



Avigilon Control Center™ Player User Guide

Version 6.0

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What is the Avigilon Control Center™ Player?

The Avigilon Control Center Player is the video player for Avigilon Native Video Export (AVE) files and Avigilon Backup (AVK) files.

The Player displays video in image panels, and allows you to control their playback through the Timeline. The Player is able to authenticate video files against tampering, and can be used to re-export video into other formats. Both AVE and AVK video include event data embedded in the file, so you are also able to search for events that are linked to the video.

A copy of the Player can be downloaded from the Avigilon website, or exported with the AVE file from the Avigilon Control Center Client software (see *The Avigilon Control Center Client User Guide* for more information).

For More Information

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

Avigilon Resource Center

Register for access to the Avigilon Resource Center to gain access to additional resources for your Avigilon products. The Resource Center provides free online training videos, product documentation, and other self-directed support resources.

Register and login at https://avigilonresourcecenter.force.com/avigilon/avg_login

Technical Support

To contact Avigilon Technical Support, go to <http://avigilon.com/contact-us/>

Upgrades

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

Feedback

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


Starting Up and Shutting Down the Avigilon Control Center Player

The Avigilon Control Center Player can be started up or shut down at any time.

Starting Up the Player

The Player can be opened in any of the following ways:




- Double-click the  shortcut icon on the desktop.
- In Windows, select **All Programs** or **All Apps > Avigilon > Avigilon Control Center Player > Avigilon Control Center Player**.

When the application first opens, you will be prompted to open an AVE or AVK file.

- Double-click an Avigilon Native Video Export (AVE) file or Avigilon Backup (AVK) file. The Player will open and display the video file.

Shutting Down the Player

- In the Avigilon Control Center Player software, select  > **Exit**.

Authenticating Video

All Avigilon Native Video Export (AVE) and Avigilon Backup (AVK) files contain an encrypted digital signature that is used to confirm that exported images have not been tampered with.

- To authenticate a video, select  > **Authenticate Images...**

The Authenticate Images dialog box appears and displays the progress as the application checks all the video images for tampering.

When the process is complete, the Authenticate Images dialog box displays the number of images that are authentic and the number of images that have been corrupted.

Organizing 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.

Making a View Full Screen

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


- On the toolbar, click .

Ending Full Screen Mode

- While the View is in full screen mode, click .


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.
- If you select **Auto**, the View automatically selects the layout based on the number of camera video that are playing from the Timeline.

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.

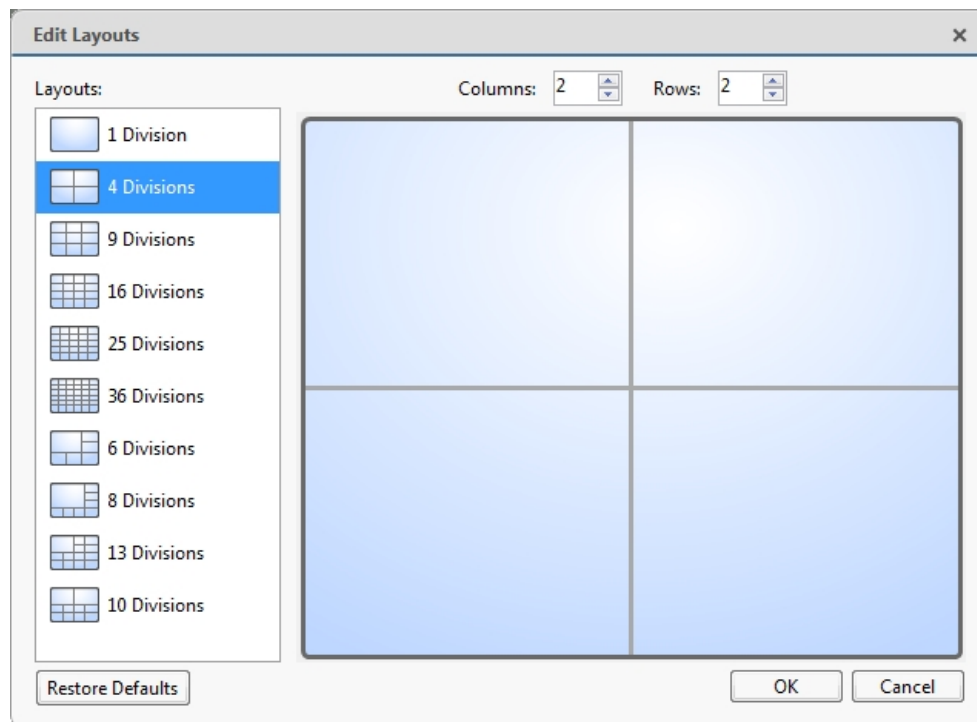


Figure 1: The Edit Layouts dialog box

- 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.

Reviewing Video

The Avigilon Control Center Player allows you to watch exported Avigilon Native Video Export (AVE) video and Avigilon Backup (AVK) video in View tabs, similar to the Avigilon Control Center Client software.

If the video file contains video from multiple cameras, the video can be displayed in multiple image panels. You can zoom and pan the exported video images, and use the Timeline to control the playback of the recorded video.

Adding and Removing Cameras in a View

You can add and remove cameras from the View to focus on specific parts of the video file.

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 .

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.

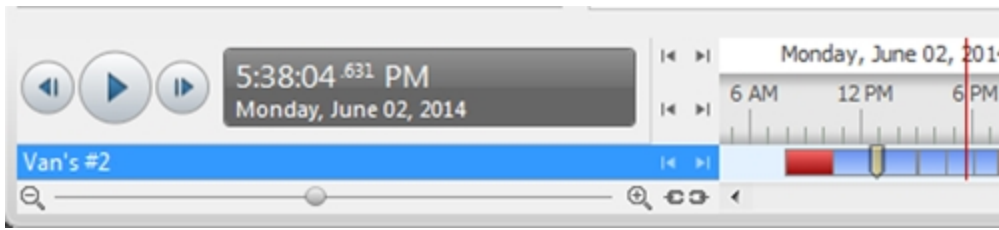






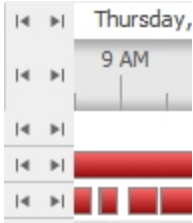


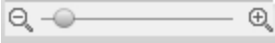
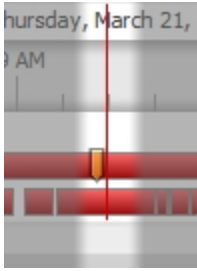


Figure 2: Playback controls on the Timeline

To...	Do this...	
Select a playback time	<ul style="list-style-type: none"> Click the dark gray date display and select a specific date and time. Click a point on the Timeline. 	
Start playback	<p>Click .</p> <ul style="list-style-type: none"> 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. <p>You can play the video up to eight times the original speed.</p> <p>As video plays, the Player automatically skips through white areas on the Timeline with no recorded content.</p> <p>If you are using the Auto View layout mode, the View automatically displays video from all the cameras with recorded content at the same point on the Timeline. As each recorded video segment ends, the View hides the video that is not playing.</p>	
Stop playback	<p>Click .</p> <ul style="list-style-type: none"> Click  to step forward one frame. Click  to step backward one frame. 	
Jump forward or backward on the Timeline		<p>On the Timeline, click  or  to move to set points on the Timeline.</p>
Zoom in or out of the Timeline		<ul style="list-style-type: none"> 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. <p>You can zoom in to a quarter of a second, and zoom out to see years if recorded video exists.</p>



To...		Do this...
Center the Timeline on the time marker		Right-click the Timeline, and select Center on Marker .
Pan the Timeline		<ul style="list-style-type: none"> • Click and drag the time marker through the Timeline. • Move the horizontal scroll bar under the Timeline. • Right-click and drag the Timeline.

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.

Listening to Audio


If audio was included in the video file, you can listen to it through the video image panel. The audio is muted by default.

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.

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 10.

If you want to find a specific POS transaction, see *Performing Text Source Transactions Search* on page 21.

Video Display

You can adjust how video is displayed on your monitor. The settings only affect how video is displayed on your monitor and will not affect the contents of the video file.

1. In the top-right corner of the Player, select  > **Player Settings...**

The Display dialog box is displayed.

2. Perform any of the following procedures to adjust how video is displayed in image panels.

Displaying Analog Video in Deinterlaced Mode

Select the **Display Deinterlaced Images** check box if the analog video you are watching is showing interlacing artifacts. This setting will help improve video image and smooth out some of the artifacts.

Looping Playback

If you want the Player to automatically repeat the video it is playing, select the **Loop Playback** check box.

Displaying Image Overlays

Select any of the Image Overlays: options to set the type of information that is displayed over video.

Overlay	Description
Camera Name	Displays the name assigned to the camera.
Camera Location	Displays the location assigned to the camera.
Playback Timestamp	<p>(Recorded video only) Displays the exposure timestamp for the video.</p> <p>From the Timestamp Zone: area, select the time that should be displayed:</p> <ul style="list-style-type: none"> • Show device time — If you have cameras installed at different locations in your system, select this option to display the time recorded at the camera location. • Show local time — Select this option to display the recorded video time in your local timezone.
Motion Activity	Highlights motion in red.
Video Analytics Activity	<p>Bounding boxes outline objects detected in the video. The color of the bounding box identifies the object type:</p> <ul style="list-style-type: none"> • Red - a person • Blue - a vehicle <p>The Video Analytics Activity overlay is only activated for video from a video analytics device.</p> <p>NOTE: The bounding boxes may not be displayed if the feature is disabled on the specific device.</p>

Changing Display Quality

If your computer does not have enough network bandwidth or processing power, you may not be able to watch video at its full image rate and quality. You can configure the image panels to display video in high quality and low frame rate, or low quality and high frame rate.

Select a higher display quality setting if you need to see specific details or faces in the scene. Select a lower display quality setting if it's more important to see moving events as they occur.

The Change Display Quality: settings only affect the image panel display and do not affect the actual video quality or image rate between the camera and the server. Therefore, you can review recorded footage later to confirm what you saw in the image panel.

In the Change Display Quality: area, select one of the following options:

- **Maximum:** displays video at full resolution with the lowest image rate.
- **High (Default):** displays video at 1/4 resolution.
- **Medium:** displays video at 1/16 resolution.
- **Low:** displays video at 1/64 resolution with the highest image rate.

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:**

By default, **Gamma:** is set to 0.55, **Black Level:** is set to 0.5%, **White Level:** is set to 98%, and Auto-Contrast is disabled.

The image panel displays your changes.

3. Select the **Enable Auto-Contrast** check box to allow the system to automatically adjust the contrast level for the video stream.

NOTE: When Auto-Contrast is disabled, the **Black Level:** and **White Level:** cannot be adjusted.

4. To clear your changes, click **Restore Defaults.**

If display adjustments have been made in the Client Settings, they will be applied to the image panel.

5. To set the selected levels as the default settings for all image panels going forward, click **Save as Defaults.**

Camera Properties

To see detailed information about any camera in the AVE file, you need to access the camera properties.

- In the System Explorer, right-click a camera and select **Properties...**

The Camera Properties dialog box displays the following information about the camera:

- Camera Name
- Model number
- Firmware Version:
- Location:
- MAC Address:
- Serial Number:
- Resolution:


Search

AVE and AVK files have embedded event data, so you can quickly search for events or motion that occur within the video file.

NOTE: If your video file does not contain a specific type of data, that search option will not be available.

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 10.
3. Click **Export this event** to export the selected event video.
For more information, see *Export* on page 23.
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 **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.

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 10.

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

For more information, see *Export* on page 23.

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


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.

6. 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 License Plate Search

The License Plate Search allows you to search for license plates that were detected in the exported video.>



1. In the New Task menu, click .

The Search: License Plates 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 **License Plate Search Options:** area, enter the license plate you want to find and a minimum confidence of a match.
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 10.

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 23.


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.

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.

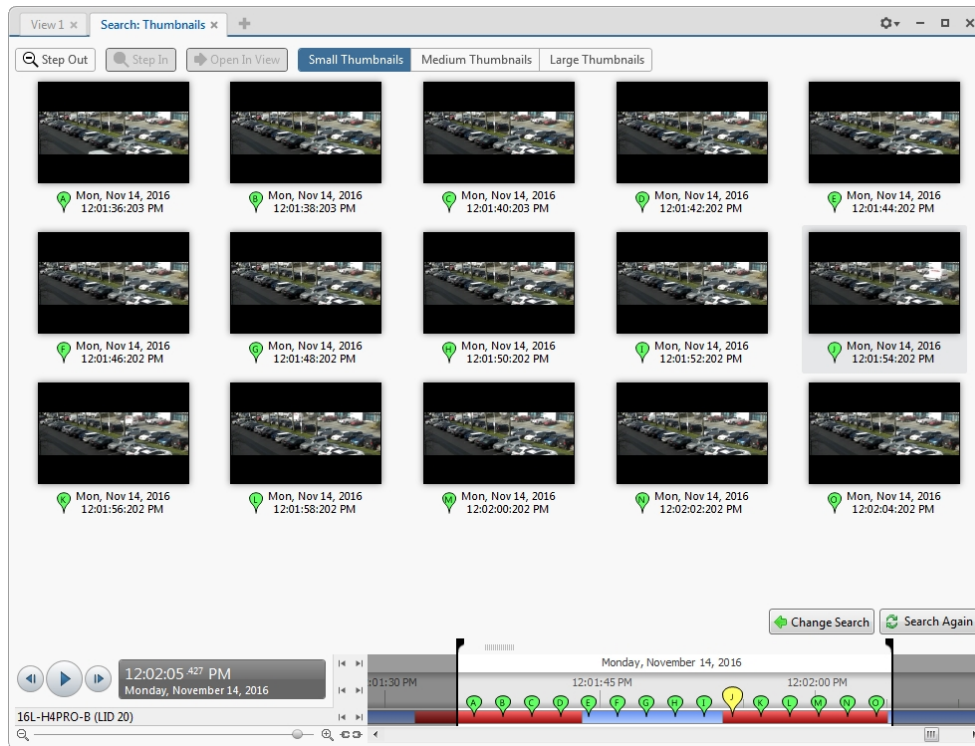


Figure 3: The Search: Thumbnails results tab

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.

You can resize the image panel, search results and result details to see the information more clearly.

2. Use the Timeline controls to review the event.

For more information, see *Playing Back Recorded Video* on page 10.

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 the next page.

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.

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.

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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.

- 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.

- 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	<ol style="list-style-type: none"> 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. Select the image overlays you want: Timestamp, Camera name and Camera location. 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

Format	Export Options
	<p>areas highlighted in green are exported.</p> <ol style="list-style-type: none"> Click Display Adjustments... to adjust the Gamma, Black Level, and White Level.
JPEG image	<ol style="list-style-type: none"> In the Quality: drop down list, select the exported image quality level. Set the image Resolution. Select the image overlays you want. Click Change Image Region... to only export a part of the video image. Click Display Adjustments... to modify the image quality.
TIFF image	<ol style="list-style-type: none"> Set the image Resolution. Select the image overlays you want. Click Change Image Region... to only export a part of the video image. Click Display Adjustments... to modify the image quality.
Print image	<ol style="list-style-type: none"> Select the image overlays you want. Click Change Image Region... to only export a part of the video image. Click Display Adjustments... to modify the image quality. Click Printer Settings... to change the selected printer and paper size. Click Add Export Notes... to add notes about the snapshot. The notes are printed below the image.
PDF file	<ol style="list-style-type: none"> Select the image overlays you want. Click Change Image Region... to only export a part of the video image. Click Display Adjustments... to modify the image quality. Click Add Export Notes... to add notes about the snapshot.

3. Click **Start Export**.


4. 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.

5. 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.

1. In the New Task menu, click . 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 10.

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 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 10.
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**.

NOTE: The Timestamp displays the time that was recorded by the server that the camera is connected to.

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:**, **White Level:**, or **Enable Auto-Contrast**.

The Display Adjustment Settings: can be adjusted for each image panel or for all image panels from the **Display Adjustments...** floating pane. For more information, see *Making Image Panel Display Adjustments* on page 15.

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 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 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 23.



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 10.

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**.

NOTE: The Timestamp displays the time that was recorded by the server that the camera is connected to.

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:**, **White Level:**, or **Enable Auto-Contrast**.

The Display Adjustment Settings: can be adjusted for each image panel or for all image panels from the **Display Adjustments...** floating pane. For more information, see *Making Image Panel Display Adjustments* on page 15.

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 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 23.



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 10.

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**.


NOTE: The Timestamp displays the time that was recorded by the server that the camera is connected to.

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**;, **White Level**;, or **Enable Auto-Contrast**.
The Display Adjustment Settings: can be adjusted for each image panel or for all image panels from the **Display Adjustments...** floating pane. For more information, see *Making Image Panel Display Adjustments* on page 15.
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 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**.