Contents

1. About This Manual ................................................................................................................. 9
   Scope ........................................................................................................................................ 9
   Audience ................................................................................................................................. 9

2. Overview ................................................................................................................................ 10
   CompleteView Web Client Features ..................................................................................... 10

3. Requirements ......................................................................................................................... 11

4. Initial Setup ............................................................................................................................ 12
   Install Silverlight .................................................................................................................... 12
   Create Account and Login ....................................................................................................... 13
   Add Server ............................................................................................................................... 15
   Create View ............................................................................................................................. 16

5. Live View ............................................................................................................................... 19
   Live View Toolbar .................................................................................................................. 19
   Live View ............................................................................................................................... 20
   Playback ................................................................................................................................ 20
   Thumbnail Search .................................................................................................................... 20
   View Layout ............................................................................................................................ 20
   View List ................................................................................................................................ 20
   Manage Views ........................................................................................................................ 20
   Expand Cameras ..................................................................................................................... 21
   Full Screen Mode .................................................................................................................... 21
   User ID/Logout ....................................................................................................................... 21
7. **Thumbnail Search** ................................................................. 39
   - Adding a Camera .................................................................. 39
   - Select Date, Time, Duration, and Thumbnail Count ............ 40
   - About Thumbnail Count ...................................................... 40
   - Thumbnail Zoom .................................................................. 41
   - Thumbnail Playback ............................................................ 44

8. **Settings** ............................................................................. 45
   - Servers ................................................................................ 45
   - Add Server .......................................................................... 45
   - Delete Server ...................................................................... 46
   - Import/Export Configuration: Export .................................. 46
   - Import/Export Configuration: To Import ............................... 47
   - Cameras .............................................................................. 47
   - Camera Settings Overview .................................................. 47
   - Preferred Video Codec ....................................................... 48
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTZ Speed</td>
<td>48</td>
</tr>
<tr>
<td>Image Quality</td>
<td>48</td>
</tr>
<tr>
<td>Frame Rate</td>
<td>48</td>
</tr>
<tr>
<td>Bitrate</td>
<td>48</td>
</tr>
<tr>
<td>Certificates</td>
<td>49</td>
</tr>
<tr>
<td>Loading a Certificate</td>
<td>49</td>
</tr>
<tr>
<td>Logging</td>
<td>50</td>
</tr>
</tbody>
</table>
List of Figures

Figure 4-1, Install Silverlight........................................................................................................ 12
Figure 4-2, Create Account ........................................................................................................... 13
Figure 4-3, Enter Credentials ....................................................................................................... 14
Figure 4-4, Add Server ................................................................................................................ 15
Figure 4-5, Camera List ............................................................................................................. 16
Figure 4-6, Adding a Camera ...................................................................................................... 17
Figure 4-7, Edit Layout Name .................................................................................................... 18
Figure 5-1, Live View Toolbar ................................................................................................. 19
Figure 5-2, Manage Views ......................................................................................................... 20
Figure 5-3, Camera List ............................................................................................................. 21
Figure 5-4, Adding a Camera .................................................................................................... 23
Figure 5-5, Enable and Start Touring ....................................................................................... 24
Figure 5-6, Live View Right Click Menu ................................................................................... 25
Figure 5-7, Quick Review .......................................................................................................... 26
Figure 5-8, Quick Review Playback .......................................................................................... 26
Figure 5-9, View Options .......................................................................................................... 28
Figure 5-10, Stream Properties ............................................................................................... 28
Figure 5-11, Camera Controls .................................................................................................. 30
Figure 5-12, Snapshot ............................................................................................................... 31
Figure 5-13, PTZ Control Panel ............................................................................................... 32
Figure 5-14, Edit Preset ............................................................................................................ 33
Figure 6-1, Playback Toolbar .................................................................................................... 35
Figure 6-2, Playback Date Selection ....................................................................................... 36
Figure 6-3, Playback Speed Select ................................................................. 37
Figure 6-4, Mark for Export ........................................................................... 37
Figure 6-5, Export Clips .................................................................................. 38
Figure 7-1, Add Camera .................................................................................. 39
Figure 7-2, Bottom Toolbar ......................................................................... 40
Figure 7-3, Thumbnail Search ....................................................................... 41
Figure 7-4, Thumbnail Controls .................................................................... 42
Figure 7-5, Thumbnail Zoom ......................................................................... 42
Figure 7-6, Thumbnail Zoom ......................................................................... 43
Figure 7-7, Thumbnail Zoom ......................................................................... 43
Figure 7-8, Thumbnail Playback ..................................................................... 44
Figure 8-1, Server Config ............................................................................. 45
Figure 8-2, Import/Export Configuration ...................................................... 46
Figure 8-3, Camera Settings Panel ................................................................. 47
Figure 8-4, Certificate Info Screen ................................................................. 49
Figure 8-5, Logging Information .................................................................. 50

List of Tables
Table 5-1, Live View Toolbar .................................................................... 19
Table 5-2, Manage Views ............................................................................. 21
Table 5-3, Live View Right Click Menu ....................................................... 25
Table 5-4, Camera Controls ......................................................................... 30
Table 5-5, PTZ Controls ............................................................................. 33
Table 6-1, Playback Toolbar ....................................................................... 35
Table 8-1, Server Configuration Data ......................................................... 46
Table 8-2, Camera Settings ......................................................................... 48
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1. About This Manual

Scope

This manual provides information related to the configuration and use of the CompleteView™ Web Client. Its primary intent, contained in the *Initial Setup* section, is to convey practical information that enables personnel to begin viewing video data as quickly as possible. Subsequent sections detail advanced features and configuration information.

Audience

The CompleteView™ Web Client User Manual is for end-user personnel who are responsible for the daily operation and use of Salient’s CompleteView™ Web Client.

This manual assumes the reader is familiar with the operation of common web browsers, such as Mozilla™ Firefox, Microsoft™ Internet Explorer, Google™ Chrome, and Apple™ Safari.
2. Overview

The CompleteView™ Web Client enables viewing and playback of video streams associated with a CompleteView™ Video Management System (VMS) server. A web browser, Internet connection, and the VMS server’s address and appropriate credentials are required to view the video feeds. Up to sixteen live cameras may be viewed simultaneously, and up to four may be viewed for video playback and export.

CompleteView Web Client Features

Up to 16 live video feeds may be viewed simultaneously.

Up to 4 feeds may be used for playback and export.

Select multiple cameras from multiple servers for customizable view layouts.

Both 4:3 and 16:9 aspect ratios are supported.

PTZ controls are displayed within the video feed as an overlay for PTZ equipped cameras.

Stream properties are displayed within the video feed as an overlay.

Audio and light controls are available on appropriately equipped cameras.

CompleteView Web Client operates in true Full Screen mode.

Video feed snapshots are captured in full resolution.

CompleteView Web Client supports both H.264 and MJPEG codecs.

CompleteView Web Client employs Dynamic Resolution Scaling to mitigate bandwidth usage.
3. Requirements

Software prerequisites:

- CompleteView™ Server v4.5.1 or later (4.6 or later required for Thumbnail Search)
- Microsoft™ Silverlight 5.x or later (TCP port 943 must be open)

Supported Browsers:

- Mozilla™ Firefox 12 or later, Microsoft™ Internet Explorer 9 or later, Google™ Chrome 12 or later*, Apple™ Safari 4 or later

Client operating system minimum requirements:

- Microsoft Windows (32 and 64 Bit) Windows 7/8.x
- Apple Macintosh OS 10.5.7 or later

Client hardware minimum requirements:

Windows:

- Core 2 Duo 2.0 GHz or faster
- 2 Gigabytes (GB) of system memory

Macintosh (Intel-based):

- Core Duo 1.83 GHz or higher CPU
- 2 Gigabytes (GB) of system memory

Tablet:

- Microsoft™ Surface Pro® 3 or better

*Google has announced that Silverlight will no longer function in Chrome after 9/15. Use of an alternate, Silverlight compatible browser will be required for CompleteView Web Client after that date.
4. Initial Setup

The CompleteView™ Web Client can be accessed via most web browsers capable of running Microsoft™ Silverlight version 5 and later. See System Requirements for details.

Install Silverlight

Launch an appropriate browser, and enter the address of a CompleteView™ server. If Silverlight is not installed, an installation prompt will appear. Installation of Silverlight only needs to be done once.

Follow the prompts to complete the installation.
Create Account and Login

After Silverlight initializes, the CompleteView™ Web Client log in screen will appear.

For initial setup, click [Create Account] in the bottom right corner of the login window.

Choose and enter a username and password into the appropriate fields, then confirm the password. Click [Create Account].

The Web Client account credentials do not need to be the same as either the CompleteView server or CompleteView Video Client credentials. The purpose of the Web Client account is to store information solely for the configuration of the Web Client itself, and has no bearing on any other Salient software.
As noted previously, the Web Client credentials do not need to be the same as either the CompleteView server or Video Client. They can be the same, however. Selecting “Credential Pass Through” during the account creation process will automatically send the entered credentials for the Web Client on to the CompleteView server for automatic connection and log in.

After creating an account, select the appropriate language if necessary, enter the username and password, and click [Login].

Selecting Remember Me in the login window will automatically log in the last valid credentials used. The most recent View will be displayed. Remember Me functionality is not supported for Credential Pass Through accounts.

Upon initial launch, the Web Client will ask permission to expand its isolated storage quota within Silverlight. Click [Ok], then respond in the affirmative to the Silverlight prompts.
Add Server

In order to view video, one or more CompleteView™ servers must be added. Upon first log in, the Add Server administration screen will appear.

Click [Save Changes].

Select Server Type, Enter Configuration Information

Figure 4-4, Add Server

Click [Add Server] and enter the appropriate information and credentials, as supplied by your system administrator (typically, CompleteView Video Client or Administrator credentials are used). More detailed information can be found on table 8.1.

Click [Save Changes].

The Web Client will test and verify the server settings.

After adding one or more servers, close the Add Server configuration window.
Create View

After at least one CompleteView™ server has been successfully added, cameras from the server (or servers) should be added to create a View.

Selecting a Camera

On the main toolbar, click the [Expand Cameras] control to reveal available video feeds. If multiple servers have been added, select the appropriate one from the list. Multiple cameras from multiple servers may be used in a single View. Note that the camera names are displayed for each video feed.

Next, select the View Layout configuration in which to view video feeds. CompleteView™ Web Client supports layout sizes from 1x1 up to 4x4 in Live View.

Drag and drop the video feeds to populate the View Layout.
Drag and drop the camera into the View Layout

Figure 4-6, Adding a Camera

The Web Client automatically saves the initial View as “Default Layout”. To change the name of the layout (optional), click the [Manage Views] drop down menu, and select [Edit View].
Select [Edit View] Enter {Layout Name}, click [SAVE]

Change Layout Name

Figure 4-7, Edit Layout Name

Enter a new name. Changes are automatically applied.

The CompleteView™ Web Client is now ready for use.
5. Live View

After setting up a View (as detailed in Initial Setup), video feeds are monitored in Live View. Live View concentrates video streams from multiple cameras and multiple servers into one window which can display up to 16 cameras simultaneously.

Live View Toolbar

Controls for use in Live View are contained in the Live View Toolbar, detailed below.

<table>
<thead>
<tr>
<th>Control</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Live View</td>
<td>Selects live monitoring of video feeds in the current View.</td>
</tr>
<tr>
<td>Playback</td>
<td>Enables selection of up to 4 feeds’ recorded video for playback.</td>
</tr>
<tr>
<td>Thumbnail Search</td>
<td>Jumps to Thumbnail Search for camera selection. See Thumbnail Search.</td>
</tr>
<tr>
<td>View Layout</td>
<td>Selects the grid size of viewing video, from 1x1 (1) to 4x4 (16).</td>
</tr>
<tr>
<td>View List</td>
<td>Dropdown menu which enables selection of user-defined video layouts.</td>
</tr>
<tr>
<td>Manage Views</td>
<td>Enables adding, editing, clearing, and deleting of user-defined views.</td>
</tr>
<tr>
<td>Expand Cameras</td>
<td>Displays list of servers and available cameras from those servers.</td>
</tr>
<tr>
<td>Full Screen Mode</td>
<td>Toggles between full screen and window viewing of the Web Client.</td>
</tr>
<tr>
<td>User ID/Logout</td>
<td>Displays currently logged in user, and log out menu item.</td>
</tr>
<tr>
<td>Settings</td>
<td>Accesses server configuration, camera settings, and security certificates, also enables importation and exportation of client configuration.</td>
</tr>
<tr>
<td>Help</td>
<td>Accesses help knowledgebase.</td>
</tr>
<tr>
<td>Info</td>
<td>Displays Web Client version information and support contact data.</td>
</tr>
</tbody>
</table>

Table 5-1, Live View Toolbar
Live View

Click [Live View] to view current live View.

Playback

Click [Playback] to select video for review and export. See Playback section for details.

Thumbnail Search

Click [Thumbnail Search] to generate chronological thumbnail images for a single camera, based on user-provided search criteria. See Thumbnail Search section for details.

View Layout

Selects the preferred grid size for placement of video streams. Select from 1x1 to 4x4.

View List

Clicking View List will reveal a drop down menu displaying a user defined list of views. If a custom view is not created, only Default View will be listed.

Manage Views

Clicking Manage Views will reveal a drop down menu with options to Add, Edit, Clear, and Delete views.
<table>
<thead>
<tr>
<th>Control</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add View</td>
<td>Creates a new, blank View wherein video feeds may be added as detailed Initial Setup. After adding video feeds, enter a name, and click [Save].</td>
</tr>
<tr>
<td>Edit View</td>
<td>Select Edit View to change the name of the current View (see Manage Views in Viewing Live Video to remove cameras from a View).</td>
</tr>
<tr>
<td>Clear View</td>
<td>Removes all video feeds from the View. Confirmation will be required.</td>
</tr>
<tr>
<td>Delete View</td>
<td>Deletes the existence of the view. A confirmation prompt will appear. The last View may not be deleted.</td>
</tr>
<tr>
<td>Start Tour</td>
<td>Begins cycling through views whose Enable Tour option has been enabled.</td>
</tr>
</tbody>
</table>

**Table 5-2, Manage Views**

**Expand Cameras**

Clicking the Expand Cameras control displays the list of cameras on the selected server.

**Full Screen Mode**

Clicking Full Screen Mode toggles the current View Layout between full screen and windowed viewing.

**User ID/Logout**

The User ID/Logout drop down menu displays the username of the currently logged in user. Clicking it will reveal a Logout option. Clicking Logout will return the user to a log in window.
**Settings**

*Settings* grants access to settings related to **Servers**, **Cameras**, and **Certificates** and **Logging**. Those functions will be detailed in **Web Client Configuration**.

**Help**

Selecting Help will redirect the browser to Salient Systems Corporation’s online Help website. Enter the same credentials as used for the Web Client login.

**About**

Clicking About displays version and support information.
Viewing Live Video

To view live video, a View must first be created. Creation of Views is detailed in the Create View section of the Initial Setup, but here’s a quick review:

Creating a View

On the Live View Toolbar, click the [Expand Cameras] control to reveal available video feeds. If multiple servers are available, select the appropriate one from the list. Multiple cameras from multiple servers may be used in the creation of Views. Note that the names of the cameras are displayed for each video feed.

Next, select the View Layout configuration in which video feeds are to be viewed. CompleteView™ Web Client supports layout sizes from 1x1 to 4x4.

Drag and drop the video feeds to populate the View Layout.

---

Drag and drop the camera into the View Layout

Figure 5-4, Adding a Camera
Touring Views

Views may be cycled through in user-defined increments by enabling touring and setting a dwell time.

On the Live View Toolbar, click the [Manage Views] dropdown menu and select [Edit View].

Select the [Enable Tour] checkbox, and enter a dwell time (in seconds). Repeat the process for every view to be toured.

Once all desired views have been tour enabled, click the [Manage Views] dropdown menu, and select [Start Tour]. The tour enabled views will begin cycling at the set dwell time. To stop touring, click [Manage Views], and select [Stop Tour].
Live View Menu

After a View has been created, individual video feeds may be selected for more detailed information. Double clicking the feed will expand it into Full Screen Mode. Right clicking on a particular video feed will bring up the Live View Menu.

Control | Function
--- | ---
Quick Review | Enables review of the last 30 seconds to 10 minutes of recorded video.
Manage Views | Selects aspect ratio of video feed (stretch to fit, or letterbox).
Stream Properties | Toggles display of resolution, frame rate, data stream, and audio rate.
Remove Camera | Removes camera from current View (may be re-added later).

Table 5-3, Live View Right Click Menu
Quick Review

Selecting Quick Review will prompt the user to select a playback range of 30 seconds to 10 minutes of recorded video. Select the desired range, and the video will begin playback in the feed’s window. Use the play/pause button in the bottom left corner to start and stop video playback. To return to live video, click the red icon in the upper left corner of the playback window.
Some browsers toggle between windowed and full screen mode using the F11 key. Quick Review only supports Full Screen Mode using CompleteView Web Client’s embedded “Enter Full Screen” icon, as detailed in the [Live View Toolbar](#).

**View Options**

Selecting View Options will enable the user to view the video stream in either its native aspect ratio, or stretch the video to fill the allotted viewing space.
Stream Properties

Selecting Stream Properties displays current viewing resolution, frame rate, video throughput, and audio throughput. The camera name and server name are displayed by default.
Remove Camera

Selecting Remove Camera will clear the video stream from the current View. The camera may be re-added by clicking the [Expand Cameras] control from the Live View Toolbar, and dragging and dropping the video feed back in the View, as discussed in Initial Setup.
Camera Controls

Rolling over a video feed in Live View will automatically reveal **Camera Controls** relevant to that particular camera. Not all controls will be available for all cameras.

![Camera Controls](image)

<table>
<thead>
<tr>
<th>Control</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Screen Toggle</td>
<td>Toggles between Full Screen and View Layout</td>
</tr>
<tr>
<td>Light Control</td>
<td>Switches camera light on or off.</td>
</tr>
<tr>
<td>Audio Control*</td>
<td>Toggles audio on or off. Rolling over reveals volume slider.</td>
</tr>
<tr>
<td>Snapshot</td>
<td>Initiates capture of the current image displayed in the video feed.</td>
</tr>
<tr>
<td>PTZ Controls</td>
<td>Displays PTZ, Focus, and Iris controls.</td>
</tr>
</tbody>
</table>

*Note: Access to audio may be disabled for any given user within the CompleteView Server Configuration. However, if the user belongs to a group (Administrators, Operators, etc.) with permission to access the audio, the group rule overrides the individual rule, and the user will have access to the feature.

Exported clips will not include audio if the user’s audio permissions are disabled.
Full Screen Toggle

Toggles between Full Screen and View Layout.

Light Control

Switches camera light on or off.

Audio Control

Toggles audio on or off. Rolling over the icon will display a volume slider.

Snapshot

Clicking on Snapshot initiates a screen capture of the current image displayed in the video feed.

Click [Snapshot].

To save the image, click [Save Snapshot]. Images are saved as .jpg files in a user selected directory.
PTZ (Pan/Tilt/Zoom) Control Panel

The PTZ Control Panel is a multi-function interface that enables panning, tilting, and zooming of PTZ cameras. In addition, iris and focus adjustments, PTZ preset control, and saving PTZ presets are accessed through the interface.

Saving PTZ presets is only available on cameras equipped with physical, not digital, PTZ. Consult the camera’s configuration in CompleteView™ Server Configuration to determine PTZ type.

Figure 5-13, PTZ Control Panel
<table>
<thead>
<tr>
<th>Control</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTZ Navigation</td>
<td>Navigates field of view.</td>
</tr>
<tr>
<td>PTZ Preset Toggle</td>
<td>Displays which PTZ preset (name and number) is to be viewed.</td>
</tr>
<tr>
<td>PTZ Preset Edit</td>
<td>Adds/Edits a custom preset name.</td>
</tr>
<tr>
<td>PTZ Preset Select</td>
<td>Actuates the selected PTZ preset.</td>
</tr>
<tr>
<td>PTZ Preset Save</td>
<td>Saves the current view of a physical PTZ camera as selected preset (disabled for digital PTZ cameras).</td>
</tr>
<tr>
<td>Zoom/Focus/Iris Control</td>
<td>Enables adjustment of Zoom (Z), Focus (F), and Iris (F) settings on capable cameras.</td>
</tr>
</tbody>
</table>

Table 5-5, PTZ Controls

**PTZ Navigation Control**

Use the controls to pan the camera up/down, left/right, and diagonally.

**PTZ Preset Toggle**

Use the arrows to scroll through the camera’s presets.

**PTZ Preset Edit**

Clicking on the PTZ Preset Edit button allows entry of a user-definable name for the currently displayed preset. Enter a name, and click “Save”.

Figure 5-14, Edit Preset

Click [Save]
PTZ Preset Select

After selecting the preset with the PTZ Preset Toggle, click the [PTZ Preset Select] button to actuate it.

PTZ Preset Save

With physical PTZ cameras, users may configure custom PTZ presets. Use the PTZ Navigation Control to select the desired viewing area. Select the desired preset number with the PTZ Preset Toggle, then click [PTZ Preset Save]. To actuate the new preset, select it, and click [PTZ Preset Select].

Zoom/Focus/Iris Control

Clicking the letter of the Control will determine its function; “Z” for zoom, “F” for focus, and “I” for iris control. The + and – buttons control adjustment of the selected function.

<table>
<thead>
<tr>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not all functions will be available on all cameras. Iris and Focus controls will only be functional on physical PTZ cameras, while Zoom is functional on both digital and physical PTZ cameras.</td>
</tr>
</tbody>
</table>
6. Playback

Playback enables review of recorded video data. Up to four cameras’ recorded video may be reviewed at once.

Playback Toolbars

Playback has two toolbars. The top toolbar is identical to the Live View toolbar with two exceptions. First, the View Layout is limited to a maximum of four cameras in a 2x2 configuration. Second, the Manage Views dropdown menu is limited to Clear View.

<table>
<thead>
<tr>
<th>Control</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date Selection</td>
<td>Clicking reveals a calendar. Select the date of the video to be reviewed.</td>
</tr>
<tr>
<td>VCR Controls</td>
<td>Standard VCR controls, including Step Forward/Back and Play/Pause.</td>
</tr>
<tr>
<td>Clip Event Selector</td>
<td>Chooses among Motion, Alarm, and Scheduled clip display.</td>
</tr>
<tr>
<td>Playback Speed</td>
<td>Selects between 0.5x and 4x video playback rate.</td>
</tr>
<tr>
<td>Mark for Export</td>
<td>Selects time range of selected video for exportation.</td>
</tr>
<tr>
<td>Export Clips</td>
<td>Enables selection of video for exportation.</td>
</tr>
<tr>
<td>Zoom In/Out</td>
<td>Compresses or expands viewing time scale.</td>
</tr>
<tr>
<td>Expand/Shrink Timeline</td>
<td>Displays or hides clip event details.</td>
</tr>
</tbody>
</table>

Table 6-1, Playback Toolbar
Date Selection

Clicking Date Selection displays a calendar. Select the date of the video to be reviewed.

---

Date Selection Calendar

Figure 6-2, Playback Date Selection

VCR Controls

Playback uses standard VCR controls, including Step Forward/Back and Play/Pause.

Clip Event Selector

Chooses among Alarm, Motion, and Schedule recording clips to highlight in the timeline. The Clip Event Selector aides in visual identification of recorded events.

Playback Speed

Adjusts the speed of video during playback. Ranges from 0.5x to 4x speed.
Mark for Export

Clicking Mark for Export enables two sliders used to select the start and end points of the clip to be exported. Advance the left slider to the beginning of the segment to be exported. Move the right slider to the desired end of the clip.

Export Clip(s)

After selecting a clip or clips to export, clicking Export Clip(s) activates a dialog box.
The dialog box displays the selected start and end points as well as the camera and server name(s) of the selected video(s). For each clip to be saved, click Export to select a destination folder for the clip. A progress bar will display the status of the export. Exported clips will contain embedded time zone and fisheye metadata, which will be available for use within Video Player during playback operation. When completed, click [Done] to return to Playback.

Files are exported in .avi format using MD5 verification. Using CompleteView™ Video Player will take advantage of MD5, but if Video Player is not installed, most media players, such as VLC, will work.

**Zoom In/Out**

Zoom In/Out sets the time scale for Playback review. Adjustable from 10 seconds to 24 hours.

**Collapse/Expand Timeline**

Collapse/Expand Timeline hides or reveals Motion, Alarm, and Schedule event information for the selected cameras. When multiple videos are selected for Playback, hiding the event information can save screen space.
7. Thumbnail Search

Thumbnail Search generates chronological thumbnail images from a single camera, based on search criteria provided by the user.

Adding a Camera

Much like Playback mode, drag and drop the camera to be reviewed into Thumbnail Search.

Add Camera

Figure 7-1, Add Camera
Select Date, Time, Duration, and Thumbnail Count

Using the tool bar at the bottom of the window, select the date for review from the calendar, the start time from the clock, the duration from the Search Duration slider (maximum 24 hours), and the number of thumbnails from the Thumbnail Count slider.

About Thumbnail Count

The number of thumbnails selected for a given period of time will dictate the time granularity of the sequential images displayed. In the example below, a 24 hour period has been searched, and the Thumbnail Count slider has been set to “24.” Therefore, 24 sequential images have populated the Thumbnail Search screen, each represents the beginning of an hour, and each clip is an hour long. If a 12 hour search had been performed with the same Thumbnail Count (24), each of the 24 thumbnails would represent 30 minutes of time.
Search

Figure 7-3, Thumbnail Search

If a thumbnail image displays an exclamation point “!”, either there was an error retrieving video from the CompleteView server, or, more likely, there has been no video recorded for that time slice.

Thumbnail Zoom

Refining a search can be accomplished through Thumbnail Zoom. Use the “+” and “-“ controls located in the bottom corners of the thumbnail.
Thumbnail Controls

Figure 7-4, Thumbnail Controls

Zooming in on a particular thumbnail divides its time span among all the other displayed clips. In the example below, a one hour search divided into 6 thumbnails produces 6 clips of 10 minutes each (6 clips x10 minutes = 60 minutes).

Figure 7-5, Thumbnail Zoom
Zooming in on a clip divides that clip’s time evenly among the other thumbnails. From the example, zooming in on the first clip divides its 10 minute time slice (12:00AM-12:10AM) among the all 6 clips. While the first clip still begins at 12:00AM, its original 10 minute span has been divided evenly among the remaining clips. Note that the last thumbnail now ends at 12:10AM, the original end time for the first clip.

The same idea holds true when zooming in on the other thumbnails. From the original 1 hour search (6 clips at 10 minutes each), zooming in on the 5th clip (12:40AM-12:50AM) will distribute its time slice among the other thumbnails. Now, the 1st thumbnail begins at 12:40AM, and the last ends at 12:50AM. Zoom out to return to the initial search results.
Thumbnail Playback

To play back a thumbnail clip, mouse over it and click the play icon embedded in the image. Thumbnails will play sequentially until the end of the search has been reached when the [Auto Sequence] box is checked. Controls for PTZ, Snapshot, and Export Clip(s) are identical to those discussed earlier in this manual.

Figure 7-8, Thumbnail Playback
8. Settings

Clicking the Settings icon enables Importation and Exportation of configuration files, configuration of Servers, Cameras, Certificates, and Logging information.

Servers

Add Server

As discussed in Initial Setup, at least one CompleteView™ VMS Server must be added to view video streams.

Click [Server Settings]. Click [Add Server].

---

Server Configuration

Figure 8-1, Server Config
<table>
<thead>
<tr>
<th>Control</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Server Type</strong></td>
<td>Select CompleteView Server or CompleteView Proxy Server.</td>
</tr>
<tr>
<td><strong>Host Address</strong></td>
<td>Enter the IP address or CompleteView server name.</td>
</tr>
<tr>
<td><strong>Host Port</strong></td>
<td>Auto populates with port 4502. Select and change, if necessary.</td>
</tr>
<tr>
<td><strong>Username/Password</strong></td>
<td>Different than the local Web Client credentials, this is the ID and password used to log onto the CompleteView Server.</td>
</tr>
<tr>
<td><strong>HTTPS</strong></td>
<td>Check this box if using HTTP over SSL.</td>
</tr>
</tbody>
</table>

Table 8-1, Server Configuration Data

After entering the required information, click **[Save Changes]**. The settings and connection to the new server will be tested.

**Delete Server**

To delete a server, click **[Delete Server]**, and select **[Yes]** to complete the removal.

**Import/Export Configuration: Export**

After creation, configurations can be exported for use on other workstations. Configurations contain server configuration information, server login data, and previously defined Layouts. Local Web Client logins must still be created at each workstation, as detailed in **Initial Setup**.

After logging in and selecting Settings, click **[Export Configuration]**. Enter a password (optional) to secure the configuration. Either leave it blank or enter a password and click **[OK]**.

---

Select a destination folder for the configuration and save.
Import/Export Configuration: To Import

Click [Import Configuration]. Browse to the configuration file’s location, select it, enter the password, if necessary, and click [OK]. The Web Client login screen will appear with a confirmation message that the file was successfully imported. Log in normally.

Cameras

Camera Settings control the quality of video streams displayed in the Web Client. Depending on multiple factors including, but not limited to, network bandwidth capability, Internet latency, and the number of simultaneously displayed video streams, settings may need to be adjusted to accommodate data throughput realities.

Camera Settings Overview

![Camera Settings Panel]

Figure 8-3, Camera Settings Panel
<table>
<thead>
<tr>
<th>Control</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preferred Video Codec</td>
<td>Select between MJPEG and H.264 Codecs.</td>
</tr>
<tr>
<td>PTZ Speed</td>
<td>Adjusts the rate at which PTZ cameras sweep through their range of motion.</td>
</tr>
<tr>
<td>Image Quality</td>
<td>Adjusts the granularity of the displayed image. Higher settings will increase bandwidth use, lower settings may cause pixilation</td>
</tr>
<tr>
<td>Frame Rate</td>
<td>Measured in Frames Per Second (FPS), sets the maximum rate the server delivers video data to the Web Client.</td>
</tr>
<tr>
<td>Bitrate</td>
<td>For H.264 use only, adjusts the expected video data throughput.</td>
</tr>
</tbody>
</table>

**Table 8-2, Camera Settings**

**Preferred Video Codec**

The default setting, MJPEG, is optimal for most applications. H.264 should be selected in specific instances, contingent upon advice from the system administrator.

**PTZ Speed**

Increasing the PTZ speed will allow navigation of the camera’s range of motion more quickly, but may make fine viewing adjustments more difficult.

**Image Quality**

MJPEG images are divided into constituent image blocks. The Image Quality slider adjusts the granularity of those blocks. A higher setting will produce higher quality video, but at the cost of bandwidth.

**Frame Rate**

Setting a higher frame rate will produce smoother video motion, but at the cost of higher bandwidth consumption.

**Bitrate**

When using H.264 compression, setting a higher bitrate will allow the server to push more data to the Web Client. This will result in smoother video motion, but at the cost of bandwidth.
Certificates

Certificates affirm secure communications between a CompleteView™ VMS Server and the Web Client, and are optional. Certificates are created on the server by a system administrator, and saved to the client workstation for implementation.

Loading a Certificate

Click [Add Certificate]. Select the folder in which the certificate has been saved, and click [Open]. If successful, the Certificate fields will populate. Click [Save Changes].

Certificate Information

Figure 8-4, Certificate Info Screen
Logging


![Logging Information](image)

Log files automatically purge after they reach a preset size.

Logging Information

Figure 8-5, Logging Information

After selecting desired event Severity levels, click [View Logs]. Logs are exportable as .log files.