display the Operator pages, as described in the [“Accessing VSOM”](#) section on page 1-5.
If you are already viewing the VSOM Administrator pages, click the **Ops** link near the top left of the VSOM window.
- Step 2** Click the **Create View** button  in the lower right corner of the Operator window (see [Figure 8-3](#) on page 8-8).
Note Verify that the **Display Feed/Archive Controls**  toolbar is selected. Otherwise the **Create View** button does not appear.
- Step 3** Choose a layout from the pop-up display that corresponds to the number and arrangement of panes required for the view.

The selected pane layout appears in the window above the pop-up.

- Step 4** Choose a video source for each pane in the layout:
- a. Click a video pane to select it. The pane is shown with a green border.
 - b. Choose a video source from either the **Camera Feeds** or **Video Archives** lists on the left.

Step 5 Enter the view name in the pop-up display.

Step 6 Click the **Save View** button.

The name appears in the **Predefined Views** list.

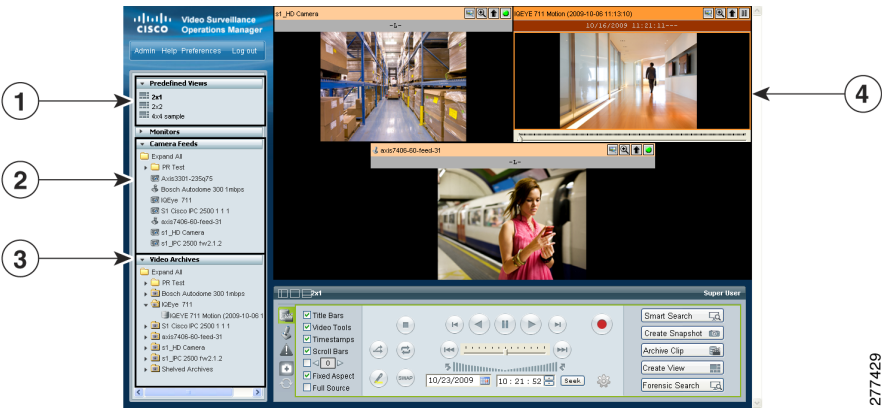


Note Only an administrator can delete views. See the [“Managing Predefined Views” section on page 5-36](#).

Viewing Live and Archived Video

The sources for live and archived video are listed under **Camera Feeds** and **Video Archives** in the side menu, as shown in [Figure 8-5](#). **Camera Feeds** lists cameras individually or organized in groups (represented by folders). Video archives are organized according to the corresponding camera feed.

Figure 8-5 Choosing Video Feeds or Archives



1	Predefined Views	3	Video Archives
2	Camera Feeds	4	Video panes

To view live or archived video, click a video pane to highlight it, expand the video feed or archive folders to see the cameras or archives included in that group, and then click the feed or archive. The video plays in the selected pane.

This section includes the following information:

- [Viewing Live Video, page 8-13](#)
- [Understanding Video Archives, page 8-16](#)
- [Viewing Archived Video, page 8-19](#)
- [Sending Video to a Monitor or Viewing Video from a Monitor, page 8-20](#)
- [Synchronizing the Playback Between Multiple Video Panes, page 8-21](#)

- [Switching Between an Archive and Live Video, page 8-24](#)
- [Creating an Archive Clip, page 8-24](#)
- [Recording Live Video, page 8-28](#)
- [Creating a Snapshot, page 8-30](#)

Viewing Live Video

Select a video pane and then click a Camera Feed to display live video, as shown in [Figure 8-6](#). You can also display additional information about the camera feed, or use DVR controls to stop and rewind live video.

**Note**

To enable the DVR controls for viewing live video, enable the Use VMR and USE DVR options in the administrator Settings panel. For instructions, see the [“Configuring System Settings” section on page 6-25](#).

Figure 8-6 Viewing Live Video Feeds

1	Predefined Views	4	DVR controls
2	Camera Feeds	5	Timestamp ("L" for live video)
3	View check boxes	6	Title bar showing camera source

To view live video, follow these steps:

Procedure

Step 1 Start VSOM and display the Operator pages, as described in the [“Accessing VSOM”](#) section on page 1-5.

If you are already viewing the VSOM Administrator pages, click the **Ops** link near the top left of the VSOM window.

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- Step 2** Choose a predefined view (see the [“Creating Predefined Views”](#) section on page 8-10).
- Step 3** Click a video pane to make it active. The active pane appears with a green border. See the [“Understanding Video Pane Border Colors”](#) section on page 8-45 for more information.

- Step 4** Expand the **Camera Feeds** to display a list of live camera feeds.

The camera type is represented by the following icons:



—Analog camera



—IP camera



—Camera with PTZ controls

- Step 5** Choose a camera.

The video from the camera appears in the selected pane.

Tip To control video playback, adjust the quality of a live video feed, or display information about the video, see the [“Understanding the Toolbars”](#) section on page 8-36.



Tip

To record a video clip from a live feed, see the [“Recording Live Video”](#) section on page 8-28.



Note

For information about configuring cameras and camera groups, see [Chapter 3](#), [“Managing Devices.”](#)

Understanding Video Archives


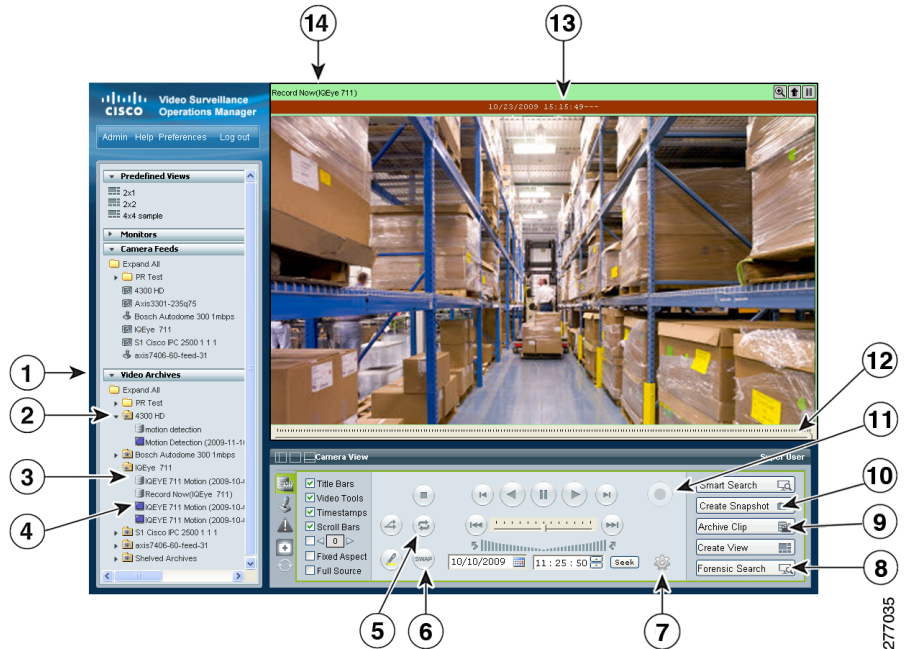
Video archives contain recorded video. Each archive is listed under **Video Archives** in the left side menu next to an archive icon , as shown in [Figure 8-7](#).

Figure 8-7 Video Archives



1	Video Archives	8	Forensic Search button
2	Cameras and camera groups	9	Archive Clip button
3	Archived Video	10	Create Snapshot button
4	Archive clip	11	Record Now button
5	Loop Archive button	12	Scroll Bar for archive video
6	Swap Live & Archive button	13	Timestamp
7	Player Control/Settings	14	Camera feed

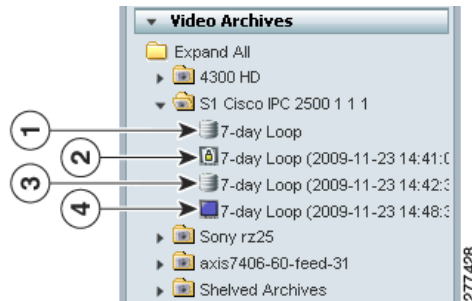
Video Archive Types and Icons









Archives are organized according to their corresponding camera feed and are configured by an administrator to record video in the following ways:

- As a one-time event. For example, from 6 p.m. to 8 p.m. (18:00 to 20:00) on a specific date.
- On a recurring schedule. For example, from 8 a.m to 10 a.m (08:00 to 10:00) every Tuesday.
- As a continuous loop. Loop archives include video from a set number of hours, days, weeks, months or years. Video that is older than the set time period is overwritten with new video. For example, a loop archive might include video from the past three hours. Video older than that three hours is automatically overwritten.

See the [“Managing Archives” section on page 5-26](#) for information about configuring video archives.

In addition, you can create downloadable archive clips in a variety of file formats. These archive clips can contain the entire archive, or a subset of the archive video. Archive clips saved on the VSMS host server appear in the **Video Archives** list with one of the icons shown in [Figure 8-8](#).

Figure 8-8 Video Archive Types and Icons

1.		<p>Video Archive: an archive defined by an administrator that can be viewed using the Operator pages. For example:</p> <p> 7-day Loop.</p> <p>The recording type can include “motion” if the video is based on a motion event, or “Record Now” if the video is created using the Record Now feature.</p>
2.		<p>BWX Secure Video Clip. When an archive clip is saved in BWX format, it is displayed with a secure icon and the clip date and time range. For example:</p> <p> 7-day Loop (2009-11-23 14:41:00 2009-11-23 14:42:00)</p>
3.		<p>Streamable Archive Clip. When an archive clip is saved as Streamable, the clip name includes the date and time range for the included video. For example:</p> <p> 7-day Loop (2009-11-23 14:41:00 2009-11-23 14:42:00)</p>
4.		<p>BWM Archive Clip. When an archive clip is saved in BWM format, it is displayed with a monitor icon and the clip date and time range. For example:</p> <p> 7-day Loop (2009-11-23 14:41:00 2009-11-23 14:42:00)</p>


**Tip**

See the [“Creating an Archive Clip”](#) section on page 8-24 for more information.


Viewing Archived Video

To view archived video, follow these steps:

Procedure

-
- Step 1** Start VSOM and display the Operator pages, as described in the [“Accessing VSOM”](#) section on page 1-5.
- If you are already viewing the VSOM Administrator pages, click the **Ops** link near the top left of the VSOM window.
- Step 2** Select the video pane in which you want to view the video.
- Step 3** Expand the **Video Archives** in the left side menu (see [Figure 8-8](#)).
- The archive includes an entry for each camera that appears in the **Camera Feeds** list.
- Step 4** Expand the archive folder to display the available archives for that camera.
- See [Figure 8-8](#) for a description of the archive types and icons.
- Step 5** Click the name of the archived video clip that you want to view.
- If the archive is a streamable archive with the  icon, the video plays in the selected pane. To control the video playback, see the [“Switching Between an Archive and Live Video”](#) section on page 8-24.



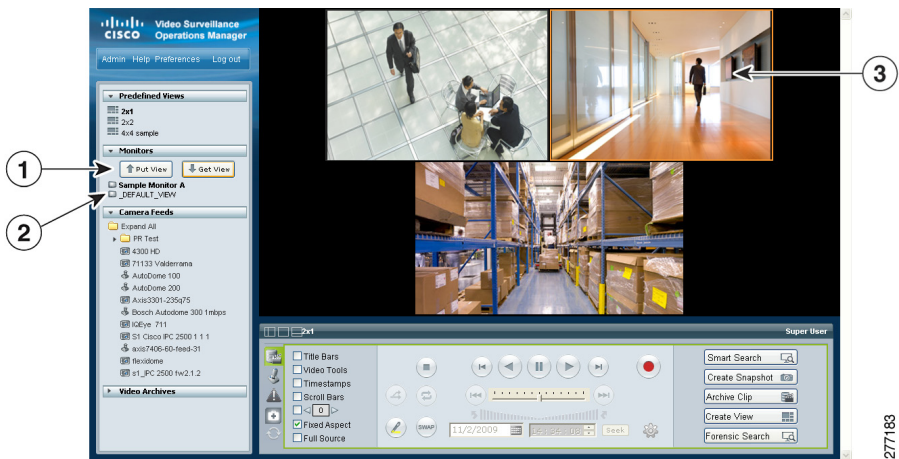
Tip To play the video as a continuous loop, click the **Loop Archive** button . The video loops to the beginning when the end is reached.

- If the archive was saved in a downloadable format (BWV or BMX), you are prompted to save the file. See the [“Creating an Archive Clip”](#) section on page 8-24 for more information.
-

Sending Video to a Monitor or Viewing Video from a Monitor

The Monitors feature allows you to transfer video that is playing in a video pane to a physical monitor, or to view the video from a physical monitor in a selected pane. [Figure 8-9](#) illustrates this feature.

Figure 8-9 Monitors



1	Get View and Put View buttons
2	Available monitors. The selected monitor is shown in bold type.
3	Selected video pane.

Before You Begin

Physical monitors must be installed and configured on the system, as described in the [“Managing Monitors” section on page 3-46](#). After they are configured, the physical monitors are listed under **Monitors**.

Procedure

To send video to a monitor or view video from a monitor, follow these steps:

-
- Step 1** Start VSOM and display the Operator pages, as described in the [“Accessing VSOM” section on page 1-5](#).
- If you are already viewing the VSOM Administrator pages, click the **Ops** link near the top left of the VSOM window.
- Step 2** Choose a video pane.
- Step 3** Expand the **Monitors** list (see [Figure 8-9](#)).
- Step 4** Click the name of the monitor to which to send video or from which to view video. The monitor name changes to bold type.
- Step 5** Take either of these actions:
- Click the **Put View** button at the top of the monitor list to send the video from the selected pane in the Operator page to the selected monitor.
 - Click the **Get View** button to display the video from a the selected monitor in the selected Operator page pane.
-

Synchronizing the Playback Between Multiple Video Panes


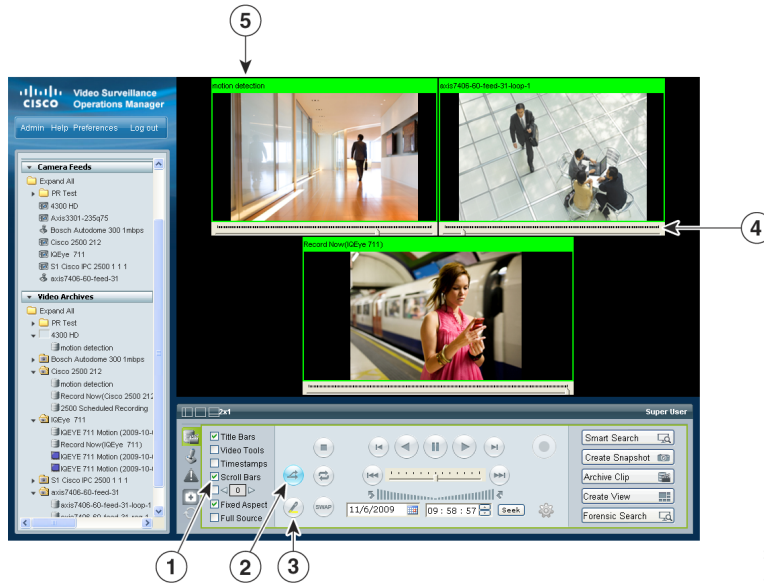
You can play multiple video panes that are synchronized to the same time by choosing the panes and clicking the **Synchronize** button , as shown in [Figure 8-10](#).

Figure 8-10 Synchronizing Video Playback

1	Scroll bar check box	4	Synchronized video panes
2	Synchronize button	5	Master video pane
3	Highlight All button		

The following notes apply to synchronized video:

- Synchronization is supported for archived video only.
- Synchronization is performed only if the time in the selected panes overlap. If the time for a video pane does not overlap with the master pane, the pane is excluded from synchronization
- Synchronization is not supported when archives are stored on multiple VSMS hosts.
- When you move the scroll bar for a video pane that is synchronized, that pane becomes the new synchronization master pane. The other synchronized panes play video according to the new master pane.

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- If the seek controls are used to search video in the master pane, the other synchronized panes pause until the seek completes, then continue to display video that is synchronized with the new master pane time. See the [“Using the Playback Controls” section on page 8-41](#) for information about the seek feature.


To play multiple video panes synchronized to the same time, follow these steps:

Procedure

Step 1 Control-click to select multiple video panes for synchronization.

The selected panes are displayed with a light green border.



Tip Click the **Highlight All**  button to highlight all panes in the view.

Step 2 Click the **Synchronize** button .

The video playback is synchronized to the upper-leftmost pane, called the *master* pane. All synchronized panes appear with a bright green border and the synchronize button turns bright blue, as shown in [Figure 8-10](#).

If the time for a video pane does not overlap with the master pane, the pane is excluded from synchronization and displayed with an border color other than green.

Step 3 (Optional) To select a specific synchronization time, move the scroll bar indicator for the master pane:

When you move the scroll bar for a video pane that is synchronized, that pane becomes the new synchronization master pane. The other synchronized panes play video according to the new master pane.


- a. Check the scroll bar check box to turn the scroll bars on (see [Figure 8-10](#)).
 - b. Click and drag the scroll bar in a pane to choose a playback time.
-

Switching Between an Archive and Live Video

If an archive loop is configured for a camera, you can quickly switch between the archive and live video for that camera shown. If no archive loop is configured for that camera, then the most recent non-loop archive is displayed.

To switch between archive and live video, follow these steps:

Procedure

-
- Step 1** Start the archive playback as described in the [“Viewing Live and Archived Video” section on page 8-12](#).
- Step 2** Use the **Swap** button  to toggle the video display between the archive video and live video for that camera.

The status of the video is displayed in the timestamp. To turn on the timestamp bar above a video pane, choose the pane and check the **Timestamp** check box. See the [“Understanding View Option Check Boxes” section on page 8-46](#) for more information.

Archive video displays the date and time in the timestamp bar. Live video displays an “L”.

Creating an Archive Clip

An Archive Clip is a video file created from an existing archive that contain the entire archive, or a subset of the archive video. You can save downloadable archive clips in a variety of file formats, or save them on the VSMS host server in the **Video Archives** list. See the [“Understanding Video Archives” section on page 8-16](#) for more information.



Tip

To create a clip archive from live video, see the [“Recording Live Video” section on page 8-28](#). To create a video clip from an event, see the [“Creating Event Video Clips” section on page 8-60](#).

To create, save, and view an archive clip, follow these steps:

Procedure


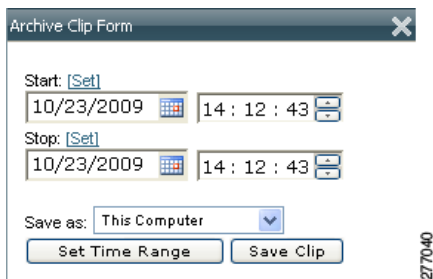
- Step 1** Choose an archive as described in the [“Viewing Live and Archived Video” section on page 8-12](#).
- Step 2** Click the **Archive Clip** button  in the lower right corner of the screen.
- Step 3** In the **Archive Clip Form** pop-up window, take these actions:
 - a. Click the **Set Time Range** button. This button enters the archive start date and time and end date and time in the time fields.
 - a. Enter the start date and time and the end date and time for the clip, as shown in [Figure 8-11](#).

Figure 8-11 Start and End Date and Time for a Clip




Tip


You can move the scroll bar to the desired location in the video, and then click **Set** to enter the selected date and time.

Click **Set Time Range** to automatically enter the full range of the archive.

When the archive includes video from both daylight savings (DS) and standard time (ST), the Archive Clip Form includes DS and ST buttons in front of the Start and Stop time.







- Step 4** From the **Save as** drop-down list, choose a file format option for the clip:
- Server-side—Choose **BWM**, **BWX**, or **Streamable** to save the clip in a file format that can be stored on the VSMS host server.
See the “[Video Archive Types and Icons](#)” section on page 8-17 for more information.
 - This Computer—Choose the **CVA**, **AVI/MP2**, or **WMV** file formats under **This Computer** to save the file to a local or networked computer.
- Step 5** Click the **Save Clip** button and take one of these actions:
- If you chose a file format for **This Computer**, choose a location for the file on a local or network computer.
 - If you chose the **WMV** format, select a profile for the clip and then enter a file name.
 - If you chose the **BWX** format you are prompted to enter an alphanumeric password from 6 to 64 characters. For example: `ci0sCO3`. This password must be entered to view the clip.
- Step 6** Wait for the clip to be saved.
While the clip is being saved, the video pane border turns yellow and the title bar displays a caution icon .
- Step 7** Click the **X** icon to close the **Archive Clip Form** pop-up window.
- Step 8** To view the clip, do one of the following:

Server-side Clips

- a. Click the **Refresh** icon  to update the **Video Archives** list.

The new archive clip appears in the **Video Archives** list under the source clip. [Table 8-1](#) shows how to identify the clip type.

Table 8-1 Identifying Archive Clips

	<p>BWX Secure Video Clip. When an archive clip is saved in BWX format, it is displayed with a secure icon and the clip date and time range. For example:</p> <p> 7-day Loop (2009-11-23 14:41:00 2009-11-23 14:42:00)</p>
	<p>BWM Archive Clip. When an archive clip is saved in BWM format, it is displayed with a monitor icon and the clip date and time range. For example:</p> <p> 7-day Loop (2009-11-23 14:41:00 2009-11-23 14:42:00)</p>
	<p>Streamable Archive Clip. When an archive clip is saved as Streamable, the clip name includes the date and time range for the included video. For example:</p> <p> 7-day Loop (2009-11-23 14:41:00 2009-11-23 14:42:00)</p>

- b. Click the name of the clip and choose a location for the file on a local or network computer.



Note Streamable clips are viewed in VSOM and are not downloaded. Click the streamable archive name to begin playback in VSOM.

- c. Locate the video clip on your local or network computer.
- d. Double-click the file to view the clip using the Cisco ReView Player video client.



Note If the clip is in BWX secure format, enter the password for the clip when choosing to view it?.


This Computer

- a. Locate the video clip on your local or network computer.
- b. Double-click the file to view the clip using the Cisco ReView Player video client.

**Note**

- To install the video client, go to the **Software & Downloads** panel in the Administrator pages click the **VSOM Video Client** link, and follow the installation instructions. See the [“Managing Software and Downloads” section on page 4-2](#) for more information.
- CVA files with mixed media types may briefly display *No data for current time period* until each video stream is fully synchronized. Playback continues normally when synchronization is complete.

Recording Live Video

To record the live video being played in the video panes, click the **Record Now**  button. Video is recorded for all currently displayed live video panes. The video panes do not need to be selected.

The button turns blue while recording is in progress. Recording stops automatically after the specified recording length.

Recorded video appears in the video archive under the camera feed folder. The name of the archive is:

`Record_Now camera feed name`

See the [“Viewing Archived Video” section on page 8-19](#) for more information.

**Note**

- Only live video currently being viewed is recorded. Archive video and blank panes are not recorded.
- The **Record Now** button is active only for live video feeds. To create a clip from archived video, see the [“Creating an Archive Clip” section on page 8-24](#).
- The **Record Now** button is enabled by default. To change the default recording time, or to disable the feature, go to the administrator Settings panel and chose the time from the **Max Record Now Length** drop-down list. (For related information about the Settings pane, see the [“Configuring System Settings” section on page 6-25](#).)

- You can also enable events for Record Now. See the [“About Events” section on page 6-1](#).

Defining the Recording Length

To change the default recording time, go to the administrator Settings panel and chose the time from the **Max Record Now Length** drop-down list. (For related information about the Settings pane, see the [“Configuring System Settings” section on page 6-25](#).)

To specify the time length for the current recording session, follow these steps:


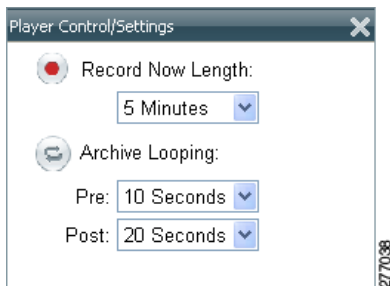
-
- Step 1** Click the **Player Control/Settings** button  before you click the **Record Now** button.
- Step 2** In the Player Control/Settings pop-up window, choose the desired record length from the Record Now Length drop-down list, as shown in [Figure 8-12](#).

Figure 8-12 *Choosing a Record Length*



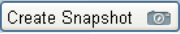
- Step 3** Click the **X** icon to close the window.
-

Creating a Snapshot

A snapshot is a still image that you can capture from live or archived video. You can save a snapshot if a folder that you specify and in a variety of formats.

To create a snapshot, follow these steps:

Procedure




-
- Step 1** Choose the camera feed or video archive as described in the [“Viewing Live and Archived Video”](#) section on page 8-12.
 - Step 2** Click the **Create Snapshot**  button in the lower right corner of the screen (see [Figure 8-7](#) on page 8-16).
 - Step 3** In the **Save As** window, enter a file name, choose the preferred file type, and choose a location for the file.
 - Step 4** Click the **Save** button.
-

Searching a Thumbnail Summary of Video Archives

Use the **Forensic Search** feature to create a thumbnail summary of a video archive. Use the thumbnails to locate specific scenes or events in the archive. Once located, you can play the video in the Operator window, or save the video clip to a local drive.



Note

-
- Only regular archives or streamable archives that are displayed with the  icon can be used with forensic search. BWX secure video clips  and BWM archive clips  cannot be searched. See the [“Video Archive Types and Icons”](#) section on page 8-17 for more information.
 - The Forensic Search feature can only be used when the Operator page is open. If you close the Operator page, or click on the Admin or Preferences links, the Forensic Search window closes.
-

Forensic Search Window

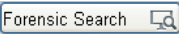
Click the Forensic Search button  on the Operator page to open the Forensic Search window (Figure 8-13), which includes a thumbnail summary and available controls. This button is available only if enabled by your administrator

Figure 8-13 Forensic Search Window



1	Video Archives. To create a thumbnail summary of an archive, double-click the archive name, or drag and drop the archive name to the viewing panel. Archives are displayed in alphabetical order.
2	Skip back by the Duration time increment. This icon is disabled if the entire archive is selected.
3	Start date and time for the entire video archive.
4	The start date and time for the first thumbnail (in the top left corner of the window pane).

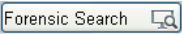
5	Thumbnail Duration setting. Choose the time span for the video thumbnails.
6	Show Timestamp check box. Check this check box to show the date and time displayed at the top of each thumbnail.
7	Timeline representing the entire video archive.
8	<p>Start time slider. The slider represents the Duration setting relative to the length of the entire archive. If the Duration setting is for the entire archive, the black slider covers the entire time line and cannot be moved.</p> <p>To use the slider, choose a Duration that is less than the entire archive time and drag the slider to a different start time (the time is displayed above the slider). Release the mouse button to choose the new time.</p>
9	End date and time for the entire video archive.
10	Skip forward by the Duration time increment.
11	Timestamp. Displays the date and time for each thumbnail. Select the Show Timestamp check box to turn timestamps on or off.
12	Video thumbnails. Thumbnails are displayed for the time span that is selected in the Duration drop-down menu. Use the Thumbnail Size menu to display larger or smaller thumbnails.
13	<p>Title bar. Displays a summary of the displayed thumbnails in the following format:</p> <p><i>archive_title</i> (Range <i>beginning-time</i> - <i>ending-time</i>) [<i>Duration</i>])</p>
14	Actions menu. See Step 5 for more information.
15	Thumbnail Size menu. Enlarges or reduces the size of each thumbnail. Larger sizes display less thumbnails.

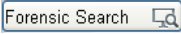
Using Forensic Search

To open and use the Forensic Search feature, do the following:

Procedure

- Step 1** Verify that **Use Forensic Search** is enabled in the Administrator Settings pages.


The Forensic Search button  appears on the Operator page only if the **Use Forensic Search** option is enabled in the administrator Settings panel. For instructions, see the [“Configuring System Settings” section on page 6-25](#).

- Step 2** Click the Forensic Search button  on the Operator page to open the Forensic Search window, as shown in [Figure 8-13](#).

Archives are displayed in alphabetical order.


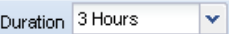



- Step 3** To display a thumbnail summary for a video archive, double-click the archive name from the Video Archives list, or use your mouse to drag the archive name onto the thumbnail window pane.

Note the following when choosing a video archive:

- Video archives use the same organization as archives shown in the Operator page. See the [“Understanding Video Archives” section on page 8-16](#) for more information.
- Click the refresh icon  to update the archive list to make sure that it’s current.

- Step 4** Use the controls described in [Figure 8-13](#) to refine the forensic search.

For example:

- Choose the start date and time for the first thumbnail in the display and click **Set Start** . The selected start thumbnail is displayed in the top left corner.
- Choose the **Duration**  for the thumbnail display. For example, choose **1 Hour** to display thumbnails for a single hour. The default is **Entire Archive**.
- Click the skip icons to skip back  or forward  in the video archive by the time that is defined in the Duration drop-down menu. For example, if the Duration is 1 hour, click the skip buttons to skip forward or back by 1 hour.
- Click and drag the slider  to a new start time. The slider date and time appears when the slider is selected. Release the mouse button to refresh the thumbnail display with the time displayed above the slider.



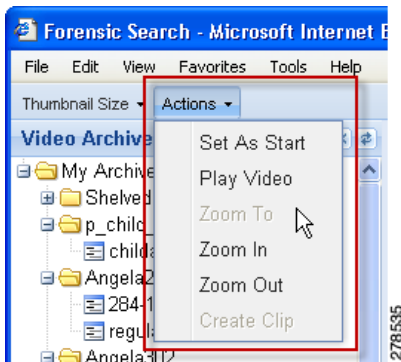
Note

The slider length represents the thumbnail duration relative to the entire length of the archive. The gray time line equals 100 percent of the archive. The black slider covers the entire time line if the selected Duration is Entire Archive (default).

- Choose a thumbnail size to enlarge or reduce the size of each thumbnail. Larger sizes display fewer thumbnails, and each thumbnail represents a greater time span.

Step 5 (Optional) Further refine your search by choosing one or more thumbnails and choosing one of the following options in the **Actions** menu, as shown in [Figure 8-14](#).

Figure 8-14 Actions Menu



Tip

You can also right-click a thumbnail to access the **Actions** menu.

- **Set As Start**—Set a thumbnail as the first thumbnail in the range.
- **Play Video**—See [Step 6](#).
- **Zoom To**—Set the beginning and ending thumbnail for the display. Shift-click or Ctrl-click to select multiple thumbnails. Choose **Zoom To** from the **Actions** menu. The first frame in the selected thumbnails becomes the new start time. The last frame in the selected thumbnails becomes the new end time.
- **Zoom In**—Decreases the displayed thumbnail duration. For example, if the Duration is 6 hours, choose the Zoom In option to decrease the Duration to approximately 3 hours.
- **Zoom Out**—Increases the duration of the displayed thumbnail duration. For example, if the Duration is 3 hours, choose the Zoom Out option to increase the Duration to approximately 6 hours.

- **Create Clip**—See [Step 7](#).

Step 6 (Optional) To play a video thumbnail, select the thumbnail and choose **Play Video** from the **Actions** menu.

- Video is played in the Operator page from the start timestamp of the thumbnail. If the start timestamp is not available, the next available frame is displayed.
- Any video being played in the Operator page is replaced by the selected forensic search video.

Step 7 (Optional) Save a video clip to a local or network drive.

- The clip is saved in CVA format and includes the video from the range represented by the thumbnails.
 - The start time of the clip is the start timestamp of the first thumbnail selected. The end time is the end timestamp of the last thumbnail selected.
- a. Shift-click or Ctrl-click to select a range of thumbnails.



Note You must select at least two thumbnails to save a video clip.

- b. Choose **Create Clip** from the **Actions** menu.



Tip You can also right-click one of the selected thumbnails and choose **Create Clip**.

- c. Choose the location to save the file.
- d. Click **Save** to save the file.
- e. To view the clip, double-click the file to view it using the Cisco ReView Player video client.



Tip

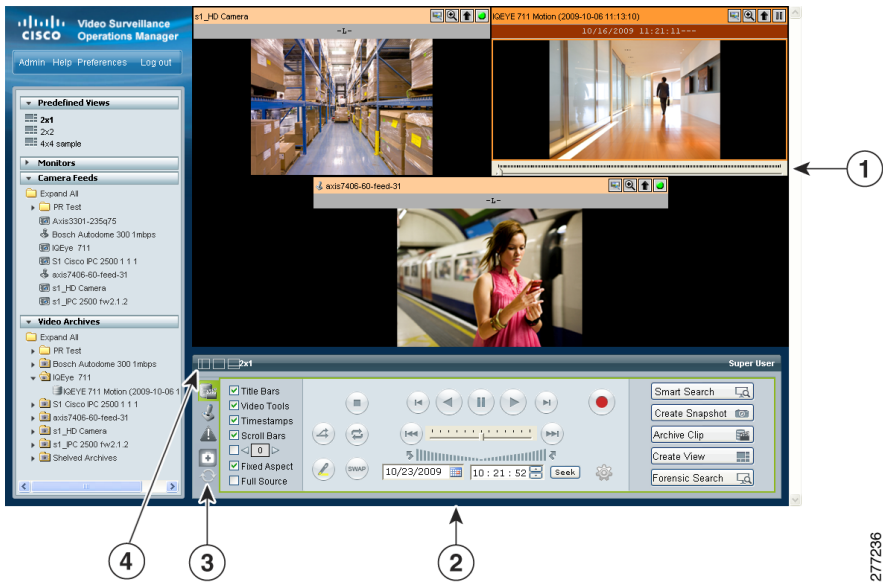
-
- To install the Cisco ReView Player video client, go to the Software & Downloads panel in the Administrator pages. Click the **VSOM Video Client** link and follow the installation instructions. See the [“Managing Software and Downloads”](#) section on page 4-2 for more information.

- CVA files with mixed media types may briefly display *No data for current time period* until each video stream is fully synchronized. Playback continues normally when synchronization is complete.

Understanding the Toolbars





Toolbars appear below the video panes and provide video playback controls, video information, PTZ functions, and access to video events. Figure 8-15 shows the toolbar for Feed/Archive Controls.

Figure 8-15 Toolbars




1	Video panes	3	Toolbar tabs
2	Toolbars	4	Collapse/Expand Toolbar icons

Click a tab to display the features and function for the following:

-  **Feed/Archive Controls**—Default, see the [“Using the Playback Controls” section on page 8-38](#).
-  **PTZ Camera Controls**—See the [“Using the Camera PTZ Controls” section on page 8-53](#).
-  **Event controls**—See the [“Viewing Video Events” section on page 8-56](#).
-  **Health Dashboard**—See the [“Using the Health Dashboard” section on page 6-32](#).

**Note**

The **Refresh** icon  refreshes the list of predefined views, monitors, camera feeds and video archives in the side menu. The icon appears highlighted when any of the lists have changed. For example, it appears highlighted when you modify a view or save a video clip.

Hiding or Showing the Toolbar and Side Menu


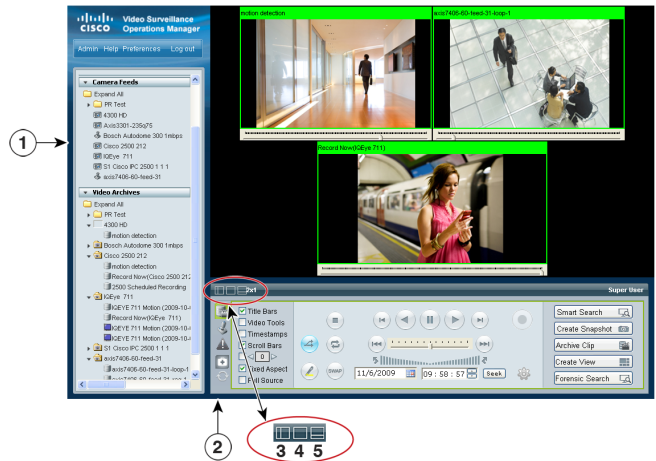
Click the Collapse/Expand icons  to hide or show the toolbar and the left side menu (see [Figure 8-16](#)). Hiding the side menu or toolbar enlarges the video in the VSOM window.



Figure 8-16 Hide/Show Toolbar and Side Menu

1	Sidebar. The sidebar includes the Predefined Views, the Monitors, Video Feeds and Video Archives drawers. See the “Understanding the Operator Window” section on page 8-2 for more information.
2	Toolbar. Includes controls for video playback, PTZ, and Events. See the “Understanding the Toolbars” section on page 8-36 for more information.
3	Collapse/Expand Sidebar. Hides or shows the left side menu.
4	Collapse/Expand Both Sidebar and Toolbar. Hides or shows both the left side menu and the bottom toolbar. Use this button to expand the video to the full window.
5	Collapse/Expand Toolbar. Hides or shows the bottom toolbar.

Using the Playback Controls

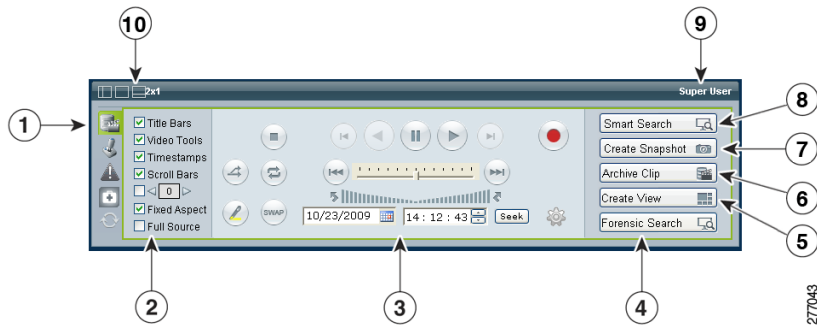
The Feed/Archive Controls toolbar includes the video playback controls, options to display information and functions in each video pane, and other features. [Figure 8-17 on page 8-40](#) describes the toolbar features in detail.

**Tip**

- The Feed/Archive Controls toolbar is displayed by default, or when you click the **Display Feed/Archive Controls** tab . See the “[Understanding the Toolbars](#)” section on page 8-36 for more information.
- If no toolbar is displayed, click the Collapse/Expand Toolbar icon  as shown in [Figure 8-16 on page 8-38](#).
- The controls that appear in the toolbar depend on your VSOM user rights.
- Controls that appear dimmed are disabled for the selected video pane.

This section includes the following information:

- [Using the Playback Controls, page 8-41](#)
- [Understanding Video Pane Border Colors, page 8-45](#)
- [Understanding View Option Check Boxes, page 8-46](#)
- [Adjusting Image Quality for Live Video, page 8-48](#)
- [Using Digital Zoom, page 8-50](#)

Figure 8-17 Feed/Archive Control Toolbar

1	Display feed/archive controls. Choose this tab to display the video controls.
2	View option checkboxes. Check or uncheck the check boxes to show or hide the information and controls that each video pane displays. See the “Understanding View Option Check Boxes” section on page 8-46.
3	Playback controls. Choose an option to control video playback. See the “Using the Playback Controls” section on page 8-41 for descriptions of each function.
4	Forensic Search. View a thumbnail summary of a video archive to locate specific events. You can then play or save the video clip. See the “Searching a Thumbnail Summary of Video Archives” section on page 8-30.
5	Create View. Creates a new camera pane layout. See the “Using Predefined Views” section on page 8-7.
6	Archive Clip. Creates a video clip from a portion of an existing archived video clip. See the “Creating an Archive Clip” section on page 8-24.
7	Create Snapshot. Create a still image from live or archived video. See the “Creating a Snapshot” section on page 8-30.
8	Smart Search. Search archived video to locate where motion is detected. See Chapter 9, “Using Smart Search.”
9	User. Displays the current operator username.
10	Collapse/expand icons. See the “Hiding or Showing the Toolbar and Side Menu” section on page 8-37.

Using the Playback Controls

To control video playback, click anywhere in a video pane to make it active and choose the settings and actions that [Figure 8-18](#) shows.

Many of the controls described in this section are available only for video archives. See the “[Using DVR Controls for Live Video](#)” section on [page 8-44](#) for information about additional controls.



Note



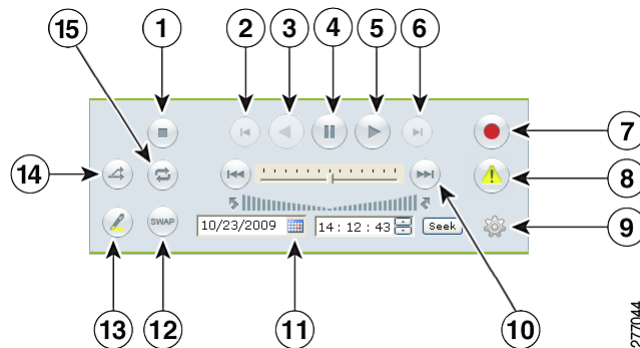


- The active pane is shown with a green border, and the controls and actions performed in this section apply to the active pane. See the “[Understanding Video Pane Border Colors](#)” section on [page 8-45](#) for more information.
- If the controls are not shown, click the **Display Feed/Archive** tab . See the “[Understanding the Toolbars](#)” section on [page 8-36](#).
- If no toolbar is displayed, click the **Collapse/Expand Toolbar** icon  as shown in [Figure 8-16](#) on [page 8-38](#).
- Controls that appear dimmed are disabled for the selected video pane.

Figure 8-18 Playback Controls

1	Stop button. Stop playing the video archive.
2	Step Reverse button. Play the video archive in reverse one frame at a time.
3	Play Reverse button. Play the video archive in reverse. Note Reverse playback is available only for archived video. Reverse playback is not supported for MPEG-4 streams.
4	Pause button. Pause the archive video playback. To resume, click play. When an archive is paused, you can use the Step Reverse and Step Forward buttons to play the video archive backward or forward one frame at a time, respectively.
5	Play Forward button. Play the video archive.
6	Step Forward button. Play the video archive forward one frame at a time.
7	Record Now button. Records live video from a camera feed for the number of seconds or minutes that are specified in the Player Control/Settings pop-up window. See the “Recording Live Video” section on page 8-28 for more information
8	Bookmark Events button. A bookmark allows you to dynamically create a predefined view from the video that you are playing and create an event history record for that event and time. See the “Adding an Event” section on page 6-5.
9	Player Control/Settings button. Opens a pop-up window to specify archive loop and live recording settings.

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10	<p>Play speed and jump buttons Move the slider to the left to play the video archive slower or move it to the right to play it faster. You can choose from six speeds in each direction.</p> <p>Click  to jump to the beginning of the video archive.</p> <p>Click  to jump to the end of the video archive.</p>
11	<p>Date seek controls. To jump to a specific date and time in the video archive, enter the parameters and click the Seek button.</p> <p>You also can click the bars to jump forward or back in a currently displayed archive. Click a bar to the left to jump backward and click a bar to the right to jump forward. Click closer to the middle of the set of bars for a smaller jump. The size of a bar indicated the relative jump time. The maximum jump is 2.5 minutes per click.</p>
12	<p>Swap button. If an archive loop is configured for a camera, click this button to switch between archive and live video from that camera. See the “Switching Between an Archive and Live Video” section on page 8-24.</p>
13	<p>Highlight All button. Choose all video panes in the video panel.</p>
14	<p>Synchronize button. Synchronize time between panes.</p> <p>Choose multiple panes and click Synchronize to synchronize the playback time to the upper-leftmost pane. See the “Synchronizing the Playback Between Multiple Video Panes” section on page 8-21.</p>
15	<p>Loop Archive button. Play a video archive in a continuous loop (the video loops to the beginning when the end is reached).</p>

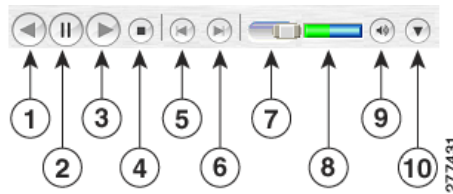
Using DVR Controls for Live Video

Figure 8-19 shows the DVR controls that are available in the top left video pane for live camera feeds. These controls are displayed only if the video pane displays a camera feed and the DVR controls are enabled.

To enable the DVR controls, enable the Use VMR and USE DVR options in the administrator Settings panel. For instructions, see the “[Configuring System Settings](#)” section on page 6-25.

For information about viewing camera feeds, see the “[Viewing Live Video](#)” section on page 8-13.

Figure 8-19 **DVR Controls for Live Video**



1	Play Reverse.
2	Pause. Note When video is paused, this button changes to an “L” . Click the button to resume playing live video.
3	Play Forward.
4	Stop.
5	Step Back one frame
6	Step Forward one frame
7	Timeline. The horizontal bar represents the overall length of the recording. Slide the bar to jump to a location in the available video.
8	Video Cache representing the entire length of the video. The green bar shows the played video, and the blue color represents the unplayed video.
9	Audio On or Off. Click to mute the audio. Click to turn sound back on.

10	Show/Hide Image Quality Adjustments. See the “Adjusting Image Quality for Live Video” section on page 8-48.
----	---

Understanding Video Pane Border Colors

The color that surrounds a video pane indicates the status of the video in that pane. For example, when you click anywhere in a video pane, the pane becomes active and the border changes to green or orange. The controls and actions performed apply to the active pane.

[Table 8-2](#) describes the meaning of each color.

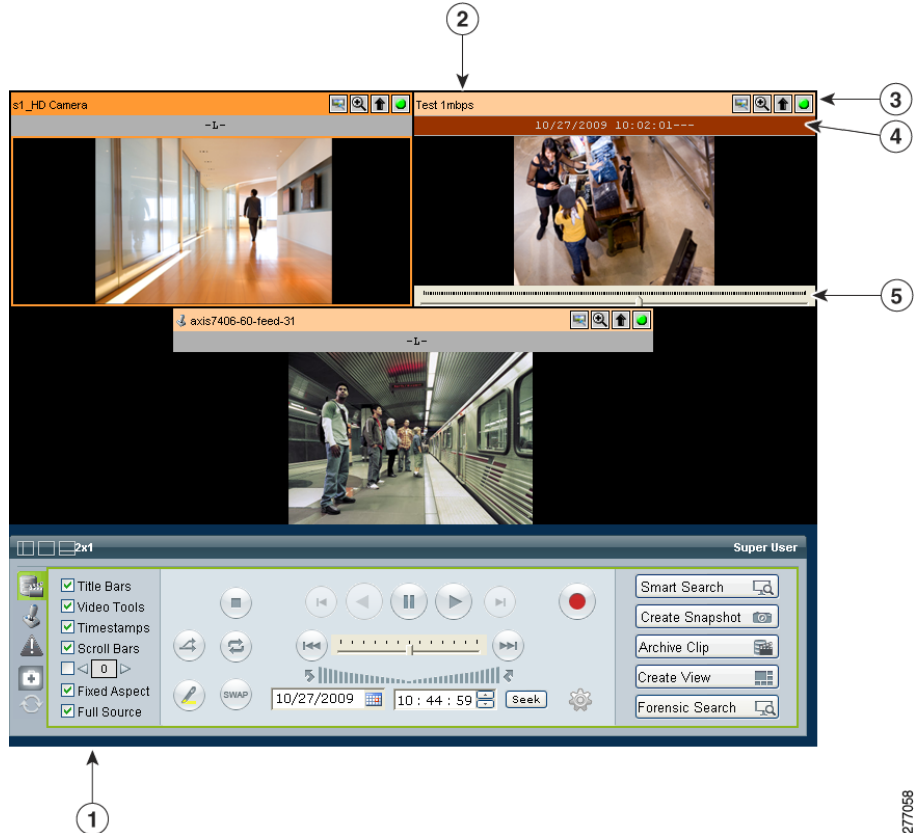
Table 8-2 **Video Pane Border Colors**

Color	Description
Gray	The pane is not highlighted. All panes have a gray border by default.
Green	The video playback time is synchronized with one or more other panes. When synchronizing playback between multiple panes, the border color for all panes is green. See the “Synchronizing the Playback Between Multiple Video Panes” section on page 8-21.
Light green	The active pane for live or archive video. The controls and actions performed apply to the active pane. Click anywhere in a video pane to make it active.
Light orange	The pane is fixed (not included in a video rotation). See the “Understanding Rotating Views” section on page 8-9.
Orange	The pane is fixed (not included in a video rotation) and selected as the active pane. The controls and actions performed apply to the active pane.
Yellow	The pane is performing an action or has an alert. For example, when you create an archive clip, the pane border turns yellow while the clip is being saved.





Understanding View Option Check Boxes

Check or uncheck the view option check boxes (Figure 8-20) to show or hide the information and controls that appears on each video frame.

Figure 8-20 Image Quality Adjustments for Live Video



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1	<p>Check boxes. To show the following information and controls, check the appropriate check box:</p> <ul style="list-style-type: none"> • Title Bars, Video Tools, Timestamps, and Scroll bars—See the following rows for descriptions. • Dwell time indicator—Overrides the dwell time for rotating video (in seconds). See the “Understanding Rotating Views” section on page 8-9. • Fixed Aspect—The view appears based on the monitor configuration. • Full Source: Display the selected video in full size (as defined by the video source).
2	<p>Title bars. Displays the name of the camera feed or archive in the title bar of each video pane.</p>
3	<p>Video tools Displays shortcut tools on the right side of the title bar (you must also check the title bar check box to see these options):</p> <ul style="list-style-type: none"> • Launch Smart Search  — See Chapter 9, “Using Smart Search” for more information. • Toggle Full Screen on this Source  —Hides the other video panes and fills the window with the selected pane. • Upload View to Monitor  —Displays the video image on a configured monitor. • Streaming  —Displays information about the video stream.
4	<p>Timestamps (archived video only). Displays the time and date that the video was recorded, in 24-hour format. The time is defined by the VSOM server, which may be different from the time in the camera location. Live video streams display “L” instead of a timestamp.</p>
5	<p>Scroll bars (archived video only). Allow you to choose a specific time in the video archive. Click and drag the scroll bar selector. The time appears above the selector. Release the mouse button at the desired time.</p> <p>This control is not available for live video feeds.</p>

Adjusting Image Quality for Live Video


Image controls adjust the appearance of live video images (see [Figure 8-21](#)). Settings that you make remain in effect until you log out of VSOM. Adjusting these control do not make changes to a camera.

**Note**

To use this feature, the camera that provides the video must support the controls, and you must enable the **Use DVR** option on the Settings page in the Administrator pages. See the [“Configuring System Settings” section on page 6-25](#).

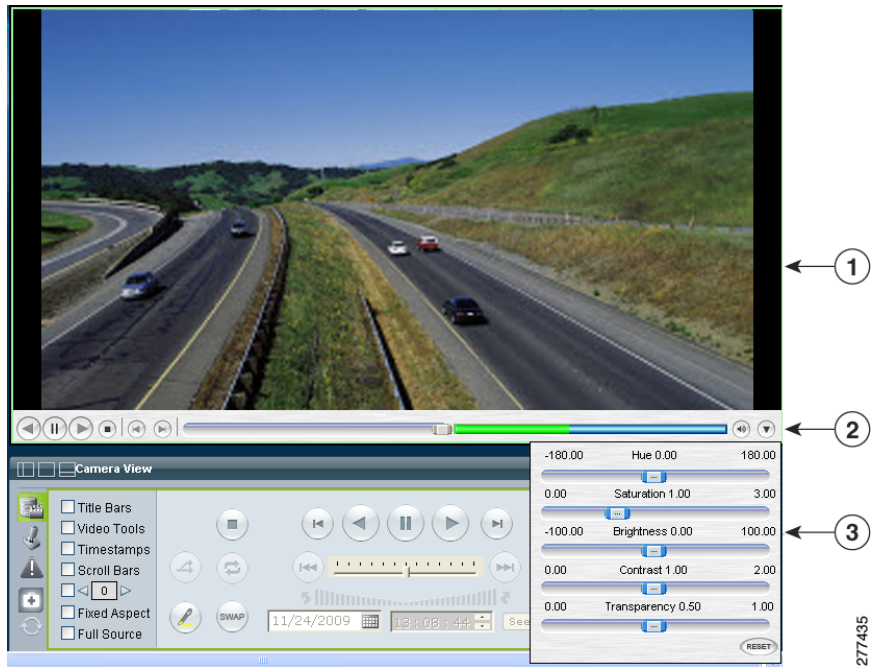
To adjust image quality, follow these steps:


Procedure

-
- Step 1** Start VSOM and display the Operator pages, as described in the [“Accessing VSOM” section on page 1-5](#).
- If you are already viewing the VSOM Administrator pages, click the **Ops** link near the top left of the VSOM window.
- Step 2** Choose the live camera feed that you want to view.
- See the [“Viewing Live and Archived Video” section on page 8-12](#).
- Step 3** Click the down arrow  on the bottom right of the video panel, as shown in [Figure 8-21](#).
- A small window opens to show the image controls.

**Note**

This arrow and the image quality control are available only if the **Use DVR** option is enabled in the administrator Settings page.

Figure 8-21 Image Quality Adjustments for Live Video

1	Live Camera Feed
2	Image Adjustment Icon 
3	Image Adjustment Settings

Step 4 Use this slider to adjust the image settings:

- **Hue**—Slide the bar to the right to increase hue or slide it to the left to decrease hue. Hue refers to the relative strength of colors in an image.
- **Saturation**—Slide the bar to the right to increase saturation or slide it to the left to decrease saturation. High saturation provides a vivid, intense color for a video image. With less saturation, the video image appears more muted and gray.

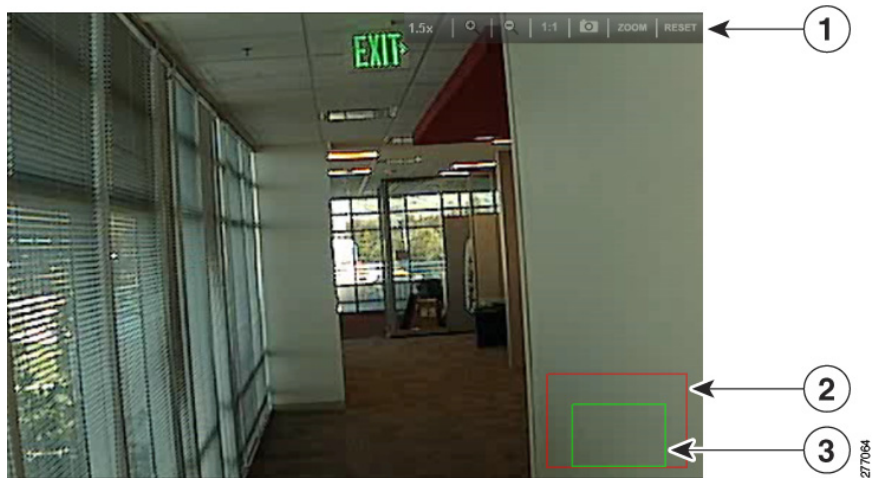
- **Brightness**—Slide the bar to the right to increase the brightness or slide it to the left decrease the brightness. For example, if a camera is facing a bright light and the video appears too dark, you can increase the brightness.
- **Contrast**—Slide the bar to the right to increase contrast or slide it to the left to decrease contrast.
- **Transparency**—Slide the bar to allow the background to display through so that the image appears to have no visible border around it. This slider also adjusts the transparency setting for on-screen controls, such as the digital zoom controls.
- **RESET**—Click to restore all image quality adjustment settings to their default values.

Step 5 Click the image adjustment icon  again to close the settings window and save your changes.

Using Digital Zoom

Use digital zoom to digitally zoom and pan in the video window. The digital zoom controls are displayed as transparent icons in the upper right corner of the video display.

Digital zooming is a pixel-based zoom that affects the video image but does not adjust the camera lens. PTZ controls are disabled when using digital zoom.

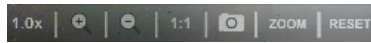
Figure 8-22 Digital Zoom

1	Digital Zoom Controls. See Table 8-3 on page 8-52 for descriptions.
2	Field of View showing the entire camera view. This box is green when the entire field of view for the camera is shown (also referred to as 1:1 view).
3	Current display. This box indicates the portion of the video image that is currently displayed. Click and drag the box to pan within the scene. Click the zoom in and out icons to narrow or enlarge the view.

To use the video zoom feature, follow these steps:

Procedure

- Step 1** Verify that **Use VMR** is enabled on the Settings page in the Administrator pages. To use digital zoom, you must enable the VMR mode as described in “[Configuring System Settings](#)” section on page 6-25.
- Step 2** Choose a camera feed or archive.
- The digital zoom controls appear as transparent icons in the upper right of the video display.



Note To make the control more or less transparent, use the Transparency setting as described in the [“Adjusting Image Quality for Live Video”](#) section on page 8-48.

Step 3 Click **Zoom**  to enable digital zoom mode.

A green box appears in the lower right to represent the entire image.








Step 4 Click **Zoom In** .

The box turns red to represent the original view. A smaller green box represents the zoom view. Drag the green box within the red box to pan within the image.

Step 5 Use other controls that [Table 8-3](#) describes, as needed.

To restore the original zoom level, click **1:1**.

Table 8-3 Digital Zoom Controls

Item	Description
 Magnification Level	Displays the current level of magnification.
 Zoom In	Increases magnification. This control is not available when the video is paused.
 Zoom Out	Reduces magnification. This control is not available when the video is paused.
 1:1	Restores the full camera view.
 Snapshot	Creates and saves a snapshot. The zoom toolbar is unavailable during this operation. See the “Creating a Snapshot” section on page 8-30.
 Zoom	Enables digital zoom mode.
 Reset	Restores the default view and exits digital zoom mode.

Using the Camera PTZ Controls


Pan-tilt-zoom (PTZ) cameras are controlled using the **PTZ Controls** toolbar. Cameras can be panned left and right, tilted up and down, or zoomed in and out. Controls are operated by using the PTZ Console or a PTZ joystick that is connected to the client workstation.

**Note**

To use the PTZ controls, the PTZ camera must be configured. (For instructions, see [Chapter 3, “Managing Devices.”](#))

To control the PTZ functions for a PTZ camera, follow these steps:

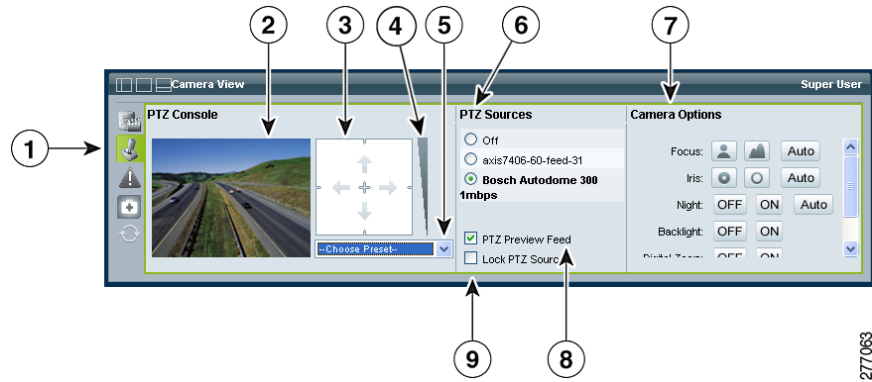
Procedure

- Step 1** Start VSOM and display the Operator pages, as described in the [“Accessing VSOM”](#) section on page 1-5.
- If you are already viewing the VSOM Administrator pages, click the **Ops** link near the top left of the VSOM window.
- Step 2** Click the **Display PTZ Controls** tab  to display the PTZ controls shown in [Figure 8-23](#).
- Step 3** Choose a PTZ camera from the PTZ Sources list.
- Only PTZ-capable cameras are displayed.

**Tip**

You can also choose a camera from the **Camera Feeds** in the left side menu.

- Step 4** Use the controls that [Figure 8-23](#) describes to manipulate the camera.
- For example:
- To pan or tilt the camera, drag your cursor around the center of the crosshair box.
 - To zoom the camera, use the vertical scale to the right of the crosshairs.
- Tip** Left-click and drag to use these controls. Do not let the mouse pointer leave the control. If it does, click the control once to recover control.

Figure 8-23 PTZ Control Toolbar

1	Display PTZ controls. Click the PTZ Controls icon to display the PTZ toolbar. If the icon does not appear, see the “Hiding or Showing the Toolbar and Side Menu” section on page 8-37.
2	Display pane. Displays video from the selected PTZ source.
3	Crosshair box. Click and drag your cursor around the center of the box to pan or tilt the camera.
4	Zoom. To zoom the camera, click and drag your cursor on the vertical scale to the right of the crosshairs: drag up to zoom in and down to zoom out.
5	Presets. Choose a preset camera position from the drop-down list to move the camera PTZ camera to that position. Preset positions are configured by an administrator. See Chapter 3, “Managing Devices.”
6	PTZ sources. Choose a camera to control. The video feed from the camera appears in the Display pane. Note If Lock PTZ Source is selected, the video in the display pane changes, but the PTZ controls still operate the previously selected camera. This way, an operator can control a camera other than the one that is feeding the Display Pane.

7	<p>Camera adjustments. Choose additional adjustments from the available buttons. Only options that the camera supports appear. These options may include:</p> <ul style="list-style-type: none"> • Focus—Focus in or out. Click Auto to auto adjust the focus. • Iris—Adjust the iris to lighten or darken the image. Click Auto to auto adjust the iris to the optimal setting. • Night—Provides improved visibility in low light. Click On or Off to enable or disable the feature. Click Auto to adjust the camera to the optimal setting. • Backlight—Enable or disable backlighting. • Digital Zoom—Enable or disable digital zoom. • White Balance—Adjust the white balance to apply a warm (indoor) or cool (outdoor) filter. Click Auto to auto adjust the indoor/outdoor white balance.
8	<p>PTZ preview feed. Choose PTZ Preview Feed to display or hide the selected video source in the Display Pane.</p>
9	<p>Lock PTZ source. Choose Lock PTZ Source to view a video source in the Display Pane that comes from a camera other than the one that is providing video in the PTZ Preview Feed. The PTZ controls still affect the camera in the PTZ Preview Feed.</p>

Using a PTZ Joystick

The Cisco VSOM supports USB joysticks for controlling PTZ cameras.

- The USB joystick must be connected to the computer before launching Internet Explorer and logging in to VSOM.
- PTZ preset commands are mapped to joystick buttons, but not to mouse buttons.


- Presets are automatically mapped to each button in order. If the joystick has zoom controls, buttons 1 and 2 are mapped to zoom in and zoom out, and the other buttons are mapped to presets in order. The Windows Game Controller in the Toolbar shows the numbers of the buttons if they are not labeled on the USB joystick.

Viewing Video Events

Events are noteworthy occurrences that may include audible and visual alarms, switching monitor views, event bookmarking, and sending preset commands. When an event is triggered, it is listed in the Events inbox, which allows you to display information about the event and take action as needed.

**Note**

Events are defined in the Administrator pages. For more information, see the [“About Events” section on page 6-1](#).

From the Events inbox, you can take actions to respond to triggered events. To display these controls, click the **Event** toolbar tab  (see the [“Understanding the Toolbars” section on page 8-36](#)).

**Note**

When a new event is triggered, a message appears for the new event in the message bar (see [Figure 8-24](#)).

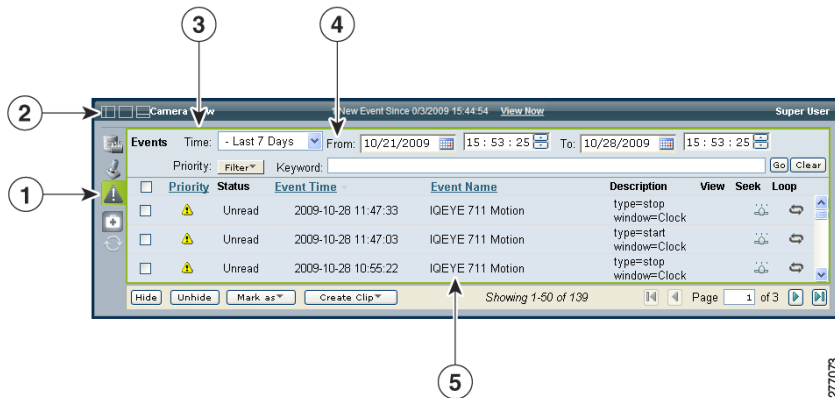
This section includes these topics:

- [Viewing Events, page 8-57](#)
- [Creating Event Video Clips, page 8-60](#)


Viewing Events

Use the **Events** inbox (see [Figure 8-24](#)) to view events and take action, if necessary. For information about configuring events, see the [“About Events”](#) section on page 6-1.

Figure 8-24 *Event Inbox*




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1	Display Events. Click this icon  to display the Events inbox.
2	Message bar. When a new event is triggered, a message appears in the center of the title bar. Click View Now to display event details.
3	Time filter. Choose a filter to display additional filter options, as described in the following procedures.
4	Filter options. Choose a time and date range, priority and keyword, then click Go.
5	Event list. See the following instructions for field and feature descriptions.

To display and manage events, follow these steps:

Procedure

-
- Step 1** Click the **Display Events** icon  to display the Events Inbox, as shown in [Figure 8-24](#).
- Step 2** (Optional) Choose one of the following time ranges to filter the events and display a subset of entries.
- Note** When you choose an option, additional fields appear for the time range, priority and keyword filters that you chose.
- **Real Time**—Choose this option to display the last 100 events and add new events to the list as they are triggered.
 - **All**—Choose this option to display all events currently in the system. To refresh the list, choose **All** again (the events list is not refreshed in real time).
 - **Date Range**—Choose a date and time interval to view the event within the specified period. For dates, enter the date in mm/dd/yyyy format or click the calendar icon. For times, enter the time in the hour, minute, and second fields or use the up and down arrows to specify the time.
- Step 3** (Optional) Choose a **Priority** level from the drop-down menu to only display events with that priority.
- This option is not available if **Real Time** is selected.
- Step 4** (Optional) Enter one or more words in the **Keyword** field to only view events that include those words.
- The keyword applies to the Event Time, Event Name, and Description fields.
- This option is not available if **Real Time** is selected.
- Step 5** Click **Go** to display only the events that are defined by the filter settings.
- The event list includes the following information:
- **Priority**—Indicates the severity of the event. The priority is defined by the Default Flag field when the event is created in the Administrator pages. See the [“Adding an Event” section on page 6-5](#).
 - **Status**—Indicates if the event is Read or Unread. Click the **Mark As** button and choose **Read** or **Unread** to change the Status of the event for use in sorting and searching.

- **Event Time**—Date and time that the event occurred.
- **Event Name**—Name of the event. Event names are assigned by an administrator.
- **Description**—Displays an optional event description. Event descriptions are assigned by an administrator.

**Tip**

Click an underlined column header to sort on that column. Click again to reverse the sort order.

Step 6 Take any of the following actions:

- Click the **View** button to display the predefined view that is associated with the event, if available.
- Click the **Seek** button to jump to the time the event occurred in the selected video panes.
- Click the **Loop** button to repeat the video for the event time. To play additional video before and after the event time, click the **Player Control/Settings** icon in the Display Feed/Archive Controls panel to change the number of seconds of additional video that should be played before and after the event time.

Step 7 (Optional) Choose one of the following additional settings or actions:


- **Hide**—Check the check boxes for one or more events and click **Hide** to hide the selected events for the current user.
 - **Unhide**—Click the **Unhide** button to display events that were hidden by using the **Hide** button.
 - **Mark As**—Check the check boxes for one or more events, and then click the **Mark As** button and choose **Read** or **Unread** to change the Status of the event.
 - **Create Clip**—Check the check boxes to create clips for one or more events. See the [“Creating Event Video Clips” section on page 8-60](#).
-

Creating Event Video Clips


To create video clips of events and save them to the VSMS host in BWM or BWX format, perform the following steps. After a clip is saved, it can be downloaded to a computer for viewing. Clips in BWX format are password protected, as described in the following instructions.



Tip

You can also use the **Archive Clip** button  to save video clips on the VSMS host in BWM and BWX format. This feature also allows you to save clips directly to your computer in AVI/MP2, WMV and CVA formats. See the [“Creating an Archive Clip” section on page 8-24](#) for instructions.

Procedure

- Step 1** Click the **Display Events** icon  to display the Events Inbox, as shown in [Figure 8-24 on page 8-57](#).
- Step 2** Check the check box for one or more events and choose **Create Clip**.
- Step 3** Choose one of the following options from the drop-down list:
 - **Create BWM Clip**—Creates the clip in BWM format
 - **Create BWX Clip** —Creates the clip in BWX format
- Step 4** If you are prompted to enter an alpha-numeric password from 6 to 64 characters (case-sensitive).



The password prompt appears if you are creating a BWX clip. This password is required to play the clip after it is downloaded to a computer.



Note

You can create a clip on a motion stop event but not on a motion start event. You cannot clip the same event twice because the start and stop times would be the same.

- Step 5** Wait for the clip to be created.
 A message regarding the status of the create operation appears above the event list.
 The clip is automatically saved to include a few extra seconds before and after the actual event.

- Step 6** Click the **Refresh** button  to update the Video Archives list and display the new event clip.
- The new clip appears next to a computer icon  in the Video Archives list.
- Step 7** To save the clip to your computer, do the following:
- Click the name of the clip and then click **Save**.
 - Choose a location for the file on a local or network computer and click **Save** again.
- Step 8** Use the Cisco ReView Player video client to play the video clip.
- To install the video client, go to the Software & Downloads panel in the Administrator pages. Click the **VSOM Video Client** link and follow the installation instructions. For related information, see the [“Managing Software and Downloads” section on page 4-2](#).
-

Health Dashboard

The Health Dashboard that is available in the Operator page provides a summary events that are related to the operational health of the overall video surveillance system. Health events are generated automatically and do not require any user configuration.

There are two types of health events: critical and warning.

- Critical health events are shown in red and render a component unusable. Examples include devices that are not reachable, archives that fail to start or stop, failed camera authentication, and motion configuration failures. Components with critical events remain out of operation until another event restores them to normal operation. Critical events also affect other components that depend upon the component that is in the error state. For example, if a camera is in the critical error state, all feeds and archives for that camera also are in the critical error state.
- Warning health events are shown in yellow and indicate a problem that does not incapacitate a component. For example, interruptions in operation due to packet losses in the network. Warning health events do not change the overall state of the component, and are not associated with critical health events.

Viewing the Health Dashboard


To view a summary of health events, click the **Health Dashboard** icon  shown in [Figure 8-25](#).

Figure 8-25 Health Dashboard icon in the Control Bar



The icon changes colors depending on the health events present in the system:



—No health events are present in the system when the icon is gray. The icon is disabled.



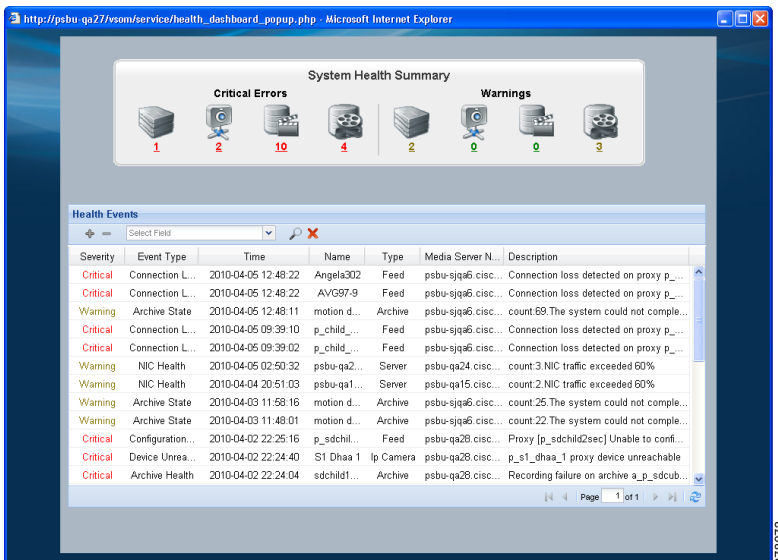
—Only warning health events are present in the system when the icon is green. There are no critical events. Click the icon to open the System Health Summary page in a separate window ([Figure 8-26](#)).



—Critical health events are present in the system when the icon is red. Click the icon to open the System Health Summary page in a separate window ([Figure 8-26](#)).

When you click either the green or red icon, the System Health Summary page shown in [Figure 8-26](#) opens in a separate window.

Figure 8-26 Health Dashboard



The icons at the top show the number of critical errors and warnings that exist for each of the following:



—VSMS host servers configured in the Cisco VSM deployment.



—Endpoints, including encoders and IP or analog cameras




—Video feeds



—Video archives



Tip

Click the refresh icon  to update the page with all current health events.



Note

- For more information about system health events, see the [“Using the Health Dashboard” section on page 6-32](#). Administrators can view additional health event history information, and detailed information for each health event.

- Health events are not related to the VSOM video surveillance events. See the [“Viewing Video Events” section on page 8-56](#) for more information.

Using the Health Dashboard (Operator Page)


To view the health events and details available to Cisco VSN Operator users, do the following.



Note

For detailed information about health events, you must have administrator privileges. Administrators can view additional health event history information, and detailed information for each health event. See the [“Using the Health Dashboard” section on page 6-32](#).

Procedure

Step 1 Click the red **Health Dashboard** icon  to open the System Health Summary window shown in [Figure 8-26](#).

Step 2 Click the number below the icons to view only entries for the corresponding source.

A summary of health events is displayed in the Health Events table. This table includes the following information [Table 8-4](#) describes.

Table 8-4 Health Events Table Information

Item	Description
Severity	The severity of the event: Critical or Warning.
Event Type	General event classification, such as “device unreachable” or “disk usage.”
Time	Date and time that the event occurred.
Name	Name component name assigned by an administrator or operator.
Type	Type of component: server, camera/encoder, feed, or archive.




Table 8-4 **Health Events Table Information (continued)**


Item	Description
Media Server Name	Name that is assigned to the associated VSMS.
Description	<p>Text description of the event, as generated by the component.</p> <p>If multiple warnings of the same type are generated during the current reporting interval, a single entry is presented with a count that indicates the number of occurrences. See the “Health Event History” section on page 6-39 for more information.</p> <p>For example, the following entry indicates that 5 “NIC traffic exceeded 60%” events have been received since the last Health History Retention reset.</p> <pre>Count 5: NIC traffic exceeded 60%</pre> <p>The current reporting interval is configured on the Settings page (default is 1 day). See the “Configuring System Settings” section on page 6-25.</p>

Step 3 To sort on a column, click the column header.

Click again to change the sort order.

Step 4 To filter events in the table, follow these steps:

- a. Choose a column from the drop-down list at the top of the table.
Additional drop-down lists appear for matching categories and value or range.
- b. Choose a matching category from the second drop-down list and specify the value or range.
For Name, Media Server Name, or Description, the match criteria include the following:
 - **Equals**—Displays entries that exactly match the value.
 - **Not Equals**—Displays entries that do not match the value.
 - **Like**—Displays entries that contain the value. For example, the value “elco” matches all “Pelco” entries.
- c. To add filters, click the  icon to the left of the filter area. To remove a filter, click the  icon. To clear all filters, click the red cross  icon.

- d. To filter the table based on the specified criteria, click the  icon. The table is updated to match the filters that you entered.
-