Avigilon™ Control Center Standard Web Client User Guide

Version 5.6

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What is the Avigilon Control Center Web Client?

The Avigilon Control Center Web Client is a simplified, web-based version of the Avigilon Control Center Client software. The Web Client allows you to access any camera that is connected to a Control Center Server.

Through the Web Client you can monitor live and recorded video, and search or export events in the camera's recording history.

The Web Client can be accessed from any Internet Explorer browser (version 6+) that is connected to your local network.

For More Information

Visit Avigilon at **http://www.avigilon.com** for additional product documentation.

The Avigilon Training Center

The Avigilon Training Center provides free online training videos that demonstrate how to set up and use the Avigilon Surveillance System. Register online at the Avigilon Partner Portal site to begin: **http://avigilon.force.com/login**

Support

For additional support information, visit **http://avigilon.com/support-and-downloads/**. The Avigilon Partner Portal also provides self-directed support resources — register and login at **http://avigilon.force.com/login**.

To call Avigilon Technical Support, go to **http://avigilon.com/contact-us/** to find the phone number for your country.

To email Technical Support, send your messages to **support@avigilon.com**.

Upgrades

Software and firmware upgrades will be made available for download as they become available. Check **http://avigilon.com/support-and-downloads/** for available upgrades.

Feedback

We value your feedback. Please send any comments on our products and services to **feedback@avigilon.com**

Accessing the Web Client

NOTE: You cannot modify any system settings through the Avigilon Control Center Web Client.

To access the Web Client, you need the IP address and port number of a server in your Site. The IP address is listed in the server's Setup tab in the Client software. The port number can be found in the Admin Tool under **Settings > Network**.

1. To access the Web Client, open Internet Explorer (version 6+) and enter the address of your Web Client in the following format:

    http://<server ip address>:<port number>/

    (For example, http://192.168.2.62:38880/)

    If you have not accessed the Web Client before, you may be prompted to install the required plug-in software before the Web Client will open.

2. When the login screen appears, enter your username and password for the Site.

The Web Client will open in your browser. You can access the video and cameras that are connected to the Site.
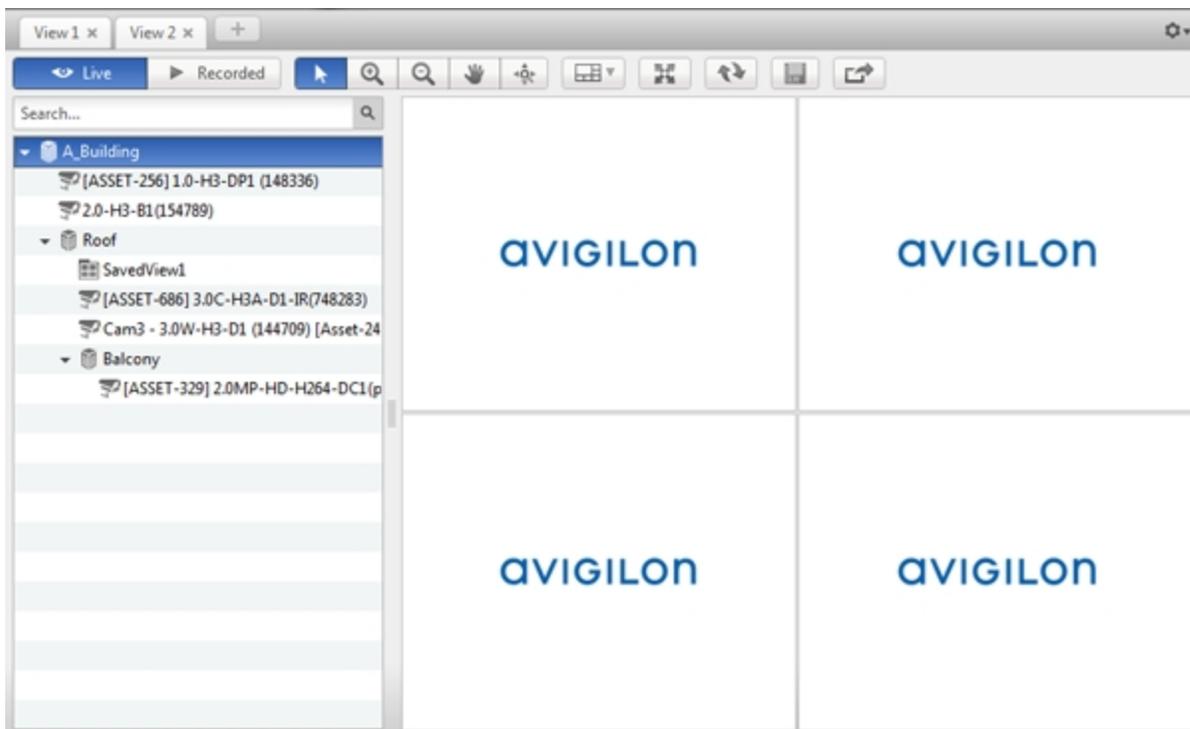
Figure 1: The Avigilon Control Center Web Client

What are Views?

A View tab is where you watch camera video. Inside the View tab is a set of image panels that allows you to organize how video is displayed.

You can arrange image panels into different layouts to take advantage of different camera angles and save View layouts that you like.

For more information on controlling live and recorded video, see *Monitoring Video* on page 12.

Adding and Removing a View

View tabs allow you to customize how you monitor video. You can open a new View in the browser to see more video. Views can also be removed as required.

To...	Do this...
Open a new View tab	Click ⬚ + > 👁 .
Close a View tab	On the View tab, click ✕ .

View Layouts

You can organize how video is displayed through View layouts. You can choose to display video in 1 - 64 image panels. You can also customize the shape of image panels to accommodate cameras that are installed vertically to capture long hallways.

There are 10 pre-configured layouts that you can edit to fit your needs.

Selecting a Layout for a View

You can organize how video is displayed by selecting a View layout.

- On the toolbar, click ▦▾ then select one of the layout options.

Editing a View Layout

If the default View layouts do not fit your surveillance requirements, you can customize a View layout.

1. On the toolbar, select ▦▾ > **Edit Layouts...**.
2. In the Edit Layouts dialog box, select the layout you want to change.
3. Enter the number of **Columns:** and **Rows:** you want in your layout.

4. In the layout diagram, do any of the following to further customize the layout.
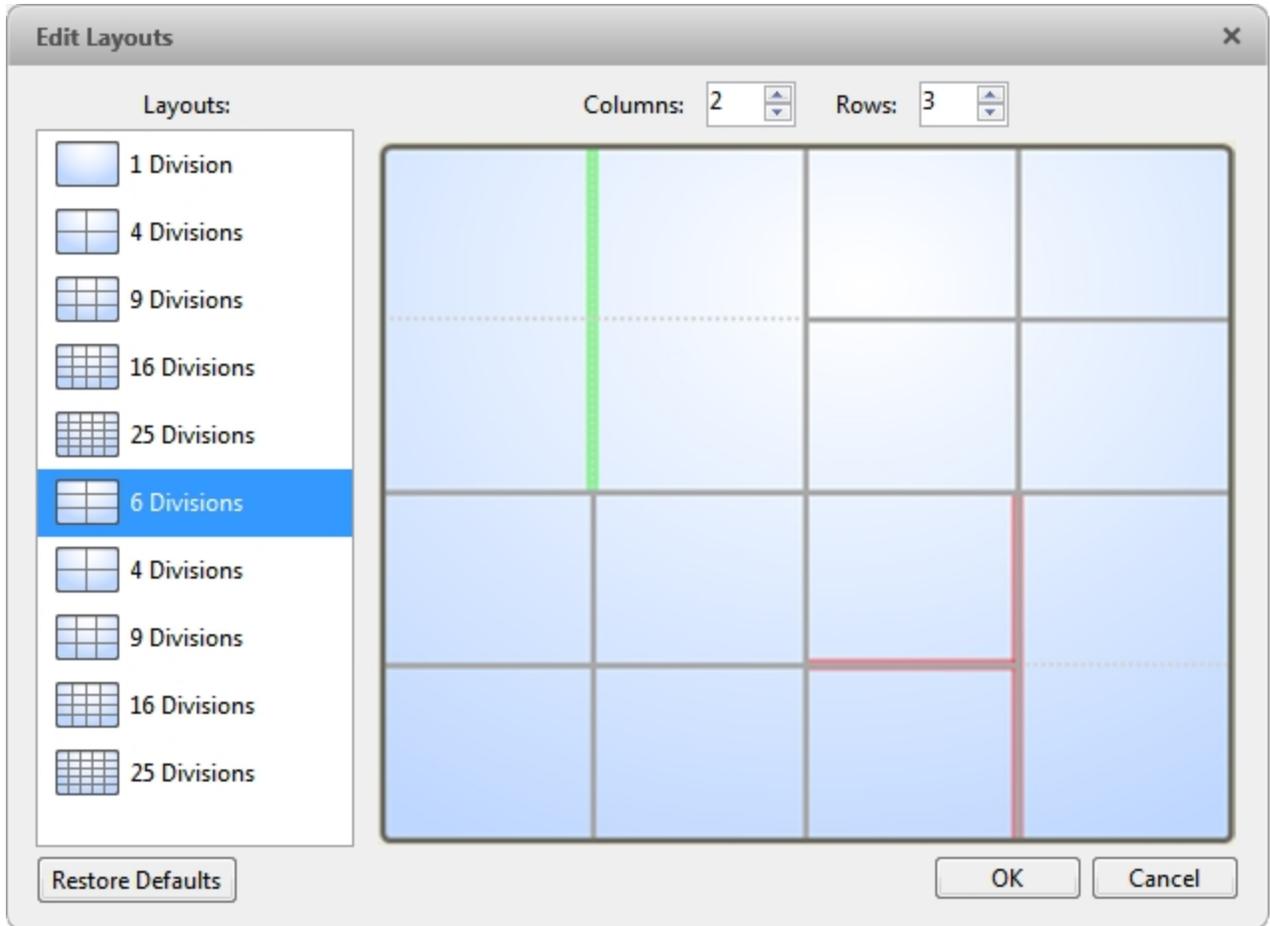
Figure 2: The Edit Layouts dialog box

- To create a larger image panel, select a gray line to delete the border between two image panels. When a line is highlighted in red, the line can be deleted.
- To restore an image panel, select a dotted line to divide a larger image panel into two. When a dotted line is highlighted in green, the line can be restored.
- To restore all default View layouts, click **Restore Defaults**. All custom layouts in the Layouts: list will be replaced.

NOTE: You can only add or subtract lines to create a rectangular shape.

5. Click **OK** to save your changes. The previous View layout has been replaced with your customized layout.

Tip: The keyboard commands used to access View layouts are linked to the layout's position in the Layouts: list. For example, if your custom layout is placed at the top of the Layouts: list (layout 1), you can press Alt + 1 to use that layout.

Making a View Full Screen

You can maximize a View to fill an entire monitor screen.

- On the toolbar, click ![icon].

Ending Full Screen Mode

- While the View is in full screen mode, click ![icon].

Cycling Through Views

If you have multiple Views open, you can cycle through the View tabs by displaying each one for a few seconds. This is useful when monitoring a large number of cameras.

- To activate the Cycle Views feature, click ![icon].

Saved Views

Once you have set up a View you like, you can save the View to share with other users in the Site. A saved View remembers the current View layout, the cameras displayed in each image panel, and the image panel display settings.

NOTE: You can only add and view cameras that are connected to the server that you are accessing through the Web Client.

Saving a View

1. In the toolbar, click ![icon].
2. In the following dialog box, complete the following:
   a. Select the Site that the View should be added to.
   b. Give the saved View a name.
   c. Assign a **Logical ID:** to the View. The logical ID is a unique number that is used to open the saved View through keyboard commands.
   d. If it is not displayed, click ![icon] to display the Site View Editor and choose where the saved View appears in the System Explorer.
      - If your Site includes virtual sub-sites, select a location for the saved View. The list on the right updates to show what is stored in that directory.
      - In the Site directory, drag the saved View up and down to set where it is displayed.
   e. Click **OK**.

Your saved View is added to the System Explorer under the selected Site. You can now manage the saved View as a part of your Site.

Opening a Saved View

Do one of the following

- In the System Explorer, double-click the saved View (▦).

- In the System Explorer, right-click ▦ and select **Open**.

- Drag ▦ from the System Explorer to the current View in the application or new window.

Editing a Saved View

1. Open a saved View.
2. Make any required changes to the View tab.
3. Click ▦.

Renaming a Saved View

1. In the System Explorer, right-click ▦ and select **Edit...**.
2. In the Edit View dialog box, enter a new name or logical ID and click **OK**.

Deleting a Saved View

1. In the System Explorer, right-click ▦ and select **Delete**.
2. In the confirmation dialog box, click **Yes**.

Monitoring Video

Inside a View tab, you can monitor and control video from multiple cameras. Once you open a camera in a View tab, you can control the camera's live and recorded video stream. You also have access to the camera's PTZ controls, connected audio devices, digital outputs, and other playback settings.

To organize how video is displayed in the View tab, see *What are Views?* on page 8.

NOTE: Some features are not displayed if the server does not have the required license, or if you do not have the required user permissions.

Adding and Removing Cameras in a View

To monitor video, add a camera to a View. Camera video can be removed from a View at any time.

Adding a Camera to a View

Do one of the following:

- Drag the camera from the System Explorer to an empty image panel in the View tab.
- Double-click a camera in the System Explorer.
- In the System Explorer, right-click the camera and select **Add To View**.

    The camera is added to the next empty image panel in the View layout.

Tip: You can drag the same camera to multiple image panels to watch the video at different zoom levels.

Removing a Camera from a View

Do one of the following:

- Right-click the image panel and select **Close**.
- Inside the image panel, click ✕.

Viewing Live and Recorded Video

NOTE: Some features are not displayed if the server does not have the required license, or if you do not have the required user permissions.

When you monitor video, you can choose to watch live and recorded video in the same View, or only one type of video per View.

Once you've added cameras to the View, you can do the following:

- To switch all of the image panels in the View between live and recorded video, click either 👁 **Live** or ▶ **Recorded** on the toolbar.

- To switch individual image panels between live and recorded video, right-click the image panel and select either **Live** or **Recorded**.

Image panels displaying recorded video have a **green** border.

Zooming and Panning in a Video

Use the zoom and pan tools to focus on specific areas in the video stream.

Using the Zoom Tools

There are two ways to digitally zoom in and zoom out of a video image:

- Move your mouse over the video image, then rotate your mouse wheel forward and backward.
- On the toolbar, select 🔍 or 🔍, then click the image panel until you reach the desired zoom depth.

Using the Pan Tools

There are two ways to pan through the video image:

- Right-click and drag inside an image panel
- On the toolbar, select ✋, then click and drag the video image in any direction inside the image panel.

Maximizing and Restoring an Image Panel

You can maximize an image panel to enlarge the video display.

Maximizing an Image Panel

Do one of the following:

- Right-click an image panel and select **Maximize**.
- Inside the image panel, click ⤢.
- Double-click the image panel.

Restoring an Image Panel

In a maximized image panel, do one of the following:

- Right-click the maximized image panel and select **Restore Down**.
- Inside the image panel, click ⤡.
- Double-click the image panel.

Making Image Panel Display Adjustments

You can change the image panel display settings to bring out video details that are hard to see with the image panel's default settings.

1. Right-click an image panel and select **Display Adjustments...**.

   The Display Adjustments... settings are displayed in a floating pane immediately beside the image panel.

2. Move the sliders to adjust the **Gamma:**, **Black Level:** and **White Level:**.

   The image panel displays the effects of your changes.

3. Click **Restore Defaults** to clear your changes.

Listening to Audio in a View

If there is an audio input device linked to a camera, the ◀))) button is displayed in the image panel when you watch the camera's video. To listen to the streaming audio, make sure there are speakers connected to your computer. By default the audio is muted.

The camera's microphone must be enabled before you can listen to any audio. The ◀))) button is not displayed if the microphone is disabled.

To control audio playback, do any of the following:

- In the lower-right corner of the image panel, click ◀))) to mute or activate the audio.
- Move the slider to change the volume.

Controlling Live Video

In this section are features that are only available while monitoring live video.

Tip: If video appears slow, it may be a network issue between the Client software and the server that the camera is connected to. Actual recorded video quality is not affected.

Broadcasting Audio in a View

If there are speakers linked to a camera, the 🎤 button is displayed in the image panel when you watch the camera's video. The 🎤 button allows you to broadcast your verbal response to what is occurring in the video, like a Public Address (P.A.) system.

The camera's speakers must be enabled before you can broadcast any audio. The 🎤 button is not displayed if the speakers are disabled.

- To broadcast audio, hold 🎤 and speak into your microphone. The red bar moves to show the microphone's audio input levels. If the level is low, speak louder or adjust the microphone volume in the Windows Control Panel.

- Release the button to stop the broadcast.

Using Instant Replay

To review an event that just occurred, you can immediately access recently recorded video through the instant replay feature.

- Right-click the image panel and select one of the instant replay options:

  - **Replay - 30 Seconds**

  - **Replay - 60 Seconds**

  - **Replay - 90 Seconds**

The image panel immediately plays back the camera's most recently recorded video.

PTZ Cameras

PTZ cameras can be controlled through the image panel on-screen controls or by using the tools in the PTZ Controls pane.

Some tools and features may not be displayed if they are not supported by your camera.

Controlling PTZ Cameras

Pan, Tilt, Zoom (PTZ) controls allow you to control cameras with PTZ features. You can control a PTZ camera by using the on-screen controls or by using the tools in the PTZ Controls pane.

NOTE: For video analytics devices, classified object detection only works when the camera is in its Home position.

1. In the toolbar, click ⊕. PTZ controls are now enabled in image panels that are displaying PTZ video.

2. In the image panel, click ⊕.

   The PTZ Controls are displayed in a floating pane immediately beside the image panel.

   NOTE: The controls may appear differently depending on the camera. Some options are disabled or hidden if they are not supported by the camera.

3. To pan or tilt, do one of the following:

   - In the image panel, drag your mouse from the center to move the camera in that direction. The farther the cursor is from the center of the image panel, the faster the camera will move.

   - If the camera supports Click to Center, click anywhere on the image panel to center the camera to that point.
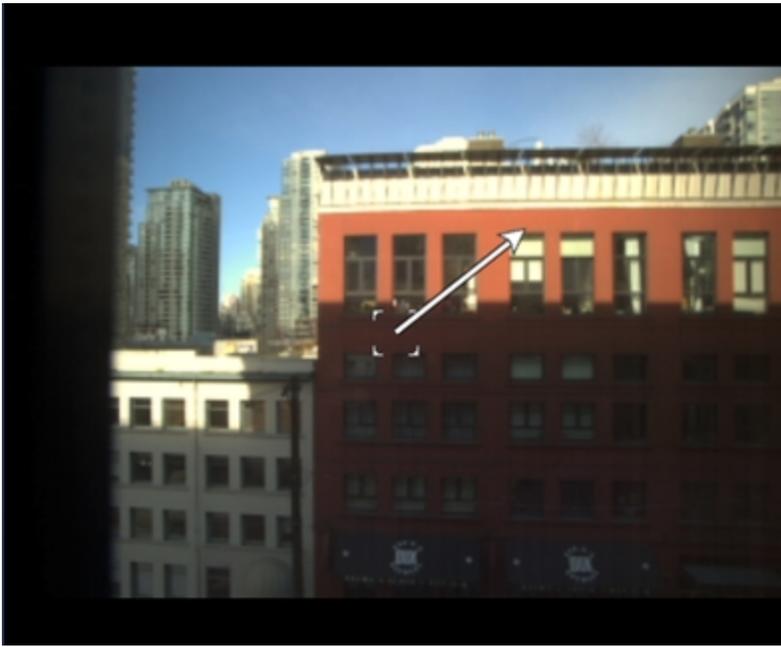
Figure 3: PTZ On-screen controls

4. Use the other PTZ controls to perform any of the following:

To...	Do this...
Zoom	• Click 🔍⁺ to zoom in. • Click 🔍⁻ to zoom out. • Click the image panel and use the mouse scroll wheel to zoom in and out. • If the camera supports Drag to Zoom, click and drag to create a green box to define the area you want to zoom in and see. • Right-click the image panel and select **Zoom Out Full**.
Control the iris	• Click ⬙ to close the iris. • Click ◯ to open the iris.
Control the focus	• Click ▲ to focus near the camera. • Click ⛰ to focus far from the camera.
Program a PTZ preset	1. Move the camera's field of view into position. 2. In the **Presets** drop down list, select a number then click ✏. 3. In the dialog box, enter a name for the preset. 4. Select the **Set as home preset** check box if you want this to be the camera's Home preset. 5. Click **OK**.

Controlling PTZ Cameras

To...	Do this...
Activate a PTZ preset	Select a preset then click ➡.
Return to the Home preset position	If the PTZ camera supports a Home preset position, click 🏠 to return the camera to its Home position.
Program a PTZ pattern	1. In the PTZ Controls pane, select a pattern number and click ●. 2. Use the PTZ controls to move the camera and create the pattern. 3. Click ■ to stop recording the pattern.
Activate a PTZ pattern	In the PTZ Controls pane, select a pattern number and click ▶. The pattern will repeat until the pattern is stopped or another pattern is run.
Program a PTZ tour	For more information, see *Programming PTZ Tours* below.
Activate a PTZ tour	In the PTZ Controls pane, select a tour number and click ▶. The tour will repeat until stopped or until other PTZ controls are used.
Activate an auxiliary command	1. Select an aux command number and click ▶. 2. Click ■ to turn off the auxiliary output.
Display the PTZ camera on-screen menu	1. Click ☰. 2. To move through the menu options, click any of the following: • Click ▲ to move down the options. • Click ▲ to move up the options. • Click ◯ to confirm your selection. • Click ◈ to cancel your selection.
Lock the PTZ controls	Click 🔒 . Other users will be unable to use the PTZ controls for this camera until you unlock the controls or log out.

Programming PTZ Tours

If the PTZ camera supports guard tours, the tours can be programmed through the PTZ controls pane. Tours allow the PTZ camera to automatically move between a series of preset positions, and can be set to pause at each preset for a specific amount of time for video monitoring.

NOTE: For video analytics devices, classified object detection only works when the camera is in its Home position.

1. Create all the PTZ presets you need for this tour.

2. In the PTZ Controls pane, select a tour number then click ✎ . The Edit PTZ Tour dialog box is displayed.

3. Give the tour a name.

4. In the **Tour Pause Duration:** field, enter the amount of time before the tour repeats. Tours repeat until manually stopped, or until other PTZ controls are used.

5. In the **Tour Mode:** drop down list, select one of the following:

    - **Sequential:** the PTZ camera will go to each preset in the set order.

    - **Random:** the PTZ camera will go to each preset in random order.

6. Select the **Set as default tour** check box if you want this tour to run automatically.

    - The **Default Tour Idle Start Time:** field is now enabled. Enter the amount of time the PTZ camera must be idle before this tour automatically starts.

7. To add a preset to the list, click ✚.

    a. In the **Preset** column, select a preset from the drop down list.

    b. In the **Move Speed** column, enter how fast you want the PTZ camera to move to this preset. The higher the %, the faster the camera moves.

    c. In the **View Time** column, enter the amount of time you want the PTZ camera to stay at this preset position. The view time is 10 seconds by default.

    d. Repeat this step until all the presets for the tour have been added.

8. To remove a preset, select the preset then click ➖.

9. To re-order a preset, select the preset then click ⬆ or ⬇. The preset order only affects tours that use Sequential mode.

10. Click **OK** to save the tour.

Triggering Manual Recording

Cameras are set to follow a recording schedule. If an event occurs outside the camera's recording schedule, you can click the record indicator icon to force the camera to record the event.

Camera Recording States

🔵	🔴	⚪
Recording	Recording triggered by an event	Not recording

Starting and Stopping Manual Recording

In an image panel that is displaying video, do either of the following:

- In the top-left corner of the image panel, click ⚪ to start manual recording.

    The recording indicator is highlighted in blue to show that the camera is recording. Manual recording

continues until it is stopped or until the maximum manual recording time is reached.

- Click ⊙ to manually stop video recording.

Triggering Digital Outputs

While you monitor live video in an image panel, you can manually trigger any digital output that is connected to the camera.

To trigger a digital output:

1. Open the camera's live video in an image panel.
2. In the image panel, click ◯.
3. If there is more than one digital output linked to the camera, you will be prompted to select the digital output you want to trigger.

Monitoring Live POS Transactions

If a camera is linked to a point of sale (POS) transaction source, you can monitor live POS transactions while you monitor video from the linked camera.

1. Open the camera's video in an image panel.
2. In the image panel, click ⊞➔.

   NOTE: If the camera is not linked to a POS transaction source, the icon is not displayed.

   If there is more than one POS transaction source linked to the camera, you will be prompted to select one. The POS transactions are displayed in the next image panel.

   Each transaction is separated by date and time, and the most recent transaction is highlighted in blue.

3. To display cameras that are linked to the POS transaction source, click 📹 in the POS transaction image panel.

   If multiple cameras are connected to the POS transaction source, you will be prompted to select one.

Controlling Recorded Video

In this section are features that are only available while monitoring recorded video.

Tip: If video appears slow, it may be a network issue between the Client software and the server that the camera is connected to. Actual recorded video quality is not affected.

Playing Back Recorded Video

The Timeline displays when video was recorded and lets you control video playback.

The colored bars on the Timeline show the camera's recording history:

- A red bar shows the camera has recorded a motion event.
- A blue bar shows the camera has recorded video.

- White areas show when the camera has not recorded any video.

- A yellow bar is a bookmark in the camera's recording history.

For more information about bookmarks, see *Bookmarking Recorded Video* on the facing page.
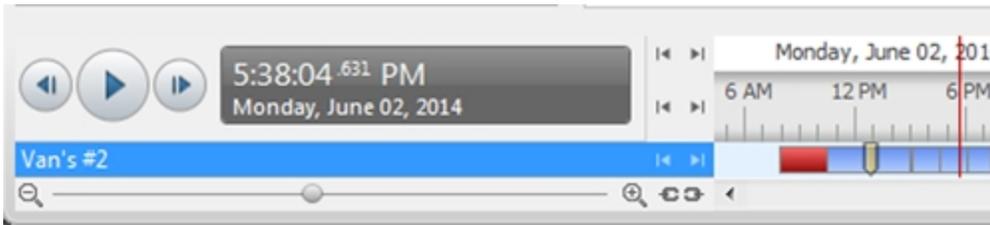
Figure 4: Playback controls on the Timeline

To...	Do this...
Select a playback time	- Click the dark gray date display and select a specific date and time. - Click a point on the Timeline.

Start playback	Click ▶.
	
	    - Click ⏩ to fast forward. Tap the arrow again to increase the playback speed.
	
	    - Click ⏪ to rewind. Tap the arrow again to increase the playback speed.
	
	You can play the video up to eight times the original speed.

Stop playback	Click ⏸.
	
	    - Click ⏯ to step forward one frame.
	
	    - Click ⏮ to step backward one frame.

Jump forward or backward on the Timeline	On the Timeline, click ⏮ or ⏭ to move to set points on the Timeline.
Zoom in or out of the Timeline	- Move the slider on the bottom left to zoom in or out on the Timeline. - Place your mouse over the Timeline and use the scroll wheel to zoom in or out on the Timeline. You can zoom in to a quarter of a second, and zoom out to see years if recorded video exists.
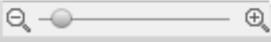
Playing Back Recorded Video

To...		Do this...
Center the Timeline on the time marker		Right-click the Timeline, and select **Center on Marker.**
Pan the Timeline		- Click and drag the time marker through the Timeline. - Move the horizontal scroll bar under the Timeline. - Right-click and drag the Timeline.
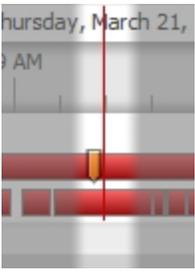
Bookmarking Recorded Video

You can add bookmarks to recorded video to help you find and review an event later. Bookmarked video can be protected against scheduled data cleanup so that the video is never deleted.

Adding a Bookmark

Tip: You can add a bookmark any time the Timeline is displayed.

1. Drag the time marker to where you want to start the bookmark, then right-click the Timeline and select **Add Bookmark**.

   The Edit Bookmark dialog box appears, and the bookmark time range is highlighted on the Timeline.

2. Enter a name for the New Bookmark.

3. In the **Cameras:** pane, select all the cameras that need to be attached to this bookmark.

   NOTE: You can only bookmark multiple cameras from the same Site.

4. In the **Time Range to Bookmark:** area, enter the full duration of the bookmark.

   You can also move the black time range markers on the Timeline to adjust the time range.

5. In the **Description:** field, enter any extra information that you want to include with the bookmark.

6. To protect the bookmark video from being deleted, select the **Protect bookmark data** check box.

   NOTE: Protected bookmarks are never deleted. Be aware that bookmarked videos take up space and can become the oldest video on the server.

7. Click **OK**.

Exporting, Editing, or Deleting a Bookmark

- Click the bookmark on the Timeline, then do one of the following:

To	Do this...
Export a bookmark	Click **Export**, then complete the Export tab. For more information, see *Export* on page 35.
Edit a bookmark	Click **Edit**, then make your changes. For more information about the editable options, see *Adding a Bookmark* above
Delete a bookmark	Click **Delete**. When the confirmation dialog box appears, click **Yes**.

Reviewing Recorded POS Transactions

While you watch recorded video, you can review POS transactions that occur at the same time.

1. Select a camera that is linked to the POS transaction source and display the camera's recorded video

2. In the image panel, click .

   If there is more than one POS transaction source linked to the camera, you will be prompted to select one. The POS transactions are displayed in the next image panel.

   - Each transaction is separated by date and time.
   - When you select a transaction, the video jumps to that event on the Timeline.
   - Scroll up or down to see other recorded POS transactions.

3. To display cameras that are linked to the POS transaction source, click in the POS transaction image panel.

   If multiple cameras are connected to the POS transaction source, you will be prompted to select one.

4. Use the Timeline to review the video in more detail.

For more information about Timelines, see *Playing Back Recorded Video* on page 19.

If you want to find a specific POS transaction, see *Performing Text Source Transactions Search* on page 32.

Working with Maps

A map is a graphical reference of your surveillance site. You can create a map out of any image of your location, then add cameras, encoders, saved Views, and other maps to the image to help you quickly navigate through your surveillance site.

Adding a Map

You can create a map from any image in JPEG, BMP, PNG, or GIF format. The image is used as the map background and cameras are added on top to show where they are located in your surveillance Site.

NOTE: You can only add and view cameras that are connected to the server that you are accessing through the Web Client.

1. In the System Explorer, right-click a Site or Site folder and select **New Map...**.
2. In the Map Properties dialog box, click **Change Image...** and locate your map image.
3. In the **Name:** field, enter a name for the map.
4. If it is not displayed, click to display the Site View Editor and choose where the map appears in the System Explorer. By default, the map is added to the Site that you initially selected.

   - If your Site includes virtual sub-sites, select a location for the map. The list on the right updates to show what is stored in that directory.
   - In the Site directory, drag the map up and down to set where it is displayed.

5. Click **OK**.

   In the following Editing: Map tab, you can click **Edit Properties...** to open the Map Properties dialog box again.

6. Drag and place cameras from the System Explorer onto the map.
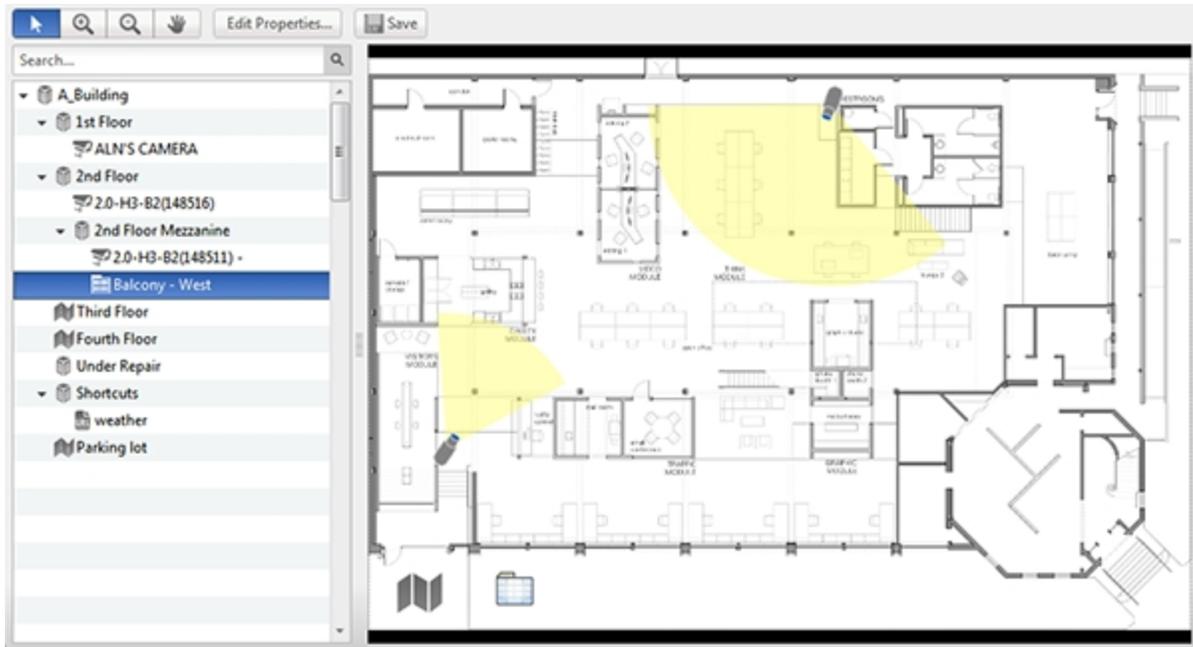
Figure 5: The Editing: Map tab

By default a camera is displayed as an icon with a yellow triangle to represent its field of view.

- Drag the black points at the end of the yellow field of view to re-size and position the camera angle.

7. Drag encoders, saved Views and other maps that you need from the System Explorer onto the map.

8. In the **Map Icon Properties** options, you can change the way icons are displayed on the map. Select any icon on the map then do the following:
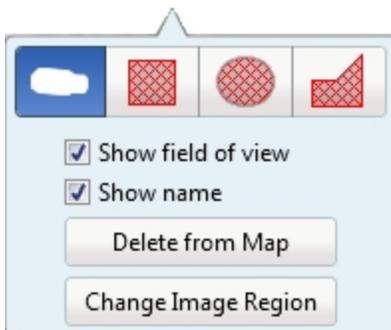
Figure 6: Map Icon Properties options

a. To replace an icon with a clickable shape region, select one of the shape buttons. You can replace the icon with a rectangle, ellipse or polygon region.

b. Select the **Show name** check box to display the object's name on the map.

c. Click **Delete from Map** to remove the object from the map.

d. (Cameras only) Select the **Show field of view** check box to display the camera's yellow field of view. This option is only available when the camera icon is used.

Drag the corners of the yellow triangle to expand the field of view. Drag the black circle at the end of the triangle to rotate the field of view.

9. Click ![save icon] to save your new map.

Using a Map

You can open a map in any image panel, then open video or alarms from the map.

1. To open a map in an image panel, do one of the following:

   - Double-click ![map icon] in the System Explorer.

   - Drag ![map icon] from the System Explorer to an image panel.

   - In the System Explorer, right-click ![map icon] and select **Add To View**

2. When the map appears in an image panel, do any of the following:
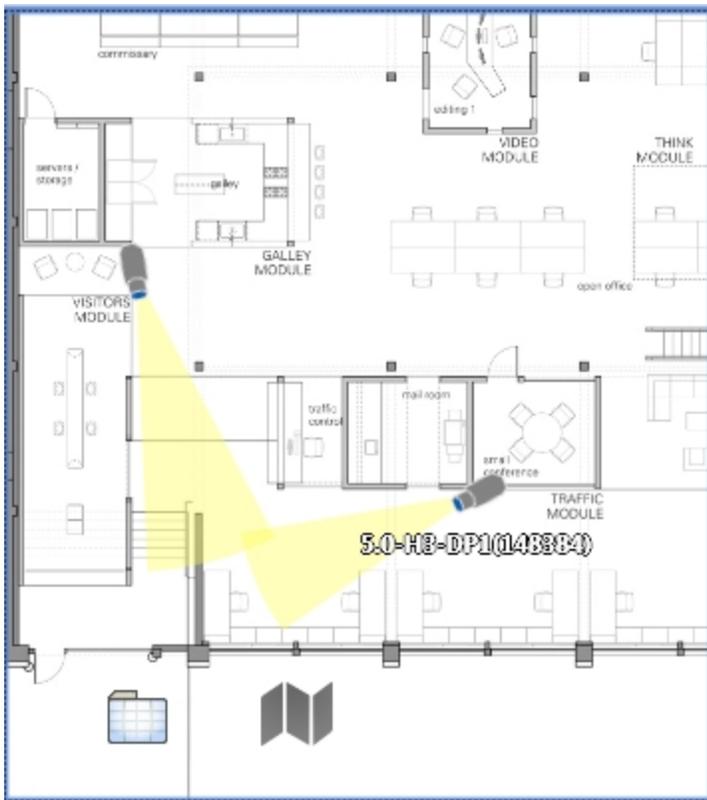
Figure 7: Map in an image panel.

To...	Do this...
Display video from a camera on the map	- Drag a camera from the map to a different image panel, or - Click the camera on the map.

To...	Do this...
Open a linked map	• Click the map icon on the map. You can use the **Forward** and **Back** buttons to move between maps.
Open a linked View	• Click the saved View on the map.

Editing and Deleting a Map

You can update a map or delete an old map anytime.

1. In the System Explorer, right-click 📖 then select one of the following:

   - To edit the map, select **Edit...**. For more information about the available map options, see *Adding a Map* on page 23.

   - To delete the map, select **Delete**. When the confirmation dialog box appears, click **Yes**.

Working with Web Pages

You can quickly review online content while monitoring videos by adding web pages to the System Explorer.

Adding a Web Page

You can add web pages to a Site for quick access to internet content that is related to your surveillance system.

1. In the System Explorer, right-click a Site or Site folder and select **New Web Page...**.

    The Web Page Properties dialog box

2. Enter a **Name:** for the web page.

3. Enter the web page URL in the **URL:** field.

4. Select a **Zoom level:** for viewing the web page inside an image panel.

5. If it is not displayed, click ⌄ to display the Site View Editor and choose where the web page appears in the System Explorer. By default, the web page is added to the Site you initially selected.

    -   If your Site includes virtual sub-sites, select a location for the web page. The list on the right updates to show what is stored in that directory.

    -   In the Site directory, drag the web page up and down to set where it is displayed.

6. Click **OK**.

Using a Web Page

To open a web page, do one of the following:

-   Double-click ⬚ in the System Explorer.

-   Drag ⬚ from the System Explorer to an image panel.

-   In the System Explorer, right-click ⬚ and select **Add To View**.

The web page is displayed in one of the image panels. Use the web browser buttons to navigate through the internet.

Figure 8: Web Page controls.

Editing and Deleting a Web Page

Whenever a web page address becomes out of date, you can choose to update the web page or delete the web page from the Site.

- In the System Explorer, right-click ![URL icon] then select one of the following:
    - To edit the web page, select **Edit...** For more information about the editable options, see *Adding a Web Page* on the previous page.
    - To delete the web page, select **Delete**. When the confirmation dialog box is displayed, click **Yes**.

Search

You can quickly search for recorded video that is linked to an event or search through a camera's recording history.

NOTE: Some features are not displayed if the server does not have the required license, or if you do not have the required user permissions.

Performing an Event Search

The Event Search allows you to search for specific events that the system is configured to identify.

1. In the New Task menu, click

   The Search: Event tab is displayed.

2. In the **Camera(s) to Search:** area, select all the cameras you want to include in the search.

3. In the **Time Range to Search:** area, set the date and time range of your search. The time range is highlighted on the Timeline by the black time range markers. You can also drag the time range markers to modify the time range.

4. In the **Events to Search For:** area, select the types of events to include in the search.

   - Select **Motion Events** to find events detected in the camera's Motion Detection area.
   - Select **Digital Input Events** to find events detected by digital inputs that are connected to the selected cameras.
   - Select **Classified Object Events** to find events detected in the camera's Video Analytics Configuration area.

5. Click **Search**.

Viewing Search Results

1. In the **Search Results** area, select a search result. The event is highlighted on the Timeline and the video is displayed in the image panel. Details about the search result are displayed to the right.

2. Use the Timeline controls to review the event.

   For more information, see *Playing Back Recorded Video* on page 19.

3. Click **Export this event** to export the selected event video.

   For more information, see *Export* on page 35.

4. If you want to further refine your search, click **Perform a motion search on this event**. You can now search for detailed changes in the selected search result.

   For more information, see *Performing a Motion Search* on the next page.

5. Click **Bookmark this event** to bookmark the selected search result.

For more information, see *Bookmarking Recorded Video* on page 21.

6. Click **Add to new View** to display the search result video in a new View tab.

7. To export all listed search results, click **Export results to a file** and save the file. The search results can be saved as either a CSV or Text file.

Performing a Motion Search

The Motion Search tab allows you to search for classified object motion and pixel motion.

NOTE: Classified Object Motion search is always displayed but only video from a self-learning video analytics device will generate meaningful search results.

1. In the New Task menu, click

   The Search: Motion tab is displayed. By default, the entire search image panel is highlighted in green.

2. In the **Camera to Search:** area, select a camera.

3. In the **Time Range to Search:** area, set the date and time range of your search. The time range is highlighted on the Timeline by the black time range markers. You can also drag the time range markers to modify the time range.

4. Select the type of motion search that you would like to perform:

   - Click **Classified Object Motion** to search for objects detected by a video analytics camera.

     a. In the Classified Object Motion area, check the box to search for persons.

     b. Check the box to search for vehicles.

     c. Move the **Confidence:** slider to set how certain the system must be that it identified the correct object type.

     d. Enter a time in seconds in the **Object Duration:** field to define how long each result must be in the scene.

     e. Select one of the following options:

        - **Individual objects** — select this option to display each classified object as an individual search result.

        - **Joined by time** — select this option to display objects that appear simultaneously as one search result. Define the minimum number of **seconds apart** before the next search result is generated.

   - Click **Pixel Motion** to search for tiny pixel changes in a specific area in the camera's field of view.

     a. In the Pixel Search Options: area, drag the **Threshold:** slider to select the amount of motion required to return a search result.

        A high threshold requires more pixels to change before results are found.

     b. Enter a number in the **Join results less than** field to set the minimum number of seconds between separate search results. You can enter any number between 1-100 seconds.

5. Define the green search area by using the tools above the image panel.

6. Click **Search**.

Viewing Search Results

Depending on the type of Motion Search you performed, some of the following options may not be available.

1. In the **Search Results** area, select a search result. The event is highlighted on the Timeline and the video is displayed in the image panel. Details about the search result are displayed to the right.

   If you performed a Classified Object Motion search, the objects in the search result are highlighted in the image panel.

2. Use the Timeline controls to review the event.

   For more information, see *Playing Back Recorded Video* on page 19.

3. Click **Export this event** to export the selected event video.

   For more information, see *Export* on page 35.

4. Click **Bookmark this event** to bookmark the selected search result.

   For more information, see *Bookmarking Recorded Video* on page 21.

5. Click **Add to new View** to display the search result video in a new View tab.

6. To export all listed search results, click **Export results to a file** and save the file. The search results can be saved as either a CSV or Text file.

7. If you performed a Classified Object Motion search and chose to join the search results, you will have the option to **Find individual objects in this event**. Click this button to perform a new search to identify each individual object in the search result.

Performing a Thumbnail Search

The Thumbnail Search is a visual search that displays search results as a series of thumbnail images.

1. In the New Task menu, click .

   The Search: Thumbnails tab is displayed.

2. In the **Camera to Search:** area, select a camera.

3. In the **Time Range to Search:** area, set the date and time range of your search. The time range is highlighted on the Timeline by the black time range markers. You can also drag the time range markers to modify the time range.

4. In the image panel, move or drag the edges of the green overlay to focus the search on one area in the video image. Only the area highlighted in green will be searched.

5. Click **Search**.

Viewing Search Results

The search results display thumbnails at equal intervals on the Timeline.

1. To change the size of the search result thumbnails, select **Large Thumbnails**, **Medium Thumbnails** or **Small Thumbnails** from the menu above the search results.
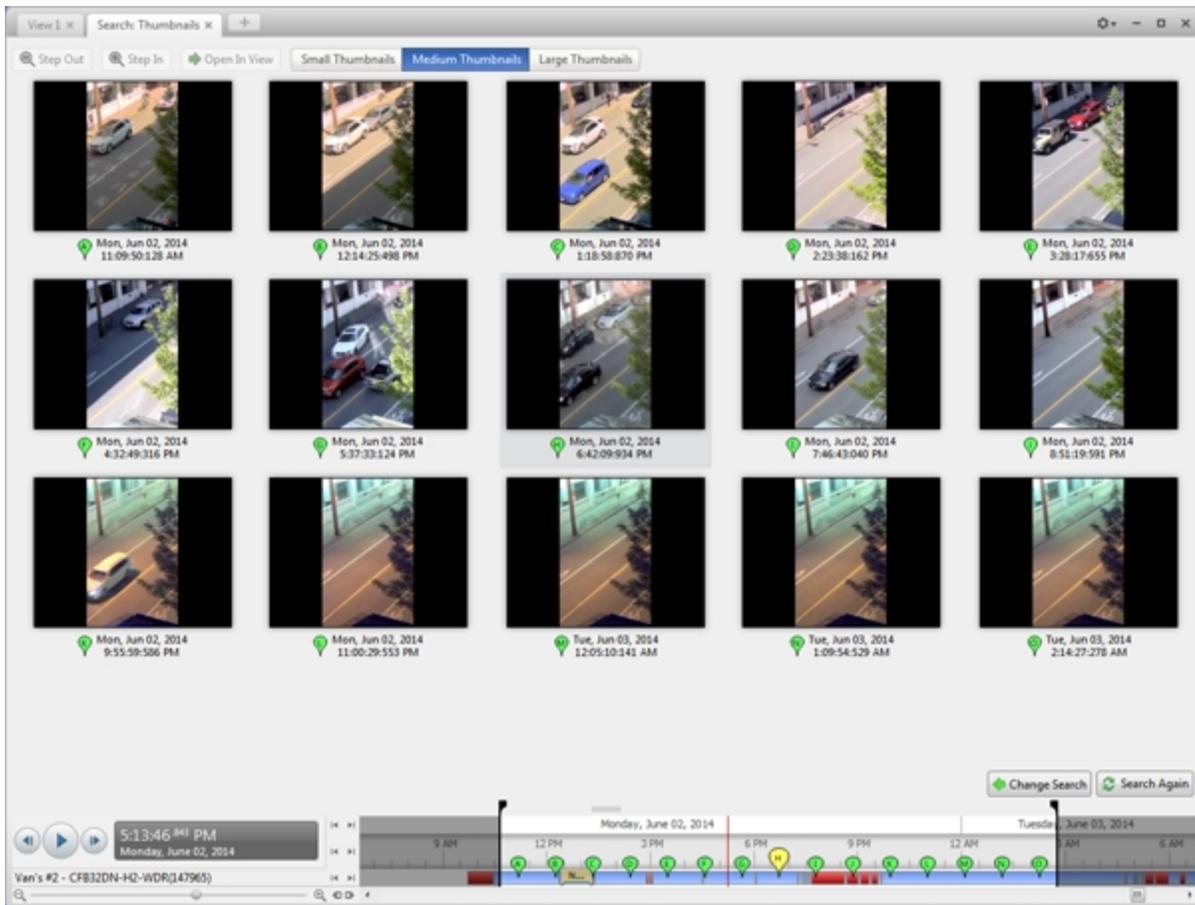
Figure 9: The Search: Thumbnails results tab

2. Select a thumbnail to highlight the video on the Timeline.

3. Click **Step In**, or double-click the thumbnail to perform another search around the thumbnail.

   Click **Step Out** to return to the previous results page.

4. Click **Open In View** (after selecting a thumbnail) to open the recorded video in a new View.

5. Click **Change Search** to change the search criteria.

Performing Text Source Transactions Search

The Text Source Transactions Search allows you to search for specific transactions recorded by the POS transactions feature.

1. In the New Task menu, click .

   The Search: POS Transactions tab is displayed.

2. In the **POS Transaction Sources to Search:** area, select all the POS transaction sources you would like to include in the search.

3. In the **Time Range to Search:** area, set the date and time range of your search. The time range is highlighted on the Timeline by the black time range markers. You can also drag the time range markers to modify the time range.

4. In the **Search Text:** area, enter any text that will help you filter the search results. For example, you can enter product names or transaction values.

   Use **Wildcards** and **Regular expressions** search methods to find a range of results. Leave the **Text:** field blank to find all transactions.

5. Click **Search**.

Viewing Search Results

1. In the **Search Results** area, select a search result. The event is highlighted on the Timeline and the video is displayed in the image panel. Details about the search result are displayed to the right.

2. Use the Timeline controls to review the event.

   For more information, see *Playing Back Recorded Video* on page 19.

3. If the search result is linked to multiple cameras, select a camera from the drop down list above the image panel to change the video that is displayed.

4. Click **Export this event** to export the selected event video.

   For more information, see *Export* on page 35.

5. To export all listed search results, click **Export results to a file** and save the file. The search results can be saved as either a CSV or Text file.

Performing a Bookmark Search

The Bookmark Search allows you to search for a specific bookmark.

1. In the New Task menu, click

   The Search: Bookmark tab is displayed. All available bookmarks are listed on the left.

2. In the **Search:** field at the top of the tab, enter any text that may appear in the bookmark's title, description, linked camera name or the name of the user who created the bookmark.

   The search is automatically performed on all the listed bookmarks until only the matches are displayed.

Viewing Search Results

1. In the Bookmark list, select a bookmark. The bookmark is highlighted on the Timeline and the video is displayed in the image panel. Details about the bookmark are displayed under the image panel.

2. Use the Timeline controls to review the event.

   For more information, see *Playing Back Recorded Video* on page 19.

3. If the search result is linked to multiple cameras, select a camera from the drop down list above the image panel to change the video that is displayed.

4. Click **Export this event** to export the selected bookmark.

5. If you want to further refine your search, click **Perform a motion search on this event**. You can now search for more detailed changes in the selected bookmarked video.

   For more information, see *Performing a Motion Search* on page 30.

6. Click **Edit this bookmark** to edit the bookmark.

   For more information, see *Bookmarking Recorded Video* on page 21.

7. To export a list of all bookmarks in the system, click **Export results to a file** and save the file. The list can be saved as either a CSV or Text file.

Export

You can export video in multiple video and image formats. The Export tab can be accessed from bookmark options, the New Task menu and any Search tab.

You can also export snapshots of an image panel as you monitor video.

It is recommended that you export video of individual events and back up video for your archives. For more information, see *Archive* on page 43.

Exporting a Snapshot of an Image

You can export a snapshot of any image panel with video. When you export a snapshot, you are exporting what the image panel is currently displaying.

1. To export a snapshot, do one of the following:

    - In the image panel, click .

    - Right-click the image panel and select **Save Snapshot**.

    The Export tab opens and your snapshot is displayed in the image panel.

2. In the **Format:** drop down list, select the export file format then define your preferences:

Format	Export Options
Native **NOTE:** The Native format requires the Avigilon Control Center Player to view.	This is the recommended export format because the exported image maintains its original compression and can be authenticated against tampering in the Avigilon Control Center Player software.
PNG image	1. In the **Resolution:** field, select a resolution for the video image. You can manually enter the resolution or click the drop down arrow to select a standard resolution. **NOTE:** The Resolution: field automatically maintains the image aspect ratio. 2. Select the image overlays you want: **Timestamp**, **Camera name** and **Camera location**. 3. Click **Change Image Region...** to only export part of the video image. In the **Change Image Region** dialog box, move and resize the green overlay then click **OK**. Only areas highlighted in green are exported. 4. Click **Display Adjustments...** to adjust the **Gamma:**, **Black Level:** and **White Level:**.
JPEG image	1. In the **Quality:** drop down list, select the exported image quality level. 2. Set the image **Resolution:**.

Format	Export Options
	3. Select the image overlays you want. 4. Click **Change Image Region...** to only export a part of the video image. 5. Click **Display Adjustments...** to modify the image quality.
TIFF image	1. Set the image **Resolution:**. 2. Select the image overlays you want. 3. Click **Change Image Region...** to only export a part of the video image. 4. Click **Display Adjustments...** to modify the image quality.
Print image	1. Select the image overlays you want. 2. Click **Change Image Region...** to only export a part of the video image. 3. Click **Display Adjustments...** to modify the image quality. 4. Click **Printer Settings...** to change the selected printer and paper size. 5. Click **Add Export Notes...** to add notes about the snapshot. The notes are printed below the image.
PDF file	1. Select the image overlays you want. 2. Click **Change Image Region...** to only export a part of the video image. 3. Click **Display Adjustments...** to modify the image quality. 4. Click **Add Export Notes...** to add notes about the snapshot.

4. Click **Start Export**.

5. In the Save As dialog box, name the export file and click **Save**. If you are printing the snapshot, the image is sent to your printer instead.

    The Preview area displays the snapshot you are exporting.

6. When the export is complete, click **OK**.

Exporting Native Video

The Native (AVE) format is the recommended format for exporting video. You can export video from multiple cameras in a single file, and the video maintains its original compression. AVE video export also includes the original video metadata so you can search the exported video, including video analytics data. AVE video is played in the Avigilon™ Control Center Player, where the video can be authenticated against tampering and re-exported to other formats.

If there is audio linked to the video, the audio is automatically included in the export.

If you are exporting a large amount of video for your records, back up the video instead. For more information, see *Archiving Recorded Video On Demand* on page 43.

1. In the New Task menu, click ![icon]. The Export tab opens.

2. In the **Format:** drop down list, select **Native**.

3. From the **Cameras:** drop down explorer, select the camera video that you want to export.

   A preview of the video is displayed in the image panel. Use the Timeline controls to playback the video. For more information, see *Playing Back Recorded Video* on page 19.

   Tip: You can select more than one camera for this type of export.

4. Enter the Time Range you want to export. The Time Range is highlighted on the Timeline by black time range markers. You can also drag the time range markers to modify the time range.

5. If you want to add another video clip to the export, click **Add clip** then select the required cameras and time range.

   The Add clip feature allows you to export video from different combinations of cameras and different time ranges as one export file.

   For example, there is a person that is suspected of stealing from a store. During the investigation, you discover that the same person visits the store multiple times over one week. The Add clip feature allows you to export one file that includes all video of the suspect from the week.

   Repeat this step until you've added all the clips that you need. You can remove a clip from the export by clicking the **X** button in the top-right corner of the clip area.

6. From the **Image Rate:** drop down list, select how many images per second are exported.

   For example, the video is streaming at 30 images per second. If you select **1/2**, only 15 images for that second will be exported.

   To define a specific image rate, select **Custom (ips)** then enter the image rate in minutes and seconds. If you enter 1 minute and 0 seconds, one frame of video is exported for each minute of the export.

7. To automatically divide the export into separate files, select a **Maximum file size:**.

   This option allows you to export smaller files for storing in a flash drive or on optical media.

   This setting is automatically disabled if you choose to burn the export to disc because the system auto-detects the disc size.

8. Click one of the following:

   Tip: While the file is being exported, you can continue to use the Client software for regular operations in the other tabs.

   - **Start Export**: to save the file locally.
     - In the Save As dialog box, name the export file and click **Save**.

- **Burn to Disc**: to burn the file directly to disc media.

    a. When the dialog box appears, insert a disc and select the media burning drive.

    b. Name the export file. The file name is automatically given a numbered suffix to help identify which file you are playing if the export spans multiple discs.

    c. Click **Burn to Disc** to start the export. If this button is disabled, the disc may be corrupt or full.

    d. Monitor the export progress to see if extra discs are required. When a disc is full, the export automatically pauses and you are asked to insert a new disc. After you insert a new disc, click **Resume Export**.

The number of discs required to export a video varies widely depending on the type of camera and disc used. Video is stored on the server with minimal compression to maximize the function of Avigilon's HDSM™ technology, so the size of an export can be quite large due to the camera's high megapixel resolution and frame rate.

Generally, if you export a 2 minute video from a 2MP H.264 HD camera into AVE format, you will export a 93 MB file. To reduce the number of discs required, you can lower the frame rate or use a disc type with a larger capacity. Be aware that reducing the frame rate too much may cause the exported video to be jerky or missing data.

9. When the export is complete, click **OK**.

Exporting AVI Video

Video exported in Audio Video Interleave (AVI) format can be played in most media players. Be aware that you can only export one video at a time in this format.

1. In the New Task menu, click . The Export tab opens.

2. In the **Format:** drop down list, select **AVI video**.

3. From the **Cameras:** drop down explorer, select the camera video that you want to export.

    A preview of the video is displayed in the image panel. Use the Timeline controls to playback the video. For more information, see *Playing Back Recorded Video* on page 19.

4. Enter the Time Range you want to export. The Time Range is highlighted on the Timeline by black time range markers. You can also drag the time range markers to modify the time range.

5. In the **Encoder:** field, select the compression used. The VC-1 (Windows Media Video) compression is included by default because it is tailored for high-resolution AVI encoding.

    If you are planning to burn the export to disc, it is important to select a compression method to help reduce the export size and maintain video quality.

6. In the **Quality:** drop down list, select the exported image quality level.

    NOTE: You can only change the Quality: setting if you've selected an Encoder: for the export.

7. In the **Resolution:** field, select a resolution for the video image. You can manually enter the resolution or click the drop down arrow to select a standard resolution.

NOTE: The Resolution: field automatically maintains the image aspect ratio.

8. From the **Image Rate:** drop down list, select how many images per second are exported.

    For example, the video is streaming at 30 images per second. If you select **1/2**, only 15 images for that second will be exported.

    To define a specific image rate, select **Custom (ips)** then enter the image rate in minutes and seconds. If you enter 1 minute and 0 seconds, one frame of video is exported for each minute of the export.

9. To automatically divide the export into separate files, select a **Maximum file size:**.

    This option allows you to export smaller files for storing in a flash drive or on optical media.

    This setting is automatically disabled if you choose to burn the export to disc because the system auto-detects the disc size.

10. Select the **Skip recording gaps** check box to avoid pauses in the video caused by gaps in the recording.

11. Select the image overlays that you want to display in the export: **Timestamp**, **Camera name** and **Camera location**.

    Select the **Video Analytics Activity** overlay to include classified object bounding boxes in the export. The bounding boxes will be embedded in the video and cannot be removed from the export.

12. Click **Change Image Region...** to only export part of the video image. In the **Change Image Region...** dialog box, move and resize the green overlay to select the region you want to export, then click **OK**. Only areas highlighted in green will be exported.

13. Click **Display Adjustments...** to adjust the **Gamma:**, **Black Level:** and/or **White Level:**.

14. Click one of the following:

    Tip: While the file is being exported, you can continue to use the Client software for regular operations in the other tabs.

    - **Start Export**: to save the file locally.
        - In the Save As dialog box, name the export file and click **Save**.
    - **Burn to Disc**: to burn the file directly to disc media.
        a. When the dialog box appears, insert a disc and select the media burning drive.
        b. Name the export file. The file name is automatically given a numbered suffix to help identify which file you are playing if the export spans multiple discs.
        c. Click **Burn to Disc** to start the export. If this button is disabled, the disc may be corrupt or full.
        d. Monitor the export progress to see if extra discs are required. When a disc is full, the export automatically pauses and you are asked to insert a new disc. After you insert a new disc, click **Resume Export**.

    The number of discs required to export a video varies widely depending on the type of camera and disc used. Video is stored on the server with minimal compression to maximize the function of Avigilon's HDSM technology, so the size of an export can be quite large due to the camera's high megapixel resolution and frame rate.

Generally, if you export a 2 minute video from a 2MP H.264 HD camera into uncompressed AVI format, you will export a 2.7 GB file. If you select an **Encoder:** format and compress the video, you can export a 224 MB video at high quality. It is recommended that you always select an Encoder: format for AVI export to help significantly reduce the file size.

To further reduce the file size you can select a lower quality setting, lower the export frame rate, reduce the video resolution, or focus the export on a specific image region. Be aware that reducing each of the available settings too much may cause the export to be blurry or missing frames.

If it is important to have a high quality and full frame rate export, it is recommended that you use the AVE export format instead. AVE export intelligently compresses the video to create a smaller export file while maintaining video data so that you can search, re-export video, and authenticate the video against tampering through the Avigilon Control Center Player software.

15. When the export is complete, click **OK**.

Exporting a Print Image

You can export a frame of video directly to your printer or as a PDF. The export can also include any notes you may have about the image.

Tip: You can perform a similar export by taking a snapshot. For more information, see *Exporting a Snapshot of an Image* on page 35.

1. In the New Task menu, click . The Export tab opens.

2. In the **Format:** drop down list, select **Print image** or **PDF file**.

3. From the **Cameras:** drop down explorer, select the camera video that you want to export.

   A preview of the video is displayed in the image panel. Use the Timeline controls to playback the video. For more information, see *Playing Back Recorded Video* on page 19.

4. On the Timeline, move the red time marker to locate the video image that you want to export.

5. Select the image overlays that you want to display in the export: **Timestamp**, **Camera name** and **Camera location**.

6. Click **Change Image Region...** to only export part of the video image. In the **Change Image Region...** dialog box, move and resize the green overlay to select the region you want to export, then click **OK**. Only areas highlighted in green will be exported.

7. Click **Display Adjustments...** to adjust the **Gamma:**, **Black Level:** and/or **White Level:**.

8. (Print Image Only) Click **Printer Settings...** to change the printer and paper size.

9. Click **Add Export Notes...** to add notes about the exported image. The notes are added below the image.

10. Click **Start Export**.

    - If you are exporting a Print image, the image is sent to the printer.

    - If you are exporting a PDF file, save the image.

The Preview area displays the video you are exporting.

11. When the export is complete, click **OK**.

Exporting Still Images

Video can be exported as a series of still PNG images, JPEG images, or TIFF images. When you export a series of still images, you are exporting each frame of video as an independent file.

If you only want one photo of the video you are watching, take a snapshot. For more information, see *Exporting a Snapshot of an Image* on page 35.

1. In the New Task menu, click . The Export tab opens.

2. In the **Format:** drop down list, select **PNG images**, **JPEG images**, or **TIFF images**.

3. From the **Cameras:** drop down explorer, select the camera video that you want to export.

   A preview of the video is displayed in the image panel. Use the Timeline controls to playback the video. For more information, see *Playing Back Recorded Video* on page 19.

4. Enter the Time Range you want to export. The Time Range is highlighted on the Timeline by black time range markers. You can also drag the time range markers to modify the time range.

5. (JPEG only) In the **Quality:** drop down list, select the exported image quality level.

6. In the **Resolution:** field, select a resolution for the video image. You can manually enter the resolution or click the drop down arrow to select a standard resolution.

   NOTE: The Resolution: field automatically maintains the image aspect ratio.

7. From the **Image Rate:** drop down list, select how many images per second are exported.

   For example, the video is streaming at 30 images per second. If you select **1/2**, only 15 images for that second will be exported.

   To define a specific image rate, select **Custom (ips)** then enter the image rate in minutes and seconds. If you enter 1 minute and 0 seconds, one frame of video is exported for each minute of the export.

8. To limit the number of images that are exported, enter a maximum number in the **Images to Export:** field or use the default Unlimited setting.

   The export stops when the maximum number is reached, or when the end of the export time range is reached.

9. Select the image overlays that you want to display in the export: **Timestamp**, **Camera name** and **Camera location**.

10. Click **Change Image Region...** to only export part of the video image. In the **Change Image Region...** dialog box, move and resize the green overlay to select the region you want to export, then click **OK**. Only areas highlighted in green will be exported.

11. Click **Display Adjustments...** to adjust the **Gamma:**, **Black Level:** and/or **White Level:**.

12. Click **Start Export**.

13. In the Save As dialog box, name the export file and click **Save**.

    The Preview area displays the video you are exporting.

14. When the export is complete, click **OK**.

Exporting WAV Audio

If you want to export audio with video, simply export the video in Native or AVI format. Any audio that is linked to the video is automatically included in the export file.

This procedure exports the audio alone.

1. In the New Task menu, click . The Export tab opens.

2. In the **Format:** drop down list, select **WAV audio**.

3. In the **Cameras:** drop down list, select the camera that the audio is linked to.

4. Enter the Time Range you want to export. The Time Range is highlighted on the Timeline by black time range markers. You can also drag the time range markers to modify the time range.

5. Click **Start Export**.

6. In the Save As dialog box, name the export file and click **Save**.

    The Preview area displays the video that is linked to the audio you are exporting.

7. When the export is complete, click **OK**.

Archive

If you need to export a large amount of camera video, it is faster to archive the content into Avigilon Backup (AVK) format. AVK files can be opened in the Avigilon™ Control Center Player and re-exported as needed.

If you only want to archive an individual event, it is recommended that you export the video instead. For more information, see *Export* on page 35.

Be aware that you can only archive video if the option is enabled in the Avigilon Control Center Admin Tool for each server. For more information, see *The Avigilon Control Center Server User Guide.*

Archiving Recorded Video On Demand

If you want a copy of the recorded video in your system, use the Archive feature. Video is always archived in Avigilon Backup (AVK) format. You can review the archived video in the Avigilon Control Center Player.

The archived files are stored in a folder set by the Avigilon™ Control Center Admin Tool. For information about changing the archive location, see *The Avigilon Control Center Server User Guide*.

1. In the application window, click > .

   The Archive tab is displayed.

2. In the System Explorer, select all the cameras you want to archive.

   NOTE: You can only archive video from one server at a time.

3. In the **Archive Options** area, set the time range of the archive.

   The time range is highlighted on the Timeline by the black time range markers. You can also drag the time range markers to change the time range.

4. Select the **Delete oldest archives when disk full** check box to allow the application to automatically overwrite old archive files when the archive folder is full.

5. Click **Start Archiving**.

6. When the archive is complete, click **OK**.

Each video archive is saved in a subfolder that is named after the archive time range.