# Table of Contents

1. **Introduction** .................................................................................................................. 1  
   1.1 Best Practices using the Control Center ........................................................................ 1  
   1.2 About this Guide ............................................................................................................ 2  
   1.3 More Information – Help System .................................................................................. 3  
  
2. **Control Center Workspace** ........................................................................................... 4  
   2.1 Workspace ................................................................................................................ 4  
   2.2 Application Menu ........................................................................................................ 5  
      2.2.1 Context Menu ......................................................................................................... 7  
      2.2.2 View/Viewing Mode ................................................................................................... 10  
         2.2.2.1 Supervisor Mode ............................................................................................... 12  
         2.2.2.2 Monitor mode ...................................................................................................... 13  
         2.2.2.3 Forensic Mode .................................................................................................... 14  
         2.2.2.4 CaseBuilder Mode ............................................................................................. 15  
         2.2.2.5 Access Control Mode ........................................................................................ 16  
      2.2.3 Tools/Options Menu ................................................................................................ 17  
         2.2.3.1 Content Display ................................................................................................. 17  
         2.2.3.2 Video .................................................................................................................. 21  
         2.2.3.3 View Settings ..................................................................................................... 25  
         2.2.3.4 Export ................................................................................................................ 32  
         2.2.3.5 Scene Tracker ..................................................................................................... 37  
         2.2.3.6 Keyboard ............................................................................................................ 37  
         2.2.3.7 PTZ .................................................................................................................... 38  
         2.2.3.8 Joystick ............................................................................................................... 38  
         2.2.3.9 Audio .................................................................................................................. 39  
         2.2.3.10 CaseBuilder ...................................................................................................... 39  
         2.2.3.11 Login Settings .................................................................................................... 40  
         2.2.3.12 Working With Keyboards .................................................................................. 40  
      2.2.4 Favorites ................................................................................................................ 52  
   2.3 Explorer Area - Navigation Pane ................................................................................. 54  
      2.3.1 Navigation Tree ...................................................................................................... 54  
      2.3.2 Query Pane ............................................................................................................. 58  
      2.3.3 PTZ Pane ................................................................................................................ 69  
      2.3.4 CaseBuilder Query Pane ...................................................................................... 72  
         2.3.4.1 CaseBuilder Navigation Tree Pane ..................................................................... 74  
      2.3.5 Privacy Mask Password ......................................................................................... 76
# Table of Contents

2.4 Display Area - Viewing Pane ............................................................... 81  
2.4.1 Layout Tabs ................................................................................... 82  
2.4.2 Configuring Layouts ....................................................................... 83  
  2.4.2.1 Thumbnail Search Layout ......................................................... 83  
  2.4.2.2 CaseBuilder Layout ............................................................... 84  
2.4.3 Viewing Tile .................................................................................. 86  
  2.4.3.1 Thumbnail Search ................................................................. 96  
  2.4.3.2 Using Draw-to-zoom with Thumbnails .................................... 96  
  2.4.3.3 Digital Presets ........................................................................ 97  
  2.4.3.4 Adaptive Streaming ............................................................. 101  
  2.4.3.5 Hide/Show Privacy Mask (Deactivate) ................................... 102  
  2.4.3.6 Spot Monitor ........................................................................... 104  
  2.4.3.7 Viewing GIS Maps ............................................................... 105  
  2.4.3.8 Panoramic Cameras ............................................................. 107  
  2.4.3.9 Viewing Live and Recorded Video from connected DVRs ....... 109  
  2.4.4 Viewing Modes for Alarms ......................................................... 110  
2.4.5 Synchronized Playback ................................................................. 114  
2.5 Workspace Panes ............................................................................ 117  
  2.5.1 Query Results Tab ................................................................. 118  
  2.5.2 Clips Tab .................................................................................... 120  
  2.5.3 Timeline Tab ............................................................................... 122  
    2.5.3.1 Selecting a clip ..................................................................... 123  
    2.5.3.2 Scrubbing ............................................................................. 125  
    2.5.3.3 Timeline scale and Viewing point ....................................... 126  
  2.5.4 Export Tab .................................................................................. 127  
    2.5.4.1 Exporting a Clip ................................................................... 128  
    2.5.4.2 Loop Playback ..................................................................... 133  
  2.5.5 Events Tab ................................................................................ 134  
  2.5.6 Alarms Tab ................................................................................ 134  
    2.5.6.1 Displaying a Camera on Alarm (Automatic and Manual) ...... 137  
3. Common Tasks .................................................................................. 139  
  3.1 Viewing live Video/Audio ................................................................. 140  
    3.1.1 To view a camera on a viewing tile ....................................... 140  
    3.1.2 Digital PTZ using the mouse .................................................. 140  
    3.1.3 Draw-to-Zoom ........................................................................ 141
Table of Contents

3.1.4 Digital Zoom Indication .................................................................................... 142
3.1.5 Playing Live Audio .......................................................................................... 142
3.2 Timeline Pane .................................................................................................... 143
3.3 Managing the Workspace .................................................................................... 143
  3.3.1 Move a video from one tile to another .......................................................... 144
  3.3.2 Remove a video from a tile ........................................................................... 144
  3.3.3 Using the Layout Pane to change the pattern of the Viewing Tiles ............... 144
    3.3.3.1 Using one tile for the content you request - Spot Monitor option. ......... 145
  3.3.4 How to add or modify a Layout ..................................................................... 145
  3.3.5 Using Customized Layouts .......................................................................... 147
  3.3.6 Maximizing the Navigation tree .................................................................. 150
  3.3.7 Aspect Ratio .................................................................................................. 151
3.4 Viewing recorded Video ..................................................................................... 151
  3.4.1 By selecting a camera from the Query pane ................................................. 152
  3.4.2 From Query Results pane ............................................................................. 152
  3.4.3 Check for recordings from live camera ......................................................... 152
  3.4.4 Using Instant Replay (IR) ............................................................................. 153
  3.4.5 Controlling the Playback using the Viewing Tile Toolbar ............................ 154
  3.4.6 Using Thumbnail Search .............................................................................. 155
  3.4.7 How to use all the controls in the Timeline tab ........................................... 155
    3.4.7.1 Timeline Tab Toolbar ................................................................................ 156
    3.4.7.2 Time Ruler .................................................................................................. 157
    3.4.7.3 Tracks ........................................................................................................ 157
  3.4.8 How to create a Bookmark on a clip ............................................................. 158
  3.4.9 Using the Bookmark Filter .......................................................................... 159
  3.4.10 Synchronizing multiple sources (Synchronized playback) ......................... 159
  3.4.11 Loop playback ........................................................................................... 160
  3.4.12 Locking clips (or segments of clips) ............................................................ 161
  3.4.13 Find and cancel a Locked section in a clip .................................................. 164
3.5 Taking a snapshot from a Viewing Tile .............................................................. 165
3.6 Exporting .......................................................................................................... 165
3.7 Alarm management ............................................................................................ 168
  3.7.1 How to handle alarms .................................................................................. 168
    3.7.1.1 Handling alarms from the Popup ................................................................. 168
    3.7.1.2 Handling an Alarm from the tile that is displaying it ............................... 169
# Table of Contents

3.7.1.3 Handling alarms from the Alarms Pane ................................................................. 170

3.7.2 How to trigger alarm manually .................................................................................. 170

3.8 How to use the file playback pane ............................................................................. 171

3.8.1 Adding clip/s or folders ......................................................................................... 171

3.8.2 Authentication ....................................................................................................... 172

3.8.3 Play single .............................................................................................................. 172

3.9 How to login to additional systems .......................................................................... 172

3.10 Using Keyboards .................................................................................................... 175

3.10.1 CCTV Keyboard .................................................................................................... 175

3.10.1.1 Selecting and Controlling Entities and Tiles ..................................................... 176

3.10.1.2 Controlling Playbacks ....................................................................................... 177

3.10.1.3 Controlling PTZ Domes ...................................................................................... 177

3.10.1.4 Controlling the Viewing Window ....................................................................... 178

3.10.2 PC QWERTY Keyboard ....................................................................................... 178

3.11 Building a Case in CaseBuilder Mode .................................................................... 180

3.11.1 Adding an Existing Clip to a Case ........................................................................ 181

3.11.2 Adding an Existing Clip Bookmark to a Case .................................................... 182

3.11.3 Adding a New Snapshot (on-the-fly) to a Case .................................................. 182

3.11.3.1 Adding an Existing Alarm to a Case ................................................................. 183

3.11.3.2 Adding a Clip Segment to a Case ...................................................................... 184

3.11.4 Adding an Existing Incident to a Case .............................................................. 185

3.11.5 Adding a File to a Case (documents, images, exports, etc.) ............................... 186

3.11.5.1 Adding an Existing Snapshot to a Case (Monitor-Tile) .................................... 187

3.11.6 Adding a URL to a Case ..................................................................................... 188

3.11.7 Opening a Saved Case ....................................................................................... 188

3.11.7.1 Opening and Viewing an Exported Case .......................................................... 189

4. Additional Technical Information ............................................................................. 190

4.1 Remote Control Options .......................................................................................... 190

4.2 Alarm Display Mode ............................................................................................... 190
1 Introduction

The ControlCenter is the typical user’s day-to-day interface with the system.

![ControlCenter](image)

**Figure 1** - ControlCenter

The ControlCenter gives users a highly customizable platform for viewing live and recorded video. Features include:

- Flexible and configurable viewing of content on single or multiple monitors, with user-selected viewing patterns
- Full control of content playback with versatile timeline controls
- Powerful query capability to assist in locating specific content or identifying recordings associated with motion events
- Thumbnail Search capability, allowing users to scan multiple thumbnail images covering a chosen time-span
- Monitoring and management of alarms
- User access rights and privileges set by system administrator allow different users to be set up to handle specific ranges of tasks
- Preparation of material to be exported for viewing and/or analysis on external systems

1.1 Best Practices using the Control Center

In order for ControlCenter to run optimally, you need to make sure that the computer running it is correctly set up.

**You should check the following:**

- For each monitor connected to the computer, screen resolution should be set as high as possible
- Depending on the graphics card you are using, you may need to set hardware acceleration ON (for some display adapters this is done automatically)
- Your Windows display setting should be set to ‘Smaller – 100% (default)’
Your Screen Saver option should be set to (None)

Your Power Saving options should be set OFF

In Windows 7, the screen should be set to a Basic mode - Aero modes should not be used

In Windows 8, the system should be set to ‘Adjust for best performance’ (Control Panel/System/Advanced System Settings)

Note: These settings vary depending on the operating system and version you are using.

1.2 About this Guide
Welcome to the United VMS 9.0.0 Latitude, Horizon, Meridian Control Center User Guide.
Note: Changes to this file were last introduced after Application Build No: 1600

This Guide is written for the users of the ControlCenter who are responsible for monitoring live and recorded video and handling alarms.

A separate publication, AdminCenter User Guide, covers the setup and operation of the overall System.

Summary of latest changes:

<table>
<thead>
<tr>
<th>Change</th>
<th>Date Changed</th>
<th>Summary</th>
<th>Links</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Latitude 9.0 Skin</td>
<td>May 2020</td>
<td>Upgrade the User interface - Dark Skin, revised Tab and Button placement, additional functionality.</td>
<td></td>
</tr>
</tbody>
</table>

Please note: This is not a formal Change Register - the list is included so that users can quickly access Topics that contain new or changed information.
1.3 More Information – Help System

Accessing the Help file

Click Help in the Main Menu bar, and then select Help.

Alternatively, each pane provides a context-sensitive Help icon, which takes you directly to the section of the Help system that deals with that specific part of the display.

A full context-sensitive Help file opens with information relevant to the current pane. Other topics, and the whole file, can be accessed from the Table of Contents on the left, and a keyword list and text search box are also provided.
2 Control Center Workspace

The Control Center Workspace is fully defined in the Control Center Help file. The description is included below for convenience.

2.1 Workspace

One of the major features of ControlCenter is that the workspace is almost entirely customizable by the user. Only the menu area at the top of the screen is static -- every other pane can be moved or hidden. The example below shows a typical layout:

The following links provide detailed information on the main components in the ControlCenter screen:

- **Menu Area**
- **Viewing Pane** - used to display cameras, sequences, alarms, maps, instant replays and archived video clips. It is also used to receive and transmit audio. The Layout tabs, located at the top of the pane, allow the user to access the different available layouts.
- **Navigation Pane** - used to browse for logical system entities and display or play them in the Viewing Pane or through external output devices (i.e. analog monitors and speakers). The following panes can be displayed below the Navigation Pane (or can replace it)
  - PTZ Pane - used to control PTZ cameras/domes and digital zoom
  - Query Pane - used to search for archived scenes based on a scene; date and time; and recording trigger
- **Workspace Pane**: This area can contain any of the panes below (but only one at a time)
  - Alarm Tab - used to trigger alarms and to handle them
Events Tab - displays events the user has been configured to receive
Timeline - shows the active viewing tile’s time line and can be used to quickly browse through a video or audio clip, and export a partial or whole video clip.
Query Results - displays the results of the query and allows users to review them in the Viewing Pane or via analog monitors.

Other panes that can be opened by clicking on their corresponding icon in the ControlCenter screen are as follows:

- Navigation Tree is used to create new cases, open exported cases and manage them.
- Export Status Pane displays the status of exported clips during their export and after the export is completed and can be used to stop exports.
- File Playback Pane synchronously plays and validates exported clips.
- CaseBuilder Query Pane is used to search for cases based on case name, serial number, the user who created the case or free text.

2.2 Application Menu
The Menu area (Application Menus) is the only part of the workspace whose size and position are not user-modifiable. It consists of four menus.

File
The file menu allows users to exit the application, connect or disconnect from the system and change their password and open an exported DVT clip.

View
This menu allows users to: show/hide the default audio and video layouts of the viewing pane, select pre-set viewing modes, choose which panes to display (the viewing pane cannot be hidden), and enter full screen mode.
To view the contents of the viewing mode section, see Viewing Mode

Tools
This menu is used to open the Options window, from which a number of application settings are configured.

To view the contents of the Options dialog box in detail, see Options Menu.

Favorites
Favorites allows the user to create and save additional custom workspace configurations to best suit his security environment and maximize operation efficiency.

To view the contents of the viewing mode section, see Favorites.

Help

This menu is used to show the Help File, allow the operator to check whether Updates are available for the ControlCenter software and to see the information held in the About screen.
2.2.1 **Context Menu**

Right-clicking on any viewing tile or on the navigation tree opens a **Context Menu**.

The Context Menu varies depending on the contents of the window from which it was opened.

For example - when watching a Live camera, the context menu shows the option of ‘Send to Query’ so the user can search for clips from that camera. When the user is watching a recording, the context menu removes that option, and shows ‘Switch to Live’.

![Context Menu when playing Live](image1)

![Context Menu when showing Playback](image2)
This is a list of all the Context Menu entries.

<table>
<thead>
<tr>
<th>Context Menu Item</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Show only this tile/All tiles</td>
<td>Changes this tile to a single-tile display</td>
</tr>
<tr>
<td>Take Snapshot</td>
<td>Saves a snapshot of the video from the selected tile in the default export folder defined in the Tools menu. Snapshots are saved as .png files.</td>
</tr>
<tr>
<td>Print Snapshot</td>
<td>Prints a snapshot of the video from the selected tile. See Print Snapshot Dialog</td>
</tr>
<tr>
<td></td>
<td>Note: In order to use this function, the ‘Export’ Privilege must be set in the User/Privileges screen</td>
</tr>
<tr>
<td>Lock/Unlock tile</td>
<td>No other content can replace this until the ‘Lock Tile’ check is removed</td>
</tr>
<tr>
<td>Show my Location</td>
<td>An open GIS map will be repositioned to show this camera in the center of the view tile. (Requires that GIS location has been stored for a camera and a GIS Map has been defined)</td>
</tr>
<tr>
<td>Spot monitor</td>
<td>Clicking on Spot Monitor defines this tile to be the destination for any video opened by double-clicking on a camera in the Navigation tree or a clip in the Query list. The Spot Monitor will also be used when video from a remote ControlCenter is to be shown. Note: Only one tile can be set as the Spot Monitor at any one time.</td>
</tr>
<tr>
<td>Enter/Exit Full Screen</td>
<td>Displays this tile in full-screen mode. Revert by right-clicking again and selecting ‘Exit Full Screen’, or otherwise press ‘Esc’</td>
</tr>
<tr>
<td>Remove</td>
<td>Clears this tile</td>
</tr>
<tr>
<td>Switch to Digital/Optical PTZ</td>
<td>PTZ cameras only - activates digital PTZ functionality, taking current PTZ position as starting point</td>
</tr>
<tr>
<td>Activate/Deactivate Privacy Masking</td>
<td>Allows the operator to remove/replace the Privacy Mask (System Administrator sets whether operator/s have access to this option)</td>
</tr>
<tr>
<td>Clear</td>
<td>(ioi units only) Clear the current state of the ioi camera</td>
</tr>
<tr>
<td>Save as preset</td>
<td>If the user has used the in-pane controls to change the view in a viewing tile, the resulting view can be saved as a digital preset</td>
</tr>
</tbody>
</table>
### Go to preset
If digital presets have been saved for the camera being displayed in this viewing pane, the user can select them by clicking on Go to preset, and then selecting the required view.

### Adaptive Streaming
Activate/Deactivate Adaptive Streaming (saves bandwidth when displaying video in smaller tiles) (Only for supported devices)

### Send to Query
Sets the selected unit as a filter in the Query pane so that all recordings from that unit can be selected.

### Switch to Live
Changes contents of the tile from Recorded content to the live view of the same camera.  
**Note:** For regular playback - not available when playback is Synchronized, Thumbnail mode, or triggered by an Alarm

### Start/Stop Manual record
Only in Nav. Tile menu – same function as clicking the Record button in a camera tile.

### Display
Only in Nav. Tree menu – Displays video from this camera in the next available tile.

### Instant Replay
Only in Nav. Tree menu – Starts replay of Manual recording in next available tile that is armed to show replays.

### Analytics-Related Context Menu Entries

<table>
<thead>
<tr>
<th>Context Menu Item</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batch Arm/Disarm</td>
<td>(Shown in the Context Menu when the System is selected in the Navigation Tree) Opens the Batch Arm/Disarm dialog box, listing all Analytics-capable cameras, and allowing the user to arm or disarm Analytics in one or more cameras</td>
</tr>
<tr>
<td>Arm/Disarm</td>
<td>(Shown in the Context Menu when an Analytics-enabled camera is selected in the Navigation Tree) Allows the user to arm or disarm Analytics in the selected Analytics-capable camera</td>
</tr>
</tbody>
</table>

### Batch Arm/Disarm Dialog

The Analytics arming status of individual cameras is shown in the Navigation tree
When using *ioi Analytics*-enabled cameras, the user can open a Batch Arm/Disarm Dialog box to arm or disarm the Analytics feature in one or more cameras.

**Print Snapshot Dialog**

If the Print Snapshot option is clicked in a Viewing Tile Context menu, then the Print Snapshot Dialog box is opened, allowing the user to set the required Print parameters.

*Note:* When printing a larger image (high resolution video) than the size of the page used for printing, the image will be scaled down to fit to page.

### 2.2.2 View/Viewing Mode

The ControlCenter user can easily manage different tasks by adjusting the application workspace in a single button click.

**Content Display**
The Content Dropdown controls what Tabs are displayed - If you do not see the Tab you want, it may have been deselected in a previous action. To see the list of available tabs and select which you want to display, click on View/Content.

To select tabs to display in the Workspace:
Access the View > Content section from the Application Menu, and then select the desired Tabs.

To select the mode you want to use:
Access the View > Viewing Mode section from the Application Menu, and then click the desired mode.

- **Supervisor mode** – adjusted for a supervisor overview of the security environment
- **Monitor mode** – for live video and audio monitoring
- **Forensic mode** – optimized for searching and reviewing of recorded information
- **CaseBuilder mode** – an authoring tool used to collect and review recorded data in specific cases
- **Access Control mode** – optimized for real-time handling of Alarms and Events

See [Quick summary of Control Center UI changes](#).
2.2.2.1 Supervisor Mode

In the Supervisor mode, the following panes appear:

- **Navigation Pane**
- **Query Pane**
- **Alarms Pane**
- **Viewing Pane**
2.2.2.2 Monitor mode

In the Monitor mode, the following panes appear:

- [Navigation Pane](#)
- [PTZ Pane](#)
- [Alarms Pane](#)
- [Viewing Pane](#)
2.2.2.3 Forensic Mode

In the Forensic mode, the following panes appear:

- **Query Pane**
- **Query Results Pane**
- **Viewing Pane**
2.2.2.4 CaseBuilder Mode

In the CaseBuilder mode, the following panes appear:

- CaseBuilder Navigation Pane
- CaseBuilder Query Pane
- Query Results Pane
- Viewing Pane
2.2.2.5 Access Control Mode

In the Access Control mode, the following panes appear:

- Navigation Pane
- Query Pane
- Combined Alarms Pane & Events Pane
- Viewing Pane
2.2.3 Tools/Options Menu

Using the Options menu, you can customize your ControlCenter Settings.

To access the Options menu, select **Tools / Options** from the **Application Menu**.

Use the **Options Navigation Tree** to access the customizable parameters.

2.2.3.1 Content Display

There are four sub-menus in this category: **Alarms**, **Events**, **Timeline** and **Query**.

**Alarms**
The **Alarms** sub-menu is used to set the **General Settings** and the **Display Settings** parameters:

![Options](image)

**Note:** If the Accepted alarms only radio button is selected, a warning pop up appears reminding you to restart the system.

In the **General Settings** field:

- **Queue size**: Determine the number of alarms displayed in the alarm queue.
- **Snooze time**: Determine the time span after which the alarm is triggered again when the Snooze button is clicked.
- **Play alarm sound**: Determine whether to play a sound when an alarm is triggered.

In the **Display Settings** field:

- **Alarms pane color indication**: determine whether to give color indication to an *Entire Column* or to a *Priority Column Only*
- **Alarms sequence display option**: determine whether to *Show All Alarms* or to show *Accepted Alarms Only*. 
• **Maximize on alarm**: Determine whether to maximize the alarm pane when an alarm is triggered

**Events**
The **Events** sub-menu is used to specify how many events are shown in the Events pane.

**Timeline**
The **Timeline** sub-menu is used to specify whether to **Show Motion** in the Timeline pane.

**Query**
The **Query** sub-menu is used to set the following parameters in the Query Results pane:

- **Query Max Results** - Determine the maximum number of results shown in the Query Results pane.
- **Motion Query** - specify the motion strategy used in motion-based searches (either higher bound or lower bound).
- **Offline Query** - select the check box to optimize offline query.
2.2.3.2  Video
The Video Options screen has three sub-menus: General, Instant Replay and Playback.

![Video Options Screen]

**General**
The Video General sub-menu is in two sections - **Settings** and **Quality**:

**Settings**
- **Maintain Aspect Ratio**
  - **Maintain Aspect Ratio** (default ON) This controls how video scenes are shown in the ControlCenter.
  - **Note**: This setting can be toggled in real time for individual tiles by selecting the tile and clicking Shift-R.

- **Adaptive Streaming**

**Quality**
- **Deinterlacing**
- **Deblocking**

When Maintain Aspect ratio is checked, the display has 'frames' to fill the unoccupied portions of the tile.

When Maintain Aspect ratio is unchecked, the display is stretched to fill the available tile.

**Adaptive Streaming**
**Adaptive Streaming** (default ON) - This allows the system to choose the optimum available stream from a camera, depending on the size of its viewing tile. The system selects a high-resolution stream when the image is shown in larger tiles or full-screen mode. When the viewing tile is smaller, not so much resolution is needed, so a lower-resolution stream can be chosen.

![Adaptive Streaming - showing how resolution changes between large and regular Viewing Panes](image)

Adaptive Streaming is currently available with FLIR and DVTEL's Ariel, Quasar, and Quasar Gen 2 edge devices.

Adaptive streaming is enabled by default, but can be disabled on each Control Center by un-checking this box. It may also be disabled for an individual camera using the Context Menu in an open camera Viewing Tile.

**Quality**
The system uses various video filters to improve the appearance of displayed scenes. Filters consume system resources, so the user has the option to switch them off on client machines that have performance limitations.

The **Video Quality** sub-menu specifies whether the following filters are applied:

- **Dejittering** (default ON)
  Dejittering uses memory buffers to make the video presentation smoother. On Client machines with limited memory, this filter can be switched off, which reduces memory consumption, but might impact video quality.

- **Deblocking** (default ON)
  The deblocking filter is applied to decoded compressed video to improve visual quality while decoding video.

- **Deinterlacing** (default ON)
  Deinterlacing is the process of converting interlaced video, such as 1080i format HDTV signals, into a non-interlaced form.

**Instant Replay**
The **Instant Replay** sub-menu is used to set the rewind time before a replay (in seconds).

![Instant Replay settings](image)

The **Tile arm settings** lets the user define whether instant replay is done in a video tile specified by "Arming it for alternative content" as the playback tile or whether the playback will default to the next available tile. If no tile is available, this will be the first tile.

The **Instant Replay source** allows you to choose if, when using Instant Replay, to always use the camera's 'alternative scene' for IR. Normally, clicking on Instant Record for a camera will result in a recording being made from the Live camera stream, using its resolution parameters. When the camera has been defined as 'Dual Scene', clicking on this option allows the IR function to use the alternative stream - thus the IR clip will be at the 'Recorded Stream' resolution.

**Playback**
The **Playback** sub-menu is used control the load imposed on the client machine during playback. Defaults are set for dealing with lower number of streams, but higher quality. If a client machine is experiencing load issues, the operator can change settings to provide higher throughput, but possibly impacting on video quality.

The user can set the type of online playback (TCP or UDP), smooth playback, streaming buffer length, the number of scenes that can be played synchronously, and max. number of CPU cores to be used during decoding.

These settings are unique to the specific client machine on which they are set, so the user can 'tune' specific workstations depending on the power of the client machine, and whether it is more important to keep high quality playback, or allow more streams to be handled.

### TCP/UDP
Default setting is TCP. UDP will allow more streams to be played, but this may allow dropped frames.

### Offline Playback
Fast playback normally displays only key frames. This may provide some jerkiness in the image.

When **Enable smooth reverse playback** is enabled, playback is not limited to only key-frames but displays all video frames. This prevents the jerky motion that can occur during reverse playback. This option requires TCP playback.

**Note:** Smooth playback is not supported on Transcoded video.

Additionally, Smooth playback can be enabled independently for online and offline playback.
Synchronized Playback
Default set to 6 streams. If higher quality playback is required, the number of simultaneous synchronous streams should be reduced.

CPU Utilization
By default, this is set to 2. The maximum number of cores that is available will correspond to the number of cores on the computer being utilized (and hence can vary on Control Center applications being run on different computers.).

If only one or two streams are to be watched fast forward/reverse, then the number of cores to be used may be increased to the maximum available on the target machine.

Note: Playback of final frames of a clip:
Under certain specific conditions, when using multiple CPU cores (see CPU Utilization parameter), then the final \((n-1)\) frames will not be played back (where \(n\) is the number of cores specified in the CPU Utilization parameter).

This will occur if the following conditions are satisfied:

- This is the final clip available for the device (No later clips exist), and
- A single stream is being played (not Synchronized Playback), and
- The 'Smooth Reverse Playback' parameter is unchecked.

If the user needs to see the final frames:

- Use the Pause and Play controls to play the frames individually, or
- Reset the number of cores to be used can be reset to 1 in the Tools/Options/Video/Playback menu, and start the playback again.

2.2.3.3 View Settings
The sub-menus in this category are: General, Full Screen, Layout, Advanced, Layout Patterns, OSD, Tile Toolbar and Notifier.
General
The General sub-menu specifies the global screen parameters for this ControlCenter.

- The **General** section shows icons for each of the display screens attached to the ControlCenter. The check-box in each top left corner is used to indicate that the corresponding screen is to be used for the ControlCenter display. When a screen icon is checked, the corresponding entity number is shown.
- The **Status bar** check-box is used to control whether the Windows Status Bar is to be shown or not.
- The **Navigation Tree** check-box controls whether the Navigation tree entry for an entity should be shown in bold when that entity is displayed in the ControlCenter or not.

Full Screen
The Full Screen sub-menu is used to specify which GUI elements should be shown in full screen mode.

Layout

- **Dwell Time** - Is used to specify the how long each layout should be displayed during layout tours (the dwell time).
- **Drag Behavior** - Is used to indicate if a stream should be removed by dragging it out of the layout
- **PIP Behavior** - Is used to enable/disable the ability to show a Picture in Picture view of a camera with multiple streams (dual Thermal/visible PTZ, Multi-imager with 5th lens, etc.)
Advanced
The Advanced sub-menu is used define the stack length, stream disposal, Limits on system resources, and control on video retries.

Limits on system resources
- **Check-box** to limit Maximum Number of Active Video Tiles and Value - by default this box is unchecked (disabled), as the normal setup will use the Memory usage flag (below)

- **Check-box** to activate limit flag on CPU Usage - by default this is checked (enabled) and default value is 90%

- **Check-box** to set level at which to flag Memory usage - by default this is checked (enabled) and default value is 90%

When invoking a new function that will require memory resources, a message is displayed that gives the user the option to take steps to reduce memory usage such as reducing the number of viewing tiles, before invoking the next instruction.
When the defined memory usage level is reached, a warning message is displayed.

<table>
<thead>
<tr>
<th>Memory Usage</th>
<th>Graphics Memory</th>
<th>CPU Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>996M</td>
<td>2430M</td>
<td>50%</td>
</tr>
</tbody>
</table>

The application is close to reaching its memory limit and might stop functioning properly. To ensure proper functionality, you can reduce the memory level by clearing some of the video tiles.

**Layout Patterns**

The Layout Patterns sub-menu is used to determine which layout patterns are available. Move the desired layouts from the Available list to the Selected list using the arrows.

**OSD**
The OSD sub-menu is used to set the font and background parameters of the information displayed on screen and determine what information is displayed. You can select to display the scene name, status description, status image, video statistics and time.

**Metadata General**
Metadata Text

Tile Toolbar
The Tile Toolbar sub-menu is used to determine the opacity level of the toolbar background and buttons as well as the visibility of the tile toolbar and the tile number. By default, the toolbar background is very opaque and it fades when the cursor is not placed on top. The buttons are visible and the Armed Tile button is always visible.

Notifier
The Notifier sub-menu is used to determine whether the message notifiers, display timers, displays on alarms and displays on errors should be visible.

**Event Display**
The Event Display sub-menu is used to select which event types will be displayed.

**2.2.3.4 Export**
There are three sub-menus in this category: **Snapshot**, **Clip** and **Burn**.
The **Clip** sub-menu sets the default export format (.dvt, .mp4 or .avi). If required, these settings can be over-ridden in the Export dialog at the time a specific export is initiated.
**Snapshot**
The **Snapshot** sub-menu is used to set the following snapshot export parameters:

- **Saved Location** - Determine the location of the export folders.

  **Note**: This can also be done using an environment variable such as `%temp%`.

- **Snapshot title format** - Determine the title format of the snapshots. To export snapshots without captions, delete the title in this field.

![Snapshot Sub-menu Image]

**Clip**
The **Clip** sub-menu is used to set the clip export parameters.

![Clip Sub-menu Image]
- **Saved Location** - Set the location of the export folders.
- **Create new folder for each export** - Select this check box to create a separate folder for each exported clip.
- **Create autorun file** - Select this check box to create an autorun file for all exported files to automatically run the files after they are burnt on a disk.
- **Include player** - Select this check box to automatically export and burn an executable player along with exported files that are burnt on a disk.
- **Max File size** - allows the user to set a maximum clip size.
- **Time Segment** - The duration of the exported clip. This parameter is only applicable when exporting from the query results pane, since export from the timeline requires specifying start and end points.
- **Advanced mode** - Select the advanced mode check box to access the export settings from the Query pane when exporting a clip. By default, this option is selected. If unchecked, the user does not have the option of changing the parameters at export time.

For more information, see [Exporting a Clip](#).

### Format, Bookmark and OSD

Within the Clip menu there are three sub-menus: **Format, Bookmark** and **OSD**

**Format**

The **Format** sub-menu is used to determine the clip format. The available options for the related fields (Embed OSD, Video and Audio Codec, Interleaved Export) change depending on which format is selected.

**Note:** When using the default option of NOT embedding the OSD, if the clip is around 15 minutes or longer the subtitles update once every second to reduce delay.

**Note:** When selecting to embed OSD into MP4 clips, it is recommended that the user only use this option for short clips

**Note:** Interleaved (video and audio) export is checked by default for all formats.
The **Bookmark** sub-menu displays the export settings of the Bookmark Clip.

![Bookmark Export](image)

The **OSD** sub-menu is used to set the font and background parameters of the information displayed on screen to determine what information is displayed.

![OSD Settings](image)

**Burn**

The **Burn** sub-menu enables you to burn the Exported files and if required, to delete these files at the end of the burn operation.

The **Burn** dialog box contains these fields:
**Temp Burn Location:**

Click the browse icon to specify a temporary location for the burned file

-or-

Mark the check box to use a default location.

**Delete Files After Burn** Operation: mark this check box if you want to delete the files after the burn process is complete.
2.2.3.5 Scene Tracker

The Scene Tracker menu is used to select the Video Quality and whether to flip the video frame.

![Scene Tracker Menu Example]

2.2.3.6 Keyboard

The Keyboard menu is used to specify the type and port address of a keyboard connected to the client machine's RS232 serial port, as well as whether keyboard beeping should be enabled.

![Keyboard Menu Example]
2.2.3.7 **PTZ**

The **PTZ** menu is used to determine whether to display a message informing the user about overriding a PTZ lock.

![PTZ Menu](image1)

2.2.3.8 **Joystick**

The **Joystick** menu is used to select the joystick type and determine the joystick settings.

![Joystick Menu](image2)

*For more information, see [USB Joystick](#).*
2.2.3.9 Audio
The Audio menu is used to select the Audio Capture Device, determine whether to mute the attached audio, and set the default volume.

2.2.3.10 CaseBuilder
The CaseBuilder menu is used to set the Bookmark Clip settings (i.e. how long before and after the Bookmark the clip should be saved, the lifespan of Cases and the warning for Clip Duration Limitation.
2.2.3.11 Login Settings

The Login Settings menu is used to determine whether the login settings should be saved.

![Login Settings Menu]

2.2.3.12 Working With Keyboards

CCTV keyboards can be connected to a client PC's RS232 serial port. Since the connection is local, the use of a keyboard does not have an effect on privileges. Some functions, however, may not be available on some or all supported keyboards.

Keyboard settings can be configured by going to Tools -- Options and clicking the Keyboard tab in the Options dialog box.
Command sequences for common tasks:

<table>
<thead>
<tr>
<th>Function</th>
<th>PTZ Keyboard Command</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switch to a viewing pane or analog monitor with logical ID X.</td>
<td>X MON</td>
</tr>
<tr>
<td>Switch to a tile Y within the selected viewing pane.</td>
<td>Y MON</td>
</tr>
<tr>
<td>Switch to tile Y of viewing pane X.</td>
<td>Y MON, X MON</td>
</tr>
<tr>
<td>Display camera X on the focused tile/analog monitor or switch the viewing pane layout to layout X.</td>
<td>X CAM</td>
</tr>
<tr>
<td>Operate a PTZ camera displayed on the focused tile/analog monitor.</td>
<td>Joystick and dedicated PTZ buttons (IRIS, PRESET, etc.)</td>
</tr>
</tbody>
</table>

Additional controls are available through the FLIR Systems, Inc CCTV keyboard or the PC keyboard of the Workstation running the Control Center Client Application.

For complete information, see Controlling the ControlCenter via CCTV Keyboard and Controlling the ControlCenter via the PC Keyboard.
2.2.3.12.1 Controlling the ControlCenter via CCTV Keyboard

Using the CCTV keyboard, you can control the ControlCenter application (both local and remote).

Selecting and Controlling Entities and Tiles

All entities (cameras, camera sequences, tiles, layouts, monitors, etc.) have a unique ID represented by a logical number (xxxx).

DVT-KBD-G2

Keyboard Commands:

Note: The SHIFT button works as a toggle for other buttons on the keyboard. When SHIFT is used to trigger a function, it remains in the SHIFT state until the button is pressed again to toggle back to the previous mode.

<table>
<thead>
<tr>
<th>Function</th>
<th>Keyboard Command</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select a Control Center Monitor</td>
<td>Monitor Number → MULT</td>
<td>8</td>
</tr>
<tr>
<td>Select a View tile</td>
<td>Monitor Number → MULT</td>
<td>8</td>
</tr>
<tr>
<td>Display a camera on the selected monitor or tile</td>
<td>Tile Number → CAM</td>
<td>7</td>
</tr>
<tr>
<td>Toggle through viewing pane layouts with 4 tiles</td>
<td>2 → SETUP</td>
<td>2</td>
</tr>
<tr>
<td>Toggle through viewing pane layouts with 9 tiles</td>
<td>3 → SETUP</td>
<td>2</td>
</tr>
<tr>
<td>Toggle through viewing pane layouts with 16 tiles</td>
<td>4 → SETUP</td>
<td>2</td>
</tr>
<tr>
<td>Function</td>
<td>Keyboard Command</td>
<td>Key</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>----------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Expand currently selected tile to fill viewing pane</td>
<td>MULT</td>
<td>8</td>
</tr>
<tr>
<td>Clear currently selected tile</td>
<td>SHIFT → CAM</td>
<td>3+7</td>
</tr>
<tr>
<td>Display a sequence on the selected monitor or tile</td>
<td>Sequence number → TOUR</td>
<td>19</td>
</tr>
<tr>
<td>Pause Sequence</td>
<td>TOUR</td>
<td>19</td>
</tr>
<tr>
<td>Switch to next camera of a paused sequence</td>
<td>SHIFT → FOCUS+</td>
<td>3+13</td>
</tr>
<tr>
<td>Switch to previous camera of a paused sequence</td>
<td>SHIFT → FOCUS-</td>
<td>3+13</td>
</tr>
<tr>
<td>Turn recording of the selected camera's video stream on/off</td>
<td>SCAN</td>
<td>17</td>
</tr>
<tr>
<td>Audio PTT</td>
<td>OTHER</td>
<td>15</td>
</tr>
<tr>
<td>Audio Listen</td>
<td>SHIFT → OTHER (enabled by default)</td>
<td>3+15</td>
</tr>
<tr>
<td>Trigger an alarm</td>
<td>Alarm Number → PAN</td>
<td>18</td>
</tr>
<tr>
<td>Acknowledge alarm in active tile</td>
<td>SHIFT → PAN</td>
<td>3+18</td>
</tr>
<tr>
<td>Full Screen</td>
<td>11 → FN</td>
<td>11+5</td>
</tr>
<tr>
<td>Display CC Help File</td>
<td>1 → FN</td>
<td>1+5</td>
</tr>
<tr>
<td>Switch between Systems (while logged in to multiple systems)</td>
<td>System number → SHIFT → MULT</td>
<td>3+8</td>
</tr>
</tbody>
</table>

**Instant Replay Commands:**

**Note:** Moving the joystick will pause the video, moving the joystick to the left or right will move the playback needle within the time-line. When a desired spot is determined, press PLAY to continue watching.

<table>
<thead>
<tr>
<th>Function</th>
<th>Keyboard Command</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display Instant replay on next available tile</td>
<td>PLAY</td>
<td>11</td>
</tr>
</tbody>
</table>
### Control Center Workspace

#### Function | Keyboard Command | Key
--- | --- | ---
Play | IRIS + | 12
Pause | IRIS - | 12
Rewind | FOCUS - or joystick left | 13/21
Fast Forward | FOCUS + or joystick right | 13/21
Bookmark the selected tile | SHIFT+SCAN | 2+17

### Controlling PTZ Domes:

**Note:** Entering the PTZ menu, by pressing the PTZ Button (10) will display a menu with the options listed below as **PTZ**

To learn more about navigating the menu, see the *UVMS_Keyboard_DVT-KBD-G2_UIG*

#### Function | Keyboard Command | Key
--- | --- | ---
Pan left/right | Joystick left/right | 21
Tilt up/down | Joystick up/down | 21
Zoom in/out | ZOOM +/- | 21
PTZ preset | *Preset Number* → PRESET | 16
PTZ Pattern | *Pattern Number* → PATTERN | 20
Send to 'home' position | PTZ | 10
Lock/unlock | PTZ | 10
Flip position | PTZ | 10
Control Iris | IRIS +/- | 12
Focus | FOCUS +/- | 13
Auxiliary controls ON | *AUX Number* → AUX | 9
Auxiliary controls OFF | *AUX Number* → SHIFT → AUX | 3+9
**Change Camera Mode**

Note: In order to utilize this function, there must be a video profile assigned to the camera. The default timeout for these functions is 3 minutes at which time it will revert back to the system picture profile settings.

Supported only for FLIR CP-6302-31-I

<table>
<thead>
<tr>
<th>Function</th>
<th>Keyboard Command</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set night mode</td>
<td>6 → FN</td>
<td>6+5</td>
</tr>
<tr>
<td>Set Night mode with IR On</td>
<td>7 → FN</td>
<td>7+5</td>
</tr>
<tr>
<td>Set Day mode</td>
<td>8 → FN</td>
<td>8+5</td>
</tr>
<tr>
<td>Reset to current system picture</td>
<td>9 → FN</td>
<td>9+5</td>
</tr>
</tbody>
</table>

**DVT-KBD (Legacy)**

<table>
<thead>
<tr>
<th>Function</th>
<th>Command</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select an analog monitor or ControlCenter viewing pane</td>
<td>Monitor number and MON</td>
</tr>
<tr>
<td>Select a viewing tile</td>
<td>Monitor number and MON</td>
</tr>
<tr>
<td>Display a camera on the selected monitor or tile</td>
<td>Camera number and CAM</td>
</tr>
<tr>
<td>Toggle through viewing pane layouts with 4-8 tiles</td>
<td>2x2</td>
</tr>
<tr>
<td>Toggle through viewing pane layouts with 9-13 tiles</td>
<td>3x3</td>
</tr>
<tr>
<td>Toggle through viewing pane layouts with 16 tiles</td>
<td>4x4</td>
</tr>
<tr>
<td>Expand currently selected tile to fill viewing pane</td>
<td>MON</td>
</tr>
<tr>
<td>Clear currently selected tile or analog monitor</td>
<td>CLEAR</td>
</tr>
<tr>
<td>Clear contents of the keyboard screen’s ENTER field</td>
<td>CLEAR</td>
</tr>
</tbody>
</table>
Function | Command
--- | ---
Display a sequence on the selected monitor or tile | Sequence number and SEQ
Display a sequence on the selected monitor or tile | Press SEQ twice
Hold a sequence | NEXT
Switch to the next camera of a paused sequence | LAST
Display an instant replay on the selected analog monitor (not available on a viewing tile when using the keyboard) | INST. REPLAY (See additional table for more instant replay controls)
Bookmark the selected file | BOOKMARK
Turn recording of the selected camera’s video stream on/off | RECORD ON/OFF
Trigger an alarm | Alarm number and ALARM
Acknowledge an alarm in its active tile | ACK

Controlling Playbacks

Following are the CCTV keyboard commands used to control playbacks:

Function | Command
--- | ---
Play | IRIS OPEN
Pause | IRIS CLOSE
Rewind | FOCUS NEAR or joystick left
Fast Forward | FOCUS FAR or joystick right
Increase playback speed | IRIS OPEN
Decrease playback speed | AUX ON
Controlling PTZ Domes

Following are the CCTV keyboard commands used to control PTZ domes:

<table>
<thead>
<tr>
<th>Function</th>
<th>Command</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pan left/right</td>
<td>Joystick left/right</td>
</tr>
<tr>
<td>Tilt up/down</td>
<td>Joystick up/down</td>
</tr>
<tr>
<td>Zoom in/out</td>
<td>Twist joystick clockwise/counter-clockwise</td>
</tr>
<tr>
<td>Call a dome preset</td>
<td>Preset number and PRESET</td>
</tr>
<tr>
<td>Call a dome pattern</td>
<td>Pattern number and PATTERN</td>
</tr>
<tr>
<td>Send a dome to its home position</td>
<td>HOME</td>
</tr>
<tr>
<td>Lock/unlock a dome</td>
<td>LOCK</td>
</tr>
<tr>
<td>Flip a dome’s position</td>
<td>FLIP</td>
</tr>
<tr>
<td>Control a dome’s iris</td>
<td>Press and hold IRIS OPEN or IRIS CLOSE</td>
</tr>
<tr>
<td>Focus a dome</td>
<td>Press and hold FOCUS FAR or FOCUS NEAR</td>
</tr>
<tr>
<td>Utilize a dome’s auxiliary controls</td>
<td>Aux number and AUX ON or AUX OFF</td>
</tr>
</tbody>
</table>

2.2.3.12.2 Controlling the ControlCenter via the PC Keyboard

Using the PC keyboard, you can control the ControlCenter application (local and remote) with extensive functionality and ease of use. Following are the supported PC keyboard commands.

Selecting Entities and Tiles by ID

All entities (cameras, camera sequences, tiles, layouts, monitors, etc.) have a unique ID represented by a logical number (xxxx). To apply a command to specific entities, they have to be entered after the entity ID. To help the user keep track of what number has been entered, all digit keystrokes ('0' through '9') are shown in the toolbar. The number displayed in the toolbar will be the ID used by the next keyboard command.
Note: The keypad NUM LOCK must be on for the following commands.

Following are the PC keyboard commands used to select entities and tiles by their IDs:

<table>
<thead>
<tr>
<th>Function</th>
<th>Command</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select monitor or tile xxxx</td>
<td>xxxx and keypad '.'</td>
</tr>
<tr>
<td>The current monitor, tile and camera selections are all indicated in the toolbar.</td>
<td></td>
</tr>
<tr>
<td>Select camera or layout xxxx</td>
<td>xxxx and keypad ENTER</td>
</tr>
<tr>
<td>Select camera sequence xxxx</td>
<td>xxxx and CTRL and keypad ENTER</td>
</tr>
<tr>
<td>Select system (Control Center system) xxxx</td>
<td>xxxx and M</td>
</tr>
<tr>
<td>Clear led display</td>
<td>ESC</td>
</tr>
</tbody>
</table>

For example, to put a camera on a tile, type the following:
<monitor ID>.<tile number>.<camera ID>ENTER

Controlling the Selected Tile

Following are the PC keyboard commands used to control the selected tile:

<table>
<thead>
<tr>
<th>Function</th>
<th>Command</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selected tile - Arm/disarm toggle</td>
<td>A</td>
</tr>
<tr>
<td>Selected tile - Expand/collapse toggle</td>
<td>keypad ' '</td>
</tr>
<tr>
<td>Remove displayed entity</td>
<td>BACKSPACE</td>
</tr>
<tr>
<td>Camera - Add bookmark</td>
<td>B</td>
</tr>
<tr>
<td>Camera - Start/stop recording</td>
<td>R</td>
</tr>
<tr>
<td>Camera - Talk (push-to-talk)</td>
<td>, (comma)</td>
</tr>
<tr>
<td>Camera - Listen (on/off)</td>
<td>. (period)</td>
</tr>
<tr>
<td>Camera sequence - Start/stop</td>
<td>CTRL and Up arrow</td>
</tr>
<tr>
<td>Camera sequence - next camera</td>
<td>CTRL and Right arrow</td>
</tr>
</tbody>
</table>
Control Center Workspace

<table>
<thead>
<tr>
<th>Function</th>
<th>Command</th>
</tr>
</thead>
<tbody>
<tr>
<td>Camera sequence - next camera</td>
<td>CTRL and Left arrow</td>
</tr>
</tbody>
</table>

Controlling Alarms
Following are the PC keyboard commands used to control alarms:

<table>
<thead>
<tr>
<th>Function</th>
<th>Command</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trigger alarm</td>
<td>xxxx and CTRL and A</td>
</tr>
<tr>
<td>Acknowledge alarm on selected tile</td>
<td>CTRL and Space</td>
</tr>
</tbody>
</table>

Controlling Playbacks
Following are the PC keyboard commands used to control playbacks:

<table>
<thead>
<tr>
<th>Function</th>
<th>Command</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instant Replay on selected tile</td>
<td>I</td>
</tr>
<tr>
<td>Play/Pause</td>
<td>G</td>
</tr>
<tr>
<td>Rewind</td>
<td>K</td>
</tr>
<tr>
<td>Fast Forward</td>
<td>L</td>
</tr>
<tr>
<td>Increase playback speed</td>
<td>Shift and keypad ‘+’</td>
</tr>
<tr>
<td>Decrease playback speed</td>
<td>Shift and keypad ‘-’</td>
</tr>
</tbody>
</table>

Controlling PTZ and Digital PTZ
Following are the PC keyboard commands used to control PTZs and digital PTZs:

<table>
<thead>
<tr>
<th>Function</th>
<th>Command</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pan left</td>
<td>Shift and Left arrow</td>
</tr>
<tr>
<td>Pan right</td>
<td>Shift and Right arrow</td>
</tr>
</tbody>
</table>
Control Center Workspace

<table>
<thead>
<tr>
<th>Function</th>
<th>Command</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tilt up</td>
<td>Shift and Up arrow</td>
</tr>
<tr>
<td>Tilt down</td>
<td>Shift and Down arrow</td>
</tr>
<tr>
<td>Zoom in</td>
<td>Shift and keypad '/'</td>
</tr>
<tr>
<td>Zoom out</td>
<td>Shift and '*'</td>
</tr>
</tbody>
</table>

Advanced PTZ Controls

Following are the PC keyboard commands used for advanced PTZ control:

<table>
<thead>
<tr>
<th>Function</th>
<th>Command</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decrease PTZ speed</td>
<td>Shift and keypad ‘-’</td>
</tr>
<tr>
<td>Increase PTZ speed</td>
<td>Shift and keypad ‘+’</td>
</tr>
<tr>
<td>Go to preset</td>
<td>xxxx and Shift and Insert</td>
</tr>
<tr>
<td>Set preset</td>
<td>xxxx and CTRL and Insert</td>
</tr>
<tr>
<td>Run pattern</td>
<td>xxxx and Shift and Home</td>
</tr>
<tr>
<td>Record pattern (start/stop)</td>
<td>xxxx and CTRL and Home</td>
</tr>
<tr>
<td>Auxiliary On</td>
<td>xxxx and Shift and Page up</td>
</tr>
<tr>
<td>Auxiliary Off</td>
<td>xxxx and Shift and Page up</td>
</tr>
<tr>
<td>Open iris</td>
<td>Shift and Delete</td>
</tr>
<tr>
<td>Close Iris</td>
<td>CTRL and Delete</td>
</tr>
<tr>
<td>Focus near</td>
<td>Shift and End</td>
</tr>
<tr>
<td>Focus far</td>
<td>CTRL and End</td>
</tr>
<tr>
<td>Lock</td>
<td>Shift and L</td>
</tr>
<tr>
<td>Go Home</td>
<td>Shift and H</td>
</tr>
</tbody>
</table>
### Function

<table>
<thead>
<tr>
<th>Function</th>
<th>Command</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flip</td>
<td>Shift and F</td>
</tr>
</tbody>
</table>

### Change Camera Mode

Note: In order to utilize this function, there must be a video profile assigned to the camera. The default timeout for these functions is 3 minutes at which time it will revert back to the system picture profile settings.

Supported only for FLIR CP-6302-31-I

<table>
<thead>
<tr>
<th>Function</th>
<th>Keyboard Command</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set night mode</td>
<td>F6</td>
</tr>
<tr>
<td>Set Night mode with IR On</td>
<td>F7</td>
</tr>
<tr>
<td>Set Day mode</td>
<td>F8</td>
</tr>
<tr>
<td>Reset to current system picture profile</td>
<td>F9</td>
</tr>
</tbody>
</table>
2.2.3.12.3 USB Joystick

**USB joysticks** can be connected to a client PC's USB port. Since the connection is local, the use of a joystick does not have an effect on privileges. Joysticks with Direct USB connections can be used in the ControlCenter.

A USB Joystick can be added and its settings can be configured by going to **Tools -- Options** and clicking the **Joystick** tab in the **Options** dialog box.

2.2.4 Favorites

Favorites allows the user to create and save additional custom workspace configurations to best suit his security environment and maximize operation efficiency.

**Favorites**

After customizing the ControlCenter to display the panes and tile layout of your choice, you can add the settings to your Favorites and access it at any stage by selecting it from the Favorites drop-down in the **Application Menu**.

1. To add a customized layout to your Favorites Mode
2. Access the Favorites menu by clicking "Favorites" in the Application Menu at the top of the Control Center window
3. Click 'Save layout as favorite'.
4. Type the desired name for your Favorite Mode

To access a customized layout
1. Access the Favorites menu by clicking "Favorites" in the Application Menu at the top of the Control Center window.
2. Expand the drop-down menu of the Favorites mode, and then select the desired layout.

To delete a customized layout
1. Access the Favorites menu by clicking "Favorites" in the Application Menu at the top of the Control Center window.
2. Click "Manage Favorites".
3. Select the layout to be deleted.
4. Click "Delete" on the upper left.
2.3 Explorer Area - Navigation Pane
The Explorer Area is the navigation pane where the various features for finding and displaying into the Display area the content you want. Items selected can be seen and used in viewing panes and layouts.

The following Explorer area content and features are covered in this section:

- Navigation Tree
- Query Pane
- PTZ Pane (Control Panel)

2.3.1 Navigation Tree
The Navigation Tree presents a hierarchical view of the system's logical entities (e.g. cameras, audio sources, etc.). It is most commonly used to start displaying live video or playing live audio within the application or via external output devices.
Navigation Tree Entries

The Navigation Tree contains all Sites (these can be expanded to show all logical entities within each Site) and all entities not allocated to specific Sites.

When the Control Center is connected to more than one System, the Site Filter can be used to display or hide selected Systems and Sites within those Systems.

Note: Sites and Entities displayed can be limited by the privileges associated with specific users or groups of users as set up by the system administrator.

The following display modes show information about the entities in the Navigation Tree:

- **Bold entries** refer to camera entities which are currently displayed in viewing tiles.
- Colored entries are used to show the status of Analytics-capable cameras:
  - **Green entries** - currently Armed.
  - **Red entries** - currently Disarmed
  - **Orange entries** - Analytics currently not available (low visibility/poor signal/etc.)
Dual-Sensor Cameras in the Navigation Pane

Dual-Sensor cameras that are integrated into the system (such as the FLIR PT-Series) are shown as two entries in the Navigation Pane.

To display a camera, sequence or map scene on a tile: Drag and drop the scene onto a viewing tile or double-click it to display on the first unoccupied tile (or the Spot tile, if one is configured). If audio sources are associated with a camera, they will activate.

To display a camera, sequence or map scene on a monitor: Drag and drop the scene onto the desired analog monitor in the Navigation Tree. Audio streams linked to a camera utilize the audio input/output devices linked to the monitor if any are defined.

To play audio through the workstation's speakers: Drag and drop the speaker onto a Viewing Pane audio layout and use the audio tile's controls to adjust volume and other parameters.
To transmit audio using a connected microphone: Drag and drop the microphone onto a Viewing Pane audio layout and click the microphone button to begin talking and transmitting.

Aside from the tree display, the Navigation Tree contains buttons at the top of the pane, as follows:

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Refresh Button" /></td>
<td>The refresh button can be clicked to manually refresh the Navigation Tree.</td>
</tr>
<tr>
<td><img src="image" alt="Filter Button" /></td>
<td>Clicking the filter button displays a drop-down list allowing users to toggle entity types to be visible or hidden. Settings in use are kept and restored when the same user logs in again.</td>
</tr>
<tr>
<td><img src="image" alt="Site Filter" /></td>
<td>The site filter opens up a window showing all defined sites in the system. The user can search and select/deselect the relevant sites they want displayed in the navigation tree at a given time.</td>
</tr>
<tr>
<td><img src="image" alt="Collapse All Button" /></td>
<td>The collapse all button will collapse all expanded tree entities.</td>
</tr>
</tbody>
</table>

### Icon State Symbols

The state of an entity is sometimes reflected in the appearance of its icon as shown in entity trees throughout the system, including those in the Navigation Pane.

<table>
<thead>
<tr>
<th>Icon state</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Entity being recorded" /></td>
<td>Entity being recorded.</td>
</tr>
<tr>
<td><img src="image" alt="Icon of Offline entities are shown grayed out" /></td>
<td>Icon of Offline entities are shown grayed out.</td>
</tr>
<tr>
<td><img src="image" alt="Entity is in a warning state" /></td>
<td>Entity is in a warning state</td>
</tr>
<tr>
<td><img src="image" alt="Disconnected entity" /></td>
<td>Disconnected entity</td>
</tr>
<tr>
<td><img src="image" alt="Entity linked to a microphone" /></td>
<td>Entity linked to a microphone</td>
</tr>
<tr>
<td><img src="image" alt="input/output pin device in an abnormal state." /></td>
<td>input/output pin device in an abnormal state.</td>
</tr>
<tr>
<td><img src="image" alt="input/output pin device in an unknown state." /></td>
<td>input/output pin device in an unknown state.</td>
</tr>
<tr>
<td><img src="image" alt="Archiver for this entity failed." /></td>
<td>Archiver for this entity failed.</td>
</tr>
</tbody>
</table>

Multiple state symbols may be integrated into a single entity icon, as in the case of a recording camera linked to a microphone 🎤. 
Site Filter

When the Control Center is connected to more than one System, the Site Filter can be used to display or hide selected systems and sites within those Systems.

2.3.2 Query Pane

The Query Pane provides an easy-to-use interface for searching the system’s video and audio archives. It supports search based on date and time for clips, bookmarks, incidents and alarm. It is also used to launch playback.
Types of Query

All queries can be conditioned on camera/s (or other type or source), Text filter (opt), Date and Time.

Depending on the type of Query, additional advanced parameters may be used.

The following Query types are supported:

<table>
<thead>
<tr>
<th>Name</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alarm</strong></td>
<td>Can include parameters on how Alarm was triggered, etc.</td>
</tr>
<tr>
<td>Background Export</td>
<td></td>
</tr>
<tr>
<td><strong>Clip</strong></td>
<td>Search for recorded clips</td>
</tr>
<tr>
<td><strong>Bookmark</strong></td>
<td>Search for Bookmarks created manually in the timeline</td>
</tr>
<tr>
<td><strong>Incident</strong></td>
<td>Search for incidents triggered by Actions defined in Admin Center</td>
</tr>
</tbody>
</table>
Motion Bookmark | Search for motion bookmarks display them in the Timeline in the Query Results pane
---|---
Motion Indication | Search for indicated detected motion in recorded video and display it in the Timeline in the Query Results pane
Smart Search | Search for motion in specific regions of recorded video
Thumbnail | Allows user to see thumbnails and search visually

To search for Cleared Alarms (associated clips):

1. To assure a default search, click on the bottom right.
2. To define additional parameters for an advanced search, click and do the following in the Additional clip parameters dialog that appears.
   - From the Initiated by tree, select one or more users. Note that auto-cleared alarms have no user defined. If you want to return auto-cleared alarms, you cannot select any users.
   - a. In the Alarm description field, type text that must match in the Alarm description.
   - b. To search only redundant Archivers, select Search redundant Archivers.
      - Note: If enabled the primary Archiver will not be searched.
   - c. Click OK.
3. From the Search for menu, select Alarm.
4. Select the recorded source scene, by marking the tree entities.
5. From the Date and Time menu, select a preset time option -or-
   - Select Manual selection and then enter From date and time and To date and time.
6. In the Text search, type optional text to find in the Alarm Name.
7. Click Search.
8. To view the associated clip segments of an Alarm (if defined with alarm type) in the Query Results pane, expand the Alarm by clicking on the (+) and then double click the video you want to view.

To reset your query parameters, click the Reset button.

To search for Bookmarks (with related clip segments):

1. In the Query pane from the Search for menu, select Bookmark.
2. Click and do the following in the Additional clip parameters dialog that appears.
   - a. From the Initiated by tree, select one or more users.
b. On Latitude systems, an additional check-box is shown:
   To search only redundant archivers, select Search redundant Archivers.
   Note: If enabled the primary Archiver will not be searched.

c. Click OK.

3. Select the recorded source scene, by marking the tree entities.

4. In the Text search, type optional text to find in the Bookmark Name.

5. From the Date and Time menu, select a preset time option or select Manual selection
   and then enter From date and time and To date and time.

6. Click Search.
   The returned results display in the Query Results pane.

7. To view the associated clip segment of a bookmark in the Timeline playback, in the
   Query Results pane, double click the bookmark you want to view.

To do a simple search for a Clip (Clips that satisfy the search are listed in Query Results):

1. From the Search for menu, select Clip.

2. To reset Query parameters and return to a default search, click 🔘.

3. Select the recorded source scene, by marking the tree entities.

4. From the Date and Time menu, select a preset time option
   -or-
   Select Manual selection and then enter From date and time and To date and time.

5. Click Search.

To do a simple search for a Clip (Synchronized Playback):

1. To reset Query parameters and return to a default search, click 🔘.

2. From the Search for menu, select Clip.

3. Select scenes for recorded source scenes, by marking the tree entities. You can select
   from one up to the maximum number of scenes as defined in the to the maximum as defined in the Tools ► Options ► Video ► Playback screen settings. The default is six maximum.

4. From the Date and Time menu, select a preset time option
   -or-
   Select Manual selection and then enter From date and time and To date and time.

5. Click Sync.
   The clips found by the search load into the Timeline - Synchronized Playback Layout.

6. Once the sync playback layout is opened, the User will be able to drag to open scenes
   from the main camera tree.
   a. When a scene is dragged into an empty tile, it will be automatically synced with the other scenes in the layout. The unified Timeline will be updated to include the new scene.
b. If the scene is dropped into a populated tile, it will open the new scene in the next available tile. If no tile is available, the layout will be automatically modified to include more tiles.

c. Scenes with linked audio will take two tiles, which will also expand the layout if necessary.

7. Scenes can also be dragged out of the layout to remove them and the unified timeline will be removed for that scene.

Note: One scene (the "original" scene in the top left tile) must always remain in the Sync Playback layout in order to keep the playback times.

To do an advanced search for a Clip:

1. From the Search for menu, select Clip.

2. Click  and do the following in the Additional clip parameters dialog that appears.

   a. From the Initiated by tree, select one or more users.

   b. Click the Archiving triggers menu and in the Archiving trigger options list, mark or deselect the triggers to search for. Click the menu arrow again.

   c. From the Protection status menu, select Locked for only locked clips, Unlocked for clips that are not locked, or Both for all clips.

   d. To enable or disable the optional display of motion preview on the clip in the Timeline pane, select or deselect Show motion preview.

   e. On Latitude systems, an additional check-box is shown: To search only redundant Archivers, select Search redundant Archivers. Note: If enabled, the primary Archiver will not be searched.

Click OK.

4. Select the recorded source scene by marking the tree entities.

   If you want to display found clips in Query Results pane, select one or more.
   If you want to display found clip results in a Synchronized Playback, select clips
   Note: The maximum no. of clips that may be defined is set in the Tools ► Options ► Video ► Playback screen.
5. From the Date and Time menu, select a preset time option
   -or-
   Select Manual selection and then enter From date and time and To date and time.

6. In the Text search, type optional text to find in the Clip Name.

7. Do the following:
   a. For listing found clips in the Query Results pane, click Search.
   b. For automatically playing found clips in Timeline and in a Synchronized Playback, click Sync.

Note: Changes remain in effect until reset. If the changes made are only for this search or you want to reset them, click.

⚠ Query results are displayed time ascending. When the query results exceed the limit that is specified by the query, only partial results are returned. Change the time filter to include the required time span in the query.

To search for Incidents (with all related bookmarks with clip segments):

1. In the Query pane from the Search for menu, select Incidents.

2. Click and do the following in the Additional clip parameters dialog that appears.
   a. From the Initiated by tree, select one or more users
   b. To search only redundant Archivers, select Search redundant Archivers. Note: If enabled the primary Archiver will not be searched
   c. Click OK.

4. Select the recorded source scene, by marking the tree entities.

5. In the Text search, type optional text to find in the Incident Name.

6. From the Date and Time menu, select a preset time option or select Manual selection and then enter From date and time and To date and time.

For a list of results in the Query Results pane.
   a. Click Search to start the query.
   b. Click Stop when you wish to end the query.

The query results appear in the Query Results pane.

7. To view the associated bookmarks and clip segments of a Incident in the Timeline playback, in the Query Results pane, expand the incident by clicking on the (+) and then double click the bookmark you want to view.

⚠ Query results are displayed time ascending. When the query results exceed the limit that is specified by the query, only partial results are returned. Change the time filter to include the desired time span in the query.

For a list of results in the Thumbnail search format.
   a. Click Thumbnails
b. A Thumbnail search layout will open. The results will appear in chronological order of all cameras selected.

**Motion Bookmark**

Using Motion Bookmark, you can search for motion bookmarks in recorded scenes and see if any motion occurred during a specified time. The results will appear in the timeline of the Query Results pane.

**To Use Motion Bookmark:**

2. From the Motion Query Type drop-down list, select Motion Bookmark.
3. In the Select Scene drop-down list, select the check box of the scenes you would like to search (you can select a logical location, such as a site, to search all applicable scenes in the location).
4. From the Date and Time menu, select a preset time option
   -or-
   Select Manual selection and then enter From date and time and To date and time.
5. If required, click ![gear icon] and select the Search redundant Archivers check box.

**For a list of results in the Query Results pane.**

a. Click Search to start the query.
   b. Click Stop when you wish to end the query.

The query results appear in the Query Results pane.

**For a list of results in the Thumbnail search format.**

a. Click Thumbnails
   b. A Thumbnail search layout will open. The results will appear in chronological order of all cameras selected.
Motion Indication
Using Motion Indication, you can search for motion in recorded scenes and see if any motion occurred during a specified time. The results will appear in the timeline of the Query Results pane.

To Use Motion Indication:
1. From the Motion Query Type drop-down list, select Motion Indication.
2. In the Select Scene drop-down list, select the check box of the scenes you would like to search (you can select a logical location, such as a site, to search all applicable scenes in the location).
3. From the Date and Time menu, select a preset time option -or-
   Select Manual selection and then enter From date and time and To date and time.
4. Click Preview.
5. In the Search Parameters pane, set the required level of motion indication using the slider.
6. If required, select the Search redundant Archivers check box.
7. Click Search to start the query.
8. Click Stop when you wish to end the query.
The query results appear in the Query Results pane.

Smart Search
Using Smart Search, you can select an area of interest and search if any motion occurred during a specified time in recorded scenes.
It is possible to run multiple searches concurrently.
To perform a Smart Search:

1. From the Search drop-down list, select Smart Search.
2. In the query camera tree, select the scene you would like to search (you can only select one scene at a time).
3. From the Date and Time menu, select a preset time option e.g. 24 hours
   -or-
   Select Manual selection from the bottom of the menu and then enter From date and time and To date and time.
4. Click Setup Smart Search to bring up the Smart Search configuration window.
   Note: You can disable Privacy Mask that is displayed by Right-clicking and selecting Deactivate privacy mask.
5. Select the specific area in which you want to query motion by using the icons described in the table below (it will appear as a green layer).
   Note: You can disable Privacy Mask that is displayed by right-clicking on the image and selecting Deactivate privacy mask (dependent on user permissions).
### Button | Description
---|---
[ ] | Click this button to mark a rectangle-shaped area as area of interest. In the Preview screen, mark the desired area.
[ ] | Click this button to mark the whole screen as area of interest.
[ ] | Click this button to erase single macro blocks from a previously marked area of interest. In the Preview screen, erase the macro blocks to be taken out of the desired area.
[ ] | Click this button to mark single macro blocks as area of interest. In the Preview screen, mark the desired area.
[ ] | Click this button to clear the whole screen.

Right after the zone of interest is defined, motion is displayed (green layer) in the Preview pane.

6. In the Query Type Parameters section, the default Smart Search parameters appear. You can change the following parameters:
- Threshold - The threshold which, when passed, the state alternates to Motion on, i.e. when motion is detected.
- Consecutive Frame Hit - The number of consecutive frames which should pass the motion on threshold in order to alternate the state to Motion on
- Accuracy/Speed - Select the required level of accuracy as opposed to speed using the slider.

7. Select the Search redundant Archivers check box if required.
8. Click Search to start the Smart Search. The search may take a while. The query results gradually appear in the Query Results pane.
9. Click Stop when you want to end the query. After clicking stop, the results that were found up to that point are displayed in the Query Results pane.
10. Double-click or drag the required results to the tiles to play them.

   When the results are played, the timeline changes from green to red whenever motion is detected.

To perform a thumbnail search

Selecting 'Thumbnail Search provides a visual way of browsing through recorded content.

1. Set up the Query.
   a. Select only ONE camera in the Query pane Navigation Tree
   b. Set Date and Time parameters.
   c. Set Interval. (Thumbnails will commence from the Start Time, and be displayed at the selected Interval.)

2. On pressing Search, the Viewing Pane displays a new Thumbnail Search Layout, with the recorded material from the selected source, with the set of associated Thumbnails.
To use digital zoom within thumbnail search:
1. Click the magnifying glass on the bottom right of the video.
2. Select the area to magnify.

Thumbnails are displayed.

Note: For clarity, maximize the video prior to performing the digital zoom.
See Thumbnail Search Layout for more information.

2.3.3 PTZ Pane

PTZ stands for Pan, Tilt, and Zoom
This term previously applied only to a camera with a motorized mount able to rotate to pan left and right, tilt up and down, and use motorized lens magnification to zoom in and out on the scene.

With the high resolution offered by modern cameras, PTZ capabilities within the image from a fixed camera are also provided, allowing the user to zoom in and then digital pan, tilt and zoom.
This capability is further extended by allowing the user viewing the image from a PTZ camera to choose a view, and then use Digital PTZ facilities within the selected scene.

(See Digital PTZ, below)

The PTZ Pane for the selected camera is displayed below the Navigation Pane in the Control Center.
Zoom mode - Click to change from Optical to Digital (only for PTZ cameras)

Notes:
1. Fixed cameras do not offer Optical Zoom Mode, and Presets are disabled.
2. On PTZ cameras, when returning to Optical Mode from Digital, the camera is reset to the current Optical view.

To move the camera: Use the directional buttons.

To zoom in and out: Click the + and - buttons, respectively.

To move the camera to its home position: Click the button.

To flip the camera: Click the button.

To lock the camera: Click the button.

The Preset area of the PTZ Control Panel allows you to the following functions:

- **PTZ control:** When a PTZ camera type is selected, the camera can be controlled directly
- **Preset Selection:** Clicking on a selection button moves the camera to show the preset view associated with that button.
- **Preset Settings:** This area allows each preset to be named (Edit), and stored (Set). The camera's pan, tilt, and zoom settings will be stored. Allows one preset defined for each numbered load button.
• **Aux Mode**: When an auxiliary, PT or PTZ auxiliary device is selected, much like standard PTZ presets, the aux mode allows preset of a pan tilt and zoom stored to memory. It is for devices that work on the same principles as a PTZ camera. (e.g. a PT motor or servo). This allows one preset defined for each numbered button.

• **To move the camera to a preset**: Click the corresponding button.

• **To adjust the Iris, Speed and Focus settings**: Use their respective + and - buttons.

**Digital PTZ Capability**

**Digital PTZ using a fixed Camera**

The system provides a digital PTZ capability on fixed cameras. By zooming in on the initial picture (using the + symbol in the PTZ control), the system provides a virtual zoom into the scene. Then, the user can use the PTZ controls to move the display to a particular area.

**Using Digital PTZ mode on a regular PTZ camera**

When using a regular PTZ camera, the user can select a view using the standard PTZ controls, and then change to Digital PTZ mode in one of two ways:

1. Right-click in the PTZ camera pane and select 'Switch to Digital PTZ' from the context menu

or

2. Click on the button 'Optical' in the PTZ pane

Using either method, the scene will then allow the user to use the Digital Zoom capability within the scene.

**Canceling Digital PTZ mode**

Digital PTZ mode is canceled either by clicking the Optical/Digital button in the PTZ pane (The button is set to 'Digital' when in that mode), or by again right-clicking in the PTZ camera viewing pane, and selecting 'Switch to Optical PTZ' from the context menu.

**Additional PTZ capability**

Once viewing an image in the viewing tile, the system provides additional magnification and movement around the magnified tile image using the mouse.

• **Scene Tracker Mode**: When a defined Scene Tracker view is selected, it works like a digital version of a pan, tilt and zoom preset that remembers what viewed area of the composite Scene Tracker view was loaded when the preset was defined. Allows one preset defined for each numbered load button.

**2.3.4 CaseBuilder Query Pane**

CaseBuilder Information in this file is still presented in Latitude 8 UI style.
The CaseBuilder Query Pane allows you to search the CaseBuilder server database and Data Location Path for saved cases. (To see more about how cases are created and updated, see Cases - CaseBuilder Features.)

The features of the CaseBuilder Query pane allow targeted searches using a variety of filters and matching options.

The following fields are available in the CaseBuilder Query Pane:

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case Name</td>
<td>Search for any case with a Case Name that matches the entered text (Full or partial).</td>
</tr>
<tr>
<td>Serial Number</td>
<td>Find a specific Case Number (Case Numbers are allocated automatically by the system when Cases are first created)</td>
</tr>
</tbody>
</table>
Control Center Workspace

<table>
<thead>
<tr>
<th>Created by</th>
<th>Drop-down opens list of Users. Checking one or more users in the list will limit the search to cases created by that/those users.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case Time</td>
<td>Limit the query to cases that were created between the start time/date and the end time/date.</td>
</tr>
<tr>
<td>Description</td>
<td>Search for cases where the 'long' description contains the specified text.</td>
</tr>
<tr>
<td>Advanced</td>
<td>Opens the Advanced search options dialog that allows the specification of advanced search parameters.</td>
</tr>
<tr>
<td>Go</td>
<td>Initiates the search according to the settings and returns any results in the Query Results pane.</td>
</tr>
</tbody>
</table>

Cases matching the criteria in the CaseBuilder Query Pane are listed in the Query Results pane.

Results of a CaseBuilder Query appear in the Query Results pane.

Selecting a Case from the Query window opens that case, with the CaseBuilder Navigation tab showing all the materials that have been added to the selected Case, and a dedicated CaseBuilder Layout tab. Selecting a bookmark, clip or incident from the CaseBuilder Navigation tree will open the selected item in the Case Builder Layout. The Timeline shows the playing position of a retrieved item.

See CaseBuilder Navigation Tree Pane

2.3.4.1 CaseBuilder Navigation Tree Pane

The CaseBuilder mode is selected from the Side-Bar. This opens up the CaseBuilder Layout in the display area and the CaseBuilder Navigation Tree displays in the Explorer area.

This Navigation Tree contains the CaseBuilder Toolbar as well as a tree for viewing and selecting the elements added and configured in the open case.

Note: The Case Builder Navigation tree is not used for browsing the available cases - it shows only the details of an open case.

Case Builder Navigation Tree Toolbar Icons

The following table shows the CaseBuilder Navigation Tree Toolbar icons and features:
<table>
<thead>
<tr>
<th>Icon</th>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Icon" /></td>
<td>New Case</td>
<td>Adds a new case to the CaseBuilder Navigation Tree for adding and saving material to.</td>
</tr>
<tr>
<td><img src="image" alt="Icon" /></td>
<td>Open Exported Case</td>
<td>Opens a dialog for selecting an exported case file to load into the CaseBuilder Navigation Tree and Layout. This is not for opening saved cases in the default CaseBuilder directory. To open a saved case, you must use the CaseBuilder Query and select it from the Query Results pane.</td>
</tr>
<tr>
<td><img src="image" alt="Icon" /></td>
<td>Add</td>
<td>Menu for selecting to add a file or URL.</td>
</tr>
<tr>
<td><img src="image" alt="Icon" /></td>
<td>File: (add file)</td>
<td>Opens a dialog for browsing and selecting a file to add to the case.</td>
</tr>
<tr>
<td><img src="image" alt="Icon" /></td>
<td>URL: (add URL)</td>
<td>Opens a dialog for entering a URL (path) to browser for compatible content to be linked to the case.</td>
</tr>
<tr>
<td><img src="image" alt="Icon" /></td>
<td>Save</td>
<td>Saves the case and any changes to the CaseBuilder centralized default location on the network.</td>
</tr>
<tr>
<td><img src="image" alt="Icon" /></td>
<td>Delete</td>
<td>Removes the selected item in the CaseBuilder Navigation Tree from the case.</td>
</tr>
<tr>
<td><img src="image" alt="Icon" /></td>
<td>Export</td>
<td>Opens a dialog for exporting the case and any supporting content to the location specified. If the CaseBuilder Options are set to export an included Player, exports folder and a zip file. If no player is included, exports a zip file only.</td>
</tr>
<tr>
<td><img src="image" alt="Icon" /></td>
<td>Notes:</td>
<td>1. The Export icon is only enabled after the Case has been saved.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. If a Privacy Mask is configured on the clips and the exported file user will need to disable the Privacy Mask during viewing, you will need to provide the user with the correct historical password. For more information, see Privacy Mask Password.</td>
</tr>
<tr>
<td><img src="image" alt="Icon" /></td>
<td>Undo</td>
<td>Reloads the last saved case in the CaseBuilder Navigation Tree</td>
</tr>
</tbody>
</table>

The CaseBuilder Navigation Tree provides nodes for items added. By selecting these nodes, properties for the item load into the CaseBuilder Layout Case Properties area and can be modified and saved.

The CaseBuilder Layout pane shows the contents of any item selected in the CaseBuilder Navigation Tree Pane.
The CaseBuilder Navigation Tree displaying the items and sub components added to a case, with one Case clip open

By double clicking on attached files, the ControlCenter will call the default file system program for the file extension specified to run. For example, a file with a .exe extension is added to a case, double clicking on the file in the CaseBuilder Navigation Tree will run the executable file. If the file is an image .JPG file, the file system configured image program for that file extension will open and display the file. The exception is web browser .HTML files. These will open in the layout viewing widow.

2.3.5 Privacy Mask Password

When content that contains a Privacy Mask is exported, it may be necessary to retrieve the original password in order to remove the privacy mask.

Privacy Mask Password Export Behaviors (Historical vs. Current)

The Privacy Mask password behavior changes depending on the manner you export. Because the Privacy Mask password can be changed yet remains historically attached to video clips when they are recorded, the behavior under the following export types are as follows:
<table>
<thead>
<tr>
<th>Where</th>
<th>Type</th>
<th>Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>When exporting clip from the <strong>Query Results</strong> or Timeline</td>
<td>Create Clip - use Source video and apply <strong>current</strong></td>
<td>The Privacy Mask password attached to the exported DVT file is the current system-wide Privacy Mask Password</td>
</tr>
<tr>
<td>When execution of a <strong>Background Export</strong> occurs.</td>
<td>Copy Clip from Archiver - <strong>Historical</strong> static</td>
<td>The export assumes the clips are being moved to an insecure status. For each clip segment (single Archiver container), the Privacy Mask Password set at the time the clip was recorded (not exported) is enabled</td>
</tr>
<tr>
<td>When exporting a <strong>CaseBuilder</strong> case with clips</td>
<td>Copy Clip from Archiver - <strong>Historical</strong> static</td>
<td>The clips exported are for portable external use. The Privacy Mask Password for each clip segment (single Archiver container) set at the time the clip was recorded (not exported) is enabled</td>
</tr>
<tr>
<td>When execution of a <strong>Mass Export</strong> occurs.</td>
<td>Copy Clip from Archiver - <strong>Historical</strong> static</td>
<td>The export assumes the clips are being moved to an insecure status. For each clip segment (single Archiver container), the Privacy Mask Password set at the time the clip was recorded (not exported) is enabled</td>
</tr>
</tbody>
</table>

**Privacy Mask Password Export Rules - Current or Historical**

**CAUTION:** When exporting, the password used is not always the system-wide Privacy Mask Password at the time of export.

This section addresses only the ability of a user to *remove* the privacy mask while viewing an exported video clip. Users who simply want to view the files with the mask on the video clip will not be affected as there is no need to enter a password to view the clips with the privacy mask on.

When exporting a clip of video that has Privacy Mask configured on the video, the file immediately gets password protected against disabling the Privacy Mask. This password has no relation to the ControlCenter user password or permissions.

If you have changed your password within the period of the exported file range, how you export those files will determine the password mechanism employed.

Export either the **Current** Privacy Mask Password or the **Historical** Privacy Mask Password at the time the file was recorded.
The **Historical** password for each of the files remembers the password from that time. Thus if a range of files is being exported a Historical mechanism will make each file password protected for its point in time. Depending on the number of Privacy Mask password changes that have occurred, there may be as many different passwords required to Deactivate Privacy Masking. This is because the Password is embedded in the clips being recorded during the time when the password was active.

The Privacy Mask Password is stored in the recordings made by the Archiver from the video stream of the camera. Each of these is stored in a container according to your system settings. By default the file size in this container is 80mb. When a Privacy Mask Password is changed, the new password is applied at the time the file is closed and written to the Archiver container. Thus, the password covers some video that was being buffered for recording before the file closed:

The Archiver Privacy Mask validation process for internal ControlCenter users is done via the user permissions of the Latitude system. The data of the of the Privacy Mask Password for future offline use is kept in the clips of the containers. In the diagram above this is represented by the yellow, blue and purple data core. In the color representations of different passwords in the graphic, you can see how the password changes in real-time with the live stream. The passwords changes in the middle of a clip not fully written to a file, are embedded in the recorded video from the start of the clip.

As of yet the three different embedded Privacy Mask passwords are not required for hiding or showing the Privacy mask for online users. It is when the recorded files are moved out of the Archiver storage that the Privacy Mask Password is implemented.
Privacy Mask Password - "Current" password behavior

When Exporting from a Results Query or Timeline the same video that is in the Archiver is exported with a single file Privacy Mask password whether it is the full clip or a partial. Additionally only the selected times are exported and no matter how large the clip is, it will be exported into as many files as needed based on the max size setting in the Export settings.

When Exporting from the Query Results or the Timeline pane where you can select entire clips or set video range in and out points for taking a segment. In this type of export, the embedded historical passwords are ignored and the current Privacy Mask password is used for every file created by exporting. In the example diagram that follows, two exports are represented. (one of a range and the other of the entire selected file). Only the password defined in the system advanced settings at the time of the export is applied even though the clip spans several Historical passwords. The password "ABC123" (colored purple) is used for all files exported from the Query Results or the Timeline pane export features.
Note that the file size in the above example is based on the trimmed segment or range of the video exported.

Privacy Mask Password - "Historical" password behavior

In the following example a different mechanism is used to export. In this instance the files are directly copied from the Archiver container storage as-is and the historical passwords as imbedded are simply enabled on the files being copied outside the security zone of the Archiver.

In the above instance, each file if viewed independently and the user chooses to disable the Privacy Mask, the password they will be required to enter will be the password of the clip.
Thus of the five clips, the first clip requires the password 1234, the second and third clip requires the password Old#7 and the fourth and fifth requires the password ABC123.

Because the clips are all from the same source, if they are viewed in a timeline together, only the most recent password is needed for disabling the mask of both clips.

Likewise the export of clips from the CaseBuilder has the same behavior as the Mass Export, in that it copies with the password files as-is from the Archiver. Thus if the password has changed, the selection of clips will influence what password is embedded from the historical Archiver data.

Additionally, the export file size is based one-to-one with the Archiver container files. Even if the range of the clip is limited, the file size will match the container sizes of the range and not the specific in and out points of the range.

**CASEBUILDER EXPORT CASE (Range 4:02pm-4:16pm)**

<table>
<thead>
<tr>
<th>PW: 1234</th>
<th>PW: Old#7</th>
<th>PW: Old#7</th>
</tr>
</thead>
<tbody>
<tr>
<td>80MB</td>
<td>80MB</td>
<td>80MB</td>
</tr>
</tbody>
</table>

In the above example, the segments of the DVT export file that are not specified in the range, will not be viewable to the end-user. The viewing of the clip in a timeline with a disabled privacy mask can be done by selecting the clip and entering the latest historical password. In this case "Old#7".

### 2.4 Display Area - Viewing Pane

The Viewing Pane is used to view live and recorded video, maps and web pages, respond to alarms and to listen to and transmit audio. It consists of a viewing area made up of **video tiles** in the center, a **toolbar** on the right, and **layout tabs** at the top.
The following sections present detailed descriptions of these areas of the pane.

- **Viewing Tile**
- **Layout Tabs**

### 2.4.1 Layout Tabs

The Viewing Pane’s layout tabs allow users to easily switch between layouts. The tabs appear automatically when layouts are opened.

Layouts are the only types of entities that are created and configured via `<ControlCenter>` rather than Admin Center.

Layout alternatives can be selected from the **Layout icon**. The dropdown also provides options to create a new layout, and save it.
A tile layout consists of a tile pattern, content (the entities displayed on the tiles), arming states, and digital presets (when in use).

2.4.2 Configuring Layouts

A tile layout consists of a tile pattern, content (the entities displayed on the tiles), arming states, and digital presets (when in use). (Audio layouts are associated only with content)

To configure a tile layout:

1. Switch to the layout that you would like to modify by clicking its tab at the top of the Viewing Pane or double clicking its icon in the Navigation Pane (use Default Layout 101 if none others exist).
2. Click the "Layout Pattern Menu" to the top-right of the viewing pane.
3. Choose a tile pattern by clicking one of the tile pattern buttons in the Layout Menu drop down.
4. Drag and drop cameras, sequences and maps from the Navigation Pane onto viewing tiles.
5. If you wish to use Digital Presets, select them by using the in-pane controls (Right click and select Go to Preset) or use the PTZ pane to select a Digital Preset for the current viewing tile.
6. Arm viewing tiles for alternative content or alarms as applicable.
7. In the Layout Pattern Menu, click 'Save Layout' to save your layout.

2.4.2.1 Thumbnail Search Layout

Each time the Thumbnail Search option is used as a Query Type in the Query pane, the Thumbnail Search Layout is opened, showing a set of thumbnail images from recordings available during the 'From:' and 'To:' times in the Date and Time settings.

Using Thumbnail Search is briefly described below.
2.4.2.2  CaseBuilder Layout

The CaseBuilder Layout is different from Default Layouts and Audio Layouts, as it serves a specialized task of helping a user build cases and configure information that will be used for research and investigative purposes. Additionally it allows users to review and display the materials after the case is completed and exported.

The layout displays properties for the case and components of the case based on the selection made in the CaseBuilder Navigation Tree.

Where the other layouts are tied to the Archiver server only, the CaseBuilder Layout requires the CaseBuilder Server is accessible when working with a server side case but can work offline when viewing an offline exported case.

In order to view, a server case, the CaseBuilder Query must be run and a case must be selected and opened. At start up, no case or items are displayed in the layout.

The CaseBuilder Layout is divided into two sections:

**Properties Area** and **Viewing Window**
The Properties may contain settings that cannot be changed. When viewing a new or saved case there may be some values that are inherent to the selected entity that are not permitted to be change.

When viewing exported cases, it is considered a static case at the time of export. If the exported case is out of date or incorrect, the CaseBuilder user who generated will need to modify the source and regenerate it.

The Viewing Window allows the viewing of video clips that are either opened by double clicking on the video clip (or bookmark) in the CaseBuilder Navigation Tree or by dragging and dropping video from clips in the Query Results.
Additionally the Viewing Window supports viewing of HTML content from URLs as well as snapshots that have been added to a case and are shown in the CaseBuilder Navigation Tree.

The Viewing Window also works with Privacy Masking and allows a user with the password to remove the privacy mask from Archiver recorded clips. Once a case is exported with a privacy mask, the Privacy Mask Password (or passwords) from that timeline must be used to remove the privacy mask. For more information, see Privacy Mask Password Export Rules - Historical.

### 2.4.3 Viewing Tile

The viewing tile contains a viewing area and a toolbar.

Where possible, **Adaptive Streaming** automatically selects the best video stream resolution to enhance performance and save bandwidth.

When the **Maintain Aspect Ratio** setting in **Options/Tools** is set, then if the aspect ratios of the video frame and viewing are unequal, horizontal or vertical bars fill the unused parts of the tile.

The user can change the **Aspect Ratio setting** for a selected tile by clicking **Shift-R**.

The toolbar and On-screen display are configurable.

**Viewing Tile Features**

- **On Screen Display**
- **Digital Zoom**
- **Digital Presets**
- **Dual Sensor Camera**
- **Viewing Tile Toolbar**
- **Armed Tiles**
- **Toggle Privacy Mask**
- **Spot Monitor**
- **Viewing Live and Recorded Video from connected DVRs**
The border of a tile's viewing area provides important information about the tile's state:

<table>
<thead>
<tr>
<th>Color</th>
<th>Indication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yellow</td>
<td>The tile is <strong>focused</strong>. You must focus a tile in order to expand it to fill the viewing pane or to use digital zoom or PTZ controls on its video content. Only one tile can be focused at any given time. A tile turns focused when it is clicked or when new <strong>unarmed</strong> content is dropped onto it.</td>
</tr>
<tr>
<td>Red</td>
<td>The border of a tile's viewing area turns blinking red when content <strong>for which it has been armed</strong> begins playing. The border disappears as soon as the tile is clicked. Multiple tiles can have red borders at the same time.</td>
</tr>
<tr>
<td>Grey</td>
<td>Normal tile - no specific status.</td>
</tr>
<tr>
<td>Green</td>
<td>The tile is <strong>selected</strong>. A focused tile becomes selected when another tile is control-clicked (thus becoming focused itself). Selection is only meaningful, therefore, when trying to apply an action to multiple tiles. The most common uses for this is when bookmarking or trashing multiple tiles at the same time.</td>
</tr>
</tbody>
</table>

An important feature of the viewing tile is that it can be configured to be multi-layered. When a scene is displayed on a non-empty tile, it "covers" the tile's former content but does not remove it. When the scene is removed, the previously hidden content on the now-top layer is shown again.

**On Screen Display (OSD)**

It is possible to display relevant information on the screen, such as the scene name, status description, status image, video statistics and time.

Using the **Tools - Options Menu**, you can now set the font and background parameters of the information displayed on screen and determine what information is displayed.
Note: Any changes made to the On Screen Display only apply to tile content that is dragged to the Viewing pane after the configuration, and not to the content already displayed in the Viewing pane.

Digital Zoom
Two methods are available:

- **Zoom the Viewing Tile - Draw to Zoom**

  For fixed cameras, a Magnify icon is provided, which allows the user to use the mouse to draw a rectangle around the area to be viewed.

  ![Click Magnify icon](image1)
  ![Select area](image2)
  ![Zoomed image](image3)

  After clicking the Magnify icon, use the mouse to click-and-drag the area you wish to magnify. The selected area is displayed.

  To return the tile to normal display, right-click to open the Context menu, and select **Reset digital zoom**.

- **Zoom the Viewing Tile - Manual Control**

  ![Use the mouse wheel to digitally zoom a video in a tile](image4)

  When using a mouse which has a scroll-wheel, you can control digital and optical PTZ functionality directly from the tile.

  **To enter/exit PTZ control mode**: Click the scroll-wheel while the mouse is over the tile.
Depending on the mouse’s location in the tile, the cursor will turn into one of eight directional green arrows.

**To pan or tilt:** Move the mouse so that the cursor points in the direction in which you would like to move the camera in and click the left mouse. The speed of the movement is proportional to the distance from the center of the cursor from the middle of the tile.

**To zoom in:** Scroll upwards with the scroll-wheel, to zoom out, scroll down with the scroll-wheel.

![A video tile digitally zoomed](image)

**Digital Pan**

When in digital zoom the tile displays orange directional arrows as the mouse pointer icon. These arrows shift as you move the mouse around the image to indicate the move direction that will occur if the mouse is clicked.

When clicked, the move will small if the cursor is nearer to the center of the tile, greater if it is closer to the edges.

While in Digital Move mode, a small Zoo window indicates the current state - i.e. showing the current size and location of the displayed area relative to the total camera field of view.

![Digital zoom pan (move) icons](image)

**Navigating on a Digitally-zoomed Tile:**
• **To move up** (towards the top of the image): Move the mouse pointer to the central upper part of the magnified video tile so that the green cursor arrow points up and then click the mouse.

• **To move down** (towards the bottom of the image): Move the mouse pointer to the central lower part of the magnified video tile so that the green cursor arrow points down and then click the mouse.

• **To pan right**: Move the mouse pointer to the central right edge of the magnified video tile so that the green cursor arrow points right and then click the mouse.

• **To pan left**: Move the mouse pointer to the central left edge of the magnified video tile so that the green cursor arrow points left and then click.

• **To move diagonally**: Move the mouse pointer to the corner edge (upper-right, upper-left, lower-right, lower-left of the magnified video tile) so that the green cursor arrow points in the diagonal angle you want to go and then click the mouse.

• Restoring the video image to full size centered image can be done using the Reset digital zoom menu option.

**To remove digital magnification (zoom) from a tile**

On the ControlCenter tile, right mouse-click the magnified video image in the select Reset digital zoom from the shortcut menu.

---

**Dual Sensor Camera Picture-in-Picture (PIP) Display**

When viewing output from a Dual Sensor Thermal/Visible camera that has been integrated with Latitude, such as the FLIR PT Series, the viewing tile presents a Picture-in-Picture (PIP) view of the Thermal and Visible scenes.

Both cameras appear in the Navigation Pane.
Both Images are shown in the Viewing Pane. The Primary image (Full tile) is shown highlighted in the Navigation Tree.

Using the Picture-in-Picture display
The user can switch between viewing the Visible or Thermal images as primary by double-clicking in the viewing tile's Picture-in-Picture window. Double-clicking in the main window of the Viewing tile makes the viewing tile full-screen, as for any other viewing tile.

When the mouse is inside the Picture-in-Picture window, the user has two additional controls:

- To minimize the P-i-P window, click the Minimize icon.
- (To re-open the P-i-P window, click on the P-i-P icon that appears in the margin when the image has been minimized.)
- To re-size the P-i-P window, drag the Re-size icon.

Viewing Tile Toolbar
The viewing tile toolbar displays basic information about the displayed entity - principally, its name, but may also include various buttons depending on the displayed entity's type. To enable maximum video real estate and a more comfortable way to control it, the viewing tile toolbars are semi-transparent overlays.

The opacity level of the toolbar background and buttons as well as the visibility of the tile toolbar and the tile number can be set using the Tools -- Options Menu. By default, the toolbar background is very opaque and it fades when the cursor is not placed on top. The buttons are visible and the Armed Tile button is always visible.
Note: Any changes made to the toolbar display settings will not show on a tile that, and not to the content already displayed in the Viewing pane.

### Viewing Tile Control Icons

<table>
<thead>
<tr>
<th>Button</th>
<th>Entities</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="All" /></td>
<td>All</td>
<td>Tile's logical ID. Also used to arm it for instant replays/alternative content (one click) (Orange) or alarms (two clicks) (Red). Blinks when an alarm/instant replay activates.</td>
</tr>
<tr>
<td><img src="image" alt="Microphone, Video Clip" /></td>
<td>Microphone, Video Clip</td>
<td>Adjust the volume from the source</td>
</tr>
<tr>
<td><img src="image" alt="Camera" /></td>
<td>Camera</td>
<td>Digital zoom - click to activate and then use click-and-drag in the Viewing tile to define the area to be displayed</td>
</tr>
<tr>
<td><img src="image" alt="Camera" /></td>
<td>Camera</td>
<td>Start and stop listening to the audio inputs linked to the displayed entity.</td>
</tr>
</tbody>
</table>
| ![Camera](image) | Camera | Start and stop transmitting audio through a linked microphone.  
**Note:** This microphone can send audio to all cameras that are:  
a. Linked with an audio-out device  
b. Activated by pressing the transmit button  
c. In the live view |
<p>| <img src="image" alt="Camera" /> | Camera | Start and stop manual recording of the camera scene. |</p>
<table>
<thead>
<tr>
<th>Button</th>
<th>Entities</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![IR]</td>
<td>Camera</td>
<td>View an instant replay of the live video. You must have at least one tile armed for alternative content to view instant replays.</td>
</tr>
<tr>
<td>![()]</td>
<td>Video Clip, Sequence</td>
<td>Increase a video clip’s playback speed (displayed by the tile ID) or start forward playback when in reverse mode. When viewing a sequence, use the button to jump to the next camera.</td>
</tr>
<tr>
<td>![()]</td>
<td>Video Clip, Sequence</td>
<td>Pause a video clip’s playback or, when viewing a sequence, to prevent progress to the next camera until you click the button again.</td>
</tr>
<tr>
<td>![()]</td>
<td>Video Clip, Sequence</td>
<td>Increase a video clip’s reverse playback speed (displayed by the tile ID) or start reverse playback when in normal mode. When viewing a sequence, use the button to go back to the previous camera.</td>
</tr>
<tr>
<td>![()]</td>
<td>Map</td>
<td>The &quot;Back&quot; button when viewing a map (same as in a web browser).</td>
</tr>
<tr>
<td>![()]</td>
<td>Map</td>
<td>The &quot;Home&quot; button when viewing a map (same as in a web browser).</td>
</tr>
<tr>
<td>![()]</td>
<td>Map</td>
<td>The &quot;Forward&quot; button when viewing a map (same as in a web browser).</td>
</tr>
<tr>
<td>![✓]</td>
<td>Alarm</td>
<td>Acknowledge an alarm.</td>
</tr>
<tr>
<td>![✓]</td>
<td>Alarm</td>
<td>Snooze an alarm.</td>
</tr>
</tbody>
</table>

When the contents of a live video tile is being recorded, a red circle appears in its toolbar to the right of the arming/logical ID button.

**Armed Tiles**

The user can 'Arm' one or more tiles, so that those tiles will be used for specific uses.

For example, one or more tiles can be set to 'Armed for Alarms'. Then, if an alarm that has an associated camera is triggered, the video from that camera will be displayed on an available 'Armed for Alarms' tile.

Similarly, when content needs to be displayed from a non-alarm-related event, it will be directed to an 'Armed for Alternative Content' tile. If the ControlCenter user clicks 'Instant Replay' on a tile showing live content, the 30-sec delayed video of that tile will start in an 'Armed for Alternative Content' tile.
Tiles are armed by clicking on the Tile number in the lower left corner of the tile.

The three possible arming states, indicated by the color of the left part of each tile’s ID button, are: unarmed (clear), armed for alarms (red) and armed for alternative content/instant replays (orange). A tile’s arming state does not effect its capabilities (i.e. what kind of entities it can display) but does determine whether its content may be replaced, under certain circumstances, without any user action.

<table>
<thead>
<tr>
<th>Access/Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The number indicates the Tile Logical Number which can be used for navigation via the number pad input. The color indicates the armed status.</td>
</tr>
<tr>
<td>Click 0-</td>
<td><strong>Unarmed</strong>: Indicates that the Tile is not armed and behaves according to the configured default Layout behavior for unarmed tiles.</td>
</tr>
<tr>
<td>Click 1-</td>
<td><strong>Armed for alternative content</strong>: Indicates the Tile has been armed as the target Tile for incoming “alternative content”. When this content is sent to the ControlCenter (such as the IR button being clicked) the Layout will use this tile to load it.</td>
</tr>
<tr>
<td>Click 2-</td>
<td><strong>Armed for Alarm</strong>: Indicates the Tile has been Armed for Alarm.</td>
</tr>
<tr>
<td>Click 3-</td>
<td><strong>Return to Unarmed</strong></td>
</tr>
</tbody>
</table>

The following rules govern how armed tiles are activated:

**For Instant Replays:**
1. If any tiles armed for alternative content are empty, the instant replay will be displayed on the first (i.e. lowest numbered) of them.
2. If all tiles armed for alternative content are in use, the instant replay will be displayed on the first tile displaying something other than an instant replay.
3. If all tiles armed for alternative content are displaying instant replays, the instant replay will not be shown. You must clear one of the armed tiles or arm an additional tile to display an instant replay in this case.

**For Alarms:**
1. When an alarm is triggered, ControlCenter first checks if any ‘armed for alarms’ tiles are available – i.e. not currently displaying an active alarm. If so, the alarm will be displayed on the lowest numbered of them (even if it is displaying some other content).
2. If all armed tiles are displaying active alarms, the new alarm will replace the one with the lowest priority if its own priority is higher.
3. If the new alarm’s priority is equal to or lower than the lowest of the displayed alarms’ priorities, it will not be displayed until an armed tile becomes available (i.e. if one of these alarms is acknowledged, forwarded or snoozed). If multiple alarms of the
same priority are active but waiting to be displayed, the oldest will be shown first (i.e. the first criteria is priority, the second age).

If multiple alarms occur, the highest priority will load first, and subsequent lower priority cameras will display following in sequence. When a number of alarms occur, their cameras will be distributed each in turn with the individual alarm across the available "Armed for alarm" panes. For any particular user, display will be activated according to that user's alarm display setting (Block mode, Flat mode, or Salvo mode.).

For greater explanation of these modes see AdminCenter Help - Configuring an Alarm with Cameras and explanations of the behavior in Displaying a Camera on Alarm (manual and automatic).

⚠️ You can always view an alarm by dragging and dropping it from the Alarms Pane to an unarmed tile. Once an alarm is displayed, however, you cannot replace it with any other content. It must be dealt with in order to free up the tile.

⚠️ An alarm may be "copied" to another tile in the form of a client-side sequence. This allows a user to switch between the scenes displayed by the alarm manually, regardless of the dwell time. Copying an alarm has no effect on its status.

In-Tile PTZ Controls
When using a mouse which has a scroll-wheel, you can control digital and analog PTZ functionality directly from the tile:

- To enter PTZ control mode with your mouse hovering over a tile, click the scroll-wheel button. Depending on the mouse's location in the tile, the cursor will turn into one of eight directional green arrows.
- To pan or tilt, move the mouse so that the cursor points in the direction in which you would like to move the camera in and click the left mouse. The speed of the movement is proportional to the distance from the of the cursor from the middle of the tile.
- To zoom in, scroll upwards with the scroll-wheel, to zoom out, scroll down with the scroll-wheel.
- To exit PTZ control mode, click the scroll-wheel.
2.4.3.1 Thumbnail Search
When a Query is executed with **Thumbnail Search** as the Query type, a new Thumbnail Search Layout is opened.

2.4.3.2 Using Draw-to-zoom with Thumbnails
When viewing Playbacks using a thumbnail search, it can be useful select a specific area and then zoom into that area in the thumbnails, in order to isolate an event.

**Note:** Draw-to-zoom' capability is not available on Panoramic cameras - see [Panoramic cameras](#).

Hover the mouse in the Playback Pane to access the Draw-to-Zoom control. Select the area to magnify.

The Thumbnails are all sized to display the selected area.
Hover the mouse in the Playback pane to see the extent of the zoom.

2.4.3.3 Digital Presets

In addition to the presets that can be used for regular PTZ cameras, the user can also treat input from a fixed camera as if it came from a PTZ. By zooming in so that only part of the view is shown, the normal controls (in-screen or via the PTZ pane) can be used, and different resulting images saved as Digital Presets.
2.4.3.3.1 Defining Digital Presets

The picture below shows an external camera, with various parts shown as potential 'Presets'.

1. Choose the area/s that are to be designated as Presets.

1. Use the viewing controls (in-screen or via the PTZ pane) to zoom and pan until the required scene is shown.

1. Right-click to open the Context Menu, and click on Save as Preset.
1. Choose the **Preset number** to be associated with this scene, enter an appropriate **Name**, and **Save**.

Preset numbers and names can also be set in the PTZ pane

1. Click the drop-down arrow (to the right side of the **Edit** area) to select the number to be used for the preset.
2. Click **Edit** and enter the name to be used
3. Click **Save** (this only saves the name)
4. Click **Set** to set the current view as the Preset.
2.4.3.3.2 Using Digital Presets

- When viewing live or recorded content from fixed digital camera, the user view content from the Preset view of that camera by right-clicking to open the context menu, and selecting **Go to Preset**.

- Even when viewing recorded content, presets can be defined that allow a specific view to be shown from the recorded material.
Note: The Context Menu only provides access to the first 12 Presets (similar to the way the PTZ window only has 12 buttons for selecting Presets. Where additional Presets have been defined, they can be accessed from the PTZ Pane, by clicking on the drop-down button and selecting from the list.

Camera Sequences

"Go to Preset" can be set as an Action from fixed cameras.

2.4.3.4 Adaptive Streaming

Adaptive Streaming saves bandwidth and enhances system performance by tailoring a video stream's resolution to the size of the viewing tile. The system displays high-resolution images when the image is shown in larger tiles or full-screen mode. When shown in smaller tiles, not so much resolution is needed, so the stream can be reduced.
By default, Adaptive Streaming is enabled in each Control Center client. To disable Adaptive Streaming for a ControlCenter, go to Tools/Options/Video and deselect the Adaptive Streaming check-box.

To disable Adaptive Streaming for a given camera, right-click the tile in which it is displayed and deselect Adaptive Streaming.

Adaptive Streaming is currently available with FLIR’s Ariel, Quasar, and Quasar Gen 2 edge devices.

2.4.3.5 Hide/Show Privacy Mask (Deactivate)

On systems that support Privacy Mask, cameras and camera sequences can have an overlay grayed-out area on an image that prevents viewing that part of the video image.

Caution: The reasons that masking was created on the video can vary and thus before a user removes masking from a video that may be displayed in view on a monitor, a certain level of discretion and background as to why the mask was put on the video in the first place should be considered. You may want to consult a Supervisor or Administrator of the system to learn more about the scene’s Privacy mask. In some jurisdictions, privacy masking laws may apply.
For live video scenes and exported video, the following behaviors can be expected:

- If the video is from a live display in the Tile layout, the credentials from login will automatically allow an authorized user with mask privileges to remove the Privacy Mask and see the privacy zone underneath it.

- If the video is from an Archiver recording being played in the Tile layout, the credentials from login will automatically allow an authorized user with mask privileges to remove the Privacy Mask and see the privacy zone underneath it.

- If the video is from an exported recording in DVT format (only) and being played in the Tile layout, in order to remove the mask during playback, you must enter the system assigned Privacy Mask password that was in use when the video file was exported. This is a separate password unrelated to FLIR System login and can vary based on the active system-wide Privacy Mask password at the time the file was export and which FLIR System entity system it was exported from.

- If the video is from an exported recording in AVI format, the masking is permanent as part of the image and cannot be removed.

It should be noted that some cameras have privacy masking capabilities that may have been configured outside of the system that may embed the masking in the video.

![Image of Privacy Mask activation](image-url)

*Privacy Mask is turned on and the Privacy Zone is hidden - right click menu to disable*
To hide/show a privacy mask on a ControlCenter tile

1. If the Privacy Mask is displayed on, on the video image displayed in a Layout Tile, do the following:
   a. Right-click and select **Deactivate privacy mask**.
      - If the video is live or an Archiver recording playback, the hidden area becomes visible.
      - If the video is from an exported video clip, you will be prompted for a password.
   b. If prompted for a password, enter the Privacy Mask system-wide password that was active when the specific video clip was exported and then click OK.

   ![Privacy Mask Password](image)

   **Note:** This password will be stored and will not need to be entered again. Only after unloading the clip from all panes or from closing the ControlCenter does the password get clear.

   **Caution:** If you leave the an exported clip which you entered a password for loaded in the ControlCenter and you log out from the FLIR System, the ControlCenter will only switch to offline and the passwords you entered will remain for each video still loaded in the offline ControlCenter panes. It is recommended when you are finished viewing a clip that you have entered a Privacy Mask password for, that you remove it from the tiles, Timeline and File Playback pane.

2. If the Privacy Mask is turned off, on the video image displayed in a Layout Tile, right-click and select **Activate privacy mask**.

### 2.4.3.6 Spot Monitor

Spot Monitor enables the user to select the tile in which a scene will appear by default when double-clicked.
To enable Spot Monitor: Right-click the desired tile in the Tiles pane, and then select Spot Monitor. Once a tile is selected as spot monitor, its edge remains highlighted even when another tile is selected.

2.4.3.7 Viewing GIS Maps

The GIS Map entity allows the ControlCenter Operator to display the initial map according to its stored GIS parameters (Longitude, and ‘Eye Altitude’).

Select the GIS Map you want to display, and drag it to the required tile. (In this case, the example is the Default GIS Map).

It is possible that, because of the location of the map and the selected ‘Eye Level’, that none of the selected GIS entities are shown.

You can use the standard map zoom and navigation tools to change the map until you see the GIS entities displayed.

Alternatively, you can select one of the entities that are defined with GIS coordinates, display it in one of the Viewing Tiles, and then right-click and select ‘Show my location’ from the context menu.

This will cause the GIS map to zoom and center the selected GIS entity. The entity’s icon will appear in the GIS map.
GIS Entities in a GIS Map.
The following entities may be shown in a GIS Map.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Entity</th>
</tr>
</thead>
<tbody>
<tr>
<td>📸</td>
<td>Fixed Camera</td>
</tr>
<tr>
<td>📸_alarm</td>
<td>Fixed Camera, Alarm</td>
</tr>
<tr>
<td>🎥</td>
<td>PTZ Camera</td>
</tr>
<tr>
<td>🎥_alarm</td>
<td>PTZ Camera, Alarm</td>
</tr>
<tr>
<td>📈</td>
<td>Mobile Camera, Live</td>
</tr>
<tr>
<td>🎥</td>
<td>Mobile Camera, Playback</td>
</tr>
<tr>
<td>📸</td>
<td>Mobile Camera, Alarm</td>
</tr>
</tbody>
</table>

Show video when Hovering
If the GIS Map was defined with the parameter 'Show video when hovering' enabled, then a small window showing the video from the selected camera can be shown by hovering the mouse on the relevant icon. A tooltip also shows the entity's name.
2.4.3.8 Panoramic Cameras

Panoramic cameras such as the Quasar Gen 2, or cameras equipped with Immervision Panomorph® lenses allow the user to 'plunge' into the picture. The illustration below shows the typical 'fish-eye' image from a panoramic camera, and how the PTZ compass control (or the mouse PTZ control) can be used to navigate 'into' the picture.

Note: Panoramic cameras do not provide 'draw to zoom' capability. The mouse controls are used to 'plunge' into the picture, and to navigate within it.

Multiple pictures can be generated from the fish-eye image, and shown in a Tile Layout.

To Create Tile Layout with multiple views
In the ControlCenter, choose a tile layout for setting up the camera, and save it using the Save Layout icon on the toolbar.

Drag the camera image into each of the tiles.

Using the PTZ compass controls, or the mouse PTZ control capability (described in the Viewing Tile section), set up different views in each of the tiles.
4. If any of the individual views might be used in other layouts, you can save them as individual Digital Presets.

2.4.3.9 Viewing Live and Recorded Video from connected DVRs

Digital Video Recorders (DVRs) that have been integrated into the Control Center system may be connected to the system. Cameras attached to the DVRs may be viewed 'live', and recordings can be accessed and played back. However, video recorded on DVRs remains stored 'on the edge', and is not transferred to the main system.

Functions handling content from the DVRs are slightly different from content residing on the main system. These are described below.

Cameras attached to the DVR are shown in the Logical View as regular cameras.

**Supported DVR features:**

1. Live Video - Displayed by dragging an attached camera to a viewing tile
2. Query - normal query - e.g. select the camera, right-click and choose 'Send to Query' from the drop-down. Available clips from that camera are shown in the Query results pane.
   
   **Note** - Queries are cached, so the second time a query is accessed, response is much quicker - useful when looking through a clip using the Timeline.

3. Playback
   a. Jump To Time (via timeline)
   b. Slow Forward.
   c. Fast Forward.
   d. Pause.
   e. Continuous Playback - When playback of the current clip completes, the next cached queried clip will start playing.

**Limitations on Content stored on DVRs**

1. No Export from Timeline.
2. No Motion indication on the Timeline.

3. Playback
   a. No Step Forward/Backward, Reverse Playback.
   b. No Operations on selected portions of the Timeline (such as Lock, Start Loop Playback, etc)
   c. No Synchronized Playback.

2.4.4 Viewing Modes for Alarms

Automatic and Manual Display
When alarms have been configured to display content from cameras when triggered, the display can be Automatic or Manual.

Automatic Display
A queue is maintained for all alarms that have been configured to display content (live and/or recordings). When an alarm is triggered and one or more cameras (or recordings from cameras) associated with it must be displayed, then it is added to the queue. Items in the queue will be displayed in Armed tiles, according to the display mode set for that user (User/General/Alarms Display Mode).

See below: Alarm Display Modes.

In order for the Automatic mode to be used, the user must set one or more viewing tiles to ‘Armed for Alarms’ status.

Note: In all cases, Alarm Priority takes precedence over Trigger time – in other words, higher-priority alarms are placed higher in the queue than lower priority ones. Alarms of equal priority are queued according to their trigger time.

Manual Display
If the user does not set any tiles to ‘Armed for Alarm’ status, this means that Manual display will be used.

Content from cameras associated with alarms will be displayed by the user:-

- double-clicking on an alarm in the Alarms pane. Cameras associated with the alarm will then be displayed in the next available viewing tile
- or-
- dragging-and-dropping the alarm directly to a viewing tile.

The display sequence in the viewing tile will follow the rules for Block Mode. A subsequent alarm can be opened in another ‘next available’ tile, or dragged to a user-chosen tile, where it will also be displayed in Block Mode.
Alarm Display Modes

Flat Mode

Flat mode is a simple method of showing alarms one after another (as they occur in priority sequence). Each alarm is sent to the next available ‘armed for alarms’ tile/s. If an alarm has more than one associated video, all available ‘armed for alarms’ tiles will be used. If an alarm has too many associated videos for the available tiles, the available tiles will be used and the remaining videos for that alarm will not be displayed. When alarms are cleared, meaning that tiles become available, then the next alarm in the queue will be displayed. There is no cycling of scenes. All the displayed scenes of an alarm remain in their tiles until that alarm is cleared.

Alternative Modes

In addition to Flat mode, the system supports two alternative modes - Block and Salvo, for handling the situation where two or more alarms are automatically loading into a Layout that has one or more Tiles enabled with ‘Armed for Alarms’.

Block Mode: All scenes associated with an alarm type will be shown, in sequence, in one tile. You can see information about multiple alarms at the same time, if you have more than one tile ‘armed for alarms’.

Salvo Mode: Only one alarm is displayed at any one time. As many scenes as possible of that alarm are displayed on the available ‘armed for alarms’ tiles and they remain there for the ‘dwell time’ of that alarm. Provided all scenes for the alarm have been displayed, the next alarm in the queue according to priority will be displayed. If you do not have enough ‘armed for alarms’ tiles for the scenes of one alarm to be shown, then when the alarm dwell time passes, the remaining scenes of that alarm will be displayed before the next alarms starts being displayed.

Detail

The following table describes the graphic representations in the explanations that follow:

<table>
<thead>
<tr>
<th>Graphic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Image" /></td>
<td>One Alarm color coded (priority) and showing associated cameras. The number at the side shows the order the alarm occurred in time.</td>
</tr>
<tr>
<td><img src="image2.png" alt="Image" /></td>
<td>One Associated Camera configured to the Alarm as Live View</td>
</tr>
<tr>
<td><img src="image3.png" alt="Image" /></td>
<td>A graphical representation of a cycle. Two types of cycles, one nested in the other, that are possible a cycle of alarms and a cycle of cameras for a single alarm.</td>
</tr>
</tbody>
</table>
A representation of the same four tile ControlCenter layout at a point in time during a camera cycle. Includes color coding of the frames to match the Alarm examples, Cameras being displayed from that alarm and green tiles for free tiles not being used by the current Alarm period. Also includes the icons on the lower left of the tile indicating if the tile is Armed for Alarm, by the ControlCenter user. If a large number is shown at the side of each layout, it indicates the order in the Alarm cycle which is priority first sequence.

### Block Mode

Each alarm sequences all its associated video onto a single Armed for Alarm (note the red number in the lower left corner indicating this) tile. The highest priority gets the tile if there is competition.

### Salvo Mode

Each alarm attempts to display its associated video on as many tiles as possible, trying to show as many cameras as possible at once. The sequence of the each alarm cycle is based on priority. Thus the highest priority alarm will go first in displaying all its associated cameras before passing it to the lower priority alarm, and so on. (Red high priority, Yellow intermediate, and Blue low priority.) The following represents a individual tiles in a time sequence (four per layout) and layout (three, one for when each alarm displays) a timed
cycle. The small blue nodes represent different cameras associated with each alarm (count 3, 3, and 2)

There is no pause button for Salvo mode. In order to see a video you will need to drag out the sequence into a free tile. For more information see the following section Dragging and Dropping One Alarm Sequence Out of a Salvo Group.

Note: If your user settings have been set for you to work in Salvo Mode, it is important that you keep sufficient tiles ‘armed for alarms’ so that you can see all the scenes associated with an alarm.

Draggging and Dropping One Alarm Sequence Out of a Salvo Group
The result is that the Salvo will continue with the remaining Alarm video cycles and the removed Alarm cycle will sequence on its own in block mode.

The benefit is that the Alarm that is pulled out can now be paused using the OSD pause button overlay that stops a block mode sequence from rotating while you view the video.

**Note:** In order to Remove a Salvo, the Alarms that are displayed with videos, must all be cleared or snoozed.

### 2.4.5 Synchronized Playback

Synchronized playback is used to play multiple synchronized video clips. It is launched from the Query Pane by clicking Sync after conducting a query.
Viewing Synchronized Clips
In the Query Pane, check the cameras you wish to view in a
Synchronized Playback Layout.

⚠️ This feature is very resource-consuming.
ControlCenter may exhibit unpredictable behavior if too many clips
are played back simultaneously.

1. To reset Query parameters and return to a default search, click

2. From the Search for menu, select Clip.

3. Select scenes for recorded source scenes, by marking the tree
entities. You can select from one up to the maximum number of
scenes as defined in the to the maximum as defined in the Tools
_Options_Video_Playback screen settings. The default is six
maximum.

4. From the Date and Time menu, select a preset time option
-or-
Select Manual selection and then enter From date and time and To date and time.

5. Click Sync.
The clips found by the search load into the Timeline - Synchronized Playback Layout.

6. Once the sync playback layout is opened, the User is able to drag to open scenes from
the main camera tree.
a. When a scene is dragged into an empty tile, it will be automatically synced with the other scenes in the layout. The unified Timeline will be updated to include the new scene.

Drag and Drop camera from tree into Sync Playback layout

Camera drops into layout, expanding the number of tiles if needed.

b. If the scene is dropped into a populated tile, it will open the new scene in the next available tile. If no tile is available, the layout will be automatically modified to include more tiles.

c. Scenes with linked audio will take two tiles, which will also expand the layout if necessary.

7. Scenes can also be dragged out of the layout to remove them and the unified timeline will be removed for that scene.
One scene (the "original" scene in the top left tile) must always remain in the Sync Playback layout in order to keep the playback times.

You can fast-forward, rewind or jump to a new time in the displayed clips by using the timeline.

**Privacy Mask Passwords when using Synchronized Playback**

Because the Synchronized playback may include multiple files that can be from other systems, different scenes and span various times, the possibility that the files were exported with different Privacy Mask passwords.

Playback will automatically play with masking enabled and areas of the video occluded.

The functionality of Synchronized Playback with regards to removing Privacy Mask with passwords is as follows:

- You will need to enter the Privacy Mask password for each scene you want to disable the Privacy Mask on before you can disable the Privacy Mask.
- You do not need to enter the Privacy Mask password more than once when the clips are loaded in the Synchronized layout.
- You can enter newest scene clip's password and you will need to enter the older clip passwords that are loaded with it in the Synchronized layout.
- The password remain viable as long as the clip is loaded in the Synchronized layout, Timeline and File Playback panes whether or not you are working online or offline (i.e. If you logout from the system and leave the clips loaded, the passwords and access remain available for you on the offline workspace.)

Enabling and disabling the Privacy Mask works the same in the Synchronized layout as it does in the default layouts.

### 2.5 Workspace Panes

The **Workspace** pane is located on the lower right section of the workspace. The user can select what to show in the Workspace by selecting the appropriate tab.

The workspace content can also be determined by selecting a different Mode from the **View/Viewing Mode** menu. Each viewing mode has its own preselected Workspace setting. Using the Thumbnail Search opens a **Thumbnail Search Layout**.

**Workspace – Switching Tabs**

The Tabs are used to navigate among the various Workspace displays (As toggled in the **Main Menu/View/Content** selections).

<table>
<thead>
<tr>
<th>Tab name</th>
<th>Description</th>
</tr>
</thead>
</table>

---
<table>
<thead>
<tr>
<th><strong>Query Results Tab</strong></th>
<th>Shows the returned results of queries and provides features for displaying the results in the other panes and Layout.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Clips Tab</strong></td>
<td>Provides tools for browsing, opening and selecting recordings and playing them</td>
</tr>
<tr>
<td><strong>Timeline Tab</strong></td>
<td>Provides the ability to view clips, bookmarks and associated content in an organized linear time/date oriented workspace.</td>
</tr>
<tr>
<td><strong>Export Status Tab</strong></td>
<td>Provides an interface for organizing and monitoring the exporting of recordings and clips with optional advanced file export features.</td>
</tr>
<tr>
<td><strong>Events Tab</strong></td>
<td>Provides a workspace for viewing, filtering, and researching events and event relational info.</td>
</tr>
<tr>
<td><strong>Alarm Tab</strong></td>
<td>Provides features and information for researching, assigning, following procedures, clearing, entering resolutions and generating alarms.</td>
</tr>
</tbody>
</table>

**Workspace Tabs Dropdown**

*Note:* If you do not see a particular Tab, this will be because it is unselected in the Main Menu/View/Content dropdown. The tabs can be restored by checking them in the dropdown.

**2.5.1 Query Results Tab**

The **Query Results Pane** lists the results of queries performed in the **Query Pane**, and **Motion Query Pane**.
The Query Results pane also lists results from **CaseBuilder Queries**. Aside from the retrieved clips’ start and end times, the results pane displays each clip's **Expiration Time** (the time it is scheduled to be erased from storage), **Archiving Trigger** (scheduled, manual, event or alarm-based recording, or 'Edge' for recordings recovered from Storage-on-the-Edge devices) and whether or not it has been locked (to prevent the clip from being erased even after its expiration time).

The query results are sorted by time in ascending order. The query may return partial results because the amount of results exceeds the limit that is specified by the query. Sorting the query enables the user/SDK to change the time filter and page to the next results.

There are eight buttons at the top of the pane:

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="clear.png" alt="Clear" /></td>
<td>Click this button to clear the selected query result from the list. To clear the entire list, click and choose <strong>Clear All</strong>.</td>
</tr>
<tr>
<td><img src="export.png" alt="Export" /></td>
<td>Click this button to export the selected clips.</td>
</tr>
<tr>
<td><img src="lock.png" alt="Lock" /></td>
<td>Click this button to lock or unlock the selected clips.</td>
</tr>
</tbody>
</table>
| ![Validate](validate.png) | Allows user to validate the clip by checking the digital signature  
**Note**: Clips have a digital signature appended if, at creation time, the Archiver to which they were attached had the option 'Tamper proof archiving' enabled. This setting is made in the AdminCenter Archiver/Storage Tab. |
| ![Edit](edit.png) | Not used. |
| ![Group](group.png) | Click this button to change how results are grouped. The available options are: no grouping, by scene, and by incident. |
| ![Add to case](addtocase.png) | Click this button to add the selected clips to the open case in the **CaseBuilder Navigation Tree**. |
| ![Play](play.png) | Click this button to play the selected clips as a Synchronized Playback (see **Synchronized Playback**). |

When a clip is exported, an "Export" event appears in the Event Status Pane, displaying the export progress. When the system finishes exporting the clip, the progress will be displayed as 100%. This provides a confirmation that the exported clip is now safe to view.
2.5.2 Clips Tab

The Clips pane is used to play exported clips in .DVT Format. It enables the concurrent playing of multiple media clips that occurred at the same time and were recorded by different cameras or audio sources. In addition, media clips that were exported in segments can be played as one clip. In the File Playback pane, you can also validate the authenticity of any .DVT Format clip, and indicate whether or not a clip has been tampered with.

The top of the pane contains the following buttons:

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="clip_add.png" alt="Add Clip" /></td>
<td>Click this button to add files or folders to be played in the File Playback pane.</td>
</tr>
<tr>
<td><img src="folder.png" alt="Folder" /></td>
<td>Click this button to clear an alarm or alarm related action from the table. An alarm may be cleared only after it has been acknowledged or forwarded.</td>
</tr>
<tr>
<td><img src="remove.png" alt="Remove" /></td>
<td>Click this button to remove all clips, with a check mark, from the table.</td>
</tr>
<tr>
<td><img src="validate.png" alt="Validate" /></td>
<td>Click this button to validate the selected files.</td>
</tr>
<tr>
<td><img src="group.png" alt="Group" /></td>
<td>Click this button to group the files.</td>
</tr>
<tr>
<td><img src="selection.png" alt="Selection" /></td>
<td>Click this check box to select or deselect files.</td>
</tr>
<tr>
<td><img src="play.png" alt="Play" /></td>
<td>Click this button to play files.</td>
</tr>
</tbody>
</table>

You can perform the following actions:

- Adding clips
- Removing clips
- Validating the digital signature of clips
- Playing clips

The File Playback window can also be used to play back Scene Tracker files.

Adding Clips to the File Playback Pane

You can select individual clips or whole folders to be added to the File Playback pane.

**Note:** You can only add folders that contain clips. The content of sub folders are not automatically added.

**To add clips:**
1. Click the button to add a file.
   The Open dialog box appears.
2. Select the desired clip, and then click Open.
   You can select one clip at a time.
   The selected clip is added to the File Playback pane.

To add folders:
1. Select the button, to add a folder.
   The Browse for Folders dialog box appears.
2. Select the desired folder.
   You can select one folder at a time. Make sure the folder contains clips. Clips that
   are located in sub folders will not be added automatically.
3. Click OK.
   The selected folder and the clips contained in it are added to the File Playback
   pane.

Removing Clips from the File Playback Pane
You can remove clips from the File Playback.

To remove clips or folders:
1. Select the desired clips or folders.
2. Click the button.
   A confirmation message appears, asking you whether or not to delete the selected
   items.
3. Click OK to remove the clip(s).

Validating the Digital Signature
Every clip exported in the .DVT Format contains an encrypted watermark to ensure that the
data cannot be tampered with. You can validate the files in the .DVT Format and indicate
whether or not the files have been tampered with in the File Playback pane.

It is possible to playback files even if they are indicated as invalid. The validation status of the
clips appears in the Digital Signature column. A clip can be validated, unchecked or not
valid.

To validate the digital signature of a clip:
1. Select the desired clip(s).
2. Click the button.
   While the system is validating the clips, the Digital Signature column will display the
   Validating status.
   After the validation process is complete, the Digital Signature of the clip will display as
   valid or not valid.
Playing the Clips

Once a clip has been added to the File Playback pane, it can be played and will be displayed in the Viewing pane.

- It is possible to play clips continuously, using Loop Playback.
- It is possible to play multiple clips simultaneously by selecting several clips at once.
- In addition, it is possible to play clips synchronously. For more information, see Synchronized Playback.

Once a clip is played, the Timeline pane is displayed.

To play a clip:

- Double-click the desired clip(s) in the File Playback pane.
- Drag and drop the desired clip to a tile in the Viewing pane.
- Select the desired clip(s) in the File Playback pane, and then click the button.
- It is recommended when you are finished viewing a clip that you remove it from the tiles, Timeline and File Playback pane.

Note: If you log out of the associated FLIR System system, files loaded in this pane will remain available for offline playback.

Removing Privacy Mask During Synchronized Playback

If you have loaded a clip that was exported with a Privacy Mask, it will be password protected. Once you enter a Privacy Mask password for a scene, the system will remember it during your current session and you will not need to enter it again.

If a clip has been added and is playing you can right-click and select Deactivate Privacy Mask.

You will be prompted for the password for the file you clicked on. Enter the password of the file and click OK.

If you have multiple exported clips with different passwords but for the same scene, you need only enter the latest password to unlock all of the scene.

Caution: If you leave an exported clip which you have entered a password for loaded in the ControlCenter and you log out from the FLIR System, the ControlCenter will only switch to offline and the passwords you entered will remain for each video still loaded in the offline ControlCenter panes. It is recommended when you are finished viewing a clip that you have entered a Privacy Mask password for, that you remove it from the tiles, Timeline and File Playback pane.

2.5.3 Timeline Tab

When a focused Viewing Tile is showing the playback of a clip, the Timeline Pane presents detailed information for the archived clip (or clips, in the case of Synchronized Playback), in the form of colored bars representing the recordings, and flags or colored highlights to depict information contained in the recordings - such as Alarms, Bookmarks and Motion events.
The **Timeline** provides tools for navigating the content - **zooming** to provide finer granularity, and **moving earlier or later** to see other clips that may be available from the selected source/s.

The display includes a Time Ruler (hours above, minutes below) showing the time scale that applies to the recording tracks. The user can move this left or right by clicking on the Scroll bars to move earlier or later.

Below the Time Ruler, the pane displays one or more Recording tracks. The first line shows times during which any of the selected sources have recordings. Then below that, the pane shows any other recorded information for the selected source/s.

### Recording Triggers

A recording may be associated with multiple recording triggers. For example, a user may start manually recording a camera that is already being archived by a schedule. In such cases, the quality and time-to-live settings applied to the clip are, respectively, the highest and longest for the relevant triggers.

#### 2.5.3.1 Selecting a clip

**Note:** Clicking and dragging when the mouse is positioned on a track does not change the time scale but rather is used to mark parts of the clip for Export or Locking.

**Selecting a Segment to lock or export a part of a clip:**

The timeline can be used to **Export** or **Lock** a part of an archived clip.

Click and drag the mouse over pertinent section of a track.

When the desired time frame is selected, release the mouse to mark for export or lock.
Hovering over the marked indication, shows the start and end time as selected.

The user can then click the **Lock** 🛠️ or **Export** 📄 buttons, respectively, in the toolbar section on the top left, or right-click the timeline to open the Context Menu.

The user can then select the appropriate action.

You can also mark the beginning and end of the desired section by using the ➡️ and⬅️ buttons.

When a clip is exported, the status, time and progress of the ongoing export appears in the **Export Status Pane**. When the system finishes exporting the clip, the status and time provides a confirmation that the exported clip is now safe to view.
2.5.3.2 Scrubbing

1. There are two methods of scrubbing:

**Scrub the video directly in the Playback pane**

Drag the timeline cursor earlier or later, and watch the playback in its current window.

**Scrub with thumbnails on the Timeline**

Hover over the timeline and check in the thumbnails.
2.5.3.3 Timeline scale and Viewing point

Using the Mouse to control the Timeline

The following facilities are available:

1. **Zoom the timescale:**

With the mouse positioned anywhere in the Timeline pane, the corresponding vertical position on the timescale is held constant, and moving the mouse wheel will zoom the timescale wider or narrower (showing more or less time).
2. Move to another point in the timescale:

With the mouse anywhere in the Timeline pane (but NOT on a specific clip/track*), then clicking and dragging the mouse will slide the whole timeline earlier or later.

3. Select the displayed playback range:

With the mouse positioned below a track, the user can select a part of the clip by right-clicking at a starting time and dragging the mouse to a later time. On releasing the mouse, the timescale will expand so that selected portion of the clip fills the timeline.

2.5.4 Export Tab

An Export is initiated by clicking on the Export icon in the Query Results Pane.
The Export Status pane is used to display the status, time and progress of ongoing and completed exports and to stop one or all ongoing export processes.

When the progress bar is green, the export is either in progress or it was completed successfully. When the progress bar is red, the export was either stopped or aborted (manually or by the system).

You can clear one or all export events from the Export Status pane by selecting the desired export events and clicking the button. Note that this action does not affect the export process itself.

For more information about exporting, see Exporting a Clip.

2.5.4.1 Exporting a Clip

You can export a specific clip and then burn it onto a DVD. The results are viewed in the Export Status Pane. (for more information on the Burn process, see Applications Menu/Options Menu/Export/burn).

To export a clip via the Query Results pane:

You can export clips directly via the Query Results pane of the ControlCenter.
1. At the bottom pane of the ControlCenter, click the Query icon.
2. From the search query pane, select clip.
3. The related camera appears in the query results pane. Place your cursor on the camera and click the Export icon.
4. The Export Settings dialog box appears.
5. Click browse to define a location for the exported clip.
6. Click OK and the Export process will start. The Export Status pane will show progress.
After the clip is exported it will start the Burn process. The results appear in the Export status pane.

**To burn a selected clip:**
1. In the ControlCenter, select Tools/Options, click Export and then Burn.
2. In the Temp Burn Location field, click browse to set the burn location folder. 
   -or-
   Mark the check box to *use a default location*.
3. If required, mark the check box to *delete files after burn operation*

   ![Options Window](image)

In addition, while reviewing a recorded or exported clip, you can create and export partial clips of significant events from the original clip.

It is possible to export audio and video clips in the .DVT format as well as AVI format from the ControlCenter and view them via the File Playback pane or with an executable player that can be burnt on the CD along with the exported files.

**Note:** If your system has the Privacy Mask feature and there is a privacy mask on an exported AVI format clip, the mask in the AVI file will not be an overlay, but imbedded in the image and cannot be disabled. If you export in DVT format anyone attempting to disable the Privacy Mask must have the authentication password issued at the time the file was generated. The password is maintained by the Administrator of the FLIR System entity to which the masked scene belonged. During *Synchronized Playback* if two masked files with different passwords are included, the newest password credentials will unlock the sequence to be viewed with disabled Privacy Mask (DVT format only).

For more information regarding the clip export settings, see [Tools/Options Export Clip](#).
- [To export a clip via the Query Results pane](#)
- [To export a clip or partial clip via the Timeline pane](#)

4. Set the desired parameters:
• **Clip Segment** - The duration of the exported clip. This parameter is only applicable when exporting from the Query Results pane, since export from the Timeline requires specifying start and end points.
• **Interleaved Export** - Select this check box to export interleaved audio and video clips.
• **Create autorun file** - Select this check box to create an autorun file for all exported files to automatically run the files after they are burnt on a disk.
• **Include player** - Select this check box to automatically export and burn an executable player along with exported files that are burnt on a disk.
• **Video Codec / Audio Codec** - Determine the codec of the clip.

5. Click **OK**.
   The clip is exported to the defined location.

**To export a clip or partial clip via the Timeline pane:**
1. While playing a .DVT file, mark the desired section in the timeline pane of the ControlCenter.
2. On the timeline toolbar, click the \( \text{ } \) button or right-click the desired section and select **Export**.
   The Export Settings slider appears in the Timeline pane.
3. Set the file name, export location and whether to create a new folder for the file to be exported. If you do not fill in the fields, the system will use the parameters defined in the **Export Clip Options** menu.
4. To set additional export parameters, click **Advanced**. (This option is only enabled if set appropriately in the Tools menu)
   The advanced **Export Settings** dialog box appears, allowing the user to set non-default characteristics to this specific export.
5. Set the desired parameters:

- **Clip Segment** - The duration of the exported clip. This parameter is only applicable when exporting from the query results pane, since export from the timeline requires specifying start and end points.

- **Settings**
  (for more detail, see the Note on Export Settings below)
  - **Format** - Determine clip format of the audio and video clips.
  - **Interleaved Export** - Select this check box to export interleaved audio and video clips.
  - **Video Codec / Audio Codec** - (for .avi format only) - Choose specific codecs to be used from the available lists.

**Note on Export Settings:**

- Default output format is .DVT
- If the default .DVT format is deselected and no format selection is made, the Video/Audio codec selection fields are enabled and the User can manually select the Video and Audio codecs to be used.
- MP4 not available for non-H264/H265 or Privacy-Mask streams
By default, MP4 files will be exported with associated .smi files which will contain OSD information unless "Embed OSD in Exported clip" is selected.

**Note:** When using the default option of NOT embedding the OSD, if the clip is around 15 minutes or longer the subtitles update once every second to reduce delay.

**Note:** When selecting to embed OSD into MP4 clips, it is recommended that the user only use this option for short clips.

Privacy Masks are not supported in MP4 exports, and therefore clips with Privacy Masks may not be exported in .MP4 format.

6. Click **OK**.

   The clip is exported to the defined location.

**To see OSD information in .mp4 Exports**

Exports in .mp4 format will always be accompanied by a .smi-format file containing OSD information.

*.smi* is the default subtitle format used by Windows Media Player and several other Video Player applications.

If the subtitles do not appear automatically upon opening the video file in WMP,

Check the “Show local captions when present” option in the “Security” tab

If the OSD still does not show,

Click **Alt/Tools, Play** and set **Lyrics, captions and subtitles to On**
Privacy Mask Note: When a clip which has the uses a Privacy Mask overlay is exported, the Privacy Mask feature does not use the logged-in user's privileges, but is password-protected by the system-wide Privacy Mask password. Users will not be able to remove the Privacy Mask for that exported clip during playback, unless they enter the system-wide Privacy Mask password.

2.5.4.2 Loop Playback

While reviewing an exported clip in the ControlCenter, you can play the clip continuously.

To play a clip continuously
1. While playing a .DVT file, mark the desired section in the time line of the ControlCenter.
2. On the time line toolbar, right-click the desired section and select Start Loop Playback.
3. To stop the continuous playing of the clip, right-click the desired section and select Stop Loop Playback.
2.5.5 Events Tab

The Events Pane presents a list of events that have occurred since the current user logged on to the system. Only events of the types to which the user is subscribed are displayed.

For each event, the pane provides a description as well as information on the firing entity; date and time; initiator; and the event type.

The top of the pane contains four buttons:

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear</td>
<td>Clear the selected event from the list. To clear the entire list, click ( \times ) and choose Clear All.</td>
</tr>
<tr>
<td>Edit</td>
<td>Edit an incident’s description (not applicable to other type of events).</td>
</tr>
<tr>
<td>Group</td>
<td>Change the grouping method.</td>
</tr>
<tr>
<td>Filter</td>
<td>Filter events by type.</td>
</tr>
</tbody>
</table>

2.5.6 Alarms Tab

The Alarm Pane is used both to trigger alarms and to handle them. The table contains basic information about the alarms the user received during the current login session. Above the table are a number of buttons providing the actions the user can carry out.

The top of the pane contains seven buttons:

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accept</td>
<td>Click this button to accept an alarm. When one recipient accepts an alarm it is locked for use by any other recipients. It is possible to unaccept an alarm</td>
</tr>
<tr>
<td>Button</td>
<td>Description</td>
</tr>
<tr>
<td>----------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Unaccept</td>
<td>Click this button to <strong>unaccept</strong> an alarm. When a user accepted and alarm and wants to reverse the acceptance and allow others to accept and clear the alarm.</td>
</tr>
<tr>
<td>Forward</td>
<td>Click this button to <strong>forward</strong> the alarm to another user.</td>
</tr>
<tr>
<td>Snooze</td>
<td>Click this button to <strong>snooze</strong> the selected alarm (the snooze duration can be specified by going to Options in the Tools menu. The default value is 60 seconds).</td>
</tr>
<tr>
<td>Procedure</td>
<td>Click this button to <strong>view the procedure associated with the alarm</strong> (if applicable).</td>
</tr>
<tr>
<td>Clear</td>
<td>Click this button to <strong>clear</strong> an alarm or alarm related action from the table. Once an alarm is cleared, it is released and can be used by any other recipient who received the same alarm.</td>
</tr>
<tr>
<td>Trigger</td>
<td>Click this button to <strong>manually trigger</strong> an alarm.</td>
</tr>
<tr>
<td>Filter</td>
<td>Click this button to <strong>filter</strong> the alarm information shown in the pane based on alarm state.</td>
</tr>
</tbody>
</table>

When triggering and alarm or forwarding an existing one, a new section is added to the right-hand side of the pane, as shown below.

![Alarm pane with new section](image)

**Priority**
Each Alarm has a priority associated it when it is defined.
Control Center Workspace

Displaying Alarms in Tiles

In the ControlCenter’s customizable screen configuration there is an option to dedicate one of the workstation monitors solely for alarm management, providing more real estate for the alarm task.

- Alarm video can be displayed in one of the following ways:
  - When one or more tiles are *armed for alarms*, the application automatically switches the highest priority alarms to be displayed in those tiles.
  - When an active alarm icon is double clicked in the map or drag & dropped from it onto on an available tile, the alarm is displayed
  - Double click or drag & drop an alarm from the alarm pane and onto a tile.

Alarm Life Cycle

ControlCenter supports a tri-state alarm life cycle: activated, accepted and cleared.
1. Once an alarm is triggered, it is sent by the system to multiple recipients and its status changes to activated.
2. One of the recipients can accept the alarm by clicking the accept button on the GUI, this then changes the alarm status to accepted.
3. When the alarm handling is complete, one of the users can clear it and in this way ends the life-cycle of that alarm instance, causing it to disappear from all recipient workstations.

Clear Alarm Description

When the option in AC is selected to force clear alarm description, the CC Operator is forced to enter a description for why the alarm was cleared.
This can be accomplished with:
- Free text description based on the situation
- Predefined description entered into AC field when alarm is created.
Color Coding

Each alarm is defined with priority and the priorities are mapped to color codes:

Red: high priority range; Yellow: medium priority range; Blue: low priority range

In the ControlCenter application the user can view the list of active alarms in the Alarm Pane together with color coding to help the user instantly understand the priority of the alarms:

- Each alarm instance in the list is presented with its color code
- The user can sort the alarm list by priority

When an alarm is triggered, an alarm notification pops up in the bottom-right corner of your desktop. The alarm entry is added into the Alarm Pane with the proper color coding.

2.5.6.1 Displaying a Camera on Alarm (Automatic and Manual)

When alarms have been configured to display content from cameras when triggered, the display can be Automatic or Manual.

Automatic Display

In order for the Automatic mode to be used, the user must set one or more viewing tiles to ‘Armed for Alarms’ status. Cameras associated with alarms will then automatically
be displayed in Armed tiles, according to the display mode set for that user. See: View Modes for alarms

Manual Display
If the user does not set any tiles to ‘Armed for Alarm’ status, this means that Manual display will be used.

Content from cameras associated with alarms will be displayed by the user:-

- double-clicking on an alarm in the Alarms pane. Cameras associated with the alarm will then be displayed in the next available viewing tile -
- or-

- dragging-and-dropping the alarm directly to a viewing tile.

The display sequence in the viewing tile will follow the rules for Block Mode.

(A subsequent alarm can be similarly opened in another 'next available' tile, or dragged to a user-chosen tile, where it will also be displayed in Block Mode.).

While scenes from an alarm are being displayed, the user can click the OSD pause button and stop the cycle in order to view the single camera. Clicking play returns the user to the sequence.

Displaying OSD information about an Alarm

OSD text and icons indicate what alarm and which of the alarms cameras is now displaying

To enable the OSD text as shown in the image above: Go to Tools Options/Video Settings/OSD/Metadata General and select Show metadata OSD.
3 Common Tasks

**Viewing live Video/Audio**
- To view a camera on a viewing tile:
  - Digital PTZ using the mouse
  - Draw-to-Zoom
  - Digital Zoom Indication
- Playing Live Audio

**Managing the Workspace**
- Move a video from one tile to another
- Remove a video from a tile
- Using one tile for the content you request - Spot Monitor option.
- Using the Layout Pane to change the pattern of the Viewing Tiles
- Maximizing the Navigation tree

**Playback for Media**
- From Query Results pane
- Check for recordings from a camera currently being displayed ‘live’ - ‘Send to Query’
- Using Instant Replay (IR)
- Controlling the Playback using the Viewing Tile Toolbar
- How to use all the controls in the Timeline tab
  - Timeline Tab Toolbar
  - Time Ruler
  - Tracks
- How to create a Bookmark on a clip
- Using the Bookmark Filter
- Synchronizing multiple sources (Synchronized playback)
- Loop playback
- Locking clips (or segments of clips)
  - Locking clips from the Query Pane
  - Locking clips from the Timeline
- Find and cancel a Locked section in a clip

**Exporting**
- Export from Query Pane
- Export from Timeline
3.1 Viewing live Video/Audio

To view a camera on a viewing tile

Digital PTZ using the mouse

Draw-to-Zoom

Digital Zoom Indication

Playing Live Audio

3.1.1 To view a camera on a viewing tile

- Click-and-drag it from the Navigation pane onto a Viewing tile
- Double-click it in the Navigation pane, and it plays in the next available tile
- Right-click it in the Navigation pane, and then select Display and it plays in the next available tile

If audio streams are attached to a camera, they will play.

3.1.2 Digital PTZ using the mouse

While viewing any video (Live or Playback), the ControlCenter allows you to zoom into the image to see more detail.

1. Left click the tile of the video you would like to zoom.
2. Put the mouse on the tile you wish to zoom, and click the mouse wheel once.
3. The cursor changes to a orange directional arrow – this means the Digital Zoom feature is enabled.
4. Roll the wheel forward to zoom into the picture. Digital Zoom Indication shows that Zoom is being used.
5. Once you have zoomed in, you can move the mouse up, down, left, right or diagonally, and a corresponding arrow is shown. Click the mouse again and the picture moves in the direction of the arrow.
6. Zoom out by rolling the mouse wheel towards you.
7. To return to normal viewing for the tile, Right-click in the tile, and select **Reset Digital zoom**.
8. Clicking on the mouse wheel again returns the mouse to normal operation.

### 3.1.3 Draw-to-Zoom

For fixed cameras, a Magnify icon 🕵️‍♂️ allows the user to use the mouse to draw a rectangle around the area to be viewed.

![Magnify Icon Example](image1)

After clicking the Magnify icon, use the mouse to click-and-drag the area you wish to magnify.
Common Tasks

3.1.4 Digital Zoom Indication
When Digital Zoom is in use (either using the mouse or draw-to-zoom), a Magnify icon and a thumbnail showing the zoomed area in relation to the whole scene are shown.

3.1.5 Playing Live Audio
Note: Only available when connected to a Latitude system
Drag and drop the microphone onto a tile layout.

You can use the audio controls in the tile to Start Recording, Start Instant Replay, Mute the sound and Control the Volume.
3.2 Timeline Pane

The Timeline Pane allows the user to control the playback window.

- **Workspace tabs** – Tabs for Timeline display options
  - See detailed description Timeline Tab Toolbar
- **Playback Controls** – Normal Rewind, Play, Pause, etc.
- **Date and Time** – Shows the exact Time and date of the scene that is currently being played
- **Playback Speed** – Indicates the mode of playback
- **Time Ruler** – Shows how much time is covered in the Timeline window. This can be varied using the Scale Tool (see below)
- **Scroll Control** – Clicking the double arrows allows you to move the part of the clip displayed in the Timeline window earlier or later
- **Scale Tool** – Placing the mouse on the Time ruler lets you compress or expand the Timeline scale (to show more detail or more time in the window)
- **Bookmark** – Symbols show you each place where the clip contains a bookmark
- **All Recordings track** – Shows you all recordings for the camera named in the title bar of the Timeline
- **Clips** – the bars in the All Recordings track show the times during which recordings exist for this camera
  - Note: The red areas in clips show the time during which motion was detected. The level of red indicates the amount of motion detected.
- **Timeline Cursor** – shows the point in the clip which is currently being played
- **Workspace Tabs** – Allow you to call up other Workspace Tabs.
  - (You can return to the Timeline by clicking on the Timeline icon.)

3.3 Managing the Workspace

**Move a video from one tile to another**

**Remove a video from a tile**

**Using one tile for the content you request - Spot Monitor option**

**Using the Layout Pane to change the pattern of the Viewing Tiles**

**How to add or modify a Layout**

**Using Customized Layouts**

**Maximizing the Navigation tree**

**Aspect Ratio**
### 3.3.1 Move a video from one tile to another
Click the video to be moved, and drag to the destination tile.

![Click and Drag Video to another tile](image)

### 3.3.2 Remove a video from a tile
1. Click the video to be removed, and drag it anywhere out of the Viewing Pane.

![Click and drag a video out of the Viewing Pane](image)

- or -
2. Right-Click the video and select **Remove**.

### 3.3.3 Using the Layout Pane to change the pattern of the Viewing Tiles
The **layout pane** gives the user a comprehensive set of choices of **patterns** for how to arrange viewing tiles in a layout. These range from the simple 4-tile default layout, through multiple matrix layouts that show up to 32 simple rectangular tiles, various mixes of large and small tiles that allow some areas to be shown in large tiles with others on the edges for monitoring, to specialized patterns that cater for wide-angle views such as are used by ‘stitched’ scenes.

Clicking on any of the patterns in the layout pane changes the viewing pane arrangement to the selected pattern. Tiles are re-arranged, with each tile from the old pattern being displayed in the tile with the corresponding tile number in the new pattern.
3.3.3.1 Using one tile for the content you request - Spot Monitor option.

**Spot Monitor** enables the user to designate a specific tile to be used whenever a scene double-clicked, regardless of the current Active Tile.

Spot Monitor is useful if you want to always look for the results of a double-click in the same place.

To enable the Spot Monitor, right-click the desired tile in the Tiles pane, and then select **Spot Monitor**. Once a tile is selected as spot monitor, its edge is marked red.

![Designating a Spot Monitor tile](image)

3.3.4 How to add or modify a Layout

**To configure a tile layout**

1. From the Viewing Pane Toolbar,

   ![Layout icon](image)

   Click the **Layout** icon to open the **Layout dialog**.

2. Click **Add Layout**

   ![Add Layout dialog](image)

   **Single system - Add**

   **Multiple Systems - specify in which the Layout will be saved**
3. Enter a name for the new Layout.
4. **Save** the new Layout.

**To Customize a tile layout**
1. From a blank layout (or an existing one if you want to overwrite it)
   a. Choose a tile pattern by opening the **Layout** dialog (see above) and clicking one of the tile pattern buttons.
   b. Drag and drop cameras, sequences and maps from the Navigation Pane onto viewing tiles.
   c. If you wish to use Digital Presets, select them by using the in-pane controls (Right click and select **Go to Preset**) or use the PTZ pane to select a Digital Preset for the current viewing tile.
   d. Arm viewing tiles for alternative content or alarms as applicable.
2. When the Layout contains the required components, click the **Save Layout** option on the Layout dialog.

The available layouts are displayed in the Navigation tree:

![Navigation Tree Screenshot](image)

In the Viewing Pane, pressing the **Close** icon at the right of the layout tab strip will clear the currently active Layout.
3.3.5 Using Customized Layouts

When adding a customized workspace to the Favorites, the order, visibility and size of the different panes, the open layouts (multiple systems) and the open tiles (allowing tiles from multiple systems) are saved.

The user can therefore create the mode of choice by selecting the desired panes in the workspace.

To add a customized layout to your Favorites Mode:

Favorites are stored per Control Center - all users using a particular Control Center will see the same set of favorites.

When adding a customized workspace to the Favorites, the order, visibility and size of the different panes, as well as the open layouts (multiple systems) and the open tiles (allowing tiles from multiple systems) are saved.

Therefore, before creating the mode of your choice create the complete layout, down to including all camera views and presets in your workspace.

1. Open the Favorites dialog from the Viewing Toolbar.

2. Any favorites that have already been stored for this Control Center will be shown.

3. Enter a name for this Favorite, and click on Save.
To access a customized layout:
Click on the Favorites Tab, and choose the Layout you want to display from the list of saved Favorites.

To Select patterns available in the layout pane:
There are many possible Layout Patterns in the system (currently over 30). If you want to show a smaller number so that it is easier to choose, you can set which patterns are available by selecting View Settings/Layout Patterns from the Tools/Options menu, and then using the left and right arrows move patterns between the Available and Selected lists, so that only those Layout patterns that you wish to have displayed are in the Selected list.

You can also click a pattern symbol in the Selected list to select it, and use the up and down arrows to re-order it in the sequence of Layout patterns.

![Figure 10 - Selecting Layout Patterns to be available](image)

Tile Border
When the tile has a colored border, it indicates that the tile is currently designated for a particular purpose.

<table>
<thead>
<tr>
<th>Border</th>
<th>Tile Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yellow</td>
<td>The tile is focused. You must focus a tile in order to expand it to fill the viewing pane or to use digital zoom or PTZ controls on its video content. Only one tile can be focused at any given time. A tile turns focused when it is clicked or when new unarmed content is dropped onto it.</td>
</tr>
<tr>
<td>Border</td>
<td>Tile Status</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td><strong>Green</strong></td>
<td>The tile is one of several selected tiles. A focused tile becomes selected when another tile is control-clicked (thus becoming focused itself). Selection is only meaningful when trying to apply an action to multiple tiles. The most common uses for this is when bookmarking or trashing multiple tiles at the same time.</td>
</tr>
<tr>
<td><strong>Red</strong></td>
<td>The border of a tile’s viewing area turns blinking red when content for which it has been armed begins playing. The border disappears as soon as the tile is clicked. Multiple tiles can be playing alarm-related content at the same time.</td>
</tr>
</tbody>
</table>
3.3.6 Maximizing the Navigation tree

You can maximize the Navigation Tree pane by using the push bar. This is especially useful for the Navigation tree when you are dealing with a large installation.

![Figure 11 - Using the Push bar to maximize the Navigation tree](image)

Note: Using the pushbar is not the same as minimizing the Tab by clicking on the Close icon (X).

If the Close Pane icon is clicked, the pane is not minimized, it is removed and has to be reselected in the View/Content dropdown (see Main/View/Content).
3.3.7 Aspect Ratio

When a video image is displayed, the system default is to maintain the aspect ratio in order to show the most accurate video. Where the proportions of the viewing tile differ from those of the video displayed therein, the system inserts black bars in the unused portions of the tile. When the aspect ratio is not maintained, the video stretches to fill the viewing tile.

Set ControlCenter to Maintain or Ignore Aspect Ratio

The aspect ratio setting for a ControlCenter is set in the **Tools/Options/Video** screen. By default, this is set to **Maintain aspect ratio**, but you can uncheck this option.

**Toggle Aspect Ratio in a Viewing tile**

To toggle the aspect ratio in a single viewing title, highlight that tile and press **SHIFT+R**.

3.4 Viewing recorded Video

- **From the Query Pane**
- **From Query Results pane**
- **Check for recordings from a camera currently being displayed ‘live’ - ‘Send to Query’**
- **Using Instant Replay (IR)**
- **Controlling the Playback using the Viewing Tile Toolbar**
3.4.1 By selecting a camera from the Query pane
- Click-and-drag it from the Query pane onto a Viewing tile

![Figure 12 - Drag a camera to the required pane from the Query Pane Navigation Tree](image1)

![Figure 13 - The clip plays in the selected pane](image2)

3.4.2 From Query Results pane

To play a clip from the Query Results Pane:
1. From the Query Pane
2. Select the camera from which you want to play a clip
3. Run the Query
4. From the Query Results window, pick the clip you want to run, and either double click it to play it in the next available viewing tile, or drag-and-drop it to the viewing tile in which you want to view it.

![Figure 14 - Playback from the Query Results pane](image3)

3.4.3 Check for recordings from live camera

While a camera is being displayed live in a viewing tile, you can quickly list any stored recordings for that camera.
1. Right-click in the live video tile to open the Context Menu, and select ‘Send to Query’
The Query window opens automatically with the current camera and the default Time and Date range already selected (‘Last 24 hours’).
2. You can modify the search parameters if required.
3. Click ‘Search’ to execute the Query. Results are shown in the Query Results Pane.
4. Click any line in the results pane to show the recording in the ‘next available’ Viewing tile.

3.4.4 Using Instant Replay (IR)

**Note:** In order to use Instant Replay, at least one tile should be set to play Alternate Content.

In a tile showing live video content, you can click the Instant Replay button in the Live Viewing Toolbar at any time, and a replay delayed by 30 seconds appears in the next available tile. (Provided the tile is being recorded i.e. the Tile status shows Recording).

![](image1)

**Figure 16 - Start Instant Replay from Live Viewing Tile**

The 30 second replay is a standard function, that allows you to quickly call up a replay if you noticed something in the live window and you want a quick second look.

**Note:** The IR button is a very convenient way to review material in a Live/Recording Tile. Clicking IR starts Replay and opens the Timeline for the tile, and then you can use the Scroll Controls to move to the earlier parts of the recording (see ‘Send to Query’ above).
3.4.5 **Controlling the Playback using the Viewing Tile Toolbar**

When playing a video clip, the Viewing Tile Toolbar contains control buttons for rewinding, Play/Pause and fast-forwarding the clip.

![The viewing Tile Toolbar is shown when the mouse is hovered at the bottom of the pane](image-url)

*Figure 17 – Playback Tile Toolbar*
3.4.6 Using Thumbnail Search

Thumbnail search allows users to view still images ("thumbnails") taken at regular intervals from a recorded video. The feature provides an additional way to pinpoint an event.

3.4.7 How to use all the controls in the Timeline tab

The Timeline Tab allows you to control all aspects of Playback.

The following paragraphs describe the Timeline Tab components in detail.

- Timeline Tab Toolbar
- Time Ruler
- Tracks
### 3.4.7.1 Timeline Tab Toolbar

The Timeline Tab Toolbar gives the following capabilities.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Label/Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Expand/(Collapse) Tracks" /></td>
<td>Expand/(Collapse) Tracks</td>
<td>Toggles the track views between displaying only Recordings and Bookmarks and displaying All. See <a href="#">Tracks</a>.</td>
</tr>
<tr>
<td><img src="image" alt="Reposition current frame position" /></td>
<td>Reposition current frame position</td>
<td>If the Timeline Cursor is not visible (i.e. if you have moved the clip either with the Timeline Scroll Controls or with the Scaling control), this button repositions the clip so that timeline cursor (playhead) is centered in the window.</td>
</tr>
</tbody>
</table>
| ![Lock](image) | Lock                             | (Enabled only when you have marked a clip by clicking and dragging the mouse while it is in the Timeline Tracks area, or with the MarkIn/MarkOut buttons)  
Note: Once you have locked a segment, you can only unlock it from the Clip Query results window.                                                                                                                                                                                                                                                                                        |
| ![Export](image) | Export                           | Opens the Export pane and loads the marked range of the timeline.                                                                                                                                                                                                                                                                                                                                                                                                       |
| ![Hide/Show Motion](image) | Hide/Show Motion                 | Hides or shows motion markings of the video on the timeline (toggle)                                                                                                                                                                                                                                                                                                                                                                                                   |
| ![Jump to specific time](image) | Jump to specific time            | Opens the Jump to dialog on the right of the timeline for entering a time/date which you want the playhead to go to.                                                                                                                                                                                                                                                                                                                                                   |
| ![Bookmark Filter](image) | Bookmark Filter                  | Enter text to filter which Bookmarks are to be displayed.  
See [Using the Bookmark Filter](#).                                                                                                                                                                                                                                                                                                                                                                         |
| ![Mark In/(Mark Out)](image) | Mark In/(Mark Out)              | Use to mark a section of a clip so that it can be locked or exported.  
A marked section is shown with this symbol  
You can also mark a section of a clip by ’click and drag’ with the mouse in a track.                                                                                                                                                                                                                                                                                             |
| ![Cancel marked](image) | Cancel marked                    | Use to cancel the Marked Section  
Note: Cancels only while the ‘marked’ symbol is showing – once Locked, you must use the Query Search function to cancel.  
See [Find and cancel a Locked section in a clip](#).                                                                                                                                                                                                                                                                                     |
| ![Play Controls](image) | Play Controls                    | Rewind, Pause, Play, FFWD, SlowFWD Icons.  
Each click of the FRewind or FFWD icons changes the playback speed.  
Speed increments are +/- x 1, 2, 4, 8, 16, 32, 64                                                                                                                                                                                                                                                                                    |
<table>
<thead>
<tr>
<th>Icon</th>
<th>Label/Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Date, Time</td>
<td>Exact date/Time of the playback (at the playback cursor position)</td>
</tr>
<tr>
<td></td>
<td>Playback Speed</td>
<td>Current Playback Speed setting</td>
</tr>
<tr>
<td></td>
<td>Prev/(Next)</td>
<td>Jump to the previous or next Bookmark in the current track</td>
</tr>
<tr>
<td></td>
<td>Create Bookmark</td>
<td>Create a Bookmark at the current Timeline Cursor position</td>
</tr>
</tbody>
</table>

### 3.4.7.2 Time Ruler

<table>
<thead>
<tr>
<th>Icon</th>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ScrollBack/For</td>
<td>Click with the mouse to scroll the contents of the Timeline window</td>
</tr>
<tr>
<td></td>
<td>ward</td>
<td>backwards or forwards</td>
</tr>
<tr>
<td></td>
<td>TimeRuler</td>
<td>Shows the scale of the current Timeline window. Note: You can adjust</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(compress/expand) the scale. Put the mouse on the Time ruler (it changes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>to the symbol) Click and Drag - left (expands), right (compresses)</td>
</tr>
</tbody>
</table>

### 3.4.7.3 Tracks

The default Timeline display only shows the Bookmark and Clip Timeline tracks.

By clicking on the **Expand tracks** icon in the Timeline Toolbar, you can show/hide more detail about the clip being replayed.

<table>
<thead>
<tr>
<th>Track</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bookmarks</td>
<td>All bookmarks for any of the displayed clips are shown</td>
</tr>
</tbody>
</table>
### Track Description

<table>
<thead>
<tr>
<th>Track</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Recordings track</td>
<td>The blue bar shows times during which there are recordings for this camera. Note: If 'show motion' is ON, then the dark areas in the bar show times during which the System registered that there is movement on the camera.</td>
</tr>
<tr>
<td>Manual</td>
<td>Indicates time during which recordings are made as a result of the user manually clicking 'Record' (manual recording)</td>
</tr>
<tr>
<td>Schedule</td>
<td>Time during which recordings are made as a result of a Schedule</td>
</tr>
<tr>
<td>Event</td>
<td>Times during which Events are associated with this camera</td>
</tr>
<tr>
<td>Alarm</td>
<td>Times during which alarms are associated with this camera</td>
</tr>
<tr>
<td>Edge recording</td>
<td>Times where content was recorded by the edge device and subsequently loaded into the system</td>
</tr>
<tr>
<td>Locked</td>
<td>Segment of the clip that has been Locked Note: A locked clip can only be unlocked by finding it in the Query Results Pane and unlocking it there</td>
</tr>
</tbody>
</table>

#### 3.4.8 How to create a Bookmark on a clip

Bookmarks are a convenient way to mark a point in a clip – this may be done automatically, for example by the AdminCenter setting up an Action to create a bookmark whenever motion is detected.

However, a ControlCenter user may want to insert a bookmark while reviewing a clip. The following steps are needed:

1. Click the **Viewing Tile** that is playing the clip. This makes it the Active tile, and the Timeline is displayed in the Workspace pane.
2. Position the Timeline cursor at the point where you want the bookmark. (If you want to pause the playback so that the bookmark is at an exact point, click the **Pause** icon)
3. Click the Create Bookmark icon. The Bookmark dialog box opens. Add/change the description if necessary, and click **Save**.
3.4.9 Using the Bookmark Filter

When you enter text in the Bookmark Filter box, the clips for the current camera are all displayed, but only the bookmarks which contain the text in the Bookmark Filter field appear. You can then use the Previous and Next icons to move through the clips for the current camera to see which of the matching bookmark are of interest.

3.4.10 Synchronizing multiple sources (Synchronized playback)

The system allows you to view synchronized recordings from several cameras at the same time. If multiple cameras record something of interest – say, two people moving across their field of view and you want to watch what happened.

You can do a clip search, specifying more than one camera, and then click ‘Sync’ – the system searches for all clips for those cameras in the specified time range.

ControlCenter opens a special ‘Synchronized Playback’ layout ( ), and a Timeline pane with a timeline track for each of the selected cameras. This shows any clips from the selected entities.
3.4.11 Loop playback

To play a portion of a recorded clip as a repeated loop:

- Find the part of the clip that should be played

  ![Timeline with bookmark filter](image1)

- Click and drag on the timeline to mark the start and end of the required loop

  ![Timeline showing start and end times](image2)

Alternatively, you can position the Timeline Cursor at the required points, and use the Mark In/Mark Out buttons

![Timeline with marker icons](image3)
Common Tasks

- Right-Click to display the context menu, and select **Start Loop Playback**

![Diagram of the context menu with options](image)

- To stop the continuous playing of the clip, right-click the desired section and select **Stop Loop Playback**

The same method can be used while reviewing exported clips.

3.4.12 Locking clips (or segments of clips)

Locking Clips from the Query Pane

Clips may be locked from the **Query pane** simply by selecting a clip and clicking on the **Lock icon**.

The clip entity icon changes to show that the clip is locked.

![Diagram of the query pane with locked clip](image)

**Figure 24 - Locking a Clip from the Query Pane**

<table>
<thead>
<tr>
<th>Clip is Unlocked – Click the Lock icon to Lock it</th>
<th>Clip is Locked – Click the Lock icon to Unlock it</th>
</tr>
</thead>
</table>

Latitude, Horizon, Meridian Control Center User Guide
Locking Clips from the Timeline

Alternatively, segments of a clip can be locked by marking them in the Timeline window and then Locking them.

1. Mark the start of the segment.

   1. Position the mouse where the segment should start
   OR
   1. Position Timeline Cursor where the segment should start, and click Mark in

   2. Click-and-drag the mouse through the desired time in the Timeline tracks
   OR
   2. Move the Timeline Cursor to where the segment should end, and click MarkOut

2. The system indicates the marked segment.

A mouse-over on the segment indicator shows the exact start and end times of the segment.
Lock the segment by Right-clicking and selecting Lock in the Context Menu

Click the Lock icon in the Timeline Toolbar
3.4.13 Find and cancel a Locked section in a clip

To unlock a clip from the Query pane, simply select it. When the selected clip is locked, the Lock icon changes to show that it can be unlocked, and clicking the Lock icon again unlocks the clip (see Locking Clips from the Query Pane).

When a Clip was locked from the Timeline, it cannot be unlocked from there, and you have to perform a search so that it is once again displayed in the Query Results pane.

To narrow down the search, you can select only the camera which recorded the clip and use the time parameters. To further reduce the number of results, you may wish to use the Advanced Search capability, and restrict the search to clips that are 'locked'.

Figure 25 - Using Advanced Query to find a Locked Clip
3.5 Taking a snapshot from a Viewing Tile

You can take a snapshot of video that is being displayed in a viewing tile (Live or Playback), simply by right-clicking in the Tile, and selecting 'Take snapshot' from the context menu that appears.

![Figure 26 - Taking a snapshot](image)

The resulting picture is stored in the location set in **Main Menu/Options/Export/...Snapshot**.

3.6 Exporting

Exporting from Query Pane

1. Perform a **query** to find the clip that you would like to export.

2. Select the desired clip, and then click ![Export](image). The **Export Settings** dialog appears in the Query Results pane.

3. The file name and export location are set by default. Enter changes if required, and whether to create a new folder for the file to be exported.

   The defaults are defined in the **Tools/Options/Export/Clip** menu.
4. If you need to use non-default export parameters, click **Advanced**. The **Advanced Export Settings** dialog box appears.

5. Set the desired parameters:
Common Tasks

- **Create autorun file** - Select this check box to create an autorun file for all exported files to automatically run the files after they are burnt on a disk.

- **Include player** - Select this check box to automatically export and burn copy of the Quick ControlCenter along with exported files that are burnt on a disk.

- **Clip Segment** - The duration of the exported clip.

- **Format - DVT, MP4 or AVI** – Determines clip format of the audio and video clips.
  
  The FLIR .dvt format is the default. The integrity of files exported in this format can be authenticated. If a clip must be exported in a format that can be read by other systems, then the option can be unchecked, and the file is exported in the format selected from the drop-down.

  **Note on Export Settings:**
  
  i. Default output format is .DVT
  
  ii. If the default .DVT format is deselected and no format selection is made, the Video/Audio codec selection fields are enabled and the User can manually select the Video and Audio codecs to be used.

  iii. Interleaved Export (File contains video and audio) is only available in .DVT files.

  iv. .MP4 can only be used for video content that originated in H264 format.

  v. OSD and Privacy Masks are not supported in MP4 exports. Clips with associated OSDs will be exported without the OSD. Clips with Privacy Masks may not be exported in .MP4 format.

- **Interleaved Export** - Select this check box to export interleaved audio and video clips. This option is enabled only when the .avi format is selected.

  **Note:** For high-quality output, it is recommended to use the xvid codec. If you install the xvid codec, please contact support for instructions on how to update the system to be able to use this format.

6. Click OK.

The clip is exported to the defined location.

Exporting from Timeline

1. While playing a clip, **mark** the desired section in the **Timeline** by click-and-dragging the mouse on the Recording track for the length of the required export. The area is marked . Otherwise, you can use the **MarkIn/MarkOut** buttons

2. On the **Timeline toolbar**, click the **Export** button or right-click the desired section and select **Export**.

3. The **Export Settings** dialog box appears in the **Timeline pane**.
4. Set the file name, export location and whether to create a new folder for the file to be exported. If you do not fill in the fields, the system uses the parameters defined in the Export Clip Options menu.
5. To set additional export parameters, click Advanced.
6. The Advanced Export Settings dialog box appears.
7. Set the desired parameters (see Steps 3 to 5) in Export from Query Pane above.
8. Click OK.
The clip is exported to the defined location.

3.7 Alarm management

How to handle alarms
- Handling alarms from the PopUp
- Handling an Alarm from the tile that is displaying it
- Handling alarms from the Alarms Pane
- How to trigger alarm manually

How to trigger alarm manually

3.7.1 How to handle alarms

Normally, when an alarm is triggered, it displays the camera/s associated with that alarm, in the tile/s that are ‘Armed for alarms’, and you can manage the alarm using the controls in the tile displaying the alarm.

If the new alarm is of a lower priority than one currently being displayed, it is not displayed until the higher-priority alarm has been addressed.

Handling alarms from the PopUp
- Handling an Alarm from the tile that is displaying it
- Handling alarms from the Alarms Pane

3.7.1.1 Handling alarms from the Popup

The Alarm PopUp alerts you that an alarm has been triggered and you are listed as a recipient – that is, you are one of the ControlCenter users who are able to handle this type of alarm.

To Display the Alarm in the Next Available (unarmed) Tile

You can use the icons in the Alarm PopUp to perform the following functions:
1. Click the Alarm text
   OR
2. Click the Display icon

To Clear an Alarm
Click the **Clear** icon.

To Snooze the Alarm
Click the **Snooze** icon.

To Move to the Previous or Next Undisplayed Alarm
Click the **Prev/Next** arrows.

### 3.7.1.2 Handling an Alarm from the tile that is displaying it

Once an Alarm is being displayed in a Viewing Tile, you can use the controls in the Viewing Tile Toolbar to handle the alarm.

![Figure 30 - Alarm displayed in Viewing Tile](image)

**Figure 30 - Alarm displayed in Viewing Tile**

To Accept an Alarm Directly
Click the **Accept** button.
Accepting an alarm means that you are taking responsibility for handling it – it is no longer shown to other recipients.

To Snooze an Alarm Directly from the Tile Displaying It
Click the **Snooze** button

**To Clear an Alarm Directly from the Tile Displaying It**
Click the **Clear** button
3.7.1.3 Handling alarms from the Alarms Pane

You can click the Alarms Pane Tab, and use the icons in the Alarms Pane Toolbar to handle alarms in that pane.

![Figure 31 - Handling alarms in the Alarms Pane](image)

- To Display the Alarm in the Next Available (Unarmed) Tile:
  - Double-click the entry in the table.

- To Accept the Alarm:
  - Click the Accept alarm button.

- To Forward an Alarm:
  - Click the Forward button.
  - Select the person to whom it must be forwarded from the list of users that is presented.

- To Snooze the Alarm:
  - Click the Snooze button.

- To Show a Procedure for the Alarm:
  - Click the Show procedure button.

- To Clear the Alarm:
  - Click the Clear alarm button.

3.7.2 How to trigger alarm manually

1. Open the Alarms tab by clicking on the Alarms Tab Icon.

2. Click the Trigger an Alarm button.

3. The Alarm Trigger dialog window opens.
4. Select the required alarm from the Alarm types tree
5. Add Description if required
6. Click Activate

3.8 How to use the file playback pane
The File Playback pane allows you to select files and folders that have been stored on the system, then add them to the File Playback list. From there, they may be played in the same way as files are played from the Query Results pane.

3.8.1 Adding clip/s or folders
1. Click the File Playback icon to open the pane.
2. Use the Toolbar icons Add Clip and/or Add Folder to open a File Selection window from which you can select content to be added to the list.
3. Add folders and/or files (clips) by selecting them and clicking **Open**. The selected clips are added to the File Playback list.

3.8.2 **Authentication**

Files which were exported using the .dvt or .avi format contain checksum information to be able to prove their integrity. You can validate that a file is unmodified by selecting it in the File Playback list and clicking the **Validate** icon.

3.8.3 **Play single**

To play a single item in the File Playback list, select it and click the **Play** icon.

3.9 **How to login to additional systems**

A ControlCenter can be connected to multiple systems running on Latitude, Horizon and/or Meridian platforms.

If you have a user name and password for more than one system, you can log in to additional systems and view all the entities and perform all actions for which you have authorization.

To log into another system, go to the **Main Menu** and click **File/System/Connect**.

**Note:** Some features are only available when connected to Latitude systems.
The system opens a Login window, and you can enter a user name and password to connect to another system.

When your user name and password are accepted, your Navigation Tree shows the additional system.
Figure 36 - ControlCenter connected to a 2nd system
3.10 Using Keyboards

Either a CCTV keyboard or the typical PC keyboard can be used to perform many ControlCenter tasks.

The **System Details** area of the Viewing Pane Toolbar shows details of the current ControlCenter, and displays parameters entered by the user when using a keyboard.

All entities (cameras, camera sequences, tiles, layouts, monitors, etc.) have a unique ID represented by a logical number. The ID is shown as a number in parentheses \((n)\) in the Navigation tree.

In order to display a camera in particular viewing tile, the user first sets up the required Layout, chooses the required Active tile, and then selects the required entity to be displayed in that tile.

### 3.10.1 CCTV Keyboard

Using the CCTV keyboard, you can control the ControlCenter application (both local and remote).

The following tables list the CCTV keyboard commands supported by the system.
3.10.1.1 Selecting and Controlling Entities and Tiles

All entities (cameras, camera sequences, tiles, layouts, monitors, etc.) have a unique ID represented by a logical number (xxxx).

<table>
<thead>
<tr>
<th>Function</th>
<th>Command</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select an analog monitor or ControlCenter viewing pane</td>
<td>Monitor number and MON</td>
</tr>
<tr>
<td>Select a viewing tile</td>
<td>Monitor number and MON</td>
</tr>
<tr>
<td>Display a camera on the selected monitor or tile</td>
<td>Camera number and CAM</td>
</tr>
<tr>
<td>Toggle through viewing pane layouts with 4-8 tiles</td>
<td>2x2</td>
</tr>
<tr>
<td>Toggle through viewing pane layouts with 9-13 tiles</td>
<td>3x3</td>
</tr>
<tr>
<td>Toggle through viewing pane layouts with 16 tiles</td>
<td>4x4</td>
</tr>
<tr>
<td>Expand currently selected tile to fill viewing pane</td>
<td>MON</td>
</tr>
<tr>
<td>Clear currently selected tile or analog monitor</td>
<td>CLEAR</td>
</tr>
<tr>
<td>Clear contents of the keyboard screen’s ENTER field</td>
<td>CLEAR</td>
</tr>
<tr>
<td>Display a sequence on the selected monitor or tile</td>
<td>Sequence number and SEQ</td>
</tr>
<tr>
<td>Display a sequence on the selected monitor or tile</td>
<td>Press SEQ twice</td>
</tr>
<tr>
<td>Hold a sequence</td>
<td>NEXT</td>
</tr>
<tr>
<td>Switch to the next camera of a paused sequence</td>
<td>LAST</td>
</tr>
<tr>
<td>Display an instant replay on the selected analog monitor (not available on a viewing tile when using the keyboard)</td>
<td>INST. REPLAY (See additional table for more instant replay controls)</td>
</tr>
<tr>
<td>Bookmark the selected file</td>
<td>BOOKMARK</td>
</tr>
</tbody>
</table>
### 3.10.1.2 Controlling Playbacks

Following are the CCTV keyboard commands used to control playbacks:

<table>
<thead>
<tr>
<th>Function</th>
<th>Command</th>
</tr>
</thead>
<tbody>
<tr>
<td>Play</td>
<td>IRIS OPEN</td>
</tr>
<tr>
<td>Pause</td>
<td>IRIS CLOSE</td>
</tr>
<tr>
<td>Rewind</td>
<td>FOCUS NEAR or joystick left</td>
</tr>
<tr>
<td>Fast Forward</td>
<td>FOCUS FAR or joystick right</td>
</tr>
<tr>
<td>Increase playback speed</td>
<td>IRIS OPEN</td>
</tr>
<tr>
<td>Decrease playback speed</td>
<td>AUX ON</td>
</tr>
</tbody>
</table>

### 3.10.1.3 Controlling PTZ Domes

Following are the CCTV keyboard commands used to control PTZ domes:

<table>
<thead>
<tr>
<th>Function</th>
<th>Command</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pan left/right</td>
<td>Joystick left/right</td>
</tr>
<tr>
<td>Tilt up/down</td>
<td>Joystick up/down</td>
</tr>
<tr>
<td>Zoom in/out</td>
<td>Twist joystick clockwise/counter-clockwise</td>
</tr>
<tr>
<td>Call a dome preset</td>
<td>Preset number and PRESET</td>
</tr>
<tr>
<td>Call a dome pattern</td>
<td>Pattern number and PATTERN</td>
</tr>
<tr>
<td>Send a dome to its home position</td>
<td>HOME</td>
</tr>
<tr>
<td>Lock/unlock a dome</td>
<td>LOCK</td>
</tr>
</tbody>
</table>
### Common Tasks

<table>
<thead>
<tr>
<th>Function</th>
<th>Command</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flip a dome’s position</td>
<td>FLIP</td>
</tr>
<tr>
<td>Control a dome’s iris</td>
<td>Press and hold IRIS OPEN or IRIS CLOSE</td>
</tr>
<tr>
<td>Focus a dome</td>
<td>Press and hold FOCUS FAR or FOCUS NEAR</td>
</tr>
<tr>
<td>Utilize a dome’s auxiliary controls</td>
<td>Aux number and AUX ON or AUX OFF</td>
</tr>
</tbody>
</table>

### 3.10.1.4 Controlling the Viewing Window

<table>
<thead>
<tr>
<th>Function</th>
<th>Command</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display Help File</td>
<td>1 + FUN</td>
</tr>
<tr>
<td>Toggle PIP views</td>
<td>2 + FUN</td>
</tr>
<tr>
<td>Show/Hide PIP window</td>
<td>3 + FUN</td>
</tr>
<tr>
<td>Switch Playback window to Live view</td>
<td>5 + FUN</td>
</tr>
<tr>
<td>Expand focused Layout to Full Screen</td>
<td>11 + FUN</td>
</tr>
<tr>
<td>Expand focused Tile to Full Screen</td>
<td>12 + FUN</td>
</tr>
</tbody>
</table>

### 3.10.2 PC QWERTY Keyboard

**Note:** The keypad NUM LOCK must be on for the following commands.

Following are the PC keyboard commands used to select entities and tiles by their IDs:

<table>
<thead>
<tr>
<th>Function</th>
<th>Command</th>
<th>Function</th>
<th>Command</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select monitor or tile xxxx</td>
<td>xxxx and keypad ‘.’</td>
<td>Pan left</td>
<td>Shift and Left arrow</td>
</tr>
<tr>
<td>Select camera or layout xxxx</td>
<td>xxxx and keypad ENTER</td>
<td>Pan right</td>
<td>Shift and Right arrow</td>
</tr>
<tr>
<td>Select camera sequence xxxx</td>
<td>xxxx and CTRL and keypad ENTER</td>
<td>Tilt up</td>
<td>Shift and Up arrow</td>
</tr>
<tr>
<td>Select system xxxx</td>
<td>xxxx and M</td>
<td>Tilt down</td>
<td>Shift and Down arrow</td>
</tr>
<tr>
<td>Function</td>
<td>Command</td>
<td>Function</td>
<td>Command</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>--------------------------------</td>
<td>---------------------------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>Clear led display</td>
<td>ESC</td>
<td>Zoom in</td>
<td>Shift and keypad ‘/’</td>
</tr>
<tr>
<td>Selected tile - Arm/disarm toggle</td>
<td>A</td>
<td>Zoom out</td>
<td>Shift and ‘*’</td>
</tr>
<tr>
<td>Selected tile - Expand/collapse toggle</td>
<td>keypad ‘.’</td>
<td>Decrease PTZ speed</td>
<td>Shift and keypad ‘-’</td>
</tr>
<tr>
<td>Remove displayed entity</td>
<td>Backspace</td>
<td>Increase PTZ speed</td>
<td>Shift and keypad ‘+’</td>
</tr>
<tr>
<td>Camera - Add bookmark</td>
<td>B</td>
<td>Go to preset</td>
<td>xxxx and Shift and Insert</td>
</tr>
<tr>
<td>Camera - Start/stop recording</td>
<td>R</td>
<td>Set preset</td>
<td>xxxx and CTRL and Insert</td>
</tr>
<tr>
<td>Camera - Talk (push-to-talk)</td>
<td>, (comma)</td>
<td>Run pattern</td>
<td>xxxx and Shift and Home</td>
</tr>
<tr>
<td>Camera - Listen (on/off)</td>
<td>. (period)</td>
<td>Record pattern (start/stop)</td>
<td>xxxx and CTRL and Home</td>
</tr>
<tr>
<td>Camera sequence - Start/stop</td>
<td>CTRL and Up arrow</td>
<td>Auxiliary On</td>
<td>xxxx and Shift and Page up</td>
</tr>
<tr>
<td>Camera sequence - next camera</td>
<td>CTRL and Right arrow</td>
<td>Auxiliary Off</td>
<td>xxxx and Shift and Page up</td>
</tr>
<tr>
<td>Camera sequence - next camera</td>
<td>CTRL and Left arrow</td>
<td>Open iris</td>
<td>Shift and Delete</td>
</tr>
<tr>
<td>Trigger alarm</td>
<td>xxxx and CTRL and A</td>
<td>Close Iris</td>
<td>CTRL and Delete</td>
</tr>
<tr>
<td>Acknowledge alarm on selected tile</td>
<td>CTRL and Space</td>
<td>Focus near</td>
<td>Shift and End</td>
</tr>
<tr>
<td>Instant Replay on selected tile</td>
<td>I</td>
<td>Focus far</td>
<td>CTRL and End</td>
</tr>
<tr>
<td>Play/Pause</td>
<td>G</td>
<td>Lock</td>
<td>Shift and L</td>
</tr>
<tr>
<td>Rewind</td>
<td>K</td>
<td>Go Home</td>
<td>Shift and H</td>
</tr>
<tr>
<td>Fast Forward</td>
<td>L</td>
<td>Flip</td>
<td>Shift and F</td>
</tr>
<tr>
<td>Increase playback speed</td>
<td>Shift and keypad ‘+’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Common Tasks

<table>
<thead>
<tr>
<th>Function</th>
<th>Command</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decrease playback speed</td>
<td>Shift and keypad ‘-’</td>
</tr>
</tbody>
</table>

#### Controlling the Viewing Window

<table>
<thead>
<tr>
<th>Function</th>
<th>Command</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toggle PIP views</td>
<td>F2</td>
</tr>
<tr>
<td>Show/Hide PIP window</td>
<td>F5</td>
</tr>
<tr>
<td>Switch Playback window to Live view</td>
<td>F5</td>
</tr>
<tr>
<td>Expand focused Layout to Full Screen</td>
<td>F11</td>
</tr>
<tr>
<td>Expand focused Tile to Full Screen</td>
<td>F12</td>
</tr>
</tbody>
</table>

### 3.11 Building a Case in CaseBuilder Mode

The CaseBuilder allows you to put together and label the various components of a case and then save that case to the CaseBuilder server.

**A created case has the following settings and properties:**

1. **Case Name** - a short descriptive name of the case
2. **Serial number** - a unique ID number assigned to the case when it is saved.
3. **Case Time** - The range of dates (times) when a case began and when it was closed
4. **Creation Time** - The range of dates from when a case was first created to the last time a case was modified
5. **Creator Name** - The name of the logged in user who created the case.
6. **Custom Fields** - a group of three fields that allow the entry of values for each case. **Note:** The CaseBuilder Server definition in the AdminCenter allows these fields to be given meaningful names.
7. **Description** - an optional field for entering a description of the case.
8. **Status** - Specifies the status of the case and whether it has been exported (Created/Exported Successfully/Export failed)

**In this section the following topics are discussed:**

- [Opening a Saved Case in CaseBuilder Mode](#)
- [Adding an Existing Clip to a Case and Adding a Clip Segment to a Case](#)
Adding an Existing Clip Bookmark to a Case
Adding an Existing Alarm to a Case
Adding a New Snapshot (on-the-fly) to a Case
Adding an Existing Incident to a Case
Adding a File to a Case (documents, images, exports, etc.)
Adding a URL to a Case
Opening and Viewing an Exported Case

3.11.1 Adding an Existing Clip to a Case
You can add an entire existing recorded clip recorded by an Archiver, by searching for the clip and adding it to a case.

A clip that is added to a case has the following settings and properties:

- **Clip File Name** - a short descriptive name of the clip
- **Clip Time** - The range of Date/Times that mark the beginning and end of a clip.
- **Scene Name** and **Logical ID** - this is the scene that was the video source which the clip was recorded from.
- **File Size** - The size in MB of the video clip
- **Description** - an optional field for entering a description of the clip.

**Tip:** If the clip only contains small segments of interest that are useful to the case, consider adding only the segment. This can be done using bookmarks (Bookmark query) and adding them to the case or by marking the in and out times of the clip (Viewing the clip and setting in and out times).

For more information, see Adding a Clip Segment to a Case.

To Add an Existing Archiver Recorded Clip to a Case:

1. Click the Side-Bar menu, select *CaseBuilder* and then on the bottom toolbar, click ![search](image)
   and do the following:
   a. In the Query pane, from the Search for menu, select *Clip*.
   b. Select the recorded source scene, by marking the tree entities.
   c. From the Date and Time menu, select a preset time option or select *Manual selection*
      and then enter From date and time and To date and time.
   d. Click **Go**.

2. From the results that display in the Query Results pane, select the clip you want to add.

3. Click **Add to case** and if prompted about the duration of the clip, click **Yes** to add the clip.
   (Clip length exceeds the Tools ▶ Options ▶ CaseBuilder duration limit.)
   The case will display in the CaseBuilder navigation tree and in the CaseBuilder layout.

4. In the Clip Properties, enter an optional new name in the Clip File Name field and option description in the Description field.

5. Click ![verified](image).
3.11.2 Adding an Existing Clip Bookmark to a Case
You can search and add existing video bookmarks to a case which will include the video segment that surrounds the bookmark. This will be a clip whose length is determined by the settings defined in the Options CaseBuilder settings.

A bookmark added to a case includes the following features and properties:
- **Clip File Name** – the Latitude bookmark name.
- **Description** - a long description for the bookmark
- **Bookmark time** - The time and date stamp that the bookmark represents on the recorded clip timeline
- **Related clip** - the video clip from the scene before and after the bookmark (This shows a child entity of the bookmark and contains Case Clip Properties)

To add an existing Bookmark to a case:
1. Click the Side-Bar menu arrow and from the Side-Bar menu, select *CaseBuilder*.
   a. From the Explorer area on the bottom toolbar, click and do the following in the Query pane:
   b. From the Search for menu, select *Bookmark*.
   c. Select the recorded source scene, by marking the tree entities.
   d. From the Date and Time menu, select a preset time option or select Manual selection and then enter From date and time and To date and time.
   e. Click *Go*.
2. From the results that display in the Query Results pane, select the Bookmark you want to add.
3. Click *Add to case*.
   The bookmark and associated clip appear in the CaseBuilder Navigation Tree.
4. In the CaseBuilder Navigation Tree, double click the bookmark
   The Bookmark properties display in the CaseBuilder layout.
   **Tip:** If the video playback does not show properly, it may help to minimize and restore the ControlCenter window to refresh the display.
5. Make any optional changes to the Description and Bookmark Name properties and then click .

3.11.3 Adding a New Snapshot (on-the-fly) to a Case
You can add to a case a snapshot image of a video loaded in the CaseBuilder display window.

An added Snapshot has the following features and properties:
- **Snapshot File Name** – Name for the snapshot image.
- **Description** - Optional short description area for the image
To add an on-the-fly snapshot to a Case:

1. From the Side-Bar menu, select CaseBuilder and then on the bottom toolbar, click and do the following:
   a. From the Search for menu, select Clip.
   b. Select the recorded source scene, by marking the tree entities.
   c. From the Date and Time menu, select a preset time option or select Manual selection and then enter the From date and time and the To date and time.
   d. Click Go.

2. From the results that display in the Query Results pane, click and drag the clip you want to add into the viewing window of the CaseBuilder Layout. The clip will load in the CaseBuilder Layout window, automatically display the Timeline pane, and start playing.

3. Right-click the video playing in the CaseBuilder window and select Add snapshot to case. The snapshot image appears in the CaseBuilder Navigation Tree.

4. In the CaseBuilder Navigation Tree, double click the snapshot image. The Case Snapshot Properties appear in the CaseBuilder Layout and the image displays in the CaseBuilder window.

5. Make any optional changes to the Description and Snapshot File Name properties and then click.

3.11.3.1 Adding an Existing Alarm to a Case

You can add existing "cleared" alarms to a case. It should be noted that Active, Snoozed, and Accepted have not been considered acknowledged and are not available to be searched or added to a case.

An added Alarm in a case includes the following information about the alarm:

- **Alarm Instance Name** – The name of the Alarm. (By default this is the configured alarm type.)
- **Triggered Time** – The time that the Alarm became active and was initiated
- **Acknowledged Time** – The time the Alarm was cleared.
- **Acknowledged By** – The logged in user who Cleared the alarm.
- **Description** - optional description
• **Linked Procedure URL** - If a procedure URL this will be a child entity of the Alarm in the case and can be clicked by the user to see the URL content in the viewing pane.

**Tip:** If you have a linked procedure that is a HTML page on the network and the viewer of the case will not have access (link will be broken), you may want to add this content as a file to the case.

**To Add an Existing Alarm to a Case:**
1. Click the Side-Bar menu arrow and from the Side-Bar menu, select *CaseBuilder*.
2. From the Explorer area on the bottom toolbar, click ![search](image) and do the following in the Query pane:
   a. From the Search for menu, select *Alarm*.
   b. Select the Alarm type from the Query tree.
   c. From the Date and Time menu, select a preset time option or select Manual selection and then enter From date and time and To date and time.
   d. Click Go.
3. From the results that display in the Query Results pane, select the Alarm you want to add.
4. Click *Add to case*.
   The Alarm and any associated Procedure appear in the CaseBuilder Navigation Tree.
5. In the CaseBuilder Navigation Tree, double click the Alarm.
   The Alarm Properties display in the CaseBuilder layout.
6. Make any optional changes to the Description and Alarm Instance Name properties and then click *Save*.
7. If a procedure URL for the alarm exists, double click the URL.
   The Case URL Properties display in the CaseBuilder layout.
8. Make any optional changes to the Description and URL properties and then click ![save](image).

### 3.11.3.2 Adding a Clip Segment to a Case

You can select and add only partial segments of an existing Archiver recorded clip to a case. Unlike the bookmark addition, that takes a predefined (setting in CaseBuilder options) range of time around the bookmark, the CaseBuilder feature allows you to manually select the times of the clip you want to add.

This can be done in two ways, either by marking a CaseBuilder displayed clip in the timeline pane using Mark In and Mark out or by setting the Start Time and End Time in the CaseBuilder Layout Clip Time menus.
To Add a Clip Segment to a Case:

1. From the Side-Bar menu, select CaseBuilder and then on the bottom toolbar, click and do the following:
   a. From the Search for menu, select Clip.
   b. Select the recorded source scene, by marking the tree entities.
   c. From the Date and Time menu, select a preset time option or select Manual selection and then enter From date and time and To date and time.
   d. Click Go.

2. From the results that display in the Query Results pane, drag the clip you want to add into the viewing window of the CaseBuilder Layout. The clip loads in the CaseBuilder Layout window, automatically displaying the Timeline pane and start playing.

Do one the following:
   a. Mark the in/start time, do one of the following:
      - From the CaseBuilder Layout Start Time menu, select the Start Time date and time.
      - In the Timeline, click , click-and-drag the playhead line to the start time and click (playhead being dragged)
   a. Mark the out/end time, do one of the following:
      - From the CaseBuilder Layout End Time menu, select the End Time date and time.
      - In the Timeline, drag the red playhead line to the end time and click

3. Click Add to case and if prompted about the duration of the clip, click Yes to add the clip. (Clip length exceeds the Tools ▶ Options ▶ CaseBuilder duration limit.)

   The case will display in the CaseBuilder navigation tree and in the CaseBuilder layout.

4. In the Clip Properties, enter an optional new name in the Clip File Name field and option description in the Description field.

5. Click

3.11.4 Adding an Existing Incident to a Case

You can add an existing Incident to a case. When you add an incident, all supporting information attached that incident is also attached. If there is a bookmark associated with the Incident, the incident will include the video segment surround the bookmarks as defined in the Options CaseBuilder settings.

An added incident to a case includes the following features and information:
   - Incident Name - the name of the incident
   - Description - Descriptive text related to or describing the incident.
Common Tasks

- Incident Time - The time and date the incident occurred.
- Supporting info - These are added as child entities, for example a bookmark and the bookmark supported video clip.

To add an existing incident to a case:

1. From the Side-Bar menu, select *CaseBuilder* and then on the bottom toolbar, click and do the following:

2. From the Search for menu, select *Incident*.
   a. Select the source scene, by marking the tree entities.
   b. From the Date and Time menu, select a preset time option or select Manual selection and then enter the "From" date and time and the "To" date and time.
   c. Click *Go*.

2. From the results that display in the Query Results pane, select the Incident you want to add.

3. Click *Add to case*.
   The Incident and any associated child entities appear in the CaseBuilder Navigation Tree.

4. In the CaseBuilder Navigation Tree, double click the Incident.
   The Incident Properties display in the CaseBuilder layout.

5. Make any optional changes to the Description and Incident Name properties, then click *Save*.

6. If child entities for the Incident exist, double click each and modify the properties as needed in the CaseBuilder layout.

7. When finished, click .

3.11.5 Adding a File to a Case (documents, images, exports, etc.)

You can include files in a case. Files that are included in a case can be exported and packaged along with the other case materials. Once a file is included by adding it to a case, it will appear in the case tree and can be double clicked to either launch the file in the ControlCenter CaseBuilder Layout (if a supported HTML file type) or via the workstation program associated to the file extension.
To add a file to a case:
1. From the Side-Bar menu, select *CaseBuilder*.
2. From CaseBuilder Navigation Tree Toolbar, click the Add icon and select File.

![Add File Icon]

An Open dialog appears.

3. In the Open file dialog, select the file you want to add and click *Open*.
   The selected file appears in the CaseBuilder Navigation Tree.

4. Click ![Open Icon]
   
   **Note:** If you double click the file in the CaseBuilder Navigation Tree, it will either open in the CaseBuilder layout window (HTML based content) or the application assigned to open that file extension on the workstation will launch and open the file.

### 3.11.5.1 Adding an Existing Snapshot to a Case (Monitor-Tile)

The CaseBuilder allows adding snapshots on the fly to the Case directly from the CaseBuilder Layout window, however there may be snapshots that were previously taken during monitoring.

The CaseBuilder does not allow adding previously taken snapshots to the case as "snapshots" but they can be added as files.

Snapshots taken during monitoring are stored in the location specified in the Options dialog.

**To locate the folder in which your snapshots are saved**

- From the main menu, select Tools/Options.
- In the Options dialog, click Export/Snapshot. The snapshot option settings are displayed.
- The Saved Location field displays the path of the folder in which your snapshots are saved.

**To add an existing snapshot as a file to a case:**

1. From CaseBuilder Navigation Tree Toolbar, click the Add icon and select File

![Add File Icon]

2. An Open dialog appears.

3. In the Open file dialog, select the file you want to add and click *Open*.
   The selected file appears in the CaseBuilder Navigation Tree.

4. Click ![Open Icon]
   
   **Note:** If you double click the file in the CaseBuilder Navigation Tree, it will either open in the CaseBuilder layout window (HTML based content) or the application assigned to open that file extension on the workstation will launch and open the file.
3.11.6 Adding a URL to a Case
You can add a URL link to a case. One a URL link is added to a case you can add a description as needed.

You can enter any valid HTML HREF/URL (mailto: file:, etc.)

**To add a URL to a case:**
1. From the Side-Bar menu, select CaseBuilder.
2. From CaseBuilder Navigation Tree Toolbar, click the Add icon and select URL.
   An Add URL dialog appears.
3. In the Add URL dialog, select type the URL address you want to add and click OK.
   The URL appears in the CaseBuilder Navigation Tree.
4. Click .
   **Note:** If you double click the file in the CaseBuilder Navigation Tree, it will either open in the CaseBuilder layout window (HTML based content) or the application assigned to open that file extension on the workstation will launch and open the file.

3.11.7 Opening a Saved Case
You can open an existing case that you previously saved by searching the CaseBuilder stored cases and loading it from the search results. For information on opening and viewing an exported case, see Opening and Editing an Exported Case.

**To open a saved case:**
1. Click the Side-Bar menu arrow and from the Side-Bar menu, select CaseBuilder and in the CaseBuilder Query Pane do the following:
   a. Enter optional search parameters:
      - Enter a full or partial case name in the Case Name field.
      - Enter a full or partial serial number in the Serial Number field.
      - From the Created by menu, mark one or more creator sources.
   b. In the Case time range select:
      - Start Time date
      - End Time date
      - Start Time hour and minute
      - End Time hour and minute
   c. In the Description field, enter an optional description text.
   d. Click Go.
2. From the results that display in the Query Results pane, double-click the case you want to open.
   The case will display in the CaseBuilder navigation tree and in the CaseBuilder layout.
3.11.7.1 Opening and Viewing an Exported Case

You can open and view an exported case file for viewing and playback. An exported case file does not allow editing.

**To open and view an exported case file:**
1. Click the Side-Bar menu, select CaseBuilder.
2. From the CaseBuilder Navigation Tree Toolbar, click .
   The Open Exported Case dialog appears.
3. In the Open Exported Case dialog, select case file and click Open.
4. Use the CaseBuilder Navigation Tree to select and view the components in the CaseBuilder Layout.
   Note: The attached files of a case can be found in the compressed file Documents folders.

3.11.7.1.2 Adding an Exported DVT Clip to a Case

The CaseBuilder allows adding video clips to a Case from the Archiver recordings, via search results. This is limited to the Archivers to which the logged-in user of the ControlCenter has access.

If a clip needs to be added from a scene source other than those available, this can be done by first exporting the file, and then attaching it to the case as a file.

It should be noted that DVT files that have privacy mask passwords will need the relevant passwords if they are to be opened by remote users. Thus you will need to send the passwords needed for the Privacy Mask whenever needed.

You may want to create and include a text readme file with the appropriate information and passwords as needed.

The CaseBuilder does not allow adding exported clips to the case as "Clips" but they can be added as "files".

**To add an exported video clip file to a case:**
1. From the Side-Bar menu, select CaseBuilder.
2. From CaseBuilder Navigation Tree Toolbar, click and select File.
   An Open dialog appears.
3. In the Open file dialog, select the exported clip file you want to add and click Open.
   The selected file appears in the CaseBuilder Navigation Tree.
4. Click .
   Note: If you double click the file in the CaseBuilder Navigation Tree, it will either open in the CaseBuilder layout window (HTML based content) or the application assigned to open that file extension on the workstation will launch and open the file.
4 Additional Technical Information

Table of Navigation Tree Icons
Viewing Tile Action Buttons
Tools Options Menu
Remote Control Options
Alarm Display Mode

4.1 Remote Control Options

Note: Only available when connected to a Latitude system

The Remote Control feature is a virtual system formed by joining multiple independent ControlCenter clients together. One of the systems acts as the Remote Control host. Remote Control allows ControlCenter clients on the host system to view video sources belonging to multiple independent ControlCenter installations simultaneously as if they were on the same system.

Once connected to a remote Directory, the ControlCenter Server creates a local representative for each remote entity it can access. From the local user's point of view, remote entities behave exactly like real entities, with only few limitations. The remote entities are indicated in the entity trees with a yellow arrow superimposed on the entity icon.

The configuration of the real entities cannot be done through the remote entities. The local attributes of the remote entities can be changed (such as logical ID, entity name, entity description).

You can access and control the remote ControlCenter via the Navigation Tree.

You can control a remote ControlCenter via a CCTV keyboard or a PC keyboard by selecting the desired monitor of the desired remote ControlCenter.

4.2 Alarm Display Mode

Flat Mode

Flat mode is a simple method of showing alarms one after another (as they occur in priority sequence). Each alarm is sent to the next available ‘armed for alarms’ tile/s. If an alarm has more than one associated video, all available ‘armed for alarms’ tiles are used. If an alarm has too many associated videos for the available tiles, the available tiles are used and the remaining videos for that alarm are not displayed. When alarms are cleared, the next alarm in the queue is displayed. There is no cycling of scenes. All the displayed scenes of an alarm remain in their tiles until that alarm is cleared.

Alternative Modes

Note: Only available when connected to a Latitude system

In addition to Flat mode, the system supports two alternative modes - Block and Salvo, for handling the situation where two or more alarms are automatically loading into a Layout that has one or more Tiles enabled with ‘Armed for Alarms’.
**Block Mode**: All scenes associated with an alarm type are shown, in sequence, in one tile. You can see information about multiple alarms at the same time, if you have more than one tile ‘armed for alarms’.

**Salvo Mode**: Only one alarm is displayed at any one time. As many scenes as possible of that alarm are displayed on the available ‘armed for alarms’ tiles and they remain there for the ‘dwell time’ of that alarm. Provided all scenes for the alarm have been displayed, the next alarm in the queue according to priority is displayed. If you do not have enough ‘armed for alarms’ tiles for the scenes of one alarm to be shown, then when the alarm dwell time passes, the remaining scenes of that alarm are displayed before the next alarms appear.

**Note**: If your user settings have been set for you to work in Salvo Mode, it is important that you keep sufficient tiles ‘armed for alarms’ so that you can see all the cameras associated with an alarm.
- A -
Adaptive Streaming  7, 21, 101
Aero modes  1
Alarm Display Modes  110
Alarms Tab  4
Application Menu  5
Arm/Disarm  7
Aspect Ratio  21, 151
Audio  39

- B -
Best Practices  1
Bookmark  32

- C -
CaseBuilder  39
CCTV Keyboard  42
Clip  32
configure a tile layout  145
Content Display  10
Context Menu  7
cores  21
CPU cores  21
Customize a layout  145
Customize a tile layout  145
Customized Layouts  147

- D -
Deblocking  21
Deinterlacing  21
Dejittering  21
Digital Presets  97
Digital PTZ  140
Digital Video Recorders  109
Digital Zoom Indication  142
Digital/Optical  7
Display  7
Display Area  81
Drag and Drop  114
Draw-to-Zoom  96, 141
Draw-to-zoom with Thumbnails  96
Dual Sensor  86
Dual-Head  86
DVR  109
DVR, DVRs, Recorders  109

- E -
Events Tab  4
Explorer Area  4
Export  32
Export Status Tab  4

- F -
File Playback Tab  4
Full Screen  7

- G -
GIS Maps  105

- H -
Help  3
Help file  3

- I -
Instant Replay  7

- J -
Joystick  38

- K -
Keyboard  37

- L -
Layout Pane  144
Layout Tabs  82
Lock/Unlock  7
Login Settings  40

- M -
Manual record  7

- N -
Navigation Pane  4