

exacqVision Start User Manual

www.exacq.com

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New in version 20.12

Facial Matching registration improvements

Multiple images can be specified and automatically merged in the Facial Matching panel.

Analytic Improvements

Temperature readings are displayed in live and recorded video.

Video Analytics are now enabled on live videos by default.

System installation

Hardware and software requirements

The following table provides hardware and software requirements for installing an exacqVision system.

Table 1: Hardware and software requirements

Name	Requirements
Server	For information about the minimum server requirements, see https://www.exacq.com/products/vms_requirements.html .
	Install the server operating system and exacqVision software on a dedicated, mirrored operating system.
	The storage system can limit the performance of the server. The storage system can support twice the maximum read and write data from all cameras. To reduce the chances of catastrophic failure, use RAID 5 or RAID 6 for all video storage.
	To avoid data corruption during a power failure, use UPS-powered servers.
	CPU requirements increase when hosting multiple concurrent web clients.
	The exacqVision server application requires a maximum of 4GB. Operating systems, web hosting, or any other server application require additional memory.
	For constant video recording, use enterprise-grade hard drives.
Operating System	For information about the minimum operating system requirements, see https://www.exacq.com/products/vms_requirements.html .
	Do not port block because many edge devices use multiple or dynamic port assignments.
	Antivirus programs can only scan the operating system and exacqVision software drives. To avoid decreasing the drive performance, disable virus scanning on all video storage drives.
	If you enable automatic updates, the server stops recording when the operating system restarts.
MAC Address	The exacqVision license is based on the MAC address. Servers with NIC Teaming or other configurations that obscure the MAC address require an additional USB-based NIC to provide a licensing MAC address.

Table 1: Hardware and software requirements

Name	Requirements
Network	For the most reliable system and performance, the network administrator must observe the following best practices: <ul style="list-style-type: none"> • Use a dedicated VLAN and MIC port for all cameras. • Use a dedicated VLAN and NIC port for all storage networks. • Use fixed IP addresses for cameras and servers. ExacqVision clients can use DHCP. • Ensure that the camera-to-server network capacity is double the maximum video rate. • Ensure that the server-to-thick-client network is 1.5 times the maximum total data rate of all simultaneously viewed cameras.
Web service	The default web service for exacqVision is lighttpd. For systems where you expect more than ten connections, upgrade to Apache web services. For more information see, https://www.exacq.com/kb/?kbid=34927 . Web services increase server hardware requirements and can require installation on a dedicated web server. For more information about how to configure a web service, see https://www.exacq.com/kb/ .

Installing the server software

To install the server software, complete the following steps:

1. Download the latest server and web services installation software from <https://www.exacq.com/support/downloads.php>.
2. Run the executable file to start the installation wizard.
 - ⓘ **Note:** You must use an administrator account to run the executable file.
3. Configure the IP address, username, and password for all cameras. For more information, refer to the exacqVision IP Camera Quick Start Guide at <https://www.exacq.com/downloads/ev-ip-quickstart-0311.pdf>, or the camera manufacturer’s instruction guide.
4. Use the ping command to test camera connectivity.

Installing the client software

To install the exacqVision client software, complete the following steps:

1. Download the latest client software from <https://www.exacq.com/support/downloads.php> .
2. Run the executable file to start the installation wizard.
 - ⓘ **Note:** You must use an administrator account to run the executable file.
 - a. Click **Next** on the first wizard setup page.
 - b. Select **I accept the terms of the License Agreement**.
 - c. Select a destination folder and click **Next**.
 - d. Select the components you want to install.
 - ⓘ **Note:** If you want to install Tyco AI, ensure you select **Tyco DL**. **Tyco DL** is not selected by default.
 - e. Click **Install**.
3. Use the ping command to test server connectivity.

- ① **Note:** If the exacqVision client does not connect to the server, contact the network administrator.
- 4. Start the exacqVision software.
- 5. In the **Configuration** window, select **Add Systems** from the navigation tree.
- 6. In the **Add Systems** window, click **New**.
- 7. In the **System Information** area, enter a username and password.
- 8. Click **Apply**.
 - ① **Note:** If the new server appears in the system list table with a **Connected** status, the initial server configuration is complete. If the server does not connect, but the server connectivity was confirmed in step 3, ensure that the computer's antivirus software is not blocking communication with the server's IP addresses and ports.
- 9. Start the exacqVision server configuration.

Client and server architecture

exacqVision software has a client and server architecture. You can configure every computer as a client, or as a server, or as both a client and a server. The following definitions define these configurations:

Client

A client computer can access a remote service on another computer over a TCP/IP network. The exacqVision client software is a thick client and the web browser is a thin client.

Server

A server computer delivers services to client computers over the TCP/IP network. An exacqVision server receives and stores video from cameras; sends audio, video and data to thick clients if they request it; and can host a web server for thin clients. The exacqVision server software does not have a graphical user interface. A server can connect to multiple client computers simultaneously, within hardware limitations.

Client and server

A client and server configuration operates client and server software simultaneously. The client software can communicate with the server software on the same computer using the loopback TCP/IP address of localhost127.0.0.0. exacqVision servers are configured at the factory with a client and server configuration.

System installation checklist

To install a new exacqVision system, ensure you complete all steps in the following table .

Table 2: Mandatory installation steps for installing an exacqVision system

Step	Task
Install the hardware	See Table 1 and the hardware quick start guides.
Install the software	See Installing the server software , Installing the client software , and Table 1.
Establish initial communications	To establish initial communications between the client software and an exacqVision server, refer to the server's quick start guide.
Configure IP cameras	To configure IP cameras, refer to the <i>IP Camera Setup Quick Start guide</i> .
Configure usernames and passwords	To configure usernames and passwords, refer to the <i>IP Camera Setup Quick Start guide</i> .

Getting started

exacqVision software overview

All exacqVision servers come with the following computer administrator and user operating system accounts:

Computer administrator

Username admin

Password admin256

User

Username user

Password user5710

You do not need to log on to the server to start video recording or to communicate with other client computers. You can access the exacqVision server from a multiple of exacqVision clients, which can run from the same computer as the exacqVision sever, or from a remote computer network.

For maximum reliability, the user account functionality is limited to using the exacqVision client software. All server maintenance tasks, such as the shutdown of the exacqVision service, require you to log on to the operating system's administration account. Each operating system user account has separate exacqVision client settings. These settings include usernames, passwords, and network addresses. By default, both the user and the administrator operating system accounts have settings that provide administrator access.

Logging on to a server




When you log on to a server for the first time, complete the following steps:

1. To prevent unauthorized access or modifications to the system, change the default passwords, and record them in a secure location. For more information, see [Users window](#).
2. Configure a new user on the server. For more information about how to configure a new user, see [Users window](#).
3. Restrict user privileges and change the exacqVision client settings for the operating system user account. For more information, see [Users window](#).

Main windows

exacqVision systems have three main windows, the **Live** window, the **Search** window, and the **Config (Setup)** window.

Table 3: Main windows

Icon	Name	Function
	Live window	In the Live window, you can view live video. To open the Live window, click the Live icon.
	Search window	In the Search window, you can search recorded video. To open the Search window, click the Search icon.
	Config (Setup) window	In the Config (Setup) window, administrators and power users can configure servers. To open the Config (Setup) window, click the Config (Setup) icon.

About the exacqVision client window

In the **About exacqVision Client** window, you can update the exacqVision client software, search for new software versions, and send information to the manufacturer about how you use the system. For more information, see the following table.

Table 4: About exacqVision client window

Name	Description
Check for Updates button	Checks the exacqVision client and server for software updates.
	If the system is running the latest version of the exacqVision software, a message appears. Click YES .
	If a new version of the client software is available, the download process starts. To complete the update, after the download is complete, close all instances of the exacqVision client. Click YES and complete the setup wizard.
	To check if a server software update is available, in the toolbar click the indicator icon.
Automatically Check for Updates check box	Periodically searches for exacqVision client and server software updates and notifies the user when software updates are available. If a software update is available, it does not install automatically.
Send usage statistics check box	Sends anonymous and non-sensitive information to the manufacturer about how you use the cameras and exacqVision features.

exacqVision Help

In the **Help** menu, you can access online help, compile log files, and access internet links to new product information, subscription and registration information, and technical support and knowledge base resources. To access the **Help** menu, click the **Help** icon in the toolbar.

Compiling log files

To compile log files, complete the following steps:

1. In the toolbar, click the **Help** icon and then select **Support Diagnostics**.
2. In the **Support Diagnostics** window, from the **Server** menu select a server.
3. Select the **Show Advanced Options** check box.
4. In the **Included files** area, select the files that you want to send.
5. In the **Server Log Range** area, select a date and time range.
6. **Optional:** Select the **Send usage statistics** check box to send anonymous and non-sensitive information to the manufactures about how you use cameras and exacqVision features on the system.
7. Choose one the following options:
 - Click **Save** to compile the log files.
 - Click **Upload** to open a support request form with the log files as an attachment. Enter the appropriate information, and then click **Submit Email Form**.

System configuration

System configuration overview

In the system configuration section, you can add servers to the system, configure cameras and other devices, and apply features.

Note: For S-Series storage servers, only the storage features are available.

Add Systems window

In the **Add Systems** window, you can add servers manually or add servers by searching. For more information on the functionality of the **Add Systems** window, see Table 5.

Figure 1: Add Systems window

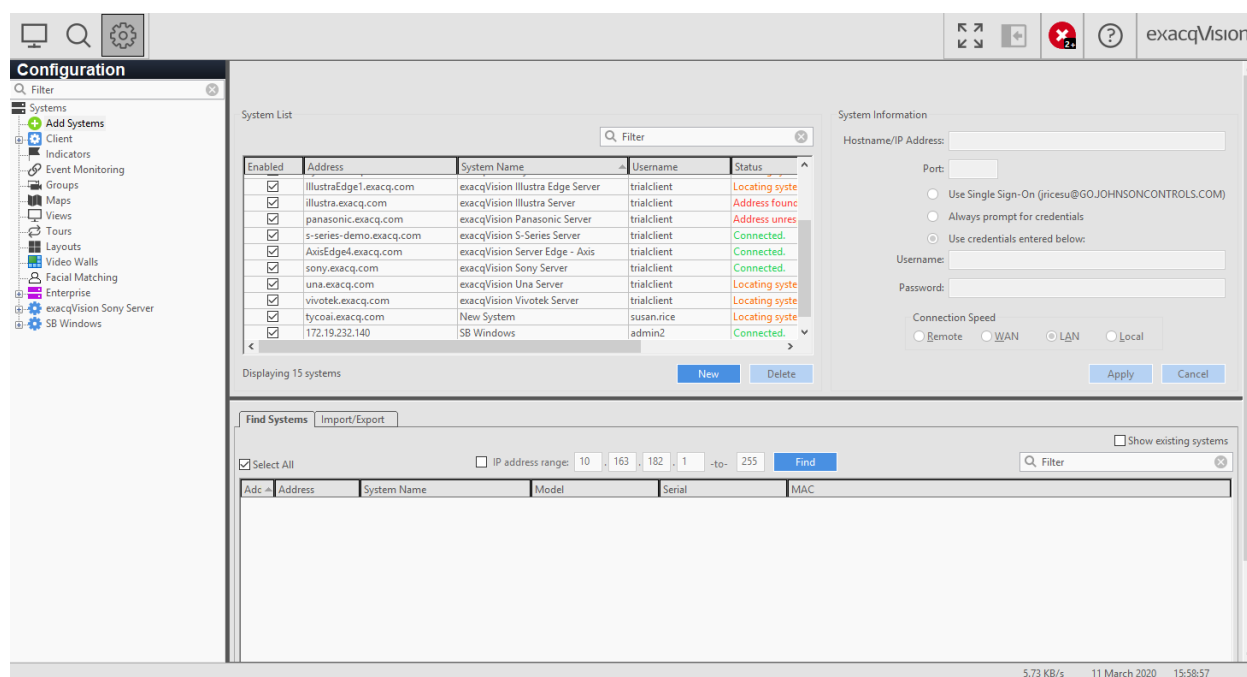


Table 5: Add Systems window

Interface element	Description
Systems list	Displays a list of available servers.
	To temporarily disconnect or reconnect a server, select or clear the server's check box.
Import/Export tab	Shares pre-configured system lists with other exacqVISION clients.
	To import a system list, enter a network location or a web site in the Manual Import area, and then click Import . This action does not delete any previously added systems.
	To export a system list that is currently on display click Export . You can then save the file to a location where another exacqVISION client can access it.
Find Systems tab	Displays a list of available servers that you can search, and then add to the system.

Manually adding a system

To add a system manually, complete the following steps:

1. In the **Systems** list pane, click **New**.
2. In the **System Information** pane, enter the system's hostname or IP address in the **Hostname/IP Address** field.
3. Enter a port number in the **Port** field. The default port number is 22609. Change this port number only if it is necessary for your network configuration.
4. Select one of the following log on methods:
 - **Use Single Sign-On** This option is only available on exacqVision Enterprise. For more information, see *exacqVision User Manual*.
 - **Always prompt for credentials** This option requires you to enter a username and password every time you start the exacqVision client.
 - **Use credentials entered below** This option automatically logs on to the system when you start the exacqVision client.
5. Enter a username and password to connect to the exacqVision system.
6. Select a connection speed option. The option you select helps to determine how much audio to buffer and the default video multistreaming speed.
7. Click **Apply**.

Adding a discovered system

About this task: For the exacqVision client to discover the recorders automatically, the recorders must reside on the same IP subnet as the exacqVision client that performs the search.

To add a system by searching, complete the following steps:

1. In the **Find Systems** tab, select the **IP address range** check box.
2. Enter an IP address range.
 - ⓘ **Note:** You can only enter the fourth digit of the IP address range.
3. Click **Find**.
4. In the **Find Systems** tab, select the systems you want to add.
5. Enter your credentials.
 - ⓘ **Note:** In exacqVision Start, the client can connect to only one exacqVision server at a time.

Configuring an automatic search for a System list update

To configure the exacqVision client to automatically check for a **System** list update, complete the following steps:

1. In the **Import/Export** tab, select **Enable**.
2. Select one of the following options:
 - **File on startup** This option automatically loads the **System** list from a specified location when you start the exacqVision client.
 - **URL on startup** This option automatically loads the **System** list from a web location when you start the exacqVision client.
3. In the **URL** field, enter a URL.
4. Click **Apply**.

Configure System window

In the **Configure System** window, you can set the basic system parameters for the client application.

System tab

On the **System** tab, you can create a name for the system, export and import settings from other systems, import and export graphics, and manage the license for the system. For more information on the functionality of the **System** tab, see Table 6.

Figure 2: System tab in the Configure System window

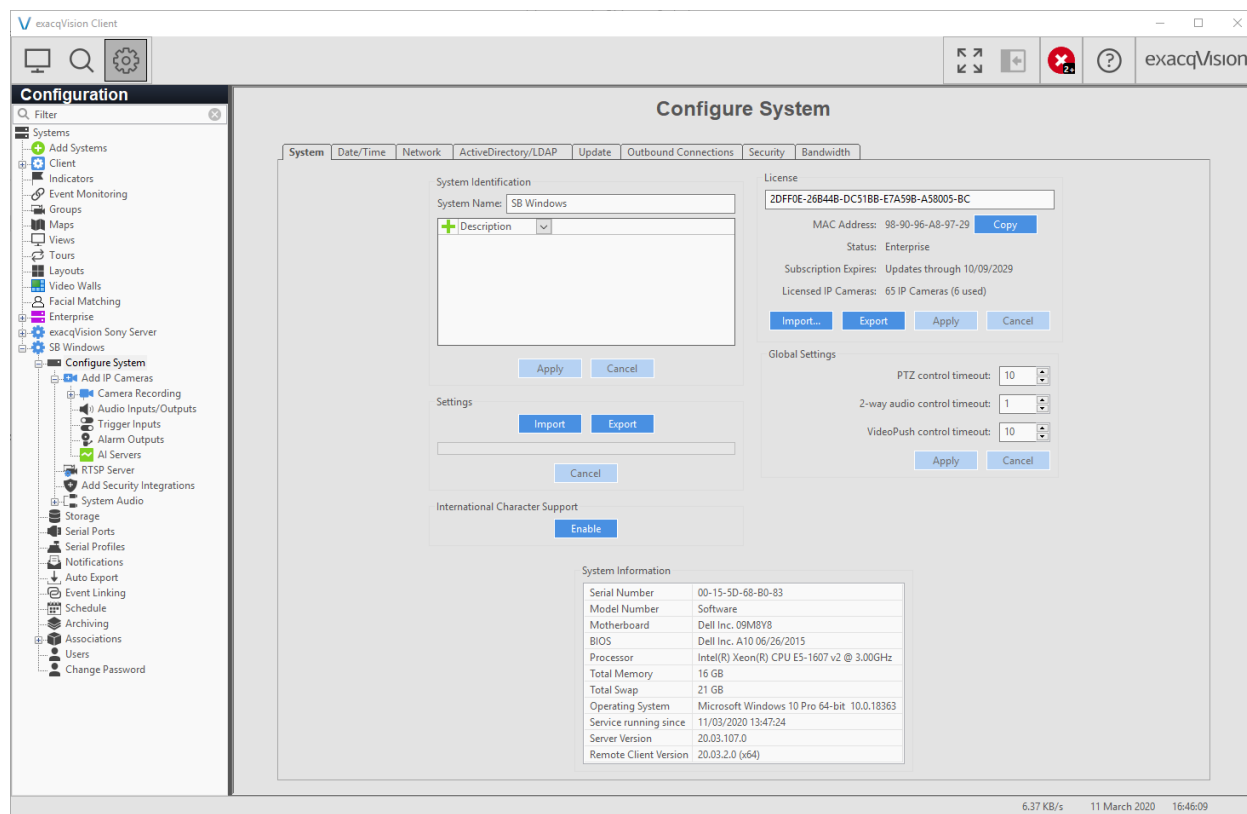


Table 6: System tab in the Configure System window

Interface element	Description
License pane	Displays the system's license information.
	To generate a license key, use the MAC address of the systems primary network adaptor.
	To obtain a license key online, contact your dealer and provide them with the system MAC address. You can then enter the license key in the License field. Unlicensed exacqVision servers can connect to only one IP device at a time.
Permanent License pane	Displays the system's permanent license information. You can view the Permanent License pane only if you apply a trial license over a permanent license. If the systems license expires, a permanent license automatically re-applies.
System Identification pane	You can use the System Identification pane to create and edit metadata fields that you can use to refine a server search.
	To add a metadata field, click the Plus icon and enter the information in the corresponding field, and then click Apply .
Settings pane	For recovery from a disaster or malfunction, you can export settings to a USB or network drive by clicking Export .
	To restore settings or to import them from another system, click Import .
International characters pane	To display international characters when entering camera and server information, click Enable , read the information and then click YES .
	You cannot reverse this action on the server, and it can cause international characters to display incorrectly on older versions of the exacqVision client.
System Information pane	Displays information about the systems hardware.
Global Settings pane	You can control PTZ control timeout , 2-way audio control timeout , and VideoPush control timeout . Use the arrows to select the required value in seconds. To update settings, click Apply .

Importing a license

To import a license, complete the following steps:

1. In the **License** area, click **Import**.
2. Select **From File** or **From exacq.com**.
3. Click **Apply**.

Date/Time tab

On the **Date/Time** tab, you can edit the date and time settings for a system's server. For more information on the **Date/Time** tab, see Table 7.

Figure 3: Date/Time tab in the Configure System window

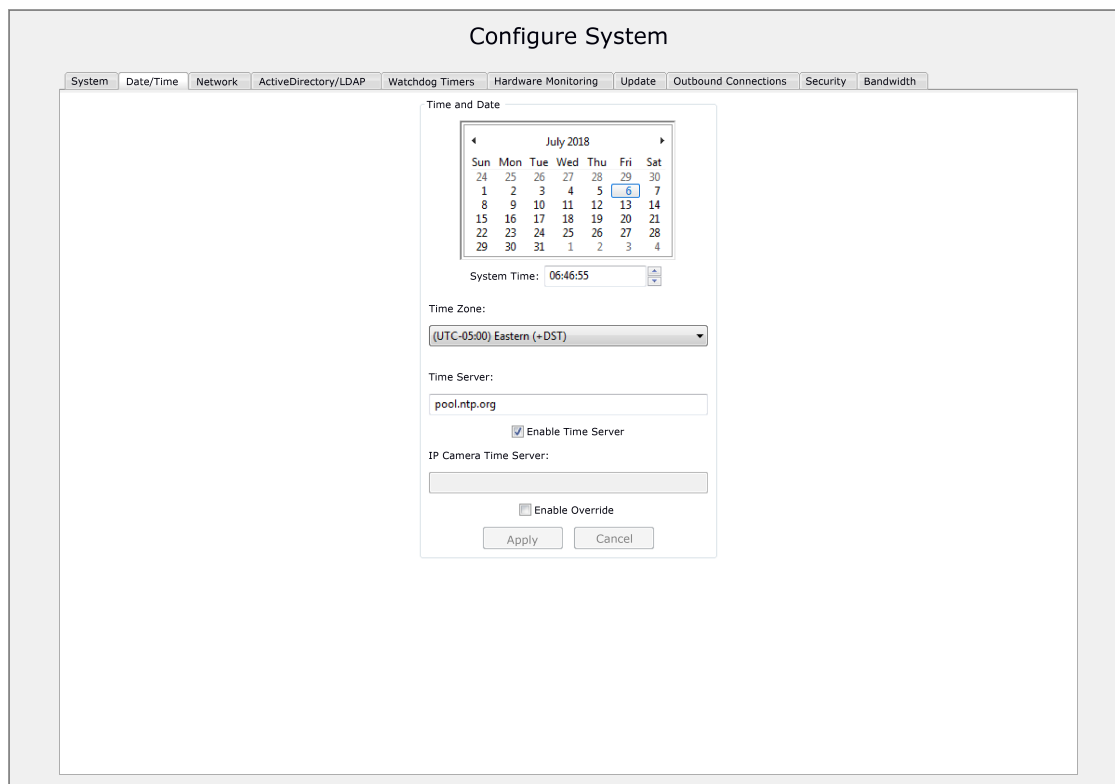


Table 7: Date/Time tab in the Configure System window

Interface element	Description
Time and Date area	Displays the date and time of the server.
Time Zone area	Displays the server's time zone and daylight saving time (DST).
Time Server area	For systems with internet access, select Enable Time Server and enter a valid internet time server in the Time Server field.
	For systems without internet access, select Enable Time Server and enter an internal time server in the Time Server field.
	For more information on the systems time server, contact your network administrator.
IP Camera Time Server area	To synchronize the IP cameras on the network with a time server other than an exacqVision server, select Enable Override , and then enter the server address in the IP Camera Time Server area.

Network tab

On the **Network** tab, you can configure the networks settings, adjust bandwidth throttling, and set the IP Reconnection time. For more information on the functionality of the **Network** tab, see Table 8.

- ❗ **Note:** On a Linux system with multiple Network Interface Cards (NIC), the Domain Name System (DNS) of the server is the same for all the NICs in the system. If you change the DNS on a single NIC, you change the DNS for all the NICs in the system .

Figure 4: Network tab in the Configure System window

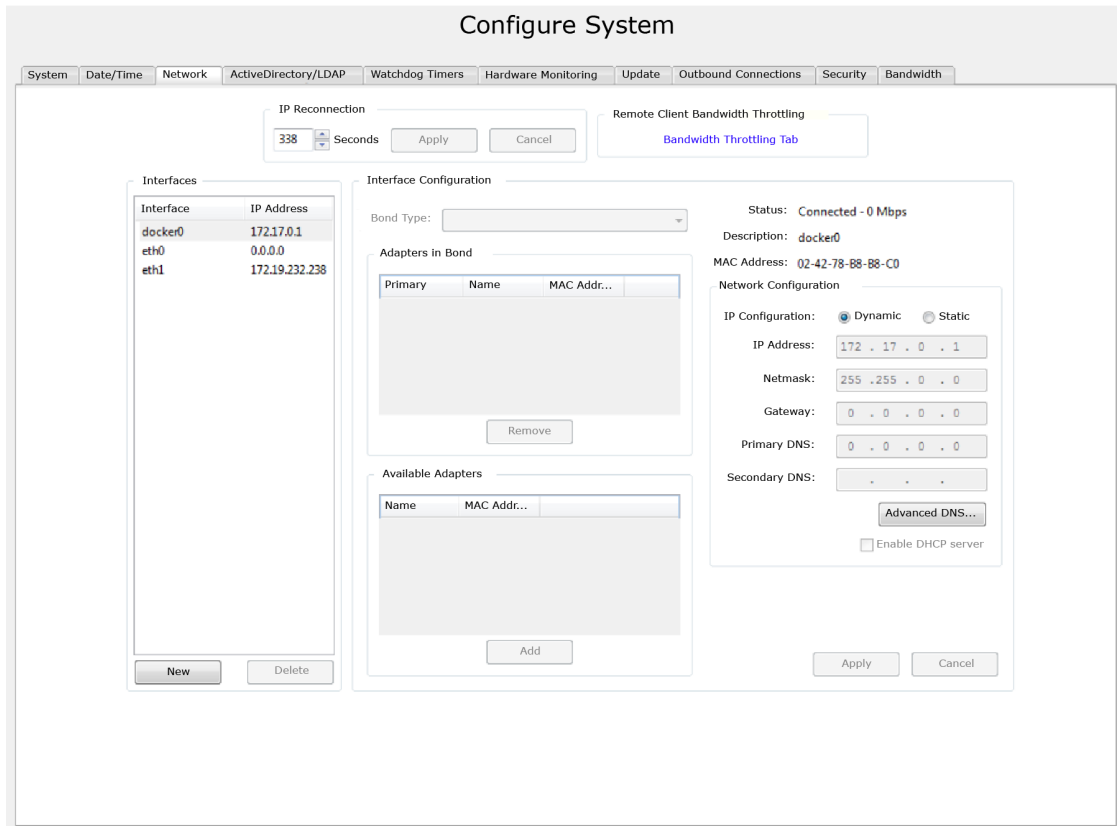


Table 8: Network tab in the Configure System window

Interface element	Description
Interfaces pane	Displays a list of network interface connection options. Systems with multiple NICs have more than one interface entry in the list. Both network interfaces can detect cameras, and you can use either for camera connections. You can also use one interface for all network traffic and purposes.
	To connect exacqVision clients, web clients and other non-camera users to a corporate network, use the Mgmt Port network. Use the Data Port network if you are only using cameras.
Interface Configuration pane	To configure an exacqVision system with a DHCP service that runs elsewhere on the network, in the Network Configuration area select Dynamic . If you select Dynamic , the IP Address , the Netmask , the Gateway , and the Primary DNS fields configure automatically.
	To configure a secondary DNS address, see Adding an additional DNS address .
	To configure an exacqVision system with a static IP, select Static .
	To receive network time services, you must configure the gateway and the primary DNS.
	If more than one network interface is available, you can bond the interfaces together.
Enable DHCP server check box	To start a DHCP service for the network interface you want, select the Enable DHCP server check box. Before you select this option, ensure that no other DHCP server resides on the network segment. After you select the Enable DHCP server check box, you can use the data network interface to configure the camera on this network.

Configuring a network connection

To configure a network connection, complete the following steps:

1. From the **Interfaces** list, select a network connection.
2. In the **Network Configuration** area, select a network configuration type. For more information on the network configuration types, see Table 8 .
3. Click **Apply**.

Adding an additional DNS address

To add an additional DNS address, complete the following steps:

1. In the **Network Configuration** area, click **Advanced DNS...**
2. In the **Advanced DNS Settings** window, enter the DNS address.
3. Click **Add**.
4. **Optional:** Use the Arrow icons to prioritize the DNS addresses.
5. Click **OK**.

Una systems

On the **Network** tab in the **Configure System** window, there are additional options for Una Systems. For more information on these additional options, see the following table. For more information on Una Systems, see the *LC-Series Una Server guide* and the *M-Series Una Server guide*.

Table 9: Interfaces pane on the Network tab

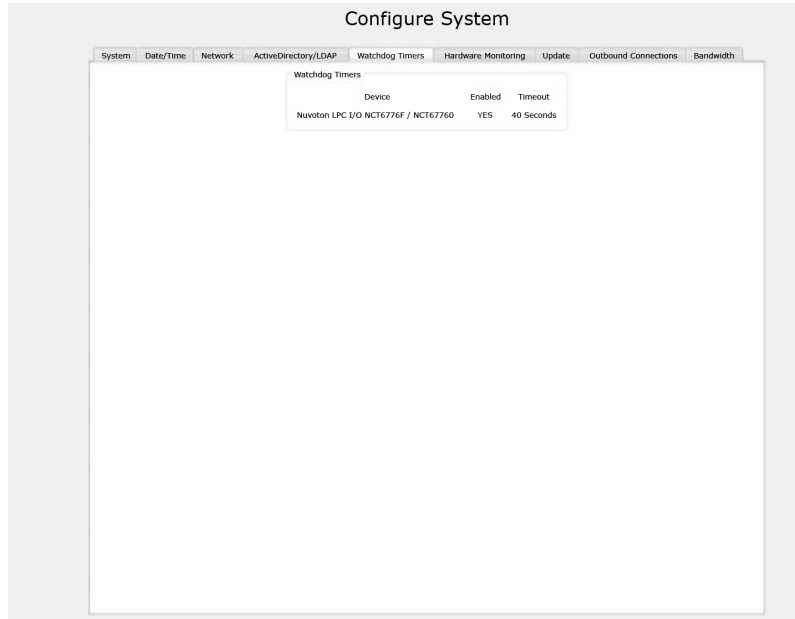
Interface element	Description
Interfaces pane	Displays a list of IP addresses.
	Each PoE port in a Una System is a unique Ethernet interface and has its own IP address. To view the IP addresses for a Una System's PoE ports, select the Show individual PoE adapters check box.
	To change the IP range, from the Interfaces list select All PoE Adapters , then in the Interface Configuration area you can choose from three built-in ranges in the Configure All field. The exacqVision system does not display range values that can conflict with the Local Area Connection.

Watchdog Timers tab

The **Watchdog Timers** tab displays information about the systems factory-installed watchdog timers. The watchdog timers can restart systems or capture cards if the computer malfunctions.

Note: The information on the **Watchdog Timers** tab is not configurable.

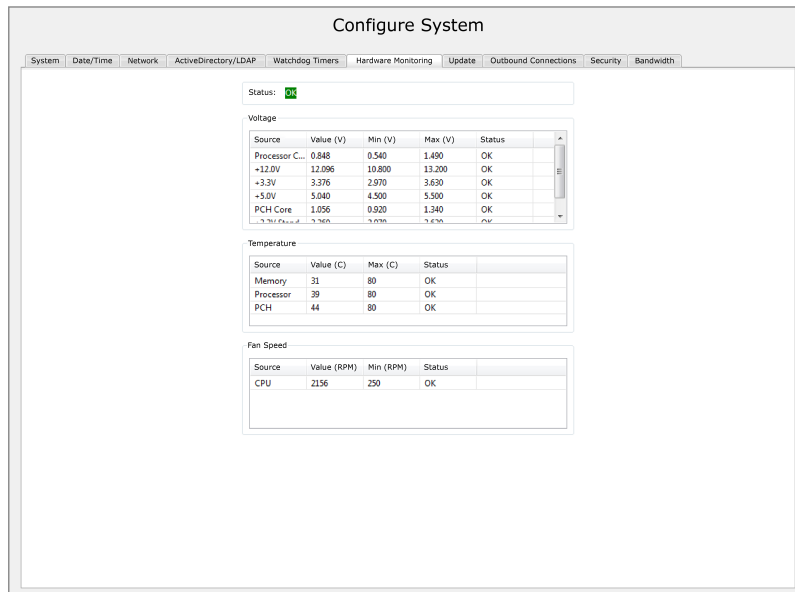
Figure 5: Watchdog Timers tab in the Configure System window



Hardware Monitoring tab

The **Hardware Monitoring** tab displays information about the system’s voltage, temperature, and fan speed. If the system reaches a minimum or maximum value in a parameter that the system is monitoring, in the **Status** area the message changes to **ALARM**.

Figure 6: Hardware Monitoring tab in the Configure System window



Update tab

On the **Update** tab, you can view the current software version that the exacqVision server is running, and remotely update the exacqVision server software. For more information on the functionality of the **Update** tab, see Table 10.

Figure 7: Update tab in the Configure System window

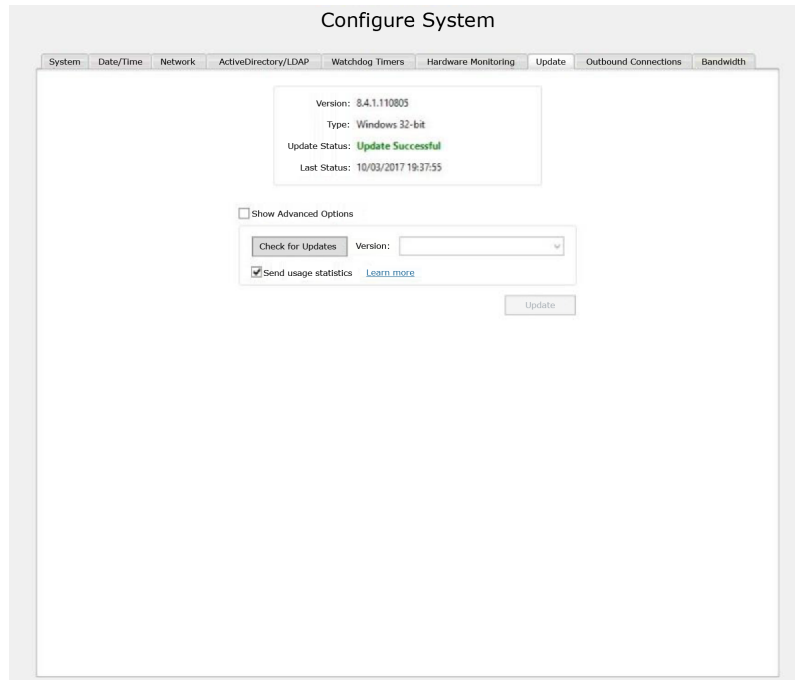


Table 10: Update tab in the Configure System window

Interface element	Description
Software information pane	Displays information about the current software version that the exacqVision server is running.
	The Update Status area tracks the progress of the update and whether it is successful or unsuccessful.
	The Last Status area displays information about the last update.
Show Advanced Options check box	Opens the Show Advanced Options window.
Location field	To locate an evFileInfo.txt file that the server can use to download exacqVision server software over the internet, click the Browse... button next to the Location field.
	An evFileInfo.txt files contains URL information that the exacqVision client communicates to the exacqVision server to connect and download exacqVision software over the internet. If you have an evFileInfo.txt file, ensure that both the exacqVision client and server connect to the internet, and then update the software. You can also download exacqVision installers on other computers, and manually copy the exacqVision systems.
Check for Updates button	Displays the latest software version available from the Version list.
Send usage statistics check box	Sends anonymous and non-sensitive information to the manufacturer about how you use cameras and exacqVision features.
Learn More hyperlink	Opens a Privacy Policy page in a web browser.

Remote updates

For remote updates, both the exacqVision server and exacqVision client require an internet connection. If the server and client cannot connect to the internet, you can copy the license file to a portable media device, and update the license file by selecting Offline Software Update Packaging Utility on the Support and Downloads tab at www.exacq.com.

Updating the exacqVision server software remotely

About this task: Available exacqVision server software releases vary, and depend on the system's license and subscription status.

To update the server software remotely, complete the followings steps:

1. On the **Update** tab, select **Check for Updates**.
 2. From the **Version** list, select a software version.
 3. Click **Update**.
- ⓘ **Note:** During an update, the exacqVision system stops recording for several minutes. The system automatically begins recording again when the update is complete.

Security tab

On the **Security** tab, you can apply security settings to user accounts, create or modify an access schedule for a user, and configure the second reviewer feature. The **Security** tab is available only when you logon to the server with Full Admin permissions. You need the second reviewer feature to view some live video or search some recorded video.

- ⓘ **Note:** The second reviewer feature is hidden by default and to use it requires a specific configuration file. To obtain this file, contact exacq support using the following link: <https://exacq.com/support/form/>.

Figure 8: Security tab in the Configure System window

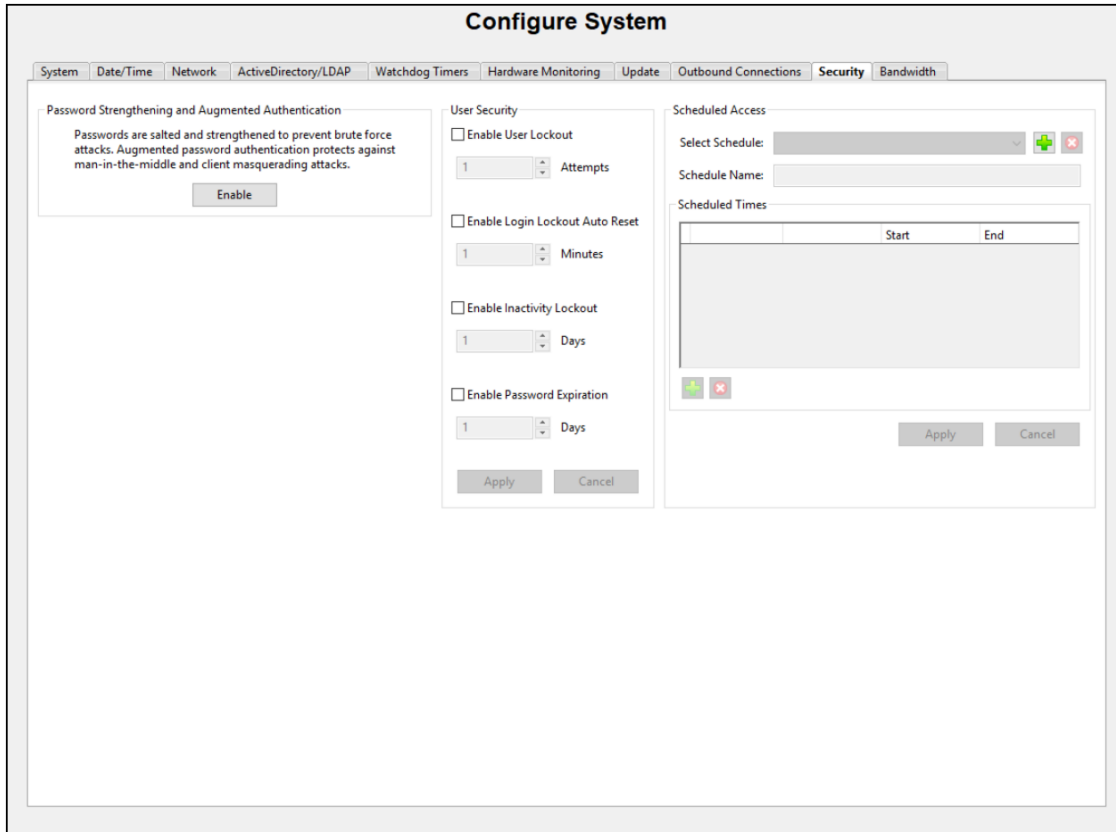


Table 11: Security tab in the Configure System window

Interface element	Description
Password Strengthening and Augmented Authentication pane	Password strengthening and augmented password authentication provides additional security. Click Enable to augment password protection. ⓘ Note: Once enabled, Password Strengthening and Augmented Authentication is not reversible.
User Security pane	To configure the settings, see the following tasks; Setting the user lockout attempts limit, Setting the user lockout reset time, Setting the inactivity lockout time, and Setting the password expiration time.
Scheduled Access pane	Displays the current users access schedule, you can configure dates and times that a user can access the system. To configure this setting, see Access schedules .

Setting the user lockout attempts limit

To set the user lockout attempts limit, complete the following steps:

1. In the **User Security** pane, select the **Enable** check box in the **User Lockout** area.
2. In the **Attempts** field, enter the number of password entry attempts to give the user before they are locked out of the system.
3. Click **Apply**.

Setting the user lockout reset time

To set the user lockout reset time, complete the following steps:

1. In the **User Security** pane, select the **Enable Login Lockout Auto Reset** check box.
2. From the **minutes** field, select how long you want a user to be locked out of the system before it resets.
3. Click **Apply**.

Setting the inactivity lockout time

To set the inactivity lockout time, complete the following steps:

1. In the **User Security** pane, select the **Enable Inactivity Lockout** check box.
2. In the **Days** field, enter the number days that a user must be inactive on the system before they are locked out of the system.
3. Click **Apply**.

Releasing system management

You can remove one or more servers from enterprise system management on the **Security** tab.

Before you begin: Ensure you have admin rights on the system you want to remove from system management.

To remove servers from enterprise system management, complete the following steps.

1. From the navigation tree, select and expand the server.
2. Click **Configure System**.
3. In the **Configure System** window, click the **Security** tab.
4. Click **Unmanage System** to release the systems from enterprise management.

Result The server is not under enterprise system management.

Setting the password expiration time

To set the password expiration time, complete the following steps:

1. In the **User Security** pane, select the **Enable Password Expiration** check box.
2. In the **Days** field, enter the number days for the duration of a password, once the password expires the user must change their password.
3. Click **Apply**.

Access schedules

On the **Security** tab in the **Configure System** window, you can create or modify access schedules that you can apply to one or more users.

Creating a new access schedule

To create an access schedule, complete the following steps:

1. In the **Schedule Access** pane, click the **Plus** icon.
2. In the **Schedule Name** field, enter a name for the schedule.
3. Select the days, and the start and end time for when you want to give access to the user.
4. Click **Apply**.

Modifying an access schedule

To modify an access schedule, complete the following steps:

1. In the **Schedule Access** pane, from the **Select Schedule** list select the schedule you want to modify.
2. Select the days, and the start and end time for when you want to give access to the user.
3. Click **Apply**.

Configuring the second reviewer feature

About this task:

To configure the second reviewer feature, complete the following steps:

- ① **Note:** The second reviewer feature does not support the exacqVision web service.
- 1. On the **Systems** tab in the Settings pane, click **Import**.
- 2. On the **Security** tab, select the **Enable** check box.
- 3. In the **Require for** area, select the functions that require the feature.
- 4. In the **First Password** field, the first user must enter a password and then enter it again in the **Confirm** field.
- 5. In the **Second Password** field, the second user must enter a password and then enter it again in the **Confirm** field.
- 6. Click **Apply**. The exacqVision client prompts for both passwords when you perform tasks that require the second reviewer feature.
- ① **Note:** When you configure the second reviewer feature, you disable the archiving, auto export jobs, and email notification attachment features.

Add IP Cameras window

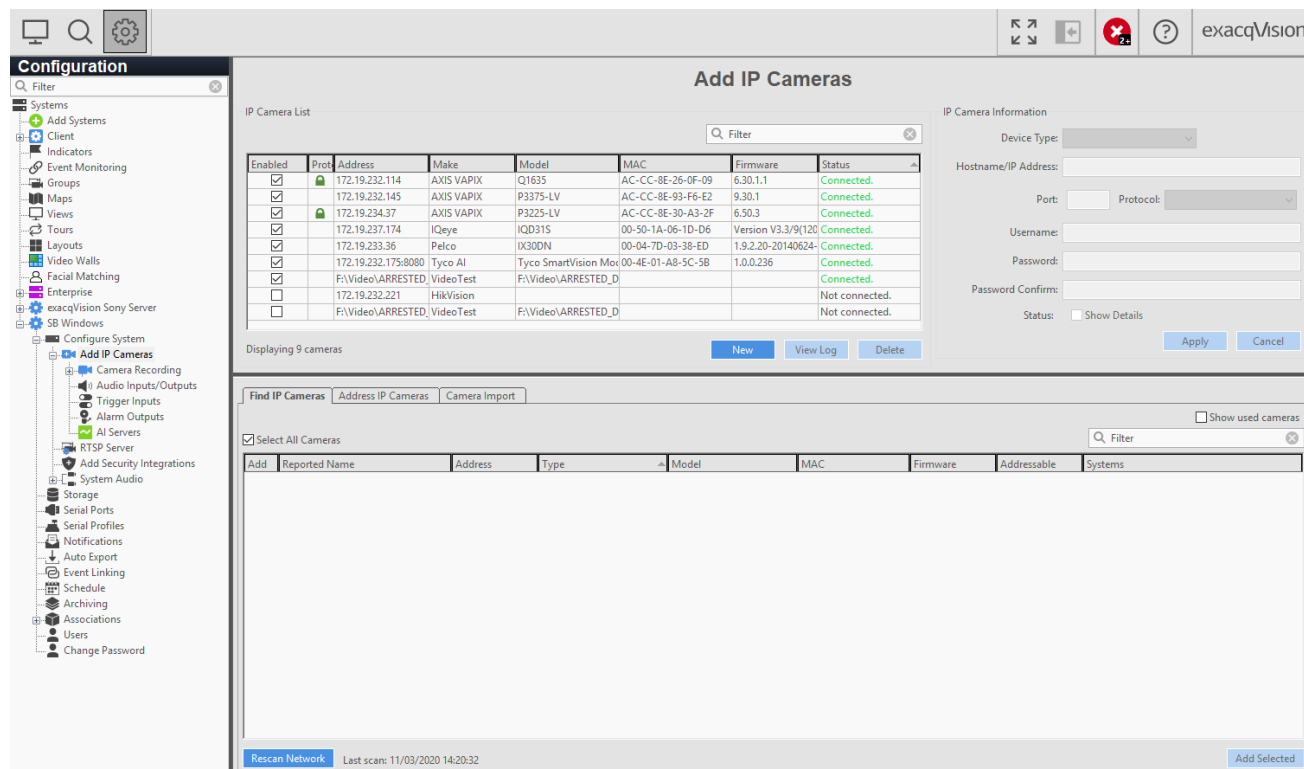
You can use the **Add IP Cameras** window to add and delete IP cameras and devices from the system. For information on how to open the **Add IP Cameras** window, see [Opening the Add IP Cameras](#).

Opening the Add IP Cameras window

To open the **Add IP Cameras** window, complete the following steps:

1. Click the **Config (Setup) window** icon on the toolbar.
2. From the navigation tree, expand the server you want.
3. Expand the **Configure System** node, and then select **Add IP Cameras**.

Figure 9: Add IP Cameras window



IP Camera List pane

In the following table, you can find information on the functionality of the **IP Camera List** pane in the **Add IP Cameras** window.

Table 12: IP Camera List pane

Interface element	Description
Enabled column	Defines whether the camera is active. The number of cameras you can enable depends on your license limits.
Protocol column	Displays whether the camera can connect using an https connection. If a green lock displays, the camera can connect using https.
Address column	Displays the camera's IP address.
Make column	Displays the camera brand.
Model column	Displays the model number of the camera.
MAC column	Displays the MAC address of the camera.
Firmware column	Displays the firmware version that the camera uses.
Status column	Displays the status of the camera connection.
	To view the number of connections and required connections, hover over the camera status.
View Log button	Displays the previous 10 minutes of the systems log messages. To display the log messages, select the cameras and then click View Log .
Delete button	To delete the cameras from the server, select the cameras and click Delete .

Manually adding a camera

To add a camera manually, complete the following steps:

1. In the **Add IP Cameras** window, click **New**.
2. In the IP Camera Information pane, select a device from the **Device Type** list.
3. Enter the IP address of the camera in the **Hostname/IP Address** field.
4. In the **Username** field, enter a username.
5. In the **Password** field, enter a password. To confirm the password, enter it again in the **Password Confirm** field.
6. To connect to the cameras and to save the camera configuration, click **Apply**.

IP Camera Information pane

You can use the **IP Camera Information** pane to manually add cameras to the **IP Camera List** list, access a camera online, and view the status connection of the camera and the time of that connection. For more information, see the following table.

Table 13: IP Camera Information pane

Interface element	Description
Device Type field	Defines the device driver type.
	For the best performance, select the manufacturer specific driver. If the manufacturer's driver is not available and the device is ONVIF compliant, select ONVIF.
	RTSP compliant cameras can stream only video. They cannot stream motion detection or camera configuration data.
Protocol list	Displays a list of camera connections. The default option is HTTPS If Available . The Protocol list is available only if you select a camera from the Device Type list that supports an https connection.
Status	Displays the status of the camera connection and troubleshooting information.
Show Details check box	Displays a brief description of the status connection in the IP Camera information pane.
Status Time area	Displays the time of the last received status connection.
Camera Website area	Displays a link that opens the camera's IP address in a web browser. To open the cameras online, the camera must reside on the same network subnet as the exacqVision client.

Find IP Cameras tab

The **Find IP Cameras** tab scans for supported IP cameras on the exacqVision server network. If the IP camera does not display on the **Find IP Cameras** tab, verify the configuration by connecting to the camera directly, or using the manufacturer's discovery tool. For more information on how to verify the configuration of a camera, see the *ExacqVision IP Camera Quickstart Guide*.

Adding a camera by searching

To add a camera to the **IP Camera List** list, complete the following steps:

1. On the **Find IP Cameras** tab, select the cameras you want to add.
 - ① **Note:** If you made changes to an IP camera and the camera does not appear in the **Find IP Cameras** tab, click **Rescan Network**.

2. Click **Add Selected**.
3. Enter a username and password.
4. Click **OK**.

Address IP Camera tab

On the **Address IP Cameras** tab, you can change the IP address of cameras. The **Address IP Cameras** tab is only available if you have camera plugins that support this feature or multiple cameras with the same IP address. On www.exacq.com, the camera plugins that support this feature display EasyConnect. For more information on the functionality of the **Address IP Cameras** tab, see the following tables.

Table 14: Network Interface pane on the Address IP Camera tab

Interface element	Description
Network interface card list	To select an NIC, use the Network interface card list at the top of the Network Interface pane.
Configure link	To view or modify NIC configurations, click Configure .

Table 15: Camera Configuration pane on the Address IP Cameras tab

Interface element	Description
IP Configuration area	To assign a device an IP address that does not change, select Static .
	To assign a device an IP address that can change, select Dynamic .
Addresses Used area	Displays the number of cameras that you select in the IP Camera List list, and the number of addresses available depending on the IP address and the Netmask. If any addresses are already in use by other devices, those addresses display as Skipped. The number of cameras cannot be greater than the number of addresses.
	To display the Addresses Used area, in the IP Configuration area select Static .
Apply to Grid button	Applies the settings in the IP Configuration and Addresses Used area to the cameras in the Address IP Cameras tab.

Table 16: Cameras area on the Address IP Cameras tab

Interface element	Description
Assigned Address column	Displays the new IP address after you select an IP configuration type in the Camera Configuration area.
Status column	Displays the progress of the IP address change.
Rescan in area	Displays the time at which the automatic rescan occurs.

Camera Import tab

On the **Camera Import** tab, you can import cameras to an exacqVision server. For information on the functionality of the **Camera Import** tab, see the following table.

Table 17: Camera Import tab in the Add IP Cameras window

Interface element	Description
CSV includes header check box	If there is a header row in the data that you import, select the CSV includes header check box.
Set Default Device Type list	You can use the Set Default Device Type list to manually select the device type for each row of data in your file.

Importing cameras to an exacqVision server

To import a camera to an exacqVision server, complete the following steps:

1. In the **Add IP Cameras** window, select the **Camera Import** tab.
2. **Optional:** If there is a header row for the data in the CSV file, select the **CSV includes header** check box.
3. Click **Import**.
4. Select the data file that you want to import.
5. From the **Device Type** list, select a device.
6. Click **Add Selected**.
 - ⓘ **Note:** If the columns in the **Camera Import** tab do not automatically populate, you can enter the column headers manually.

Changing the IP address of cameras

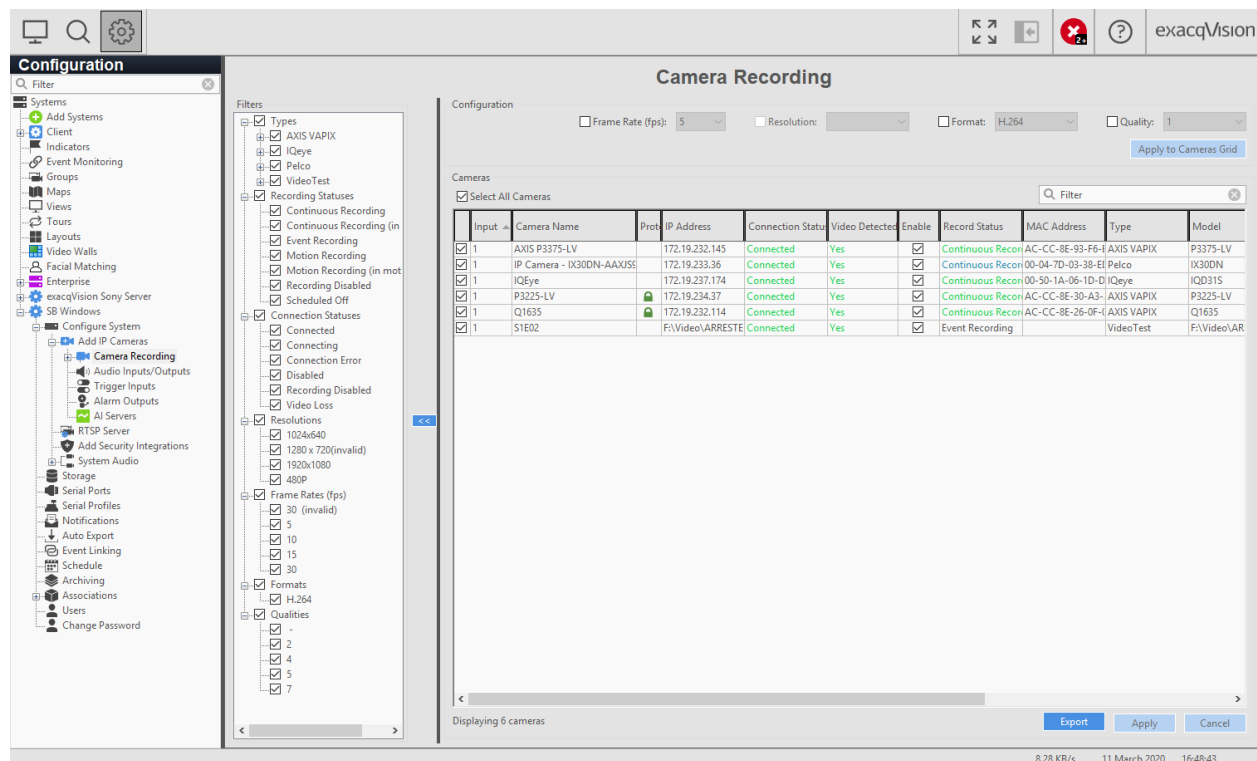
To change the IP Address of cameras, complete the following steps:

1. From the **IP Camera List** list, select the cameras.
2. In the **Camera Configuration** area, select a configuration type. For more information on the IP configuration types, see Table 15.
 - ⓘ **Note:** If you select **Static**, modify the **IP address range** field.
3. Click **Apply to Grid**.
4. Click **Apply**.
 - ⓘ **Note:** If you change the IP address of one camera, you are prompted to add the new IP address to the **IP Camera List** list. If you change more than one IP address, you are prompted to open the **Schedule** window for recording video.

Camera Recording window

In the **Camera Recording** window, you can configure IP cameras to record video, and configure a camera's recording settings.

Figure 10: Camera Recording window



The **Filters** pane in the **Camera Recording** window displays a categorized list of cameras in the server, and determines what cameras display in the Cameras pane. For more information on the functionality of the Cameras pane, see the following table.

Table 18: Cameras pane

Interface element	Description
Filter field	To search the Camera list, enter the relevant information in the Filter field. If any of the information matches information in the Camera list, the camera entries with the matching information display.
Camera list	Displays all the cameras that you select in the Filters pane.
	To hide or display a column, right-click the column and then select the column's name. You cannot hide the Camera Name and the Recording Settings columns.
	The Enable column determines whether the camera is set to record. By default, if the system detects a signal, the system sets the camera to record. To disable the camera for recording, clear the camera's check box.
	If the camera can connect to the system using a https connection, a Green lock icon displays in the Protocol column.
Export button	Exports a csv file of the Camera list.

Applying configuration settings to a multiple of cameras

To apply configuration settings to a multiple of cameras, complete the following steps:

1. From the navigation tree, expand the relevant server node.
2. Click **Configure System > Add IP Cameras > Camera Recording**.

3. On the left side of the **Cameras** list, select the check boxes of the cameras you want.
4. In the **Configuration** pane, select the check box next to configuration setting that you want to apply to the cameras.
 - ⓘ **Note:** If a setting's list is grey, the setting is not available for all the cameras that you selected.
5. Select a parameter from the **Configuration Settings** list.
 - ⓘ **Note:** The list options vary depending on the camera model and manufacturer. If a list does not display, one or more of the cameras do not support the setting.
6. Click **Apply to Cameras Grid**.

Analog camera recording

In the analog **Camera Recording** window you can configure recording settings, and configure analog cameras to record video.

Table 19: Cameras pane in the analog Camera Recording window

Interface element	Description
Filter field	To search the Camera list, enter the relevant information in the Filter field. If any of the information matches information in the Camera list, the camera entries with the matching information display.
Cameras list	Displays all the cameras that you select in the Filters pane.
	To hide or display a column, right-click the column and then select the columns name. You cannot hide the Camera Name , Frame Rate , Resolution , Format , and Quality columns.
	The Enable column determines whether the camera is set to record. By default, if a camera detects a signal recording for the camera activates. To disable the camera for recording, clear the camera's check box.
Export	Exports a csv file of the Camera list.

Applying recording settings to a multiple of cameras

To apply recording settings to a multiple of cameras, complete the following steps:

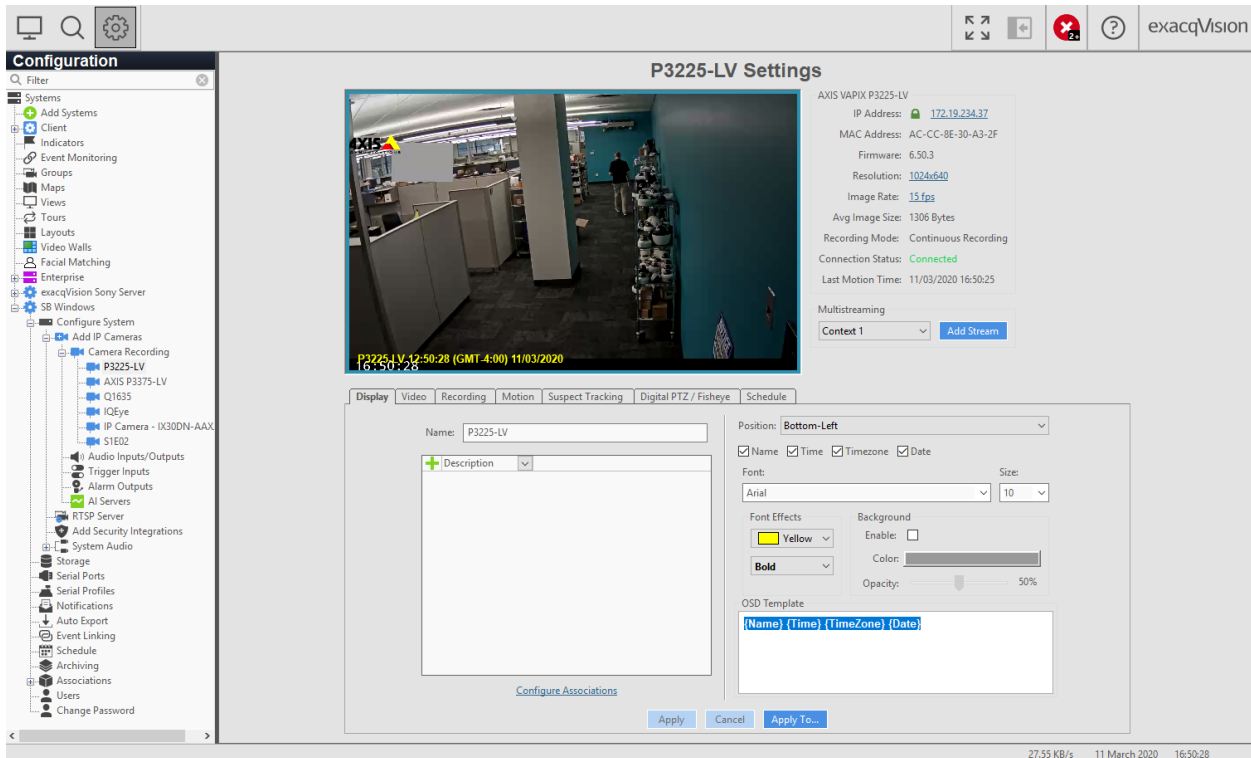
1. From the navigation tree, expand the relevant server node.
2. Click **Configure System > Add IP Cameras > Camera Recording**.
3. On the left-side of the **Cameras** list, select the check boxes of the cameras you want.
4. In the **Configuration** pane, select the check box next to recording setting that you want to apply to the cameras.
 - ⓘ **Note:** If a setting's list is grey, the setting is not available for all the cameras that you selected.
5. Select a parameter from the list.
 - ⓘ **Note:** The list options vary depending on camera model and manufacturer. If a list does not display, one or more of the cameras do not support the setting.
6. Click **Apply to Cameras Grid**.

Camera settings window

In the **Camera Settings** window you can view information about a camera and configure camera settings, such as the cameras name, onscreen display, pan-tilt-zoom (PTZ) settings, the recording status, recording quality, motion and video masks.

- ❶ **Note:** Not all tabs and settings in the **Camera Settings** window are available for all cameras. You can access some IP camera settings that are not available in the exacqVision software on the camera's web page. You can access the camera's web page by clicking on the hyperlink in the **IP Address** field.

Figure 11: Camera Settings window



Camera setting tabs

The tabs available in the **Camera Settings** window, and the options available in each tab, vary depending on the model and manufacturer of the camera. The system does not display all of the IP camera settings. You can access the settings that are not available through the camera's web page.

Display tab

On the **Display** tab, you can edit a camera's display settings. For more information on how to edit a camera's display settings, see Table 20.

Figure 12: Display tab in the Camera Settings window

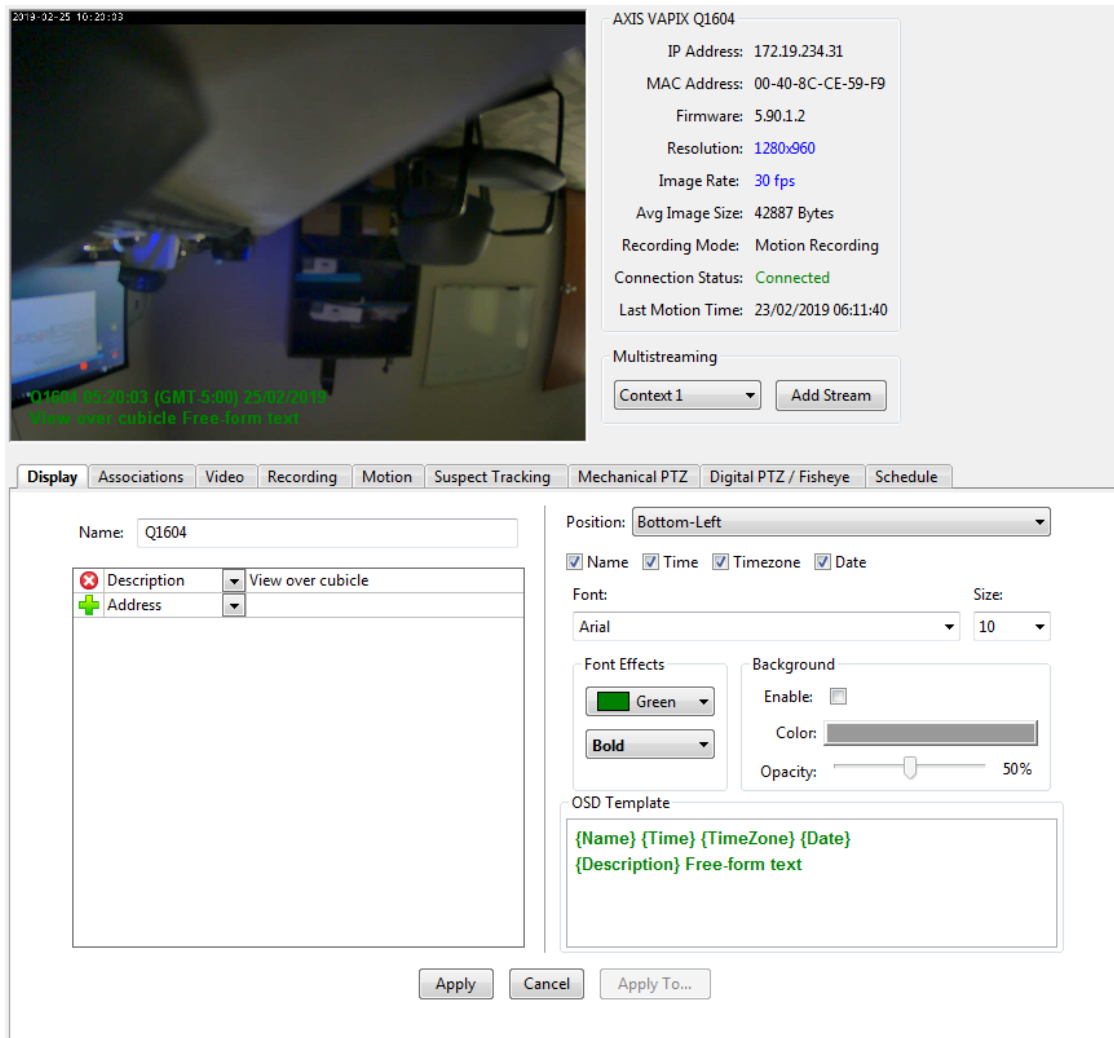


Table 20: Display tab in the Camera Setting window

Interface element	Description
Name field	Enter a name for the camera.
Position area	Determines the position of the Onscreen Display (OSD) and what information to include in the OSD. You can also create and edit metadata fields to refine a camera search. To add a metadata field to refine a camera search, click the Plus icon and enter the information in the corresponding field.
Font area	To change to OSD font theme, select a style from the Theme list.
	To change the OSD font size, select a size from the Size list.
Font Effects area	To change the OSD, select a font color from the Color list.
	To change the OSD font style, select a style from the Style list.

Table 20: Display tab in the Camera Setting window

Interface element	Description
Background area	Edits the background of the camera name that displays in the video panel.
	To adjust the color of a camera's background, select the Enable check box and then use the Color list and Opacity slider.
OSD Template	To edit the information that displays in the OSD.
Apply To... button	Applies the display settings on a multiple of cameras.

Editing information on the Onscreen Display

To edit information on the onscreen display (OSD), in the **Config Setup** window, complete the following steps:

1. From the navigation tree, expand the relevant server node.
2. Click **Configure System > Add IP Cameras > Camera Recording** , and then select the camera.
3. On the **Display** tab, select or clear the **Name**, **Time**, **Timezone**, or **Date** check box to select the fields that you want to display in the **OSD Template** pane.
4. Add any meta data or type any additional information that you want to display. You can re-order the fields if required.
5. **Optional:** Select the text you want to format and change the font type, font size, and font effects from the **Font**, **Size**, and **Font Effects** lists.
6. From the **Position** list, select the alignment and position of the template text.
7. Click **Apply**, to apply the template changes to the current camera.
8. **Optional:** Click **Apply To** and in the **Apply Display Settings to Cameras** window, select the **Select All** check box, or select the check box for each camera that you want to apply changes to.

Video tab

On the **Video** tab, you can edit a camera's video settings. For more information on how to edit a camera's video settings, see Table 21.

- ① **Note:** The **Video** tab is not available on Real Time Streaming Protocol (RTSP) interfaces, some Open Network Interface Forum (ONVIF), and proprietary interfaces.

Figure 13: Video tab in the Camera Settings window

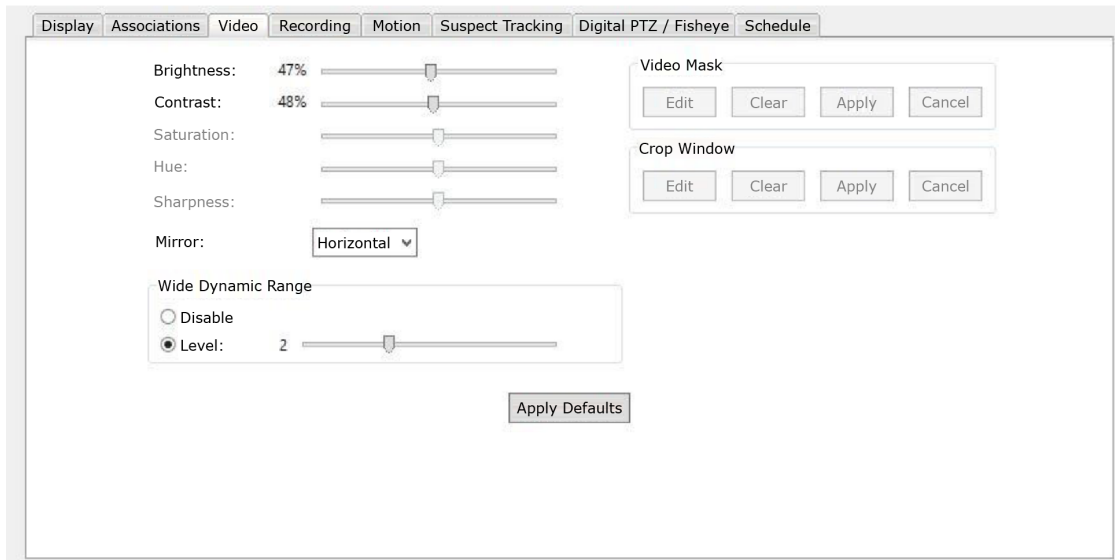


Table 21: Video tab in the Camera Settings window

Interface element	Description
Brightness slider	Adjusts the brightness of the videos OSD.
Contrast slider	Adjusts the contrast of the videos OSD.
Saturation slider	Adjusts the amount of grey color in the videos OSD.
Hue slider	Adjusts the gradient of the colors in the videos OSD.
Sharpness slider	Adjusts the quality of the videos OSD.
Rotate and Mirror lists	Changes the orientation of the camera's video.
	To rotate the camera direction, select the number of degrees from the Rotate list.
	To position the camera's video horizontally or vertically, use the Mirror list.
Wide Dynamic Range area	Adjusts the brightness and dimness of the video that is caused by the camera's surroundings.
	To adjust the dynamic range, select Level and then move the Wide Dynamic Range slider.
Frequency list	Reduces the flicker of the OSD by matching it to the frequency of lights and electronic screens that are in use near where the camera is situated.
Video Mask area	Blocks areas of the video display that you do not want to record. For more information, see Video masks .
Crop Window area	Crops portions of a camera image to save disk space. This feature is only available on some cameras.
Auto Focus button	Adjusts the clarity of the camera view.

Cropping a camera image

To crop a camera image, complete the following steps:

1. In the **Crop Window** area, click **Edit**.
2. Left-click the video panel and drag the cursor diagonally until you have drawn a box around the area where you want to crop.
3. Click **Apply**.

Video masks

A video mask hides an area of a camera's field of view so that it cannot be seen or recorded. To hide sensitive areas that must remain private, use a video mask. To create a mask, see [Creating a video mask](#).

Creating a video mask

To create a video mask, complete the following steps:

1. On the **Video** tab, click **Edit** in the **Video Mask** area. A yellow grid displays over the live video panel.
2. Left-click the video panel and drag the cursor diagonally until you have drawn a box around the area where you want to apply the motion mask.
3. Click **Apply**.

Recording tab

On the **Recording** tab, you can edit a camera's recording settings. For more information on how to edit the camera's recording settings on the **Recording** tab, see Table 22.

- ① **Note:** The **Recording** tab is not available on RTSP interfaces, and some ONVIF and proprietary interfaces.

Figure 14: Recording tab in the Camera Settings window

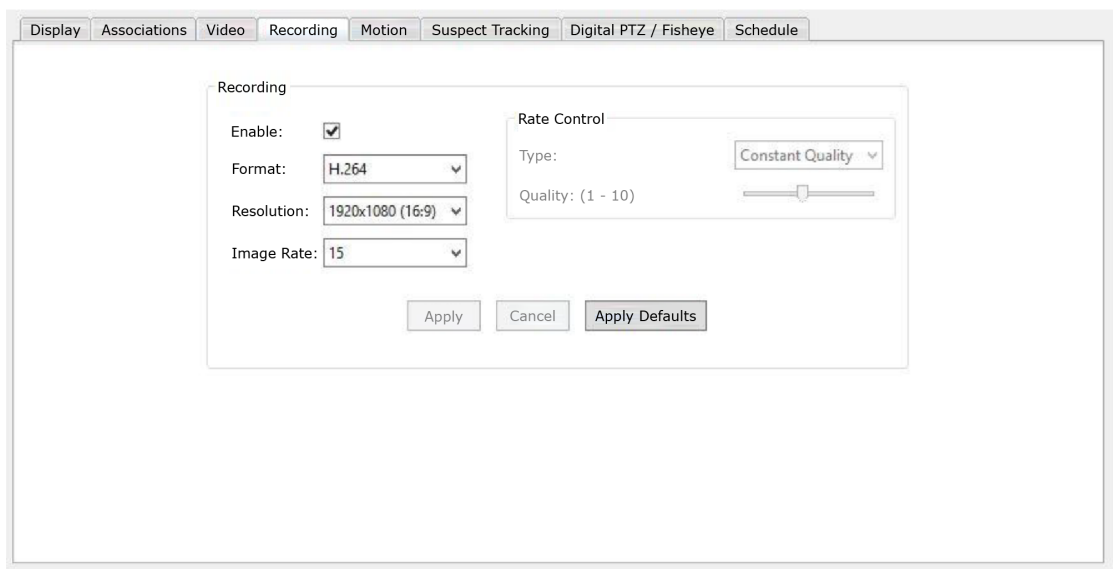


Table 22: Recording tab in the Camera Settings window

Interface element	Description
Enable check box	Records video from a camera at the times you specify in the Schedule tab .
Quality slider	Modifies the image quality in the video by increasing or decreasing the image size. Decreasing the image quality saves disk space by reducing the size of the video as it records.
Format list	To select a different compression format to improve the compatibility with other systems, use the Format list.
Resolution list	To select the resolution size for recorded video, use the Resolution list.
Image Rate list	To select how many images to record per second, use the Image Rate list.
Apply Defaults button	Applies the factory default settings.

Motion tab

On the **MOTION** tab, you can edit a camera's video motion settings to avoid false alerts. Depending on the features supported by your camera, you can use one of following methods to configure motion settings:

- Motion masks, see [Motion mask settings](#)
- Motion windows, see [Motion window settings](#)

ⓘ **Note:** The **MOTION** tab is not available on RTSP interfaces, and some ONVIF and proprietary interfaces.

Motion mask settings

A motion mask can reduce unwanted video recordings by ignoring motion events that occur in specified areas of a cameras view.

The following figure illustrates an example of the **Motion** tab when multiple masks are supported by the camera.

Figure 15: Motion tab in the Camera Settings window with masking

Kleber Illustra3 Settings

Illustra3 Illustra Flex2 3MP Dome Out

IP Address: 172.19.234.67
MAC Address: 00-50-F9-F9-11-90
Firmware: Illustra.SS004.01.06.01.0049
Resolution: 2048x1536
Image Rate: 30 fps
Avg Image Size: 8111 Bytes
Recording Mode: Motion Recording
Connection Status: Connected
Last Motion Time: -

Multistreaming
Context 1

Display Video Recording **Motion** Suspect Tracking Digital PTZ / Fisheye Schedule

Pre Motion (sec): 4
Post Motion (sec): 2

Motion Masks

Smooth Begin (sec)
Smooth End (sec)

Number
1
2

Area Configuration
Sensitivity: 6

Table 23: Motion tab in the Camera Settings window with masking

Interface element	Description
Pre Motion (sec) slider	Adjust the number of seconds of video that you can save before an event occurs.
Post Motion (sec) slider	Adjust the number of seconds of video that you can save after an event occurs.
Motion Masks pane	Reduce the number of motion alarm events, by using the Smooth Begin and the Smooth End sliders. Smooth Begin is the minimum number of seconds for motion to occur before a motion alarm activates. This prevents very brief motion occurrences from triggering a motion event alarm. Smooth End is the minimum number of seconds without motion before a motion alarm event is complete. It combines a continuous series of short motion occurrences into a single motion alarm event.
	Create up to three motion masks to block out areas where you do not want to monitor motion. Each motion mask that you create is assigned a number in the Mask Number table. You can have a maximum of three motion masks, this feature must be supported by your camera.
	To create an additional mask, click Add .
	To erase a motion mask, select the mask number from the table, then click Remove .
Area Configuration pane	Adjust how much motion must occur in the camera's view in order to trigger motion recording, by using the Sensitivity slider. A low sensitivity setting can reduce false motion, such as video noise or shadows.

Motion window settings

A motion window, allows you to create windows of a cameras view where motion is detected. In addition, within that view window you can exclude areas.

The following figure illustrates an example of the **Motion** tab when motion windows are supported by the camera.

Figure 16: Motion tab in the Camera Settings window with nested windows

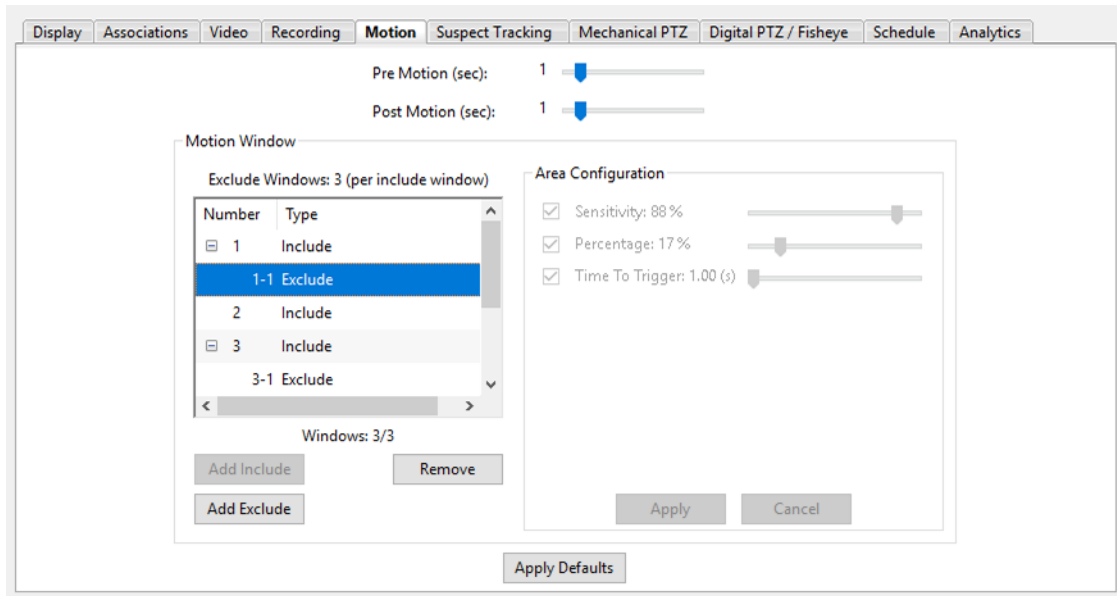


Table 24: Motion tab in the Camera Settings window with nested windows

Interface element	Description
Pre Motion (sec) slider	Adjusts the number of seconds of video that you can save before an event occurs.
Post Motion (sec) slider	Adjusts the number of seconds of video that you can save after an event occurs.
Motion Window pane	Shows a table that contains the Number and Type of window. The type of window can be either an include or exclude window. Depending on the supported cameras features, the windows can have one of the following formats: <ul style="list-style-type: none"> • Nested list of include and exclude windows • Non-nested list of include and exclude windows For information on motion windows, see Motion masks and motion windows .
	Motion window with nested list of include and exclude windows Add Include: Click Add Include , to add a window to detect or record motion within an area. The default include window is a rectangular blue window that covers the whole image. Add Exclude: Click Add Exclude , to add an exclude window to block an area so the camera cannot detect or record motion. The exclude window is contained with the include window and cannot move outside the bounds of the include window. For each include window, you can have a maximum of three exclude windows. Windows: The windows field shows two values separated by a forward slash. For example, <i>Windows: 2/3</i> . The first value represents the current number of windows that are configured, and the second value represents the total number of include windows that can be configured.
	Motion window with non-nested list of include and exclude windows Add Include: Click Add Include , to add a window to detect or record motion within an area. The default include window is a rectangular that covers the whole image. Add Exclude: Click Add Exclude , to add a window to block an area so the camera cannot detect or record motion. Windows: The windows field shows two values separated by a forward slash. The first number represents the current number of windows that are configured, the second number represents the total number of include and exclude windows that can be configured.
Area Configuration pane	Sensitivity: To adjust how much motion must occur in the cameras view to trigger motion recording, select the Sensitivity check box and move the slider. A low sensitivity setting can reduce false motion, such as video noise or shadows.
	Percentage: To adjust the size of an object to detect as a percentage of the total detection area, select the Percentage check box, and move the slider. A high percentage setting might not detect small objects.
	Time to Trigger: To adjust the number of seconds to trigger an event after motion is detected, select the Time to Trigger check box, and move the slider. Note: This option is only available for a nested list of include and exclude windows.
Apply Defaults button	Applies the factory default settings.

Motion masks and motion windows

Depending on the camera type, you can edit motion settings by using motion masks or motion windows. A motion mask, can reduce unwanted video recording by ignoring motion events that occur in specified areas of a camera's view. A motion window, records when motion is detected within a specified area.

Motion masks can save storage space, extend recording time, and make it easier to recognize motion events on the video time line in the **Search** window. Similarly, motion windows allow you to create windows of a cameras view. In addition, within that view window you can add include and exclude areas.

For example, if a camera has a moving ceiling fan in its field of view, you can avoid recording the fan's motion by using a motion mask or exclude window. The option to use motion masks or exclude windows depends on the features that your camera supports. For more information, see [Creating a motion mask](#) and [Creating include and exclude motion windows](#).

Creating a motion mask

To create a motion mask, complete the following steps:

1. On the **Motion** tab, left-click the video panel and drag the cursor diagonally until you have drawn a box around the area to mask out. A red grid displays over this area. Alternatively, click any square in the grid to select it. All motion events that occur within this area are not recorded.
2. **Optional:** Click **Add** to draw and mask out a second area. This feature must be supported by your camera. Repeat this step to create a third area. You can have a maximum of three such areas.
3. **Optional:** Move the **Sensitivity** slider to adjust how much motion must occurs in the camera's view, in order to trigger motion recording.
4. **Optional:** To create an event link to a specific mask area, from the navigation tree, select **Event Linking**. From the **Event Type** list, select **Analytics**, and then select the relevant motion zone. For more information, see [Event Linking window](#).
5. Click **Apply**.

Creating include and exclude motion windows

To create include or exclude windows, complete the following steps:

1. On the **Motion** tab, click **Add Include** . A blue rectangular area displays over the live video panel. This area is the default include window.
 - ① **Note:** In the **Windows** field, the second value shows the total number of windows that can be configured. In the case of nested windows, this value represents the total number of include windows only.
2. Select any of the boundary lines of the rectangle, click and drag to resize the window.
 - ✓ **Tip:** Only nested lists display the description **Exclude Windows 3 (per include window)**.
3. **Optional:** In the **Motion Window** pane and depending on if the window is nested or not, complete one of the following actions:

List type	Action
For a non-nested list, click Add Exclude .	A red rectangular area displays over the live video panel. This area is the default exclude window. Select any of the boundary lines of the rectangle, click and drag to resize the window, and place the window over the area to exclude.

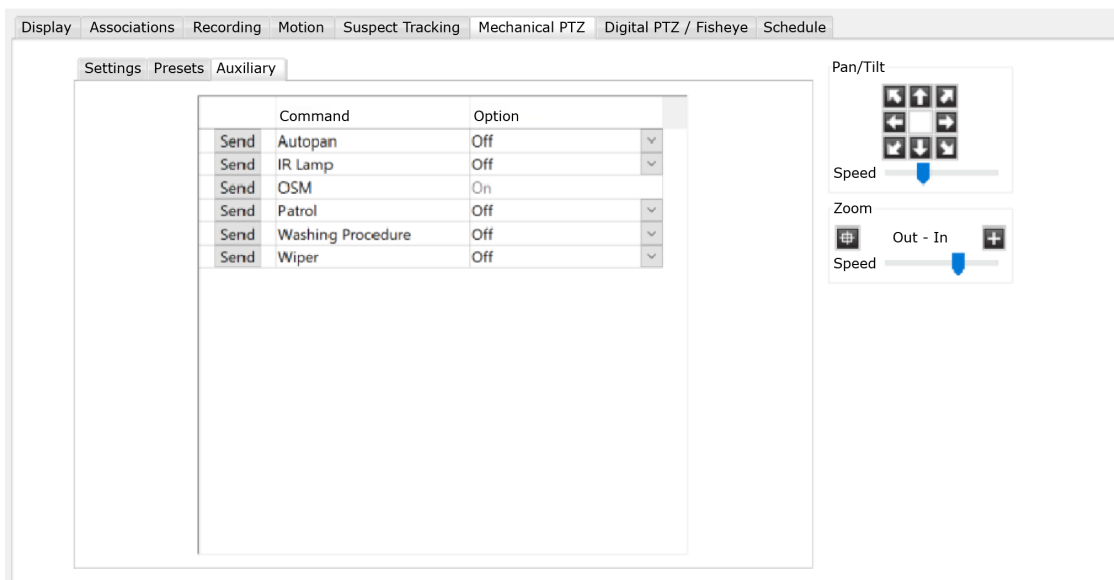
List type	Action
For a nested list, select an include window, and click Add Exclude .	A red rectangular window displays inside the include window, and cannot be moved outside this window. Select any of the boundary lines of the rectangle, click and drag to resize the window, and place the window over the area to exclude. <i>i</i> Note: You can have a maximum of three exclude windows per include window.

- Repeat Steps 2 to 3 to create as many include and exclude windows as you require.
- Click **Apply**.

Mechanical PTZ tab

A mechanical PTZ camera is a camera that you can physically adjust remotely. On the **Mechanical PTZ** tab, you can configure the COM port and address of a PTZ camera, configure PTZ presets on a camera, and send auxiliary commands to a camera.

Figure 17: Mechanical PTZ tab in the Camera Settings window



On the **Setting** tab on the **Mechanical PTZ** tab, you can configure the COM port and address of a PTZ camera. For more information, see the following table.

Table 25: Settings tab on the Mechanical PTZ tab

Interface element	Description
Serial Port list	Displays a list of COM ports.
	To configure a COM port to a PTZ Camera, select a port from the Serial Port list.
Address list	Displays a list of camera IP addresses.
	To configure the IP address of a PTZ camera, select an IP address from the Address list.

Table 25: Settings tab on the Mechanical PTZ tab

Interface element	Description
Protocol list	Displays a list of PTZ camera protocols. When you select a COM port from the Serial Port list, the camera's protocol automatically displays.
Dome Pattern area	Creates a recording of the movement of the camera. This feature is only available on some cameras.
	To create a dome pattern, click Record and then use the arrows in the Pan/Tilt area to move the camera in the pattern you want, and then click Stop .
	To review the dome pattern, click Run .
	To create additional dome patterns, use the Number list in the Dome Pattern area.
Pan/Tilt area	Adjusts the direction and direction speed of the camera.
Zoom area	Adjusts the zoom and zoom speed of the camera.
Focus area	Adjusts the focus of the camera. This feature is not available for PTZ IP cameras.
Iris area	Adjusts the amount of light that enters through the lens of the camera. This feature is not available for PTZ IP cameras.
Menu area	Displays the camera's manufacturer's onscreen menu. Some camera manufacturers require you to accept onscreen agreements.

On the **Preset** tab on the **Mechanical PTZ** tab, you can configure PTZ presets on a camera. For more information, see the following table.

Table 26: Presets tab on the Mechanical PTZ tab

Interface element	Description
Presets pane	To configure a new preset, click New and enter a name for the preset in the Name field, then click Apply .
	The total number of presets displays under the Preset list.
Preset Tour pane	To create a preset tour, select a preset from the Presets list and then click Add .
	To active a preset tour, select the Enable check box.
	To delete a preset from a tour, select the preset from the Preset Tour list and then click Remove .
	To modify the order of the presets in the Preset Tour list, click and drag the presents into the order you want.
Resume Time list	The resume time is the number of seconds that it takes the preset or preset tours to resume after the user stops manually controlling the PTZ controls.
Dwell Time list	The number of seconds that the camera views each preset before moving to the next preset.
Pan/Tilt area	Adjusts the direction of the preset location, and the camera direction speed.
Zoom area	Adjusts the zoom and zoom speed of the camera.

Table 26: Presets tab on the Mechanical PTZ tab

Interface element	Description
Focus area	Adjusts the focus of the camera. This feature is not available for PTZ IP cameras.
Iris area	Adjusts the amount of light that enters through the lens of the camera. This feature is not available for PTZ IP cameras.
Menu area	Displays the camera’s manufacturer’s onscreen menu. Some camera manufacturers require you to accept onscreen agreements.

Sending an auxiliary command to a camera

About this task:

On the **Auxiliary Commands** tab, you can send auxiliary commands to a camera. To send an auxiliary command to a camera, complete the following steps:

① **Note:** The **Auxiliary Commands** tab is available only for cameras that support this feature.

1. On the **Mechanical PTZ** tab, click the **Auxiliary** tab.
2. From the **Option** column, select an option for the auxiliary command that you want to apply.

① **Note:** The camera must support the command for it to be available.

3. Click **Send**.

To send another auxiliary command to the camera, complete steps 2 and 3.

Digital PTZ/Fisheye tab

A digital PTZ camera does not physically move, but you can zoom and navigate the camera’s video. On the **Digital PTZ / Fisheye** tab, you can configure presets for digital PTZ and fisheye cameras. For more information, see Table 27.

Figure 18: Digital PTZ/Fisheye tab in the Camera Settings window

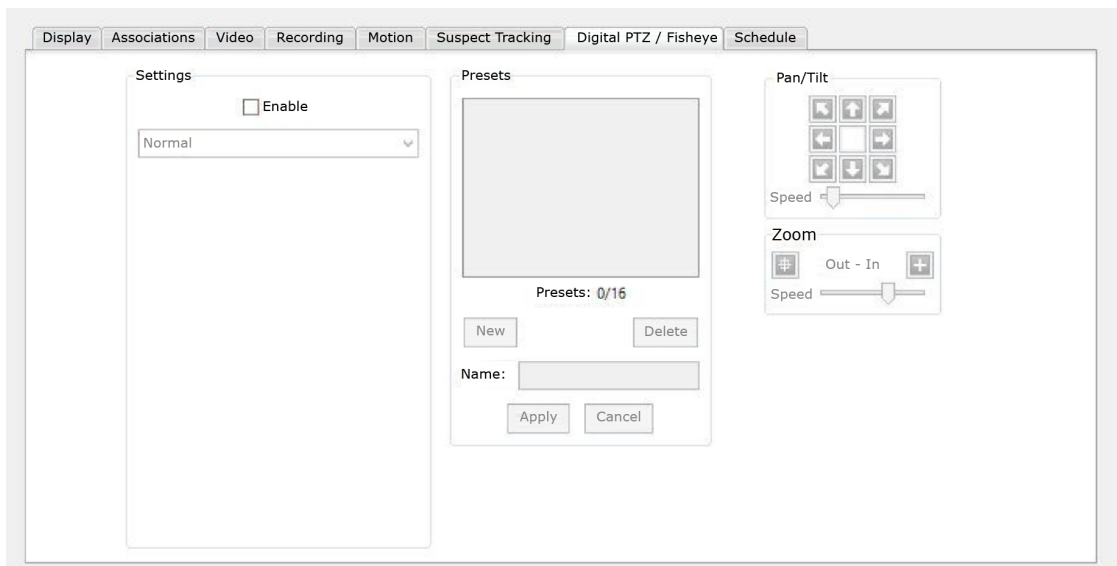


Table 27: Digital PTZ/Fisheye tab in the Camera Settings window

Interface element	Description
Settings pane	To activate the control functions for digital PTZ and fisheye cameras, select the Enable check box. This feature is available even if the camera has no mechanical PTZ functionality.
	For fisheye cameras, select a lens mode from the Fisheye mode list. If you select Immervision from the list, additional model and mounting options display.
Presets pane	Creates and modifies presets for digital PTZ and fisheye cameras.
	To create a preset, click New and enter a name in the Name field. Select Dewarp , Panorama , or Dual View . The Dewarp option can be used by any fisheye camera or lens. By default, the system assigns a name to a digital PTZ preset. The system can also assign the same name to a PTZ preset. To avoid having presets with the same name, ensure that you assign a unique name to all presets.
	The total number of presets displays under the Preset list.
Pan/Tilt area	Adjusts the direction of the preset location, and the camera direction speed.
Zoom area	Adjusts the zoom and zoom speed of the camera.

Schedule tab

On the **Schedule** tab, you can create a recording schedule for a camera or for a multiple of cameras on a server. To create a recording schedule, see [Creating a recording schedule](#). For more information on the options available in the **Schedule** tab, see Table 28.

Figure 19: Schedule tab in the Camera Settings window

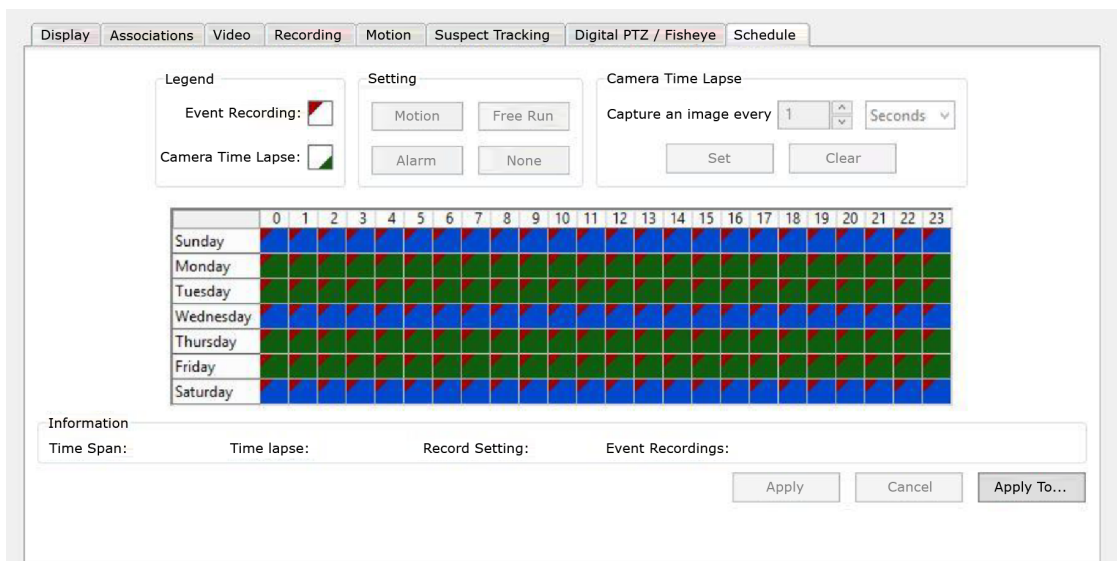


Table 28: Schedule tab in the Camera Settings window

Interface element	Description
Legend area	Displays how Event Recordings and Camera Time Lapses display in the schedule grid.
Setting area	To record any motion or alarms that occur, select MOTION .
	To record continuously, select Free Run .
	To record alarms that occur, select ALARM .
	If you do not want to record anything, select NONE .
Camera Time Lapse area	Sets the number of images you want to record for every second or minute of the selected time.
Information area	Displays details of the recording schedule for a camera on a specified day and time.
	To display the recording schedule details of a camera, hover the cursor over the corresponding square in the calendar grid.
Apply To... button	Applies the schedule to a multiple of cameras on the same server.

Creating a recording schedule

To create a recording schedule, complete the following steps:

1. On the **Schedule** tab, left-click the calendar grid and drag the cursor until you have drawn a box over the days and corresponding hours for when you want the camera to record.
2. In the **Setting** area, select a recording option.
3. Click **Apply**.

Analytics tab

On the **Analytics** tab, you can set the system to store analytic metadata from a camera, and modify the appearance of an analytic overlay. For more information, see [Analytic overlays](#), and [Performing an analytic metadata search](#). In addition, you can configure the system to record video when an analytical event occurs.

Figure 20: Analytics tab in the Camera Settings window

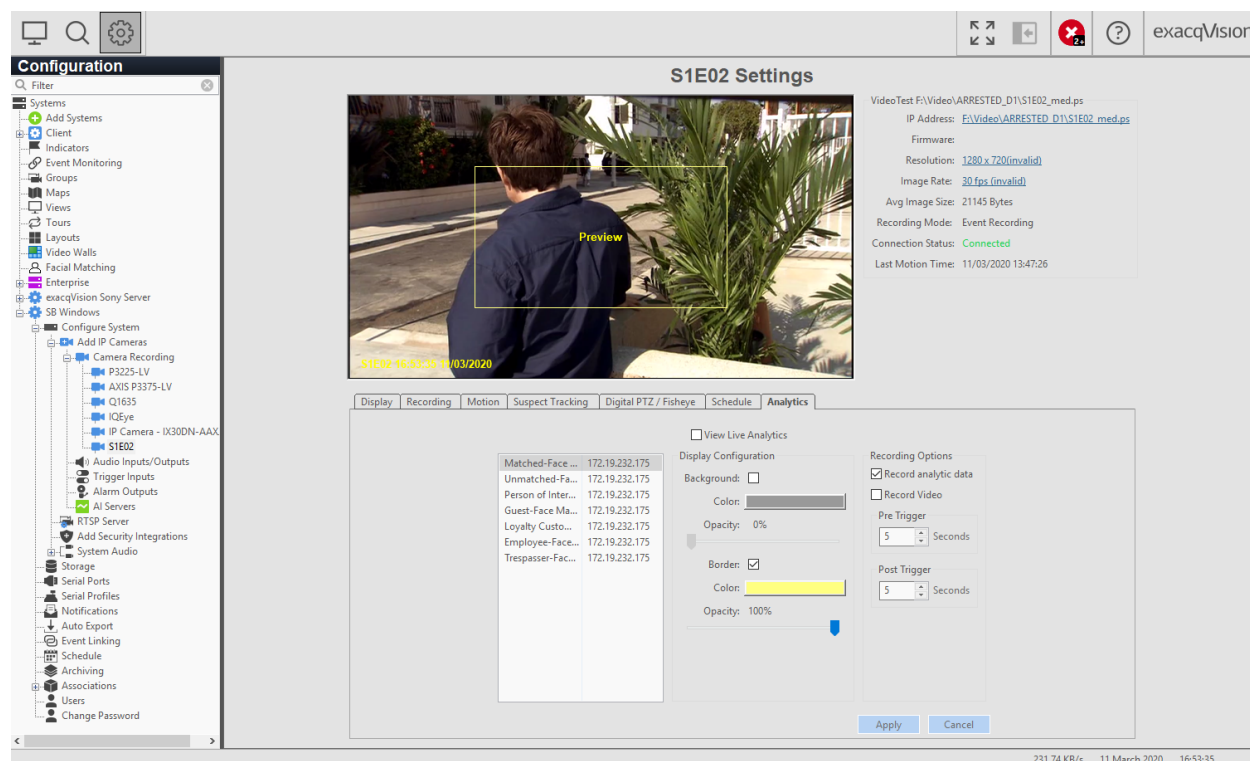


Table 29: Analytics tab in the Camera Settings window

Interface elements	Description
View Live Analytics check box	Select the View Live Analytics check box to view live analytics.
Analytics pane	The analytics pane lists the analytics collected. If you are using an analytic appliance, this pane displays the IP address of where the analytics originate from.
Display Configuration pane	Select the Background check box to change the background color and opacity of the analytic metadata overlays. Changing the background color and opacity does not affect how the camera captures data.
	Select the Border check box to change the border color and opacity of the analytic metadata overlays. Changing the border color and opacity does not affect how the camera captures data.

Table 29: Analytics tab in the Camera Settings window

Interface elements	Description
Recording Options pane	Select the Record analytic data check box to record the analytic metadata associated with the camera.
	Select the Record Video check box to record video when an analytic event occurs.
	In the Pre Trigger area, select the number of seconds that you want to record before an event occurs.
	In the Post Trigger area, select the number of seconds that you want to record after an event occurs.

Recording video for an analytic event

About this task:

You can record video when an analytic event occurs. Select the **Record Video** check box from the camera's **Analytics** tab and define the pre and post trigger times. An event link is automatically created from this tab to the **Event Linking** window.

To record video for an analytic event, complete the following steps:


1. On the **Analytics** tab, select the **Record Video** check box.
2. In the **Pre Trigger** area, enter the number of seconds that you want to record before the event occurs.
3. In the **Post Trigger** area, enter the number of seconds that you want to record after the event occurs.
4. Click **Apply**.

Advanced tab

Depending on the camera type, in the camera's **Settings** window, you can use the **Advanced** tab to configure the camera's profile settings. Profiles such as retail, gaming, and outdoor scenes can be changed for optimum performance.

For more information on the functionality of the **Advanced** tab, see Table 30 and [Configuring a camera's profile](#).

Table 30: Advanced tab in the Camera Settings window

Interface elements	Description
Exposure Profiles list	A list of camera exposure profiles that you can select to configure the camera.  Note: For information about the different profile types, refer to the documentation for your camera.
Apply button	Applies the profile to the camera.
Cancel button	Returns the camera to its original profile.

Configuring a camera's profile

To configure a camera by changing the profile, in the **Config Setup** window, complete the following steps:

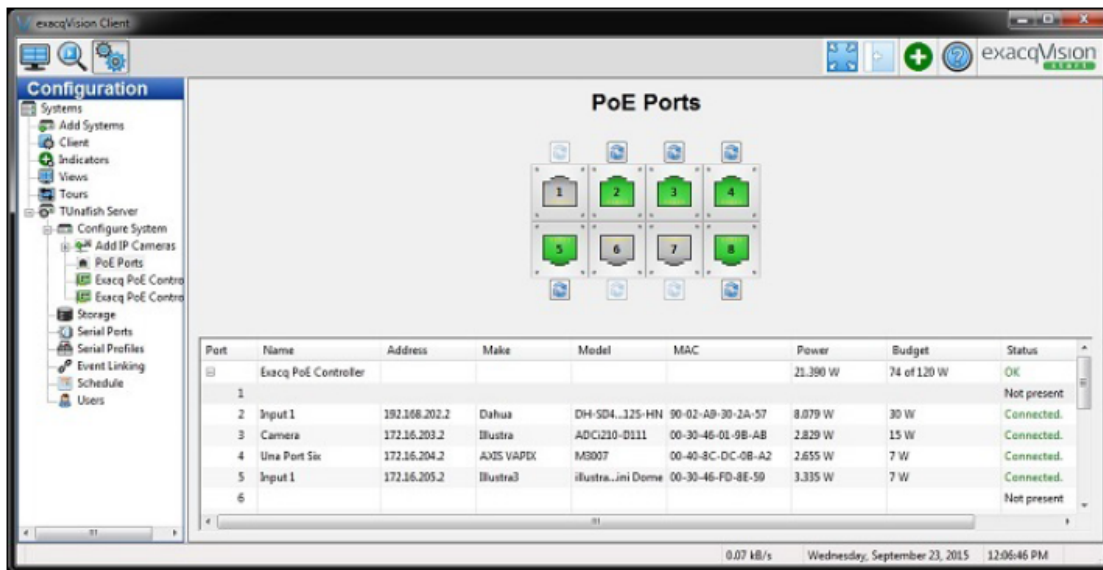
1. In the **Navigation** pane, expand the server node.
2. Expand **Configure System > Add IP Cameras > Camera Recording**, and then select the camera.

3. In the **Settings** window, click the **Advanced** tab.
4. From the **Exposure Profiles** list, select the profile to apply.
5. Click **Apply**.

PoE ports window

The **PoE Ports** window displays the port information for Una systems. The ports display in different colors and indicate the status of the camera. For more information, see Table 31.

Figure 21: PoE Ports window



Opening the PoE Ports window

To open the **PoE Ports** window, complete the following steps:

1. Click the **Config (Setup) Page** icon on the toolbar.
2. From the navigation tree, expand **Configure System**.
3. Expand the **Add IP Cameras** node, and then select **PoE Ports**.

Table 31: PoE Ports window

Interface element	Description
Port column	Displays the number of each physical Ethernet port that can be found on the back panel of a Una exacqVision recorder.
Name column	Displays the camera name that the port detects.
Address column	Displays the camera's IP address.
Make column	Displays the camera's brand.
Model column	Displays the camera model.
MAC Address column	Displays the camera's MAC address.

Table 31: PoE Ports window

Interface element	Description
Power column	Displays the camera's power output.
Budget column	Displays the maximum power that the camera can use.
Status column	Displays the status of the camera's connection. You can also determine the cameras status by the color of the port. <ul style="list-style-type: none"> • Grey indicates that the port is not connected. • Yellow indicates that the system is scanning for a port. • Green indicates that the camera is connected. • Red indicates that the camera is disconnected and is not responding.

RTSP Server window

The Real Time Streaming Protocol (RTSP) is used for streaming real-time data such as audio or video. Configure the RTSP server to allow video or audio to stream from exacqVision Video Management System (VMS) to an integration or media player, for example, VLC).

For more information on the options available, see Table 32 and [Configuring the RTSP server](#).

Figure 22: RTSP Server window

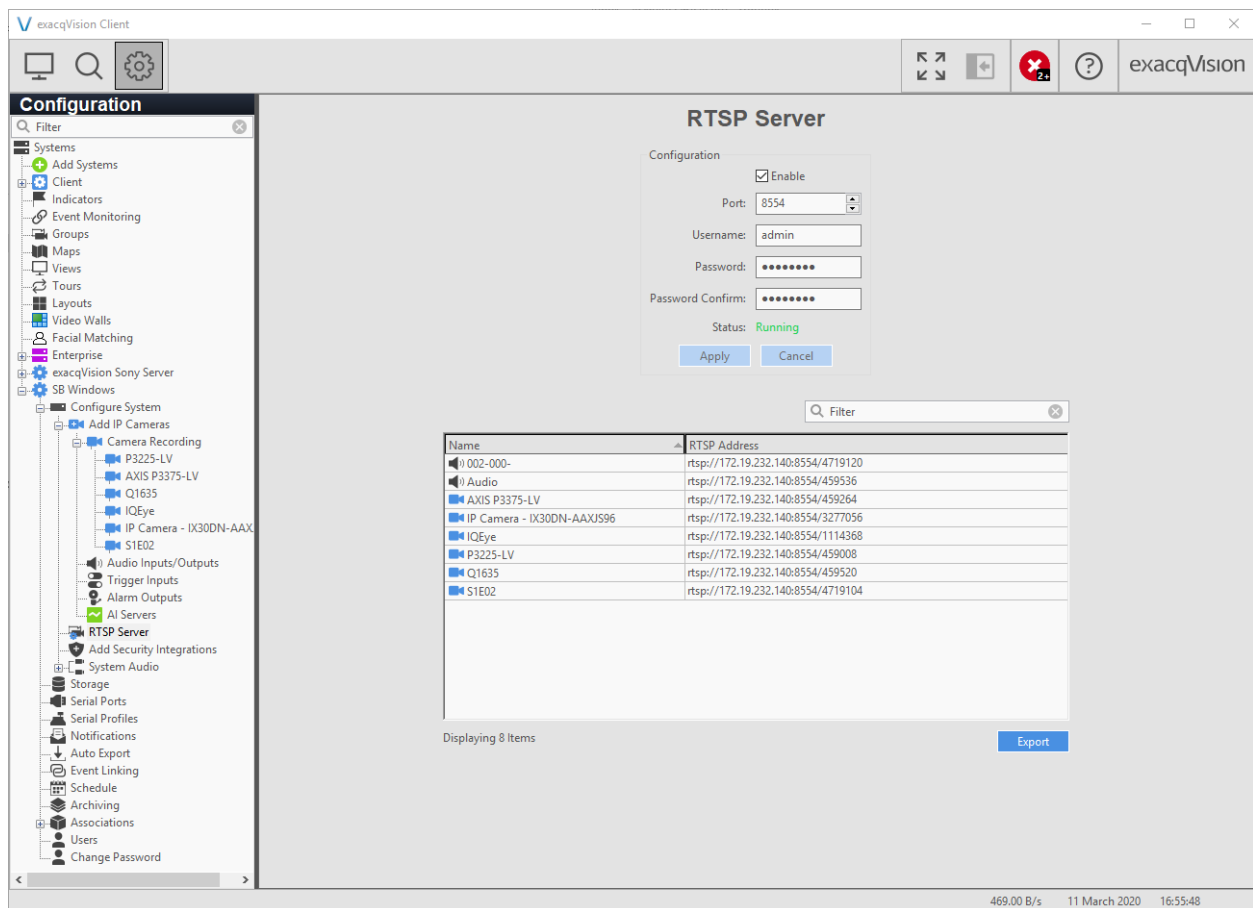


Table 32: Configure System window

Interface element	Description
Enable check box	To configure the RTSP server, select the Enable check box.
Port field	The port number of the RTSP server. The default port number value is 8554.
Username field	The RTSP server user name.
Password field	The RTSP server user password.
Password Confirm field	The RTSP server user password confirmation field. You must enter the password again to confirm the password.
Status field	The connection status. The status can be either Disabled or Running .
Filter field	Search for a camera by name.
Name field	The camera name.
RTSP Address field	The camera's RTSP address.
Export button	Exports a <code>CSV</code> file of the camera's name and associated RTSP address.

Configuring the RTSP server

To configure the Real Time Streaming Protocol (RTSP) server, in the **Config Setup** window, complete the following steps:

1. In the navigation tree, expand the server node.
2. Expand the **Configure System** and then select the **RTSP Server**.
3. In the **Configuration** pane, select the **Enable** check box.
4. In the **Ports** field, click the arrows to configure the port number.
5. Enter a username for the RTSP server.
6. Enter a password and confirm the password in the **Password** and **Password Confirm** fields.
7. Click **Apply**.
8. **Optional:** Click **Export** to export a `CSV` file of the camera names and associated RTSP addresses.
 - ① **Note:** You may have to adjust the RTSP URL based on on whatever address is reachable from the client you attempt to connect with.

Serial profiles window

In the **Serial Profiles** window, you can create and configure serial profiles to integrate an exacqVision server with serial data devices, such as Point of Sale (POS) or bank machine systems. To create a serial profile, see [Creating a serial profile](#). For more information on the functionality of the **Serial Profiles** window, see Table 33 and Table 34 .

Figure 23: Serial Profiles window

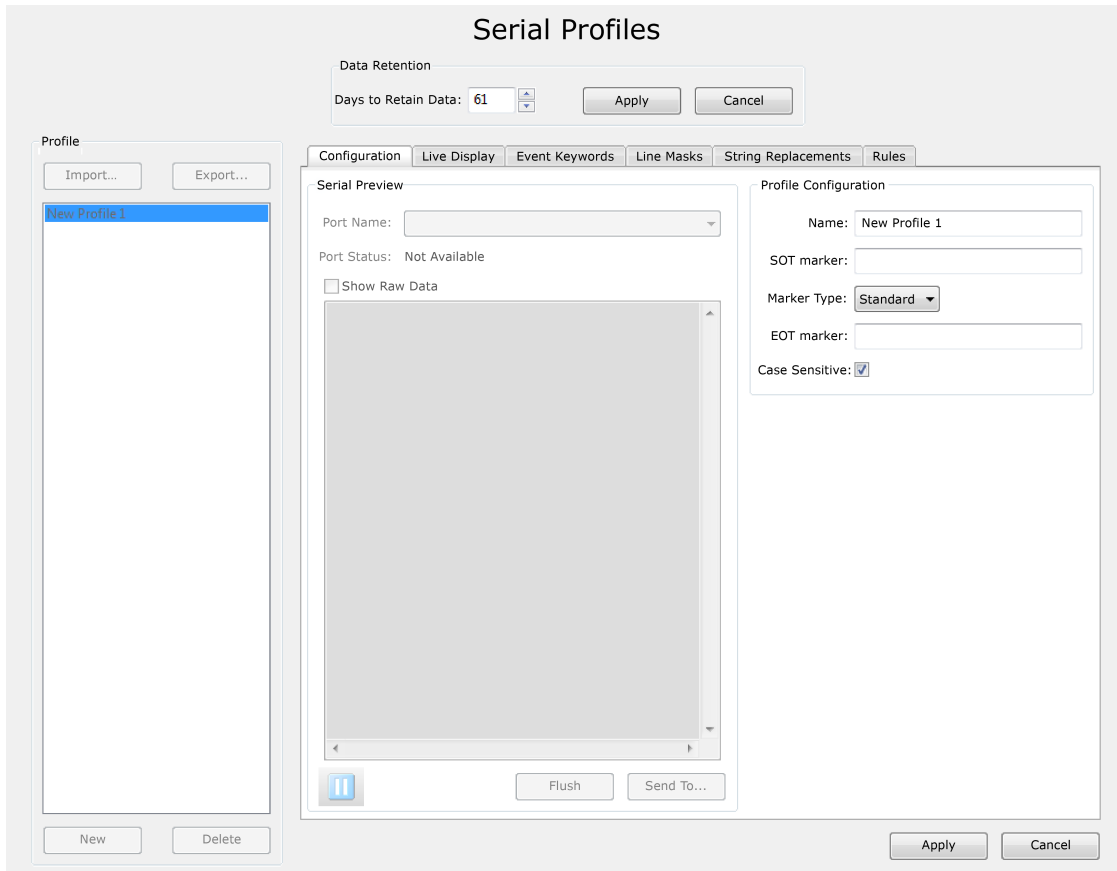


Table 33: Serial Profiles window

Interface element	Description
Profile pane	Displays a list of existing serial profiles.
	To import a serial profile, select Import .
	To export a serial profile, select Export .
	To delete a serial profile, select the profile from the Profile list and click Delete .
Data Retention pane	To select the number of days that serial data can be stored before it is automatically deleted, select the number of days from the Days to Retain Data list and then click Apply .
Configuration tab	On the Configuration tab, you can create or configure serial profiles. For more information, see Table 34.
Live Display tab	Displays a preview of the serial profile.
	To remove the lines, select Enable and then select the number of hours before the system removes the lines.
	To add more space between the data lines, select Double Space Lines .
	To change the font of the data, click Font .

Table 33: Serial Profiles window

Interface element	Description
Line Masks tab	Blacks out areas of the camera view so that they are not visible in live video panels or in recorded data. This feature is useful for hiding information such as credit card details.
	To black out an area of a camera's view, click New and then enter one or more words into the String field.
	To black out an area of a camera's view in live video panels, select Live .
	To black out an area of a camera's view for recorded data, select Search .
String Replacements tab	Modifies the serial data strings into a readable format.
	To modify the serial data, enter the information in the serial data format, and then enter the substitute information that is easier to read into the Replace field.
	To modify the data strings for viewing in the Live window, select Live .
	To modify the data strings for recorded data, select Search .
Rules tab	Creates conditions that you can use to perform a more detailed serial data string search.
	To create a rule, see Creating a rule for serial data string searches .
	To edit a rule, click Edit in the Configure field.

Table 34: Configuration tab in the Serial Profiles window

Interface element	Description
SOT marker field	The SOT marker field tells the exacqVision system when you start a transaction. This field is case-sensitive.
Marker Type list	Displays a list of marker types.
EOT marker field	The EOT marker field tells the exacqVision system when you end a transaction. This field is case-sensitive.
Case Sensitive	To apply case sensitivity, select the Case Sensitive check box.
Port Name list	Displays a list of existing serial profiles.
Port Status field	Displays the connection status of the serial port.
Show Raw Data check box	Displays all the characters between the lines of data.
Flush button	Displays the next line of data. If the serial port timeout is zero, the data does not reach the maximum line length, or if an EOT did not transmit.
Send To... button	Copies data string examples that you can then save as a SOT, EOT, keyword, line mask, or string replacement. You can also copy the data string example to a new rule or an existing rule.
	To save a data string example, click the Pause button, highlight the string, and then click Send To....

Creating a serial profile

To create a serial profile, complete the following steps:

1. In the **Serial Profiles** window, click **New**.

2. On the **Configuration** tab, enter a name for the profile in the **Name** field.
3. In the **SOT marker** field, enter a command.
4. From the **Marker Type** list, select a marker type.
5. In the **EOT marker** field, enter a command.
6. Click **Apply**.

Creating a rule for serial data string searches

About this task:

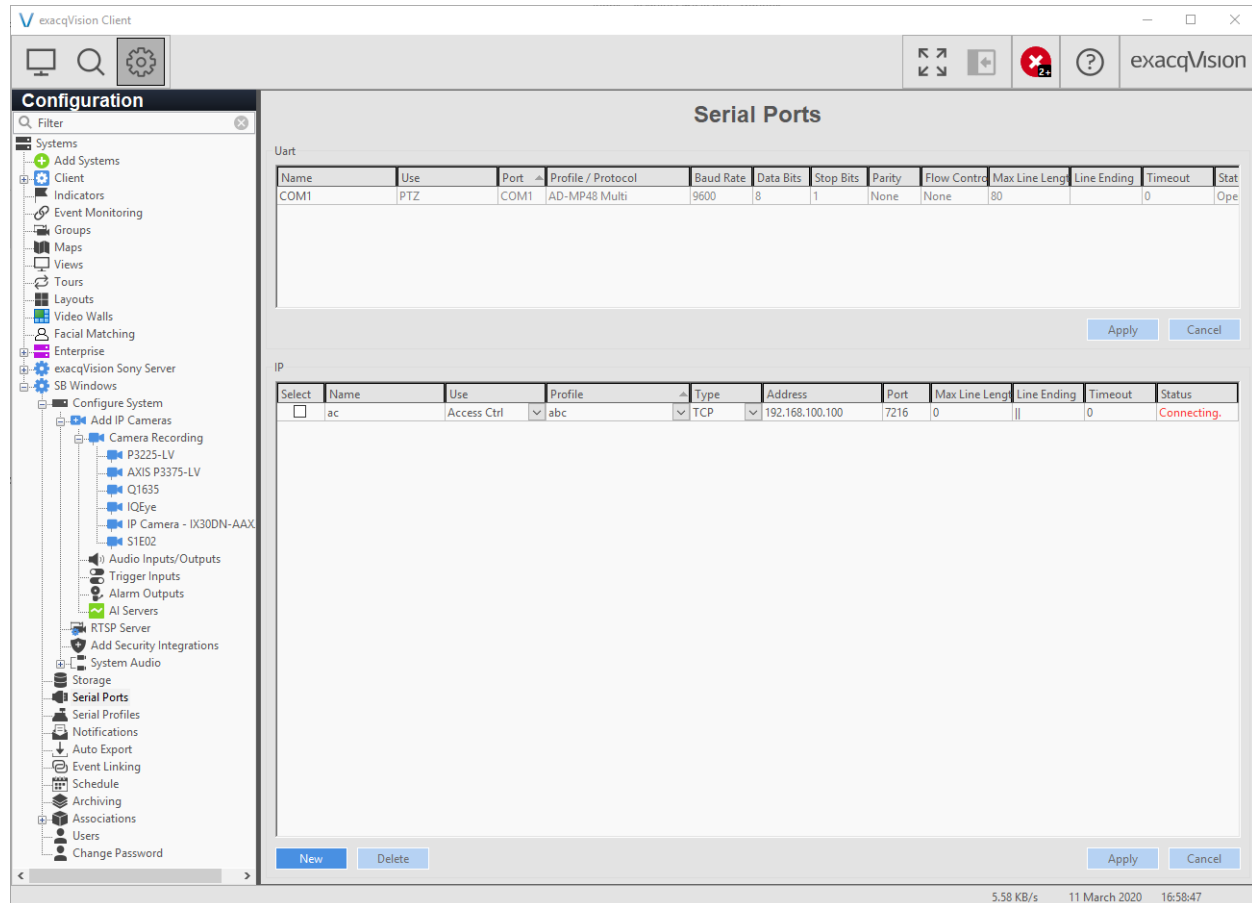
To create a serial data string condition, complete the following steps:

1. On the **Rules** tab in the **Serial Profiles** window, select **New**.
2. From the **Field Position** list, select whether the condition information occurs before or after the value of interest.
3. Enter the condition text.
4. Select an option from the **Operator** list.
5. In the **Value** field, enter the value of interest.
6. Click **OK**.

Serial Ports window

In the **Serial Ports** window, you can configure the serial ports on an exacqVision system to communicate with serial devices, such as POS terminals and PTZ cameras. There are two types of ports that you can configure; UART ports and IP ports.

Figure 24: Serial Ports window



UART pane

For UART serial ports, ensure that you connect the wires to the serial port and then configure the port. The system automatically detects and displays the ports. For more information on configuring UART serial ports, see the following table.

Table 35: UART pane in the Serial Ports window

Interface element	Description
Name field	Enter a unique name for the port.
Use list	From the Use list, select a purpose for the port.
Port list	The operating system automatically selects a port from the Port list.
Profile/Protocol list	Displays a list of configured serial profiles that you can select. To create a new serial profile for a port, from the list select New . The Serial Profiles window opens. For more information on how to create a serial profile, see Creating a serial profile .

Table 35: UART pane in the Serial Ports window

Interface element	Description
Baud Rate list	The option you select from the Baud Rate list must match the connecting device. For more information, see the devices manufacturer's manual.
Data Bits list	The option you select from the Data Bits list must match the connecting device. For more information, see the devices manufacturer's manual.
Stop Bits list	The option you select from the Stop Bits list must match the connecting device. For more information, see the devices manufacturer User Manual.
Parity list	Displays a list of connection parameters for UART serial ports.
	The option you select from the Parity list must match the connecting device. For more information, see the devices manufacturer's manual.
Flow Control list	The option you select from the Flow Control list must match the connecting device. For more information, see the devices manufacturer's manual.
Max Line Length field	Specifies the maximum number of characters that the port can receive before it assumes it is at the End of a Line (EOL). The default number of characters is 80.
Line Ending field	Specifies what characters or string of characters identifies the EOL.
	In exacqVision systems, the default line ending is Carriage Return Line Feed (CR LF) for Windows and LF for Linux. \x0D represents CR and \x0A represents LF. If this field is left blank, the system uses the OS default line ending.
Timeout field	Specifies the number of seconds the port waits after receiving data before sending the data to the serial profile for processes.
	The default value is zero. For troubleshooting, enter 1 in the Timeout field.
Status field	Displays the status of the port connection and troubleshooting information.

IP pane

For IP ports, you must add the port manually by clicking **New** in the IP pane. For more information on configuring IP ports, see the following table.

Table 36: IP pane in the Serial Ports window

Interface element	Description
Name field	Enter a unique name for the port. This name is visible in the Live window and by exacqVision client users.
Use list	From the Use list, select a purpose for the port.
Profile list	Select a profile from the Profile list.
	You can create profiles on the Serial Profiles window. For more information, see Creating a serial profile .
Type list	Select the transport connection type. The device's manufacturer defines the transport type.
Address field	Enter the IP address of the device.
Port field	Enter the Transmission Control Protocol (TCP) port of the device. The device's manufacturer defines the TCP port.
Max Line Length field	Specifies the maximum number of characters that the port can receive before it assumes it is at the End of a Line (EOL). The default number of characters is 80.

Table 36: IP pane in the Serial Ports window

Interface element	Description
Line Ending field	Specifies what characters or string of characters identifies the EOL.
	In exacqVision systems, the default line ending is Carriage Return Line Feed (CR LF) for Windows and LF for Linux. \x0D represents CR and \x0A represents LF. If this field is left blank, the system uses the OS default line ending.
Timeout field	Specifies the number of seconds the port waits after receiving data before sending the data to the serial profile for processes. The default value is zero.
	For troubleshooting, enter 1 in the Timeout field.
Status field	Displays the status of the port connection and troubleshooting information.

Audio Inputs/Outputs window

In the **Audio Inputs/Outputs** window, you can configure audio inputs and outputs for monitoring, recording, and 2-Way Audio. You can configure multiple audio inputs for recording, but you can only configure one audio input for export and live playback. For more information, see Table 37 .

ⓘ **Note:** All exacqVision systems ship with the audio inputs in a deactivated state. This is due to legal restrictions on audio recording in some countries.

Figure 25: Audio Inputs/Outputs window

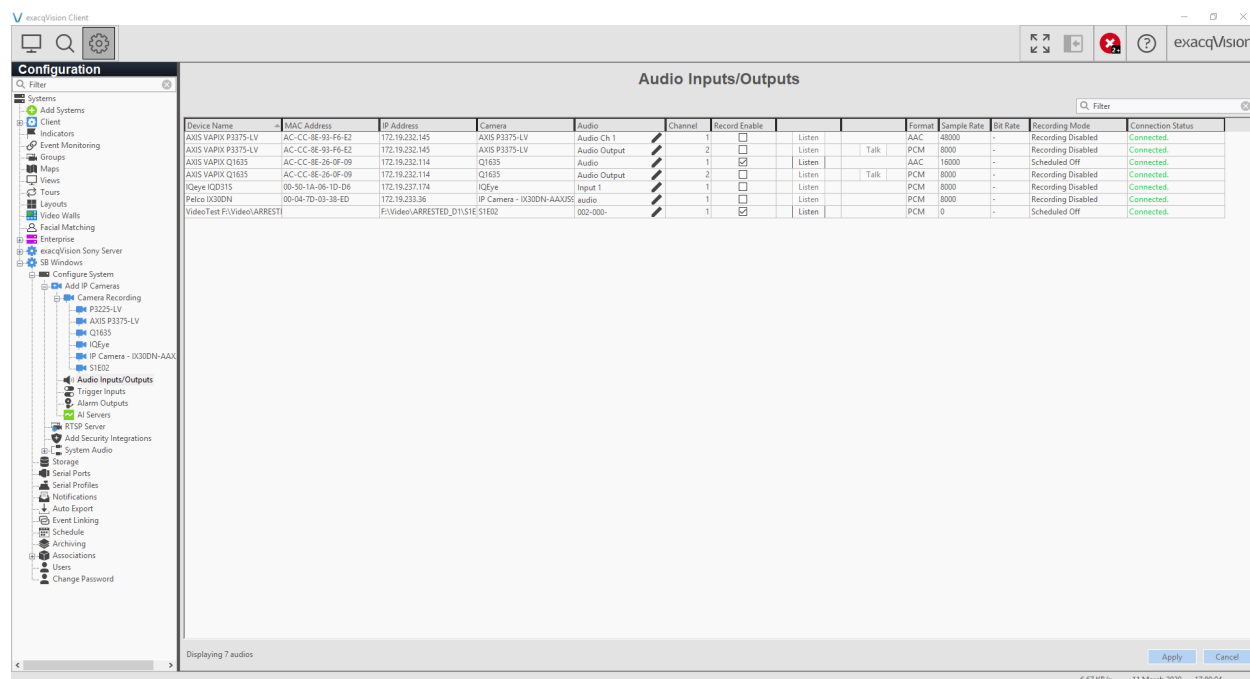


Table 37: Audio Inputs/Outputs window

Column	Description
Device Name	Displays the make and model of the camera that is associated with the audio device.
Camera	Displays the name of the camera or cameras that are associated with the audio device.
Audio	Displays the name of the audio output or input. To edit the audio output or input name, click the Pencil icon.
Channel	Displays the camera's channel number.
Record Enable	Select the Record Enable check box to activate the audio input for recording.
Listen	To verify that the audio input connects to a channel, click Listen .
Talk	To verify that you can send audio on a 2-way system, click Talk .
Recording Mode	Displays the recording mode settings for the audio input. To change the recording mode, see Schedule window .
Connection Status	Displays the connection status of the camera.

Trigger Inputs window

In the **Trigger Inputs** window, you can configure trigger inputs on hybrid systems and some IP cameras to trigger video recording. You can then activate the trigger inputs in the **Event Linking** window. For more information, see [Event Linking window](#). For more information on the functionality of the **Trigger Inputs** window, see Table 38.

Figure 26: Trigger Inputs window

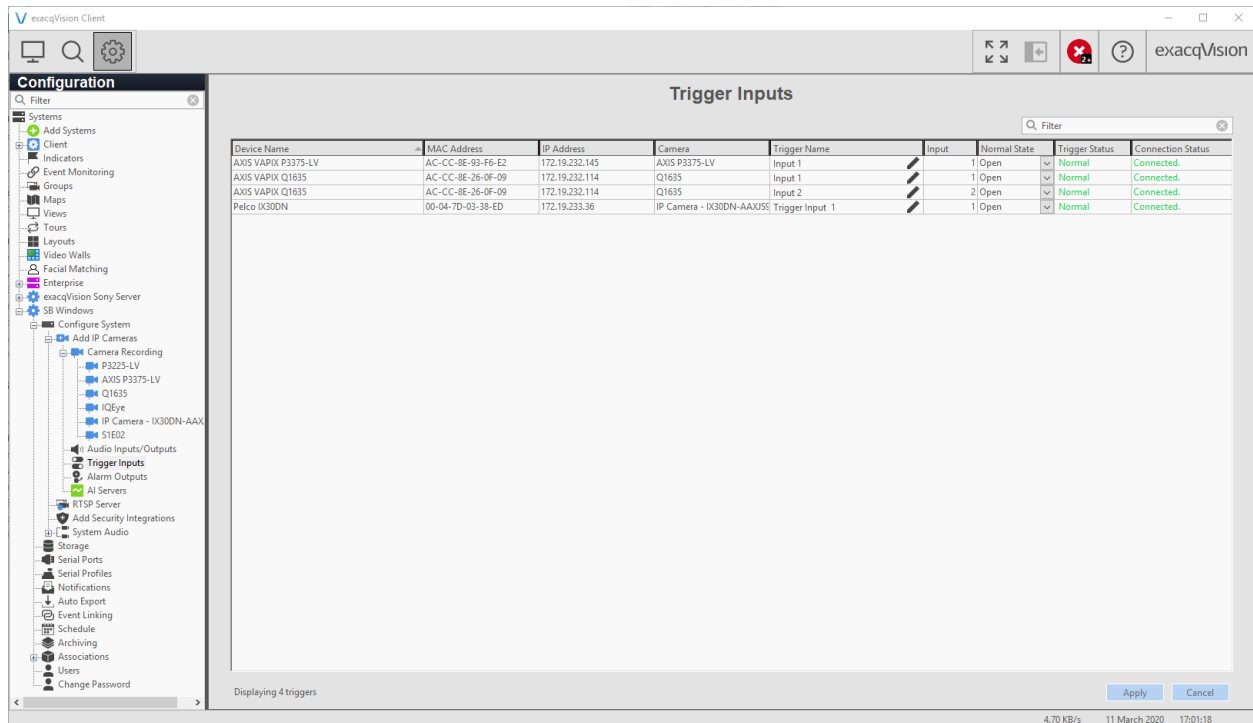


Table 38: Trigger Inputs window

Column	Description
Device Name	Displays the make and model of the camera that is associated with the trigger input.
Camera	Displays the name of the camera or cameras that are associated with the trigger input.
Trigger Name	Displays the name of the trigger input. To edit the trigger input name, click the Pencil icon.
Input	Displays the camera's input number.
Normal State	To set an alarm to not trigger when an action or an event associated with that trigger occurs, select Open .
	To set an alarm to trigger when an action or an event associated with that trigger occurs, select Closed .
Trigger Status	Displays the normal state status for the trigger input.
Connection Status	Displays the connection status of the camera.

Alarm Outputs window

In the **Alarm Outputs** window, you can configure alarm outputs on hybrid systems and some IP cameras. You can then set an alarm to trigger in the [Event Linking window](#). For more information on the functionality of the **Alarm Outputs** window, see Table 39.

Figure 27: Alarm Outputs window

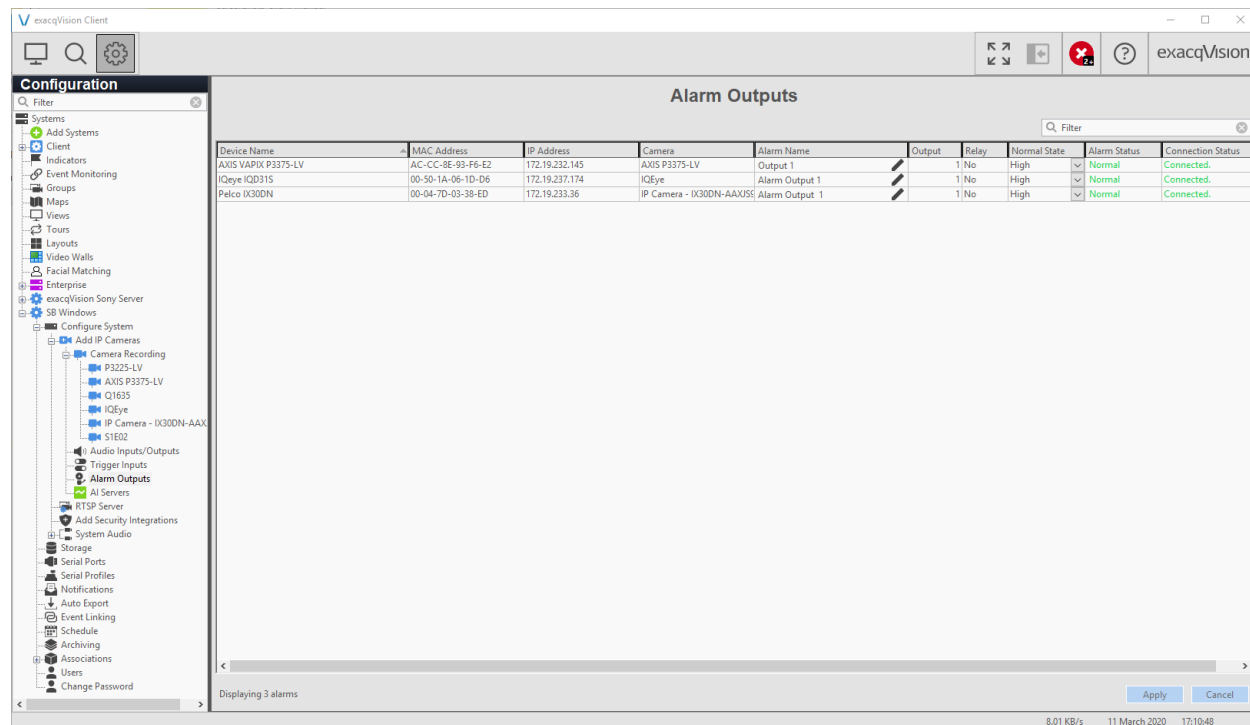


Table 39: Alarm Outputs window

Column	Description
Device Name	Displays the make and model of the camera that is associated with the alarm output.
Camera	Displays the name of the camera or cameras that are associated with the alarm output.
Alarm Name	Displays the name of the alarm output. To edit the alarm output name, click the Pencil icon.
Output	Displays the camera's output number.
Relay	Displays whether the alarm output is a relay.
Normal State	To set the alarm output to 5VDC, select High . To set the alarm output to 0VDC, select Low .
Alarm State	Displays the normal state status for the alarm output.
Connection Status	Displays the connection status of the camera.

AI servers window

Click the Facial Matching tab on the AI Servers window to register faces on events and detect faces across multiple cameras after an event. Click the Mask Detection tab to register faces on events where a face mask is either detected or not detected.

Figure 28: Facial Matching tab

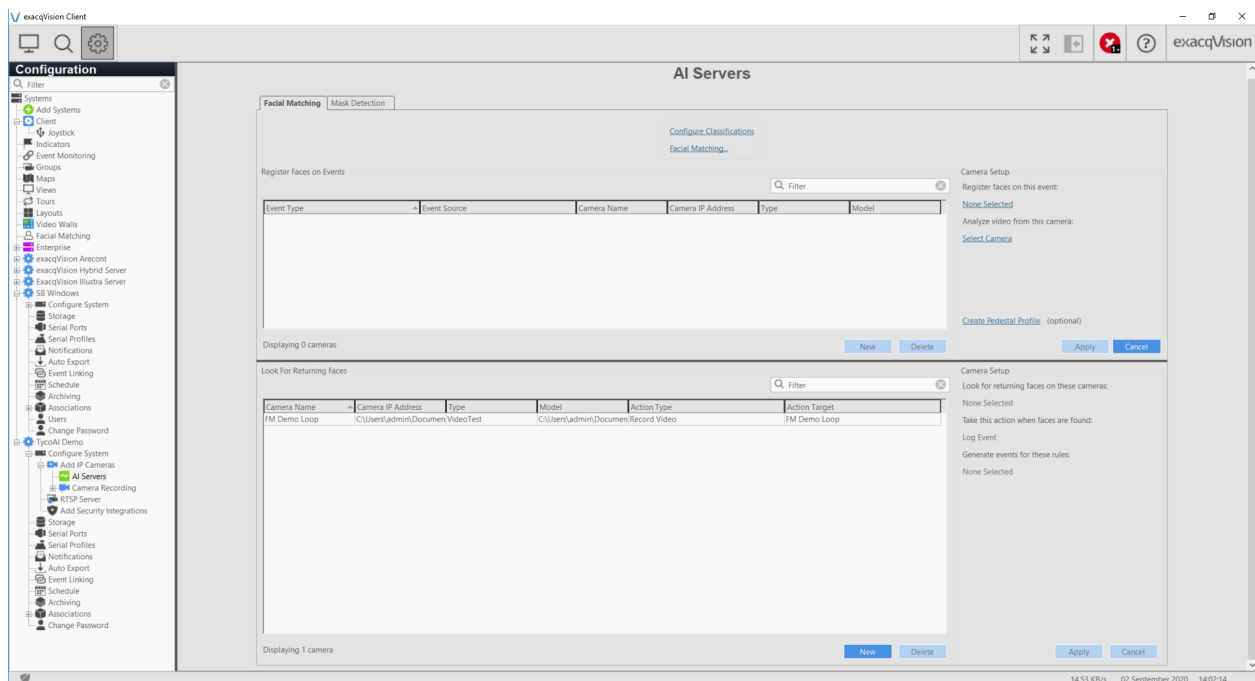


Table 40: Facial Matching tab

UI element	Description
Configure Classifications dialog box	Click Configure Classifications to configure AI server classifications. Set bookmarks and confidence levels on the AI server page. For more information, see Configuring classifications
Facial Matching page	Click Facial Matching to navigate directly to the Facial Matching page.
Register Faces on Events pane	Register faces when specific events occur. Registering faces on events
Camera Setup pane (Register Faces on Events)	Configure cameras to register faces on events. Click Create Pedestal Profile (optional) if required.
Look For Returning Faces pane	Configure systems to search for faces that are registered from previous events. Looking for returning faces
Camera Setup pane (Look For Returning Faces)	Configure cameras to register returning faces.

Figure 29: Mask Detection tab

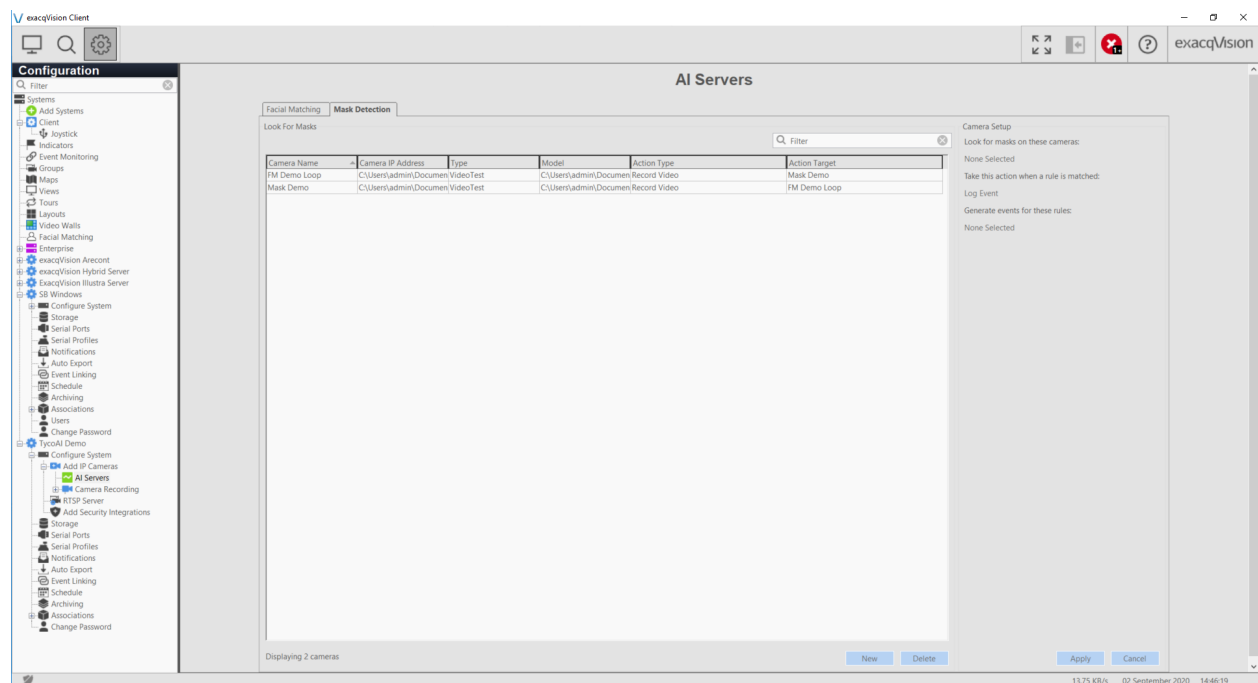


Table 41: Mask Detection tab

UI element	Description
Look For Masks pane	In the Look For Masks pane, you can view recorded events where faces are registered with or without a mask.
Camera Setup pane (Mask Detection)	Configure cameras to register faces with or without masks on events.

Registering faces on events

Register faces when specific events occur and add faces to **Person Configuration** in the **Facial Matching** window.

1. In the **Facial Matching** window, in the **Register Faces on Events** pane, click **New**.
2. In the **Camera Setup** pane, in the **Select Event Type** window, select an event type and click the arrow to move to **Select Source For**.
3. Select the source, select **Lasts at Least**, and use the arrows to select a value.
4. In the **Select Camera** window, select a camera and click **Select**.
5. Click **Apply**.

Result Cameras are configured to detect faces registered in the **Facial Matching** database.

Registering faces with or without face masks

You can register an event when a camera detects a face with or without a face mask.

Before you begin: You must install Tyco AI to use this feature.

To register an event when a camera detects a face with or without a face mask, complete the following steps:

1. On the **Mask Detection** tab, click **New**.
2. In the **Camera Setup** pane, in the **Select Cameras** window, select a camera and click **Select**.
3. In the **Select Action Type** window, select an action type and click the arrow to move to the **Select Target For:Log Event** window.
4. Select the target and click **Select**.
5. Under **Generate events for these rules;**, select a rule and click **Select**.
6. Click **Apply**.

Result An alert is created when a camera detects a face with or without a face mask.

Looking for returning faces

Configure systems to look for faces that are already registered. You can request that a specific action occurs when a person of interest is detected.

1. In the **Configuration** window, select a server and expand it.
2. Select **AI Servers** in the **Camera Recording** window.
3. In the **Look for Returning Faces** pane, click **New**.
4. Click **Select Cameras** in the **Camera Setup** window and select a camera.
5. In **Take this action when persons of interest are found**, click **Log Event**.
6. Select an action type.
7. Click the arrow to select a target for the action type.
8. Click **Apply**.

Result Cameras are configured to search for registered faces and action types are specified.

Configuring classifications

To configure Tyco AI server classifications, set bookmarks and confidence levels on the AI server page.

1. Expand a system with the **Tyco AI** server installed.
2. Click **AI Servers**.
3. On the **AI Servers** page, click **Configure Classifications**.
4. Edit preset classification names if required.
5. Select the **Auto Bookmark** checkbox if you want to create a bookmark on the **Search Cameras** page for each classification. If you select **Auto Bookmark** for a classification, a bookmark is automatically generated every time a returning face is detected with that classification type.
6. Set confidence levels for each classification in the **Confidence Level** field. The **Confidence Level** is the minimum confidence level required for a returning face to be identified with that classification type.
7. Click **Apply**.

Result When you register a face in recorded video, you can select the new or updated classification in the **Classifications** list.

Analytic Appliances window

In the **Analytic Appliances** window, you can see the status of all the analytic appliances that are associated with cameras and are configured on the system. Analytic appliances offset some of the processing on the NVR, which can increase its performance.

You must configure the analytic appliance from the analytic appliance interface. For more information on the functionality of the **Analytic Appliances** window, see Table 42. To manually add an analytic appliance that provides analytics for an existing camera, see [IP Camera Information pane](#).

Figure 30: Analytic Appliances window

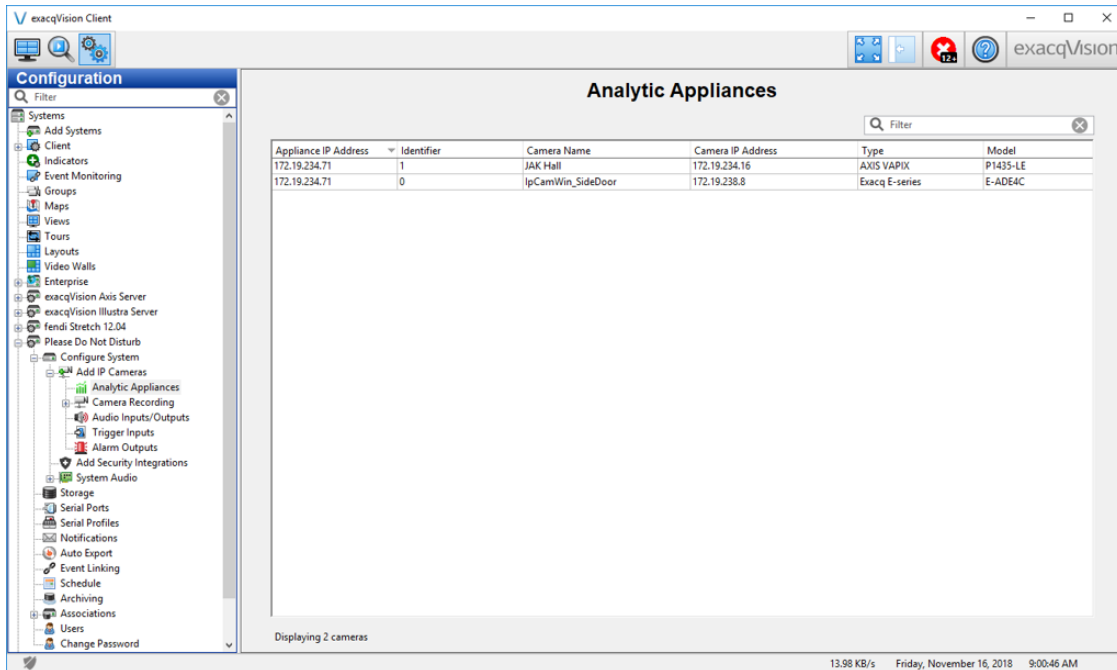


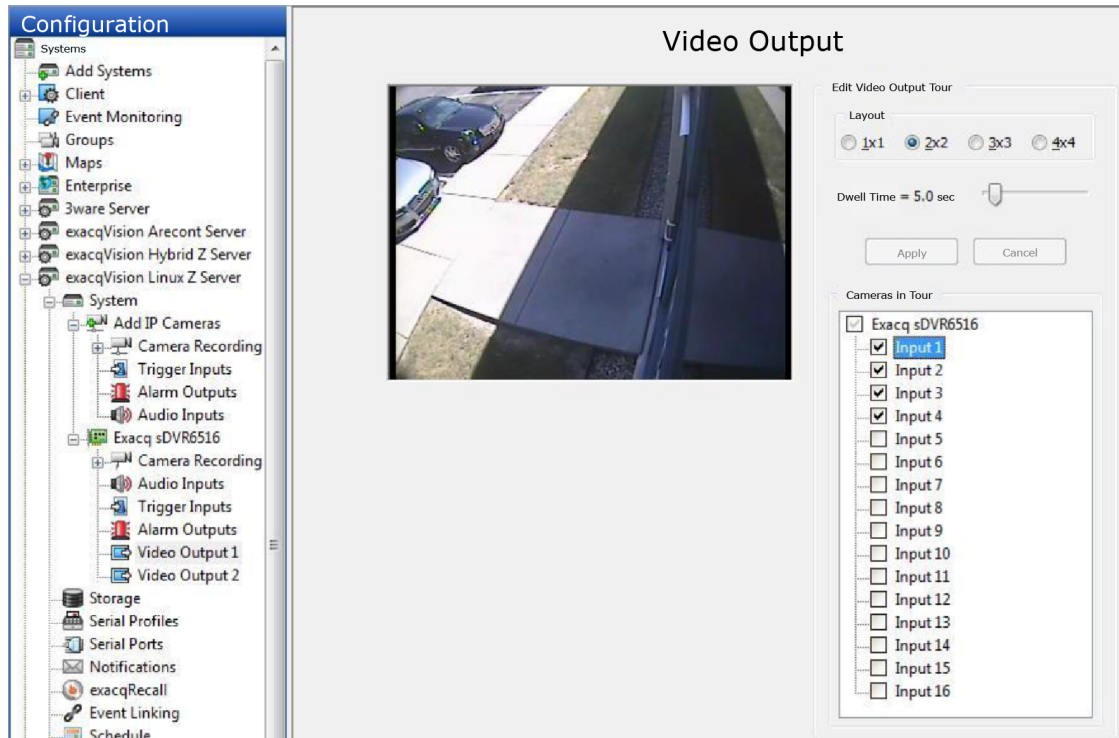
Table 42: Analytic Appliances properties

Interface element	Description
Appliance IP Address	The IP address of the analytic appliance.
Identifier	The input number of the analytic appliance.
Camera Name	The name of the camera associated with the analytic appliance.
Camera IP Address	The IP address of the camera associated with the analytic appliance.
Type	The analytic appliance brand type.
Model	The analytic appliance brand model number.

Video Outputs window

In the **Video Output** window, you can create tours between analog video cameras in different display modes. For more information on how to create a tour, see [Creating a tour in the Video Output window](#).

Figure 31: Video Output window



Creating a tour in the Video Output window

To create a tour in the **Video Output** window, complete the following steps:

1. From the **Cameras in Tour** list, select the cameras that you want to include in the tour.
2. From the **Layout** area, select a layout.
3. Move the **Dwell Time** slider to set the length of time before a monitor switches to the next camera. The dwell time range is between one and 60 seconds.
4. Click **Apply**.

Storage window

In the **Storage** window, you can access the **Drive**, **Extended**, **Hardware**, and **Network** tabs to configure the system's hard drives for video storage, and to monitor the health of the system's drives and RAID arrays.

Drive tab

The **Drive** tab displays information about the drives that you install on the system, including the capacity of the drive, the available storage space, and its health status. On the **Drive** tab, you can also set the minimum or maximum time period for storing video. For more information, see Table 43 and Table 44.

Figure 32: Drive tab in the Storage window

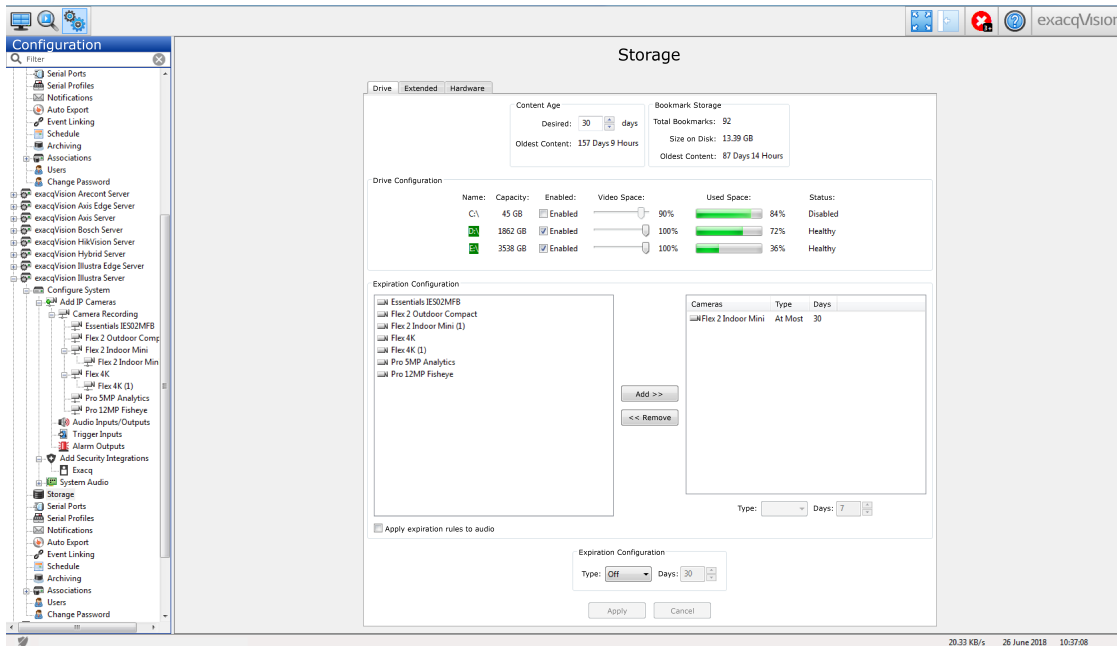


Table 43: Drive tab in the Storage window

Interface element	Description
Content Age pane	Displays the age of the oldest recorded video on the system, and sets how long the system retains video data before it deletes. If you delete the video data before the set date, a trigger action on the Event Linking window activates. For more information, see Event Linking window .
Drive Configuration pane	Displays information about the drives you install on the system. For more information, see Table 44.

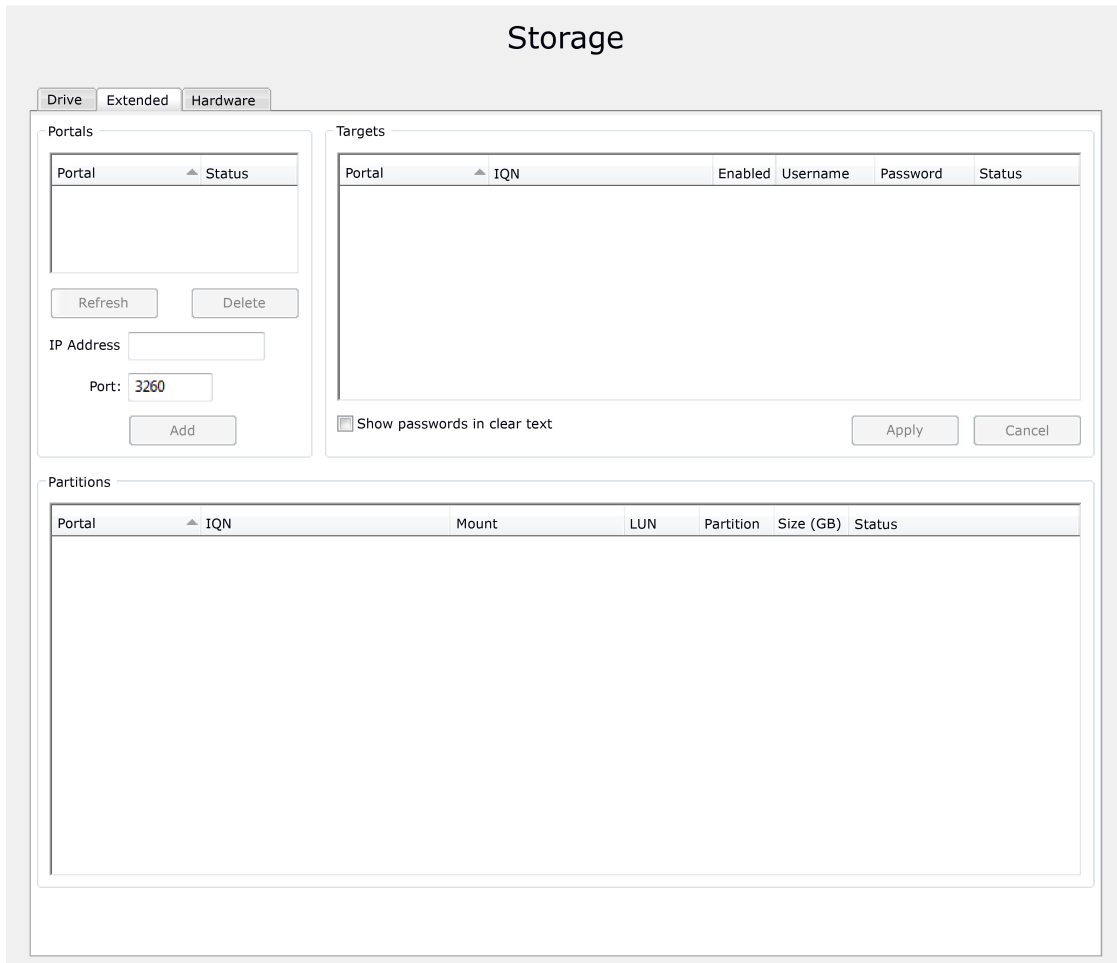
Table 44: Drive Configuration pane in the Storage window

Interface element	Description
Name area	The system drive C:\ in Windows, or /mnt/edvr/0 in Linux, is for the exacqVision software and operating system. You cannot record video to this drive, or use it for video storage.
Capacity area	Displays the space capacity of the hard drive.
Enabled check box	To enable a drive for video storage, select the Enabled check box. You can locate the storage drives below the system drive.
Video Space slider	Adjusts the amount of drive space that you want to use for data storage.
Used Space area	Displays the current hard drive capacity.
Status	Displays the current health status of the hard drive.

Extended tab

On the **Extended** tab, you can configure storage drives on an S-Series system. For more information, see [Configuring a storage drive on an S-series system](#).

Figure 33: Extended tab in the Storage window



Configuring a storage drive on an S-series system

To configure a storage drive on an S-series system, complete the following steps:

1. In the **Portals** pane, click **Add**.
2. Enter the IP address of the S-series system in the **IP Address** field.
3. In the Targets pane, select the **Enabled** check box of the system.
4. Click **Apply**.

Network tab

On the **Network** tab, you can allocate drives in an S-Series system for archiving or for extended storage. For more information, see the following table.

Table 45: Network tab

Interface element	Description
Name field	Displays a list of the installed drives on an S-Series server.
Size field	Displays the size of the drive.
Type list	To allocate a drive for archiving or for extended storage, select an option from the Type list.

Table 45: Network tab

Interface element	Description
Server Address field	Displays the IP address of the server.
IQN/Address field	Displays the address for a iSCSI drive
Status field	Displays the status of the drive.

Event Linking window

The event linking feature improves searches by including a linked action in the search options. In the **Event Linking** window, you can connect different events, such as the activation of an input trigger with actions such as recording video or triggering an alarm. For more information see, [Creating an event link](#) and Table 46.

Figure 34: Event Linking window

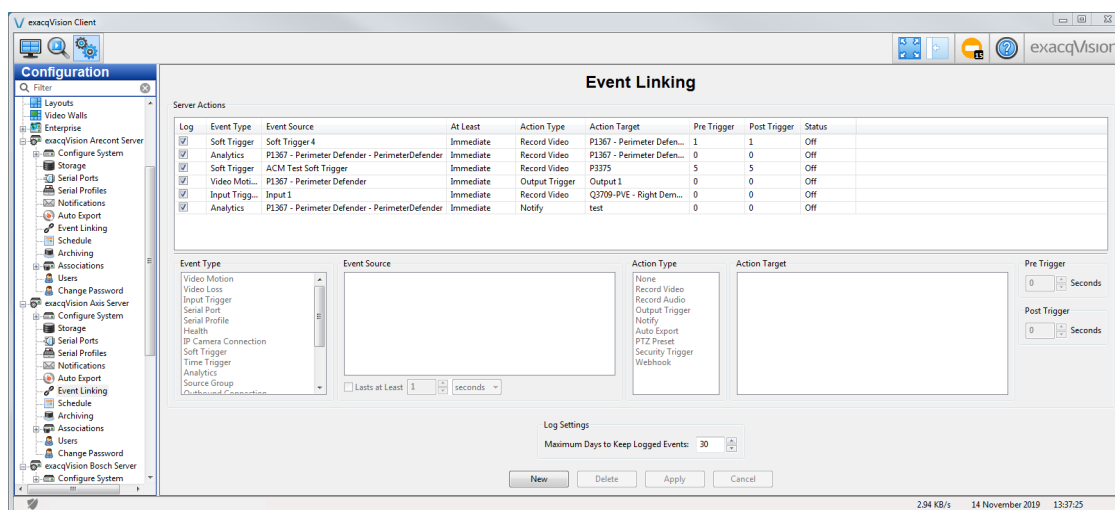


Table 46: Event Linking window

Interface element	Description
Server Actions list	Displays a list of events.
Event Type list	Displays a list of possible events. Input triggers and soft triggers are the only event types available in exacqVision Start.
Event Source list	Displays a list of event sources. For some options, you can create, edit or delete the event source using the New , Edit , and Delete buttons. The Event Source list sets how long an alarm must occur before an action takes place and the system logs the event. The default value is Immediately. To set the event source time, select the Lasts at Least check box, and then select the number of seconds, minutes, or hours.
Action Type list	Displays a list of possible actions. For more information, see Table 47.
Action Target list	Displays a list of possible targets. For more information, see Table 47.
Pre Trigger list	Determines how much buffered data to store before an event occurs.
Post Trigger list	Determines how long to continue to perform the action that you select from the Action Type list after an event occurs.
Log Settings area	Determines how long the system stores the event in the event database. The maximum time that the system can store an event is 365 days.

Creating an event link

To create an event link, complete the following steps:

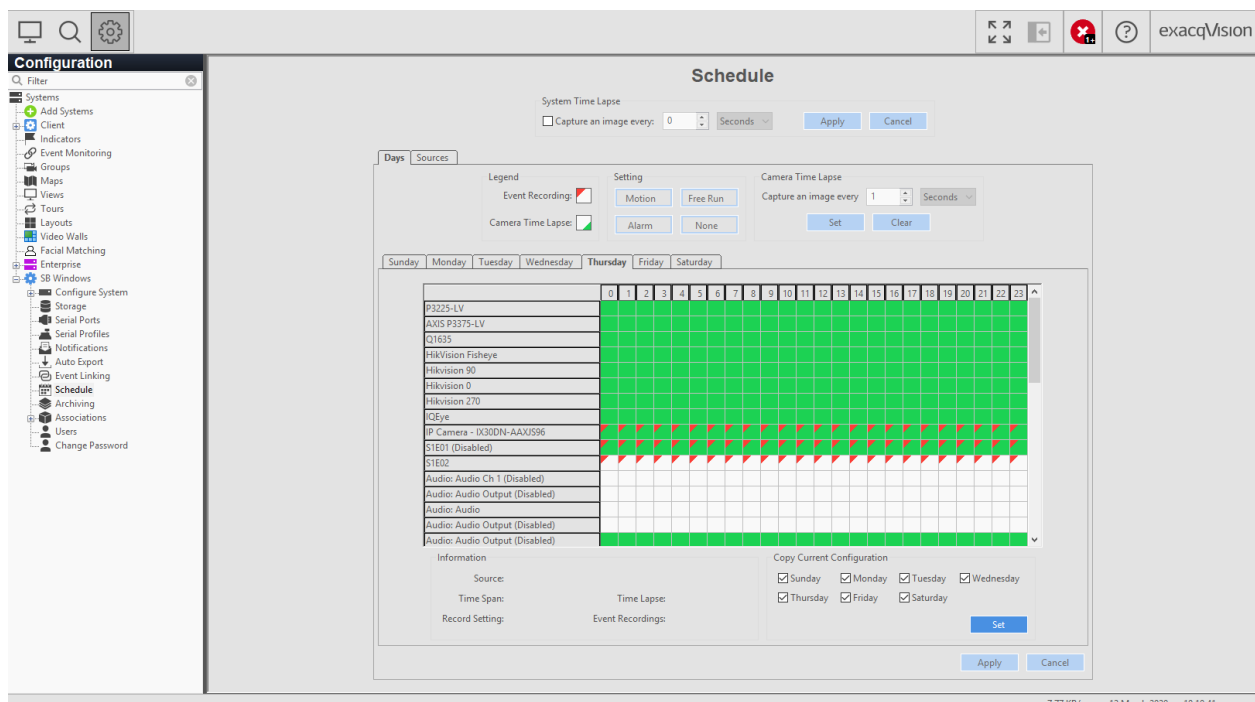
1. Click **New**.
2. From the **Event Type** list, select an event.

3. From the **Event Source** list, select an event source.
 - ① **Note:** If you select **Soft Trigger**, **Time Trigger**, or **Source Group** in the **Event Type** list, you can create or edit the **Event Source** list using the **New**, **Edit**, or **Delete** buttons.
4. From the **Action Type** list, select an action.
5. From the **Action Target** list, select a target.
6. Click **Apply**.

Schedule window

In the **Schedule** window, you can create a recording schedule. The **Schedule** window contains two tabs; the **Days** tab and the **Sources** tab. On the **Days** tab, you can create a schedule for all connected devices in the system. On the **Sources** tab, you can create a schedule for a single connected device. By default, an exacqVision system configures a schedule to record all motion and events.

Figure 35: Schedule window



Schedule modes

When creating a schedule, you can choose from four modes of recording settings. For more information, see the following table.

Table 48: Recording setting modes

Recording mode	Color	Description
MOTION	Blue	Records any motion or when alarms that occur.
Free Run	Green	Continuously records. Free Run recording uses a large amount of disk space.
ALARM	Red	Records when alarms that occur.
NONE	White	Does not record.

Days tab

On the **Days** tab, you can create a schedule for all connected devices in the system. To create a schedule, see [Creating a schedule for all devices](#). For more information on the functionality of the **Days** tab, see the following table.

Table 49: Days tab in the Schedule window

Interface element	Description
Legend pane	Displays how Event Recordings and Camera Time Lapses display in the schedule grid.
Setting pane	Displays the different recording settings modes. For more information, see Table 48.
Camera Time Lapse pane	Sets a system wide time lapse for all the cameras.
Information pane	Displays details of a camera's settings for the day and time you select. To display the details of the camera's settings, in the grid hover the cursor over a square that corresponds to the day and time you want.
Copy Current Configuration pane	Applies the recording schedule to other week days. To apply the schedule to another week day, select the day's check box and then click Set .

Creating a schedule for all devices

To create a schedule for all devices, complete the following steps:

1. In the **Days** tab, select the appropriate tab for the day of the week.
2. Left-click the grid and drag the cursor until you have drawn a box over the days and corresponding hours for when you want to schedule the recording.
3. In the **Setting** area, select a recording mode. For more information on the schedule modes, see Table 48 .
4. Click **Apply**.

Sources tab

On the **Sources** tab, you can create a schedule for a single connected device. To create a schedule for a single connected device, see [Creating a schedule for a single device](#). For more information on the functionality of the **Sources** tab, see the following table.

Table 50: Sources tab in the Schedule window

Interface element	Description
Camera list	Displays a list of cameras that are available for scheduling.
Legend pane	Displays how Event Recordings and Camera Time Lapses display in the schedule grid.
Settings pane	Displays the different scheduling settings modes. For more information, see Table 48.
Apply To... button	Applies the camera's schedule to another device.

Creating a schedule for a single device

To create a schedule for a single device, complete the following steps:

1. In the **Sources** tab, from the Cameras list select a device.
2. Left-click the grid and drag the cursor until you have drawn a box over the days and corresponding hours for when you want to schedule the recording.
3. In the **Setting** area, select a schedule mode.
4. Click **Apply**.

Users window

In the **Users** window, you can add or delete users from the system, configure the access level of a user role, and assign permissions to view cameras. For information on the functionality of the **Users** window, see Table 51.

Figure 36: Users window

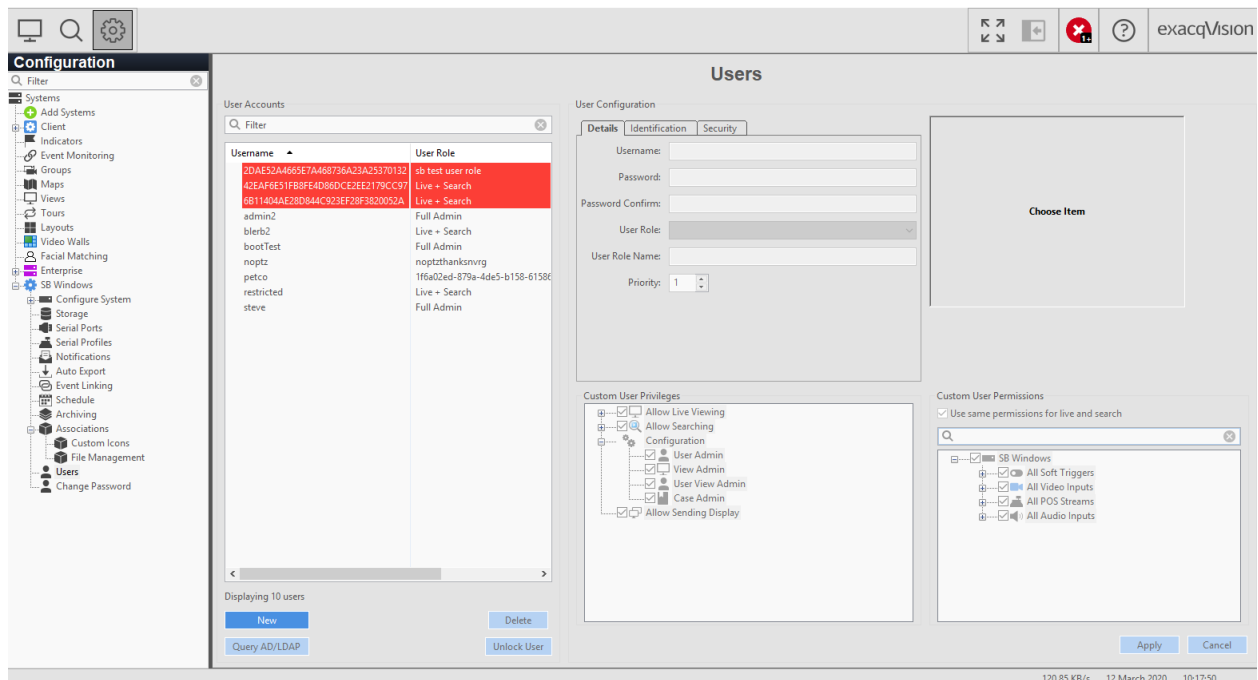


Table 51: Users window

Interface element	Description
User Accounts list	Displays a list of system users and user roles.
	To add a new user or user role, see Adding a user to the system and Adding a user role to the system .
	To delete a user or user role, select the user or user role from the User Accounts list, and then click Delete . Deleting the last user from a role automatically deletes the role.
Query AD/LDAP button	Tests the connectivity and queries the LDAP server.
Unlock User button	To unlock a user that entered their password incorrectly, click Unlock User . To change the number of password entry attempts that a user can have before they are locked out of the system, see Setting the user lockout .
Details tab	For more information on the Details tab, see Table 52.
Identification tab	You can use the Metadata area to create data fields to refine a user search. To create a data field, click the Plus icon and then enter the information in the corresponding field.
Security tab	The Security tab is available only on systems that support its features. For more information, see the Security tab in the Users window .
Custom User Permissions pane	To edit the Custom User Permissions list, you must clear the View Admin , User Admin , and Case Admin check boxes in the Custom User Privileges > Configuration pane.
	To customize a user's permissions, see Customizing a user's permissions for the Live and Search windows .
	To apply the same permissions to a user for both the Live and Search windows, select the Use same permissions for live and search check box.

In the **User Configuration** pane, you can create a new user or user role and configure their access level, permission, and privileges. For more information, see, Table 52, Table 54, [Adding a user to the system](#) and [Adding a user role to the system](#).

Table 52: Details tab in the Users window

Interface element	Description
Username field	The username must contain at least 5 characters.
Password field	The default minimum password length is 8 characters. The password must include an uppercase character and a special character. Alternatively, you can enter a pass phrase with a minimum of 20 characters.
User Role list	The User Role list displays a list of permission levels for users. For more information, see Table 53.

In the following table, you can find descriptions for the available options in the **User Role** list in the **Users** window.

Table 53: User Role list in the Users window

Permission level	Description
Full Admin	The user can access all features in the system.
Power User	The user can access all features in the system, except for adding and deleting users.
Restricted	A custom set of permissions that allows you to edit permissions for cameras.

Adding a user to the system

To add a user to the system, complete the following steps:

1. In the **Users** window, click **New**.
2. On the **Details** tab, enter a name for the user in the **Username** field.
3. Enter a password and confirm the password in the **Password** and **Password Confirm** fields.
4. Select a permission level from the **User Role** list. For information on the permission levels, see Table 53.
5. Select a PTZ priority level from the **Priority** list.
6. **Optional:** In the **Custom User Privileges** pane, select the privilege you want the user to access.
7. **Optional:** In the **Custom User Permissions** pane, customize the permissions for the role. For more information, see [Customizing a user's permissions for the Live and Search windows](#).
 - ⓘ **Note:** To edit the **Custom User Permissions** list, you must clear the **View Admin**, **User Admin**, and **Case Admin** check boxes in the **Custom User Privileges > Configuration** pane.
8. Click **Apply**.

Adding a user role to the system

To add a user role to the system, complete the following steps:

1. In the **Users** window, click **New**.
2. On the **Details** tab, select a permission level from the **User Role** list. For information on the permission levels, see Table 53.
3. Enter a name for the user role in the **User Role Name** field.
4. Select a PTZ priority level from the **Priority** list.
5. **Optional:** In the **Custom User Privileges** pane, select the privilege you want the user role to access.
6. **Optional:** In the **Custom User Permissions** pane, customize the permissions for the role. For more information, see [Customizing a user's permissions for the Live and Search windows](#).
 - ⓘ **Note:** To edit the **Custom User Permissions** list, you must clear the **View Admin**, **User Admin**, and **Case Admin** check boxes in the **Custom User Privileges > Configuration** pane.
7. Click **Apply**.

Customizing a user's permissions for the Live and Search windows

Before you begin: Before you can edit the **Custom User Permissions** list, you must clear the **View Admin**, **User Admin**, and **Case Admin** check boxes in the **Custom User Privileges > Configuration** pane.

To customize a user's permissions for the **Live** and **Search** windows, complete the following steps:

1. From the **User Accounts** list, select a user.

2. If the **Live** or **Search** tabs are not available in the **Custom User Permissions** pane, complete the following step:
 - In the **Custom User Permissions** pane, clear the **Use same permissions for live and search** check box.
3. In the **Custom User Permissions** pane, click the **Live** tab.
4. Select the devices that you want the user to be able to use in the **Live** window.
5. Click the **Search** tab.
6. Select the devices that you want the user to be able to use in the **Search** window.
7. Click **Apply**.

Changing the priority level of a user

To change a user's priority level, complete the following steps:

1. In the **Users** window, select the user from the **User Accounts** list.
2. On the **Details** tab in the **Password** field, enter the user's password and confirm the password by entering it again in the **Password Confirm** field.
3. Select a new permission level from the **User Role** list. For information on the permission levels, see Table 53.
4. **Optional:** In the **Custom User Privileges** pane, select the privilege you want the user role to access.
5. **Optional:** In the **Custom User Privileges** pane, customize the permissions for the role. For more information, see [Customizing a user's permissions for the Live and Search windows](#).
- ① **Note:** To edit the **Custom User Permissions** list, you must clear the **View Admin**, **User Admin**, and **Case Admin** check boxes in the **Custom User Privileges > Configuration** pane.
6. Click **Apply**.

Security tab in the Users window

On the **Security** tab in the **Users** window, you can configure a user's password settings, create a temporary user, and assign an access schedule to a user. For more information on the functionality of the **Security** tab in the **Users** window, see the following table.

Table 54: Security tab in the Users window

Interface element	Description
Disable User check box	To disable a user, select a user from the User Accounts list, select the Disable User check box and click Apply .
User May Change Password check box	Gives a user the ability to change their password. Full Admin and Power Users always have permission to change their password. For more information, see Giving a user the ability to change their password .
User Must Change Password check box	Requires a user to change their password. A user with Full Admin privileges cannot select or deselect this check box for their own account. For more information, see Enforcing a user to change their password .
Temporary User check box	To create a temporary user, see Creating a temporary user .

Table 54: Security tab in the Users window

Interface element	Description
Access Schedule list	To create an access schedule, see Access schedules . To assign an access schedule to a user, see Assigning an access schedule to a user .
Lockout Status pane	The Lockout Status pane displays whether or not a user is locked out of the system. To change the number of password entry attempts that a user can have before they are locked out of the system, see Setting the user lockout .
Unlock User button	To unlock a user that entered their password incorrectly, select the user from the User Accounts list, and then click Unlock User .

Giving a user the ability to change their password

To give a user the ability to change their password, complete the following steps:

1. From the **User Accounts** list, select a user.
2. In the User Configuration panel, click the **Security** tab.
3. Select the **User May Change Password** check box.
4. Click **Apply**.

Enforcing a user to change their password

To enforce a user to change their password, complete the following steps:

1. From the **User Accounts** list, select a user.
2. In the User Configuration panel, click the **Security** tab.
3. Select the **User Must Change Password** check box.
4. Click **Apply**.

Creating a temporary user

To create a temporary user, complete the following steps:

1. From the **User Accounts** list, select a user.
2. On the **Security** tab, select the **Temporary User** check box.
3. From the **Access Time Start** and **Access Time End** lists, select a start and end time for the schedule.
4. Click **Apply**.

Assigning an access schedule to a user

To assign an access schedule to a user, complete the following steps:

1. From the **User Accounts** list, select a user.
2. In the **User Configuration** pane, click the **Security** tab.
3. From the **Access Schedule** list, select a schedule. To create a schedule, see [Access schedules](#).
4. Click **Apply**.

Change Password window

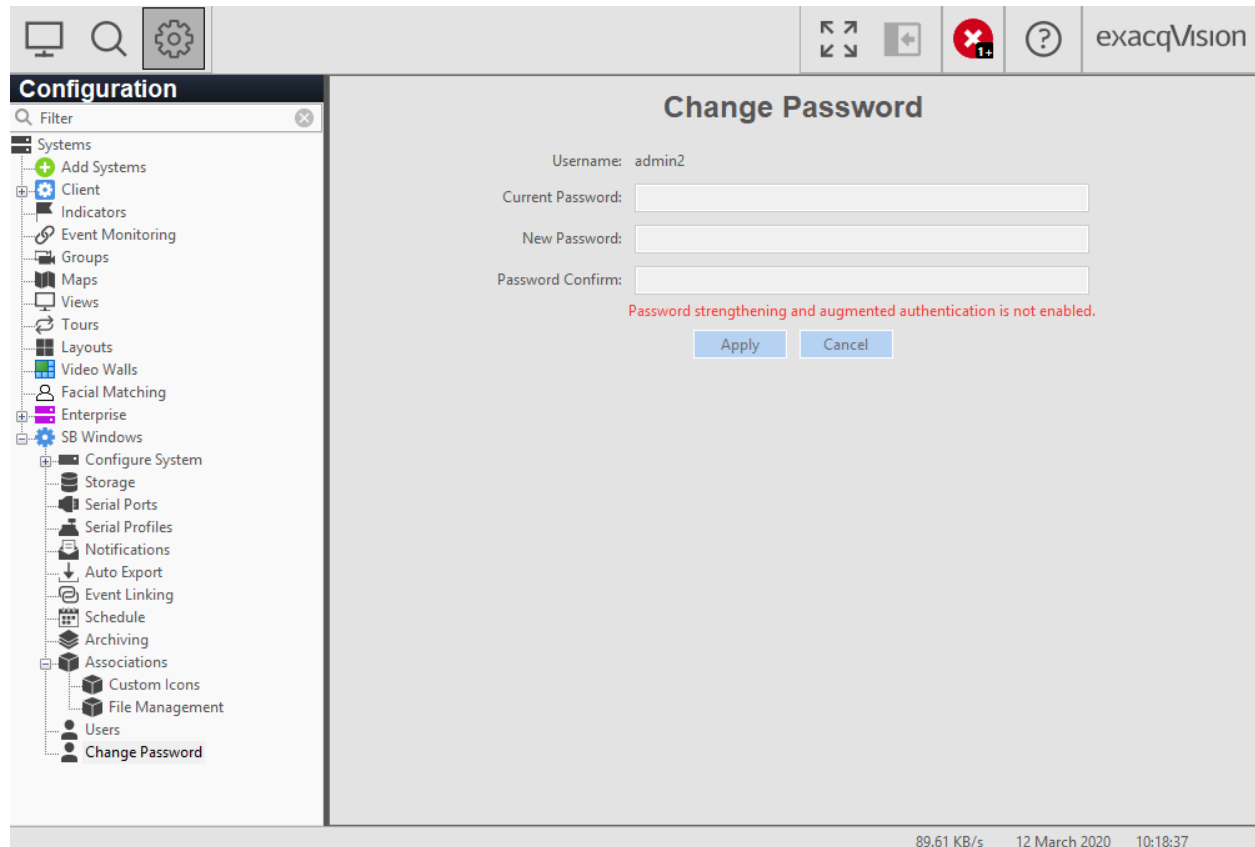
In the **Change Password** window, a user can change their password. The **Change Password** window displays only in the following conditions:

- For Full Admin and Power Users.

- If the user has permission to change their password.
- If the system enforces the user to change their password.

For more information, see [Security tab in the Users window](#).

Figure 37: Change Password window



Changing password information

You use the **Change Password** page to change your password. The system administrator must enable the change password option for you to reset the password.

To change your password, complete the following steps:

1. In the **Configuration** pane, select **Change Password**.
2. In the **Current Password** field, enter your current password.
3. In the **New Password** field, enter the new password, and in the **Password Confirm** field, reenter the new password.
4. Click **Apply**.

Systems window

The **Systems** window lists all the servers that connect to the exacqVision system and displays information about each of the servers, as well as any metadata fields that you add to refine a search. For more information on how to add a metadata field, see Table 6. For more information on the **Systems** window, see Table 55.

Figure 38: Systems window

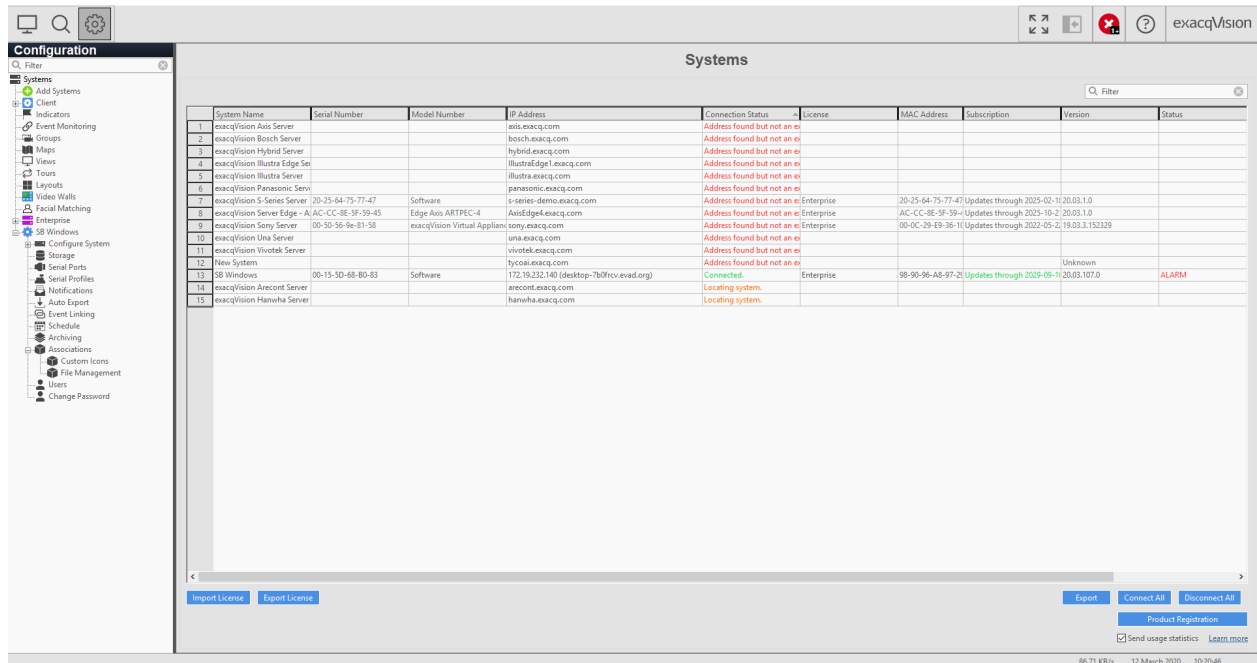


Table 55: Systems window

Interface element	Description
System Name column	Displays the name of the server.
	To view the model number and serial number information of a server, right-click the System Name field.
Serial Number column	Displays the serial number of the server.
IP Address column	Displays the IP address and hostname of the server.
Connection Status column	To connect or disconnect a single server from the exaccqVision system, right-click the connection status of the server, and then select Connect or Disconnect .
	If the physical connection between the client computer and the server is interrupted when the server is connected to the exaccqVision client, the Connection Status field displays Network Activity Timeout and the Status field displays Disconnected .
License column	Displays whether the system has a Start, Enterprise or Professional license, and updates the system's license key. You can update the system's licence key from a file or from text.
	To update a license key, right-click the License field and select Update , then select File or Update License from text.... If you select File , you can browse to a .KEY file that contains the license information. If you select Update License from text.... , you can type the license key manually.
MAC Address column	Displays the MAC address of the server.

Table 55: Systems window

Interface element	Description
Version column	Displays the software version that the server is currently using.
	To display additional information about the software version that the system is using, right-click the Version field.
Status column	Displays the recording status of the server.
Days column	Displays the number of days that the server stores recorded video.
Import Licenses button	To import a multiple of license numbers from a .CSV file, click Import Licenses .
Export Licenses button	To compile a list of the license numbers currently on display in the Systems window, click Export Licenses .
Connect All button	To connect multiple servers from the exacqVision system, left-click the connection status of the first server in the list, press Shift and then highlight the other servers. Right-click the highlighted list and then from the menu select Connect All .
Disconnect All button	To disconnect multiple servers from the exacqVision system, left-click the connection status of the first server in the list, press Shift and then highlight the other servers. Right-click the highlighted list and then from the menu select Disconnect All .
Product Registration button	Opens the exacqVision Product Registration page in a web browser.
Send usage statistics check box	Sends anonymous and non-sensitive information to the manufacturer about how you use exacqVision cameras and features.
Learn More link	Opens a Privacy Policy page in a web browser.

Device window

The **Device** window displays information about compression boards in exacqVision hybrid video servers. The compression board in an exacqVision hybrid video server manages the analogy cameras that connect to the systems. If you install a compression board in an exacqVision server, the **Device Information** pane displays the eDVR device type, and the serial number of the device. For information on the functionality of the **Device** window, see Table 56.

Figure 39: Device window

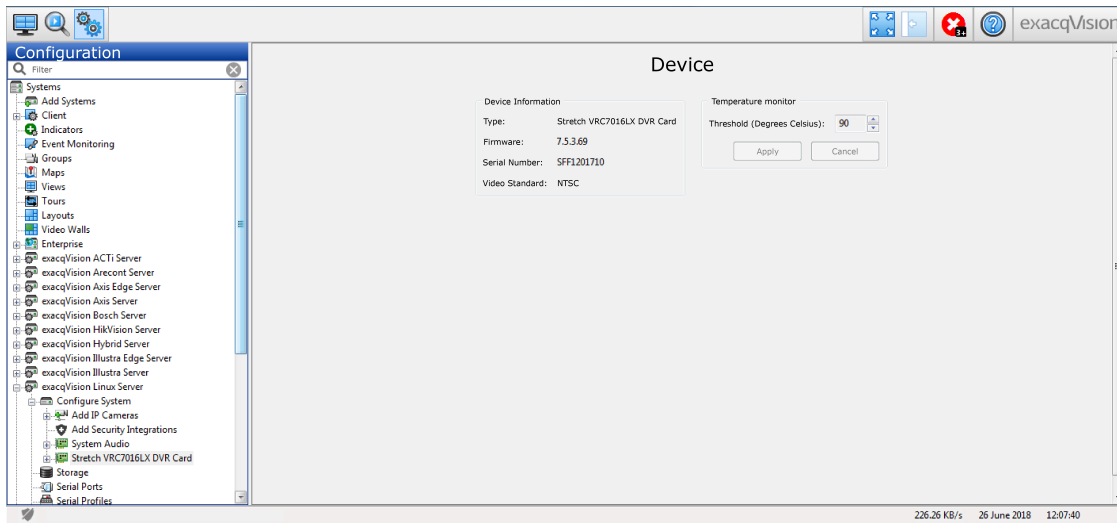


Table 56: Device window

Interface element	Description
Device Information pane	Displays the eDVB device type and the serial number of the compression board in an exacqVision server.
Temperature Monitor pane	To set the temperature threshold of the e compression board and link it to an event, select a temperature from the Threshold list and then click Apply .

Client window

In the **Client** window, you can customize the exacqVision client's settings. For more information, see Table 57 , Table 58, and Table 59.

Settings tab in the Client window

On the **Setting** tab, you can configure the **Live** window settings.

Table 57: Settings tab in the Client window

Interface element	Description
Video Panels pane	To modify the window display settings on the Live window, see Table 58.
Live pane	To use the On Screen Display (OSD) for serial profiles, select the Use OSD Color for Serial Profiles check box.
	To display a minimized client when an event occurs that requires user action, select the Restore Client on User Attention Request check box.
	To mute all sound when you use the 2-Way Audio feature, select the Mute during 2-way audio check box.
	To ensure video panel layouts are not automatically populated when you change to a larger layout, clear the Auto Fill Empty Video Panels check box.
	To send audio from the client to the server, select a microphone from the 2-Way Audio list.
	To ensure that audio, video, and analytics are synchronized, use the Lip Sync/Video Smoothing option. The buffering limit is 30 seconds for analytics sync and 5 seconds for audio sync. Select Enable from the Lip Sync/Video Smoothing list to enable lip sync and video smoothing. Select Disable from the Lip Sync/Video Smoothing list to disable lip sync and video smoothing. If you select Auto from the Lip Sync/Video Smoothing list, lip sync and video smoothing are disabled until you stream audio or display analytics. Buffering only occurs when audio plays or when analytics minimize video delay, if necessary. Buffering always occurs for intermittent video when you select Enable .
	Note: Video smoothing is automatically enabled if B frames are detected. Note: If you use PTZ, lip sync and video smoothing are disabled.
Launch New Instance	To launch a new instance of the client, click Launch New Instance . Use the arrows to increase or decrease the number of instances you want to open when the client starts.
VGA Acceleration Mode pane	Resolves display issues that the video card causes, by attempting to improve the video refresh rate and other display issues. The availability of the VGA acceleration options varies depending on the video card that you install. This pane shows the current version and type of VGA adapter installed.

Table 57: Settings tab in the Client window

Interface element	Description
Decoding pane	Improves the visual quality of video in the exacqVision client. For more information, see Table 59.
Inactivity Timeout pane	Automatically disconnects live video streams after a set time of inactivity. To set an inactivity time, select the Enable check box. In the Disconnect Live Streams After field, click the arrows to select the number of minutes and click Apply .
24-Hour Clock	This feature is only available on Mac computers.

Table 58: Video Panels pane on the Settings tab

Interface element	Description
Show Sunken Border check box	Decreases the space between video panels.
Show Record Status Border check box	Displays a border around the video panel as recording occurs. The border color indicates the reason for the recording.
Show PTZ Focus Border	Changes the border color of the video panels that are actively accepting keyboard and joystick PTZ commands.
Show On-Screen Display	Displays or removes the name, date, and time stamp of the video. This setting overrides a camera's built-in settings.
Enable All Analytics	Switches the default setting for any camera brought up in Live to come up with the analytics toggle switched on. This setting persists between sessions.
Keep Aspect Ratio During Resize	Maintains the video panel aspect ratio when you increase or decrease the size of the exacqVision client.
Panel Size list	Displays a list of video panel size options for live video.
	To display the video panels using the currently displayed video panel dimensions, select Content . If the majority of the video panels on display capture 16x9, all video panels display in 16x9.
	To display the video panels using the dimensions of the Live window, select Window .
	To display the video panels in 4x3, select 4x3 .
	To display the video panels in 16x9, select 16x9 . If the video panels display in 16x9, the wide screen layout icons are not available.

Table 59: Decoding pane on the Settings tab

Interface element	Description
H.264 Deblocking	To apply deblocking on all cameras that stream video, select By Device .
	To apply deblocking on cameras at all times, select Enabled . This option can reduce the maximum display frame rate.
	To disable deblocking, select Disabled .

Table 59: Decoding pane on the Settings tab

Interface element	Description
GPU Decoding slider	Accelerates video stream decoding. To set the GPU decoding, move the GPU Decoding slider and then click Calibrate . If multiple instances of the client are open, the GPU is shared between the clients.
Current GPU	Shows the current Graphical Processing Unit (GPU) version installed.
AVCodec Version	Shows the current version of software used to decode video and audio data.

Indicators window

Indicators provide system configuration suggestions to the user when problems arise as they navigate through the system. In the **Indicators** window, you can view and edit indicators. For more information, see Table 60 and Table 61.

Informational notifications display in the upper-right corner of the exacqVision windows. The notifications remain for 5 seconds and are then added to the **Indicators** window. You can select the notification to take immediate action.

Figure 40: Indicators window

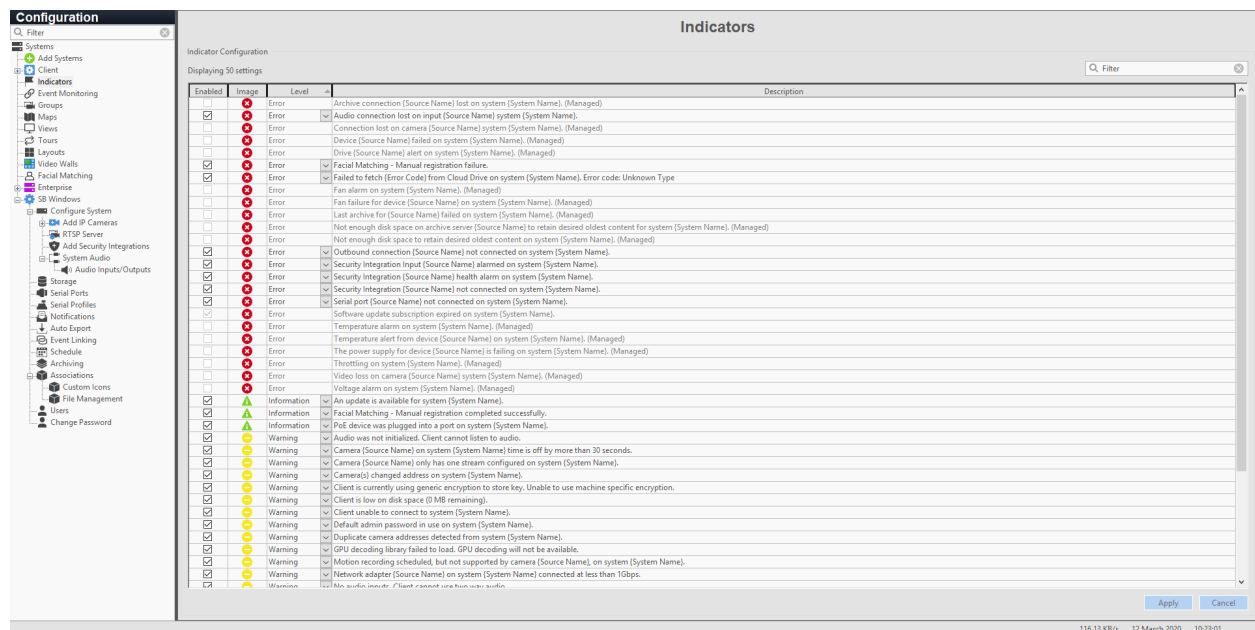


Table 60: Indicators window

Interface element	Description
Indicators list	Displays a list of connected exacqVision servers that support the indicators feature.
Indicator Configuration pane	Displays a list of system configuration suggestions. For more information, see Table 61.
Indicator icons list	Displays a list of the current error and warning messages for the server. The number in the lower-right corner of the icon indicates the number of errors and warnings that the system detects.
	To display the Indications icon list, click the Indicator icon in the upper-right corner of the toolbar.

Table 61: Indicator Configuration pane

Interface element	Description
Enabled check box	To activate an indicator message for a server, select the Enabled check box.
Image column	Displays an image depicting whether the indicator message is a warning or an error. The image changes automatically when you change the level type of the message in the Level column.
Level column	To set an indicator message to Warning or Error, select Warning or Error from the Level list.
	Error messages have a higher priority over warnings.
Dismiss column	Displays a list of options that you can use to edit the indicators settings.
	To remove the indicator for the remainder of the client session, select Dismiss . When the client restarts, the indicator displays again.
	To remove all indicators with the same level message, select Dismiss all of this type . When the client restarts, the indicator displays again.
	To permanently disable the indicator on the server, select Disable for this system .
	To permanently disable the indicator on all systems, select Disable for connected systems .

Views window

In the **Views** window, you can create custom views from a combination of cameras from the Cameras, Groups, and Maps lists, and assign views to other users or systems. There are three categories of views. To create a view, see [Creating a view](#). For information on the view categories, see Table 62. For information on the functionality of the **Views** window, see Table 63.

Figure 41: Views window

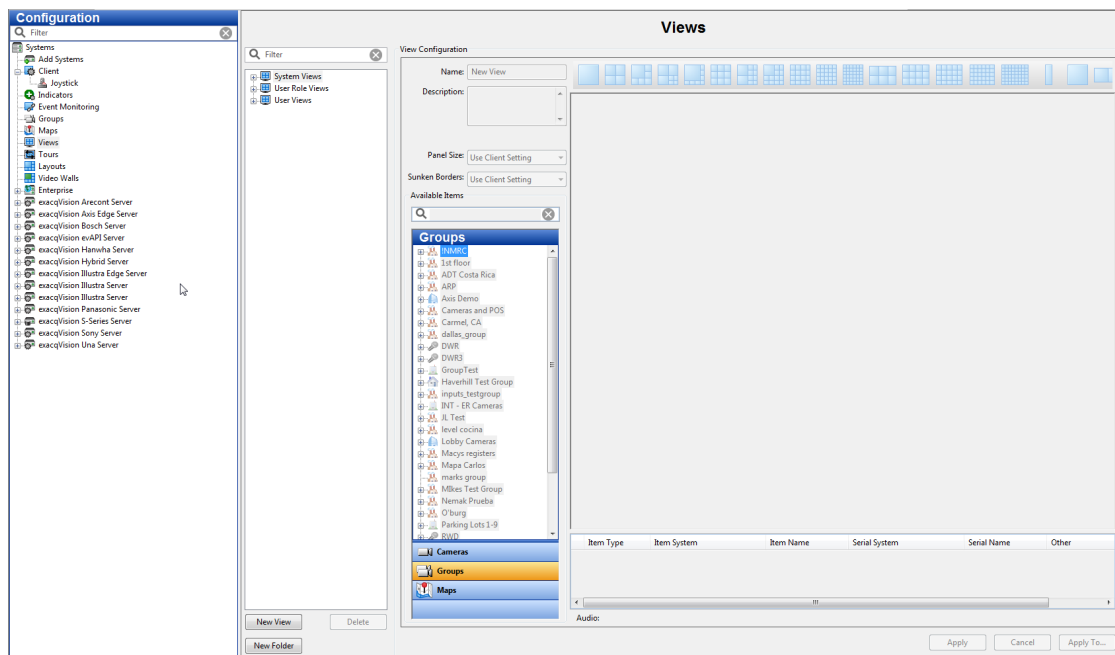


Table 62: View categories

Interface element	Description
System Views	Available to all users that connect to the server.

Table 63: Views window

Interface element	Description
View Category list	Displays the view categories and a list of the views and view folders that you create.
New Folder	Adds a new folder to the View Category list.
Available Items list	Displays a list of items from the Cameras, Groups, and Maps lists.
Item list	Displays a list of items and their servers that the view currently contains.

Creating a view

To create a view, complete the following steps:

1. Select a view category from the **View Category** list and then click **New View**.
2. Enter a name and description for the view in the **View Configuration** area.
3. In the upper part of the **View Configuration** pane, select a video panel layout.
4. To add a device, select it from the **Available Items** list and drag it onto a video panel.
5. Click **Apply**.

Tours window

In the **Tours** window, you can create tours and configure existing tours. To create a new tour, see [Creating a new tour](#). For information on the functionality of the **Tours** window, see Table 64.

Figure 42: Tours window

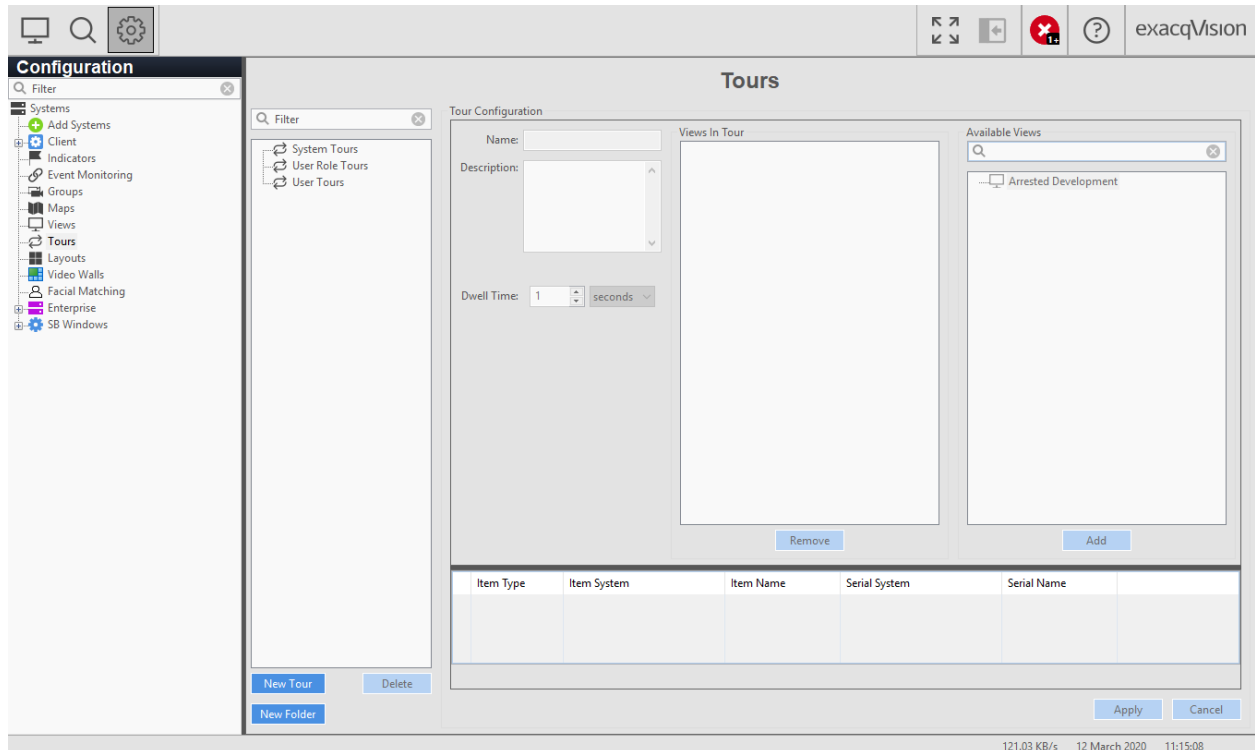


Table 64: Tours window

Interface element	Description
Tours list	Displays a list of existing tours and tour folders.
New Folder button	Adds a new folder to the Tours list.
Dwell Time list	The number of seconds that the system displays each view.
Views In Tour list	Displays a list of views in the new tour you are creating, or a list of views from an existing tour.
	To add a view to the Views In Tour list, select a view from the Available Views list and click Add .
	To delete a view from the Views In Tour list, select the view in the list and click Remove .
Available Views list	Displays a list of views and view folders that you can use to add to a tour.
Item list	Displays a list of items and their servers that the tour currently contains.

Creating a new tour

To create a new tour, complete the following steps:

1. In the **Tours** window, from the **Tours** list, select one of following tour types:
 - **System Tours**
 - **User Role Tours**
 - **User Tours**

- ① **Note:** Depending on the tour type selected, the list of available views vary. For example, if you select **System Tours**, only system views are displayed in the list.
- 2. Click **New Tour**.
- 3. Enter a name and description for the tour in the **Tour Configuration** pane.
- 4. Select a view from the **Available Views** list, and click **Add**. Repeat this step to add more views to the tour.
- ① **Note:** For all tours except system tours, when you drag the first view to the **Views in Tour** pane, the **User Name** field displays the owner of the view. The **Available Views** list contains views that are owned by this user or user role.
- 5. Select the view from the **Views In Tour** list, and then select a **Dwell Time**.
- 6. Click **Apply**.

Layouts window

In the **Layouts** window, you can create custom video panel layouts to add to the **Live** window. To create a custom video panel layout, see [Creating a custom video panel layout](#). For information on the functionality of the Layout window, see Table 65.

Figure 43: Layout window

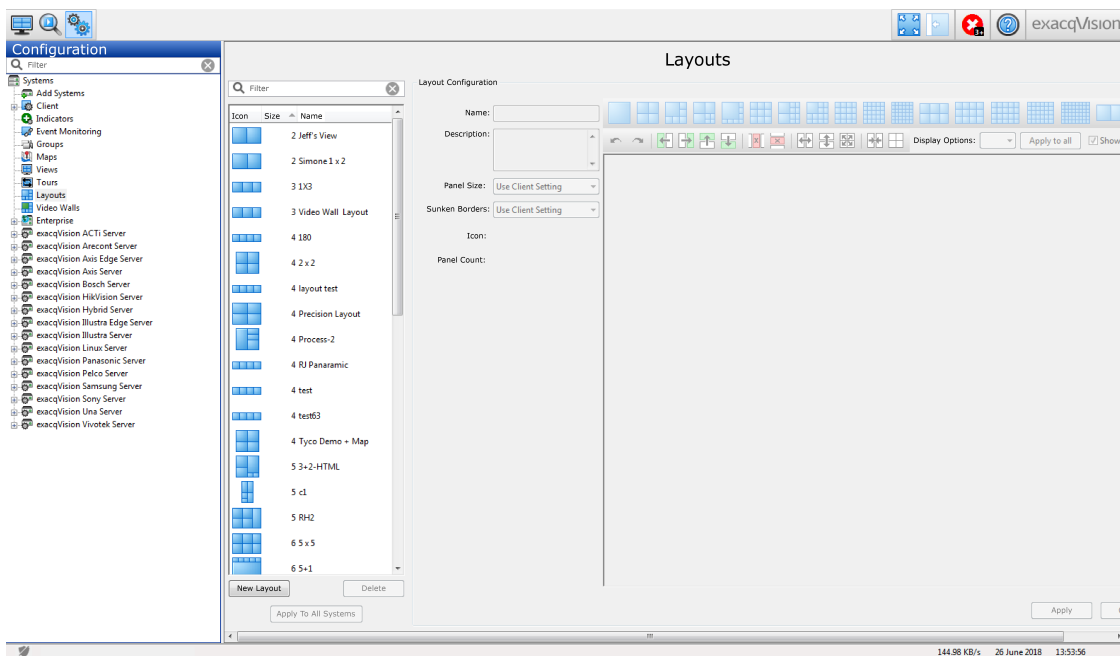


Table 65: Layout window

Interface element	Description
Layout list	Displays a list of custom video panel layouts.
Panel Size list	Displays a list of video panel sizes for the overall layout.
Sunken Borders list	Displays a list of sunken border settings. To use the default client settings, select Use Client Setting from the Sunken Borders list.
Icon area	Displays how the custom layout displays as an icon in the Live window.

Table 65: Layout window

Interface element	Description
Panel Count area	Displays the number of video panels that are in the layout. There is a limit of 48 panels in a layout.
Configuration icons	To obtain a description of the function of each Configuration icon, hover the cursor over the icon. The icons do not become active until you select one or more video panels.
Display Options list	To select a display option for a video panel, select the video panel and then select a display option from the Display Options list.
	To apply a display option to all video panels, select a display option from the Display Options list and then click Apply to all .
Show gridlines check box	Compares the video panel sizes.

Creating a custom video panel layout

To create a custom video panel layout, complete the following steps:

1. In the **Layouts** window, click **New Layout**.
2. In the **Layout Configuration** area, enter a name and description for the layout.
3. From the **Panel Size** list, select a size for the entire layout.
4. In the upper part of the **Layout Configuration** pane, select a layout option that closely resembles the custom layout you want to create.
5. Select one or more video panels.
 - ⓘ **Note:** To select a multiple of video panels, press Ctrl and then select the video panels.
6. Using the **Configuration** Icons, complete one or more of the following actions:
 - To merge two panels, select the corner of a video panel and drag it into another video panel.
 - To delete a video panel, right-click the video panel and then click **Delete**.
 - To split a video panel, right click the video panel and then select Split.
7. Click **Apply**.

Facial matching window

Use **Facial Matching** to manually register faces on the **Facial Matching** database or register faces from events in the **Search** window.

ⓘ **Note:** You must configure a Tyco AI server to use **Facial Matching**.

To manually register faces on the **Facial Matching** database, see [Registering faces on the Facial Matching database](#). To register faces from events in the **Search** window, see [Manually registering faces in the search window](#).

Table 66: Facial Matching window

Interface element	Description
Person Configuration	Add or edit a person's Name and Description on the database. Select a Classification from the list.
Persons list	Displays a list of persons registered in the Facial Matching database.
Add Person	To add a person to the facial matching database, click Add Person
Delete Person	To delete a person from the facial matching database, click Delete Person
Merge	To merge entries in the facial matching database, select more than one entry and click Merge .
Unmerge	To separate a merged entry that represents one person, click Unmerge .
Case Search	To search recorded video and confirm a person's identity, select a person in the Persons list and click Case Search .
Bookmark Search	To view an event associated with a person, expand an entry in Persons , select a bookmark entry, and click Bookmark Search .
Apply	Click Apply to save all changes on the Facial Matching page.

Registering faces on the Facial Matching database

Add a person to **Person Configuration** in the **Facial Matching** window manually.

Before you begin: Ensure that you save an image of the person you want to add to **Person Configuration** in the **Facial Matching** window saved on your system.

1. In **Configuration**, click **Facial Matching**.
2. In the **Facial Matching** window, click **Add Person**.
3. Enter a name and a brief description.
4. From the **Classification** list, select **None**, **Person of Interest**, **Guest**, **Loyalty Customer**, **Employee**, or **Trespasser**.
5. Click **Add Image** and browse to the image you want to register.
6. Click **Apply**.

Result The registered person is listed in **Persons**.

Manually registering faces in the search window

Use the Tyco AI server to register faces in recorded video and record details in the **Facial Matching** page.

1. Click **Search Page**.
2. Click the **Tyco AI** server.
3. Select a camera and complete a [Timeline search](#) Timeline Search.
4. Click **Pause** on the video when you want to register a face.

5. Select **Manual Registration** in the toolbar.
6. In the **Register As** dialog box, select a **Classification** option.
7. If registration is successful, select **Navigate to Facial Matching page** to record further details. If registration is unsuccessful, complete the search and identify the face again.

What to do next: Record the name and description associated with the face in the **Facial Matching** page. See [Facial matching window](#) for more information.

System Information window

In the **System Information** window, you can view information about the current users that are logged on to the system, the plugin file version information, and the system log. For information on the functionality of the **System Information** window, see Table 67.

Figure 44: System Information window

The screenshot shows the 'Systems' window in the exacqVision software. On the left is a 'Configuration' sidebar with various system settings. The main area displays a table of system information with the following columns: System Name, Serial Number, Model Number, IP Address, Connection Status, License, MAC Address, Subscription, Version, and Status.

System Name	Serial Number	Model Number	IP Address	Connection Status	License	MAC Address	Subscription	Version	Status
1. exacqVision Axis Server			axis.exacq.com	Address found but not an es					
2. exacqVision Bosch Server			bosch.exacq.com	Address found but not an es					
3. exacqVision Hybrid Server			hybrid.exacq.com	Address found but not an es					
4. exacqVision Ilustra Edge Se			ilustradedge1.exacq.com	Address found but not an es					
5. exacqVision Ilustra Server			ilustra.exacq.com	Address found but not an es					
6. exacqVision Panasonic Servi			panasonic.exacq.com	Address found but not an es					
7. exacqVision S-Series Server	20-25-64-75-77-47	Software	s-series-demo.exacq.com	Address found but not an es	Enterprise	20-25-64-75-77-47	Updates through 2025-02-11	20.03.1.0	
8. exacqVision Server Edge-A	JAC-CC-8E-5F-59-45	Edge-Auto-ARTPEC-4	aiudEdge1.exacq.com	Address found but not an es	Enterprise	JAC-CC-8E-5F-59-45	Updates through 2023-10-2	20.03.1.0	
9. exacqVision Sanyo Server	00-50-56-5e-81-58	exacq/Vision Virtual Applian	sanyo.exacq.com	Address found but not an es	Enterprise	00-0C-29-E9-36-11	Updates through 2022-05-2	10.03.1.152329	
10. exacqVision Una Server			una.exacq.com	Address found but not an es					
11. exacqVision Vivotek Server			vivotek.exacq.com	Address found but not an es					
12. New System			tycoo1.exacq.com	Address found but not an es				Unknown	
13. 35 Windows	00-15-5D-68-80-63	Software	172.19.232.140 (desktop-7b0frcv.evad.org)	Connected	Enterprise	98-90-96-A8-97-2C	Updates through 2023-09-11	20.03.107.0	ALARM
14. exacqVision Arecont Server			arecont.exacq.com	Locating system.					
15. exacqVision Hanwha Server			hanwha.exacq.com	Locating system.					

At the bottom of the window, there are buttons for 'Import License', 'Export License', 'Export', 'Connect All', 'Disconnect All', 'Product Registration', and 'Send usage statistics Learn more'. The status bar at the bottom right shows '86.71 KB/s', '12 March 2020', and '10:20:46'.

Table 67: System Information window

Interface element	Description
System Usage pane	Displays the current users that are logged on to the system, the users' access level, IP address, and the number of streams they view.
Version Information pane	Displays the name, filename, software version, status, and log level for each system file. Right-click a system file to change the log level. To select multiple entries, press Ctrl and click multiple system file entries.
System Log tab	To search the system log, see Searching the system's log .
	You can sort the Displaying records list by clicking any of the column headings in the list.
	To open the system log with a text editor, click Export .
	To apply a time limit to the number of days you want the system to save an entry in the system log, select the number of days from the Maximum Days Storage list, and then click Apply .
Generate button	Generates a PDF report containing information on the setup of the system's cameras and security integrations. The user can select what they want to include in the report. For more information, see Generating a report .

Searching the system's log

To view the system's log, complete the following steps:

1. On the **System Log** tab in the **Search** area, select a start date and time, and then select an end date and time.
2. From the **System Log Level** list, select the type of message that you want to search for in the system's log.
3. Click **Search**.

Searching the audit log

The audit log includes details about actions such as date and time, username, action type, for example fast forward, and camera source. In the **Details** field, you can see the duration of the action.

To search the audit log, complete the following steps:

1. On the **Audit Trail** tab in the **Search** area, select a start date and time, and then select an end date and time.
2. Click **Search**.
3. **Optional:** To filter the records that display, enter the term to search and filter on.

Generating a report

To generate a report on the system's cameras and security integrations, complete the following steps:

1. In the **System Information** window, click **Generate Report**.
2. In the **Title** field, enter a name for the report.
3. From the **Items** and **Columns** lists, select the features of the system that you want to include in the report.
4. From the **Sort By** list, select how you want to sort the report.

5. From the **Sort** area, select one of the following options:
 - **Ascending**
 - **Descending**
6. Click **Generate**.

Live window

Live window overview

In the **Live** window, you can do the following:

- View and manage your cameras, groups, maps, and websites.
- Replay video using exacqReplay.

Opening the Live window






To open the **Live** window, complete the following step:

1. Click the **Live** window icon in the toolbar.

Functions of the Live window

The following table provides an overview of the functions of the icons in the **Live** window.

Table 68: Live window icons

Icon	Name	Description
	Layout	You can use the Layout icons to change the layout of the video panels. For more information, see Video panels .
	PTZ Controls	You can use the PTZ Controls icon to access the controls for PTZ cameras. For more information, see PTZ cameras .
	Full screen mode	You can use the Full screen mode icon to hide the Navigation tree and toolbar, and enlarge the video panels to fit the screen.
	Navigation	You can use the Navigation panel icon to hide or expand the Navigation tree.
	Help	You can use the Help icon to open the context sensitive help.

Video panels

A video panel displays live or recorded video, and captured images from a camera or other devices. In the **Live** window, you can use the **Layout** icons on the toolbar to change the layout of the video panels. When you select a layout from the toolbar, the system automatically populates the video panels with the cameras in the navigation tree. This layout also becomes the default layout for the video panels. The available **Layout** icons vary depending on the number of cameras you connect and the width of the exacqVision client window. To create a custom layout, see [Creating a custom video panel layout](#). For information on the functions of video panels, see the following table.

Table 69: Video panel functions

Function	Description
Populating video panels	To populate a single video panel, drag and drop a camera from the navigation tree into a video panel. The panel can be empty or displaying video.
	To populate all the video panels with cameras, double-click a camera in the navigation tree. The camera appears in the upper-left panel, and the rest of the panels populate with the next cameras in the list. You can also drag and drop a server into a video panel to populate the video panels with the cameras in that server.
Opening a camera's settings	To access the camera's settings, right-click the video panel and select Properties .
Deleting a camera	To delete a camera from a video panel, right-click the panel and select Disconnect Video .
Saving an image	To save an image in a video panel, right-click the panel and select Save Image As... or Save Image .

Performing a quick search in the Live window

To perform a quick search in the **Live** window, complete the following steps:

1. From the navigation tree, drag the camera or cameras that you want to search into the video panels.
2. Right-click a video panel and select **Search**.
3. Choose one of the following options:
 - **Video** Searches the camera in the video panel you select.
 - **Layout** Searches all the cameras in the video panel layout.
4. The **Search** window opens and plays the last two hours of video from the camera or cameras you select. For more information on searching video, see [Search window overview](#).

Accessing a View

About this task:

In the **Live** window, you can access existing views and tours that you create in the **Views** window, and create additional views. To create a view in the **Live** window, see [Creating a view in the Live window](#). To create a view or tour in the **View** window, see [Creating a view](#) and [Creating a new tour](#).

To access a view or tour, complete the following steps:

1. In the **Live** window, click **Views**.
2. From the navigation tree, double click the view or name of the tour.
 - ⓘ **Note:** To display the names of the cameras and servers that are in the view or tour, place the cursor over the view's name in the navigation tree.

Creating a view in the Live window

To create a view in the **Live** window, complete the following steps:

1. In the **Live** window, select a camera layout from the toolbar.
2. From the navigation tree, drag the devices that you want into the video panels.
3. From the navigation tree, click **Save View**.
4. Enter a name and description of the view in the **Save View** window, and then click **Save**.

PTZ cameras

A Pan-tilt-zoom (PTZ) camera is a camera that you can physically adjust remotely. To control a PTZ camera, place the cursor over the camera's video panel to display the PTZ camera controls, or use the **PTZ Control panel** window by clicking on the **PTZ Control** icon from the toolbar. For information on the functionality of the **PTZ Control panel** window, see Table 70.

- ① **Note:** The **PTZ Control** icon appears in the toolbar only when a PTZ camera displays in a video panel in the **Live** window.

User-initiated PTZ commands have priority over event linking PTZ commands, and both have priority over PTZ preset tours. If two or more PTZ commands occur simultaneously, the command with the highest priority occurs and the other commands are ignored for a set time. You can set the Resume Time on the **Mechanical PTZ** tab in the **Camera Settings** window. For more information, see the following table.

Table 70: PTZ Control panel window

Interface element	Description
Presets list	Displays a list of saved views for PTZ cameras.
	To apply a preset to the camera, select a preset from the Presets list.
Pan/Tilt area	Adjusts the direction and direction speed of the camera.
Zoom area	Adjusts the zoom and zoom speed of the camera.
Iris area	Adjusts the iris of the camera. The Iris area is only available on some cameras.
Enable Tour button	Activates PTZ preset tours. This button is available only for users with PTZ admin permissions.
Focus area	Adjust the focus of the camera. The Focus area is only available on some cameras.

Digital PTZ cameras in the Live window

A digital PTZ camera does not physically move, but can zoom and navigate the camera's view. To activate the controls for a digital PTZ camera, right-click the video panel and select **Digital PTZ**.

- ① **Note:** To adjust a digital PTZ camera, you must enable Digital PTZ when setting up the system. For fish-eye cameras, a **Fisheye** menu to de-warp video replaces the Digital PTZ option.

Zooming in on live video

About this task:

You can use the area zoom feature to zoom in on a specific area of live video. The area zoom feature is only available on some cameras.

To zoom in on live video, complete the following steps:

1. In the **Live** window double-click the video panel that you want to zoom.
2. Press and hold Ctrl.
 - ⓘ **Note:** The cursor changes to a Magnifying glass icon.
3. Left-click the video panel and drag the magnifying glass diagonally until you have drawn a box around the area you want to enlarge. When you release the cursor, the camera zooms into the box.

exacqReplay window

In the exacqReplay window, you can access video control functions to navigate through exacqReplay videos, track the downloading progress of the exacqReplay video by using the green bar in the Timeline pane, and play and search through exacqReplay video. The number of downloaded frames and the total number of frames in the video segment displays in the status bar below the Timeline pane. For information on the exacqReplay video controls, see Table 71.

Figure 45: exacqReplay window

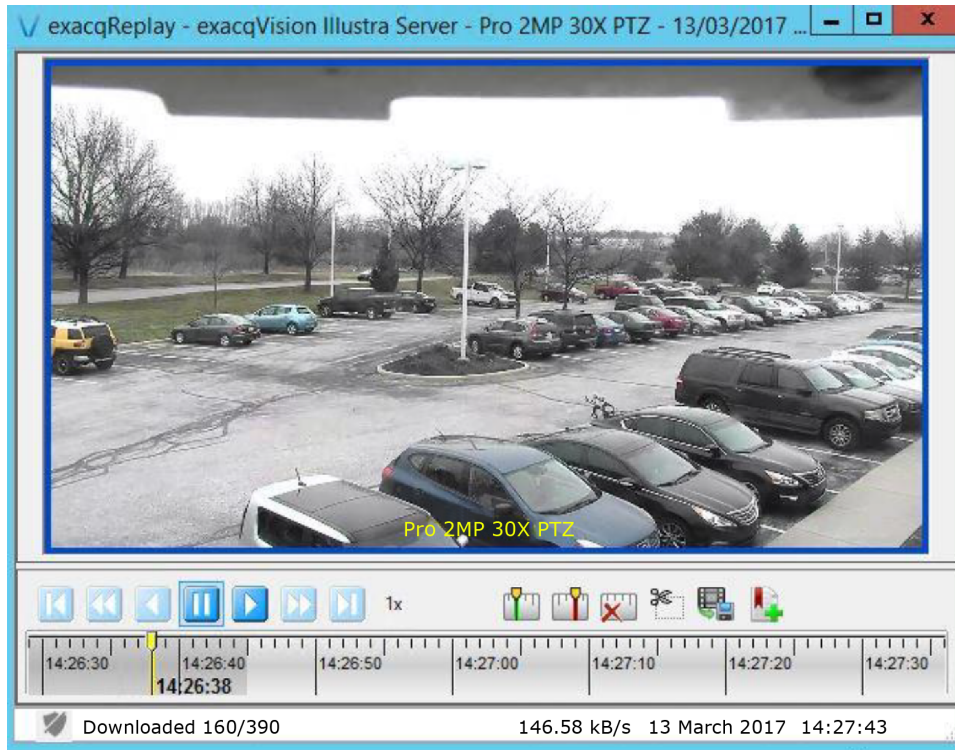









Table 71: exacqReplay video controls

Icon	Description
	Plays video backwards one frame at a time
	Rewinds the video
	Rewinds the video quickly
	Pauses the video
	Fast-forwards the video
	Fast-forwards the video quickly
	Fast-forwards the video one frame at a time

Replaying video using exacqReplay

About this task:

You can use exacqReplay to view recent live video recordings from a single camera, or from multiple cameras that are currently running in the **Live** window. The maximum time that exacqReplay can replay video for is 15 minutes.

To replay video using exacqReplay, complete the following steps:

1. In the **Live** window, right-click a video panel and then select **exacqReplay**.
2. Choose one of the following options:
 - **Video** Replays the camera in the video panel you select.
 - **Layout** Replays all the cameras in the video panel layout.
3. Select a time from when to start the playback.
4. To replay the video, use the exacqReplay video controls. For information on the exacqReplay video controls, see Table 71.

Search window

Search window overview

In the **Search** window, you can search and playback recorded video, and audio from cameras, using the following search methods:

- Timeline search.
- Thumbnail search.
- List search.
- Serial list search.

In the **Search** window, you can also search bookmarks and export manage files. When you perform a search, the camera or device's names display in the timeline. The recording bars display in different colors to represent the different modes of recorded video. For details on what the colors indicate, select the **Show/Hide Legend** check box below the **Search Range** area.

Functions of the Search window

The following table provides an overview of the functions of the icons in the **Search** window.

Table 72: Search window icons











Icon	Name	Description
	Timeline Search Mode	You can use the Timeline Search Mode icon to search items using a specified time range. For more information, see Timeline search .
	Thumbnail Search Mode	You can use the Thumbnail Search Mode icon to scan video from a single camera and capture thumbnail images from a specified interval of time. For more information, see Thumbnail search .
	List Search Mode	You can use the List Search Mode icon to create a list of cameras, devices, and events by using defined search criteria. For more information, see List search .
	Save Picture	You can use the Save Picture icon to save captured video images.
	Export	You can use the Export icon to export video, audio and serial data from the system. For more information, see Exporting files .
	Print	You can use the Print icon to print saved video images.
	Burn CD/DVD	You can use the Burn CD/DVD icon to burn saved files to a CD or DVD. For more information, see Burn Disc window .

Table 72: Search window icons

Icon	Name	Description
	Manage Files	You can use the Manage Files icon to open the Manage Files window where you can open, save, and delete content that you export from a file directory. For more information, see File Manager window .
	Show/Hide Legend	Shows and hides the timeline legend.
	Show/Hide Keywords and Serial Data	Shows and hides the Keywords pane.

Timeline search

A timeline search can search cameras, groups, maps, views, audio, or events within a specified time range.

Performing a timeline search

To perform a timeline search, complete the following steps:

1. In the **Search** window, click the **Timeline Search Mode** icon.
2. From the navigation tree, select the items you want to search.
3. In the **Search Range** area, select a date and time to start and end the search.
 - ① **Note:** The default time duration between the start and end time is two hours. If you change the start time, the end time adjusts to keep the set duration.
4. Click **Search**.

Thumbnail search

A thumbnail search scans video from a single camera and captures thumbnail images from a specific interval of time. You can use a thumbnail search to search cameras, and cameras in groups and maps. After you complete a thumbnail search, orange lines display in the timeline to indicate the capture time of each thumbnail. For information on thumbnail functions, see Table 73.

- ① **Note:** You can perform a thumbnail search only when you connect to exacqVision server that is using exacqVision software version 4.9 or higher.

Performing a thumbnail search

To perform a thumbnail search, complete the following steps:

1. In the **Search** window, click the **Thumbnail Search Mode** icon.
2. From the navigation tree, select a camera.
3. In the **Search Range** area, select a date and time to start and end the search.
4. Click **Search**.

Table 73: Thumbnail search functions

Function	Description
Playing video from a thumbnail	To play video starting from a thumbnail, double-click the thumbnail or click the thumbnail's Play icon.
Centring a search	To make a thumbnail the center point of a search, click the Plus or Minus icons.
Changing the thumbnail layout	To display more or less thumbnail images, select a Layout icon from the toolbar.

List search

In a list search, you define the search criteria, such as the time period or event type, to create a list of cameras, devices, and events. For information on the functionality of the **List Search** window, see Table 74.

Performing a list search

Before you begin: The list search option is only available in exacqVision software version 7.2 or higher.

To perform a list search, complete the following steps:

1. In the **Search** window, select the **List Search** icon from the toolbar.
2. From the navigation tree, select one or more cameras, devices, or events.
3. In the **Search Range** area, select a date and time to start and end the search.
4. Click **Search**.

Table 74: List Search window

Interface element	Description
Source list	Displays a list and images of all the events that took place within the search range.
	To play an event, double-click the event in the timeline.
	To open the exacqReplay window to replay the event, highlight an event and press Enter .
Image Size pane	Adjusts the image size in the Source list. To adjust the image size, move the slider towards Larger .
Result Filters pane	Filters the Source list with specific types of events.
	To display events that are not motion or alarm events, select the Events check box.
	To display motion events, select the MOTION check box. Motion events display in the timeline in blue.
	To display alarm events, select the ALARM check box. Alarm events display in the timeline in red.

Video playback

After you perform a search, you can playback video using the video playback control panel. By default, the system selects all the cameras that you search for video playback. For information on the functionality of the Video playback control panel, see the following table.

Table 75: Video playback control panel

Interface element	Description
Timeline	To disable or activate a camera for video playback, click the camera name.
	The video bars in the timeline change color to indicate how much video has downloaded. You can view information on the video download colors in the Legend area.
	To remove the downloaded video, right-click the timeline and select Clear All Cache or Clear Selected Item(s) Cache .
Video Panel	To display a single camera, double-click the video panel of the camera you want to display. To return to a multi-camera view, double click the video panel again.
Cursor line	After the video or videos download, you can quickly scan the video by moving the cursor left or right.
Play icon	To play video at a specific interval, in the timeline double-click the video bar at the time you want, and then click the Play icon.
Event Forward and Event Back icons	Click Event Forward to move to the end of an event. Click Event Back to move to the start of an event. ⓘ Note: An event is any block of recording excluding continuous recording. If you complete a multiple camera search, playback starts at the next event for another camera.
Stop icon	Stops the video downloading. To stop video from downloading, click the Stop icon. You can still view all the video that downloads before you click the Stop icon.

Video playback and Point of Sale

When you play back video associated with Point of Sale (POS) data, the video synchronizes with the data when it plays. The POS data displays next to the video panel. If you search from more than one device, each device displays on a separate tab.

ⓘ **Note:** Unprintable characters automatically delete from the data display.

Identifying event motion in video playback

About this task:

On analog cameras, you can locate an area of a camera's viewpoint to identify the cause of an event trigger. This feature can be useful when it is difficult to determine the cause of the event, such as a branch of a tree blowing in the wind.

To identify the event, complete the following step:

1. Right-click the video panel and then select **View Motion**. A blue box marks the area where the motion is occurring. You can remove the blue box by right-clicking the video panel again and selecting **View Motion**.

ⓘ **Note:** This feature is available only on some cameras.

View search

You can use a view search to search video from a custom view.

Performing a view search

To perform a view search, complete the following steps:

1. In the **Search** window, select **Views**.
2. From the navigation tree, select the views you want to search.
 - ① **Note:** You can find out what cameras are in a view by hovering the cursor over the view in the navigation tree.
3. In the **Search Range** area, select a date and time to start and end the search.
4. Click **Search**.

Serial search

You can perform a serial search to search devices for events that are linked to keywords or rules. For information on how to create a keyword or rule, see [Creating a rule for serial data string searches](#).

Performing a serial search

About this task:

This feature is only available for servers that support serial devices.

To perform a serial search, complete the following steps:

1. Select the device from the navigation tree.
2. In the **Search Serial** field, enter a keyword.
3. **Optional:** To modify a rule or keyword, click the **Pencil** icon.
4. In the **Search Range** area, select a date and time to start and end the search.
5. Click **Search**. All occurrences of the key word or rule during the time range displays on the timeline in red. Associated video displays in blue.

Keyword search

You can use a keyword search to search devices on a server for a keyword.

① **Note:** This feature is only available for servers that support security integrations.

Performing a keyword search

To perform a keyword search, complete the following steps:

1. Select the device from the navigation tree.
2. In the Search Keywords field, enter a keyword.
 - ① **Note:** If you select both a serial and security integration device, the **Search Serial** field also displays. For more information, see [Serial search](#).
3. **Optional:** To modify the keyword conditions, click the **Pencil** icon.
4. In the **Search Range** area, select a date and time to start and end the search.
5. Click **Search**. The search results display on the right-side of the video panel.

Analytic overlays

An analytic overlay represents an area where the camera identifies an analytic event, such as Object Entered, Object Exited, and Face Detection.

① **Note:** To configure the analytics for a camera, go to the camera's analytic web page.

Performing an analytic metadata search

To perform an analytic metadata search, complete the following steps:

1. From the navigation tree, select the analytic overlays that you want to search.
2. In the **Search Range** area, select a date and time to start and end the search.
3. **Optional:** To refine the search, select the **Show Filters** check box. For more information, see Table 76.
4. Click **Search**. The search results display on the right-side of the video panel.

Table 76: Keyword/Analytic Conditions pane

Interface element	Description
Source list	Use the Source list to limit the search to 1 keyword.
Key list	You can use the Key list to refine the search by selecting an object ID, or drawing a bounding box around the area you want to search.
	To create a bounding box, from the Key list select Bounding Box , and then drag the cursor diagonally on the video panel until you have drawn a box around the area where you want to search.
Value field	Searches by the value number.

Exporting files

You can export files from up to 16 cameras with a Professional or Enterprise license. With a Start license, you can export files from a single camera.

Exporting video files

To export a video file, complete the following steps:

1. In the **Search** window, perform a search. For information on how to perform a video search, see [Search window overview](#).
2. In the **Timeline** pane, locate the start of the video clip on the timeline, then right-click the timeline and select **Mark Start**.
3. Adjust the cursor lines to mark the start and end of the video clip.
 - ① **Note:** The green cursor marks the beginning of the video and the red cursor clip marks the end of the video.
4. **Optional:** To select a specific area of video to export, click the **Crop Export** icon, and then select an area of video to export.
 - ① **Note:** This option is only available if you select a single camera for video playback.
5. Click the **Export Video** icon from the toolbar.
6. In the **Export Video** window, enter a file name.
7. Select a file location and file type, and then click **Save**.
 - ① **Note:** The default file type is .exe (a standalone executable file). You can launch an .exe file in a player, which can be run by a user who does not have access to the exacqVision client. You can also select a .psx, a packaged .ps, a .avi, a .avi, a .mov, and a mp4 file format.

If the system disconnects during an export process, the export process automatically resumes after the system reconnects.

Export players

You can download players using the following links:

- Windows Media Player <http://www.microsoft.com/windows/windowsmedia/default.mspx>
- QuickTime Player <http://www.apple.com/quicktime/download>
- VLC Player <http://www.videolan.org/vlc>
- MPlayer <http://www.mplayerhq.hu/design7/dload.html>

You can download codecs using the following links:

- 3ivx MPEG4 decoder <http://store.3ivx.com/3ivxStore/?features=dec&platform=win&license=plus&Go=Go>
- DivX decoder <http://www.divx.com/en/downloads>
- QuickTime codec resources <https://www.apple.com/hk/en/quicktime/resources/components.html>
- Perian Codec for Quicktime <http://www.perian.org>

See the following table for information about various operating systems and compatible file formats.

Table 77: QuickTime and AVI file export players

Video File Format	Windows Players		Linux Players		Mac Players	
	WMP ¹	VLC	MPlayer	VLC	QuickTime Player ²	VLC
AVI ³ MJPEG	Yes	Yes	Yes	Yes	Yes	Yes
AVI ³ MPEG4	Yes	Yes	Yes	Yes	Yes ⁴	Yes
AVI ³ MPEG4 with ASP	Yes	Yes	Yes	Yes	Yes ⁴	Yes
AVI ³ H.264	Yes	Yes	Yes	Yes	Yes ⁴	Yes
AVI ³ H.265	H.265 is not supported by the AVI format.					
MOV MJPEG	Yes	Yes	Yes	Yes	Yes	Yes
MOV MPEG4	Yes	Yes	Yes	Yes	Yes	Yes
MOV MPEG4 with ASP	Yes	Yes	Yes	Yes	Yes ⁴	Yes
MOV H.264	Yes	Yes	Yes	Yes	Yes	Yes
MOV H.265	Yes	Yes	Yes	Yes	No	Yes
MP4 MJPEG	No	Yes	Yes	Yes	No	Yes

Table 77: QuickTime and AVI file export players

Video File Format	Windows Players		Linux Players		Mac Players	
	WMP ¹	VLC	MPlayer	VLC	QuickTime Player ²	VLC
MP4 MPEG4	Yes	Yes	Yes	Yes	Yes	Yes
MP4 MPEG4 with ASP	Yes	Yes	Yes	Yes	Yes ⁴	Yes
MP4 H.264	Yes	Yes	Yes	Yes	Yes	Yes
MP4 H.265	Yes	Yes	Yes	Yes	No	Yes

- 1 Windows Media player does not support Exacq subtitles.
- 2 QuickTime only supports Exacq subtitles within a mp4 container.
- 3 Exacq does not support subtitles for the AVI container format. This is a limitation of the format.
- 4 Requires an additional decoder DivX or 3ivx.

Burn Disc window

You can use the **Burn Disc** window to burn files to a CD or DVD. To open the **Burn Disc** window, click the Save to a CD or DVD icon from the toolbar. For information on the functionality of the **Burn Disc** window, see Table 78.

- ⓘ **Note:** If you do not have a CD burner on your computer, the **Save to CD** or **DVD** icon is not available.

Figure 46: Burn Disc window

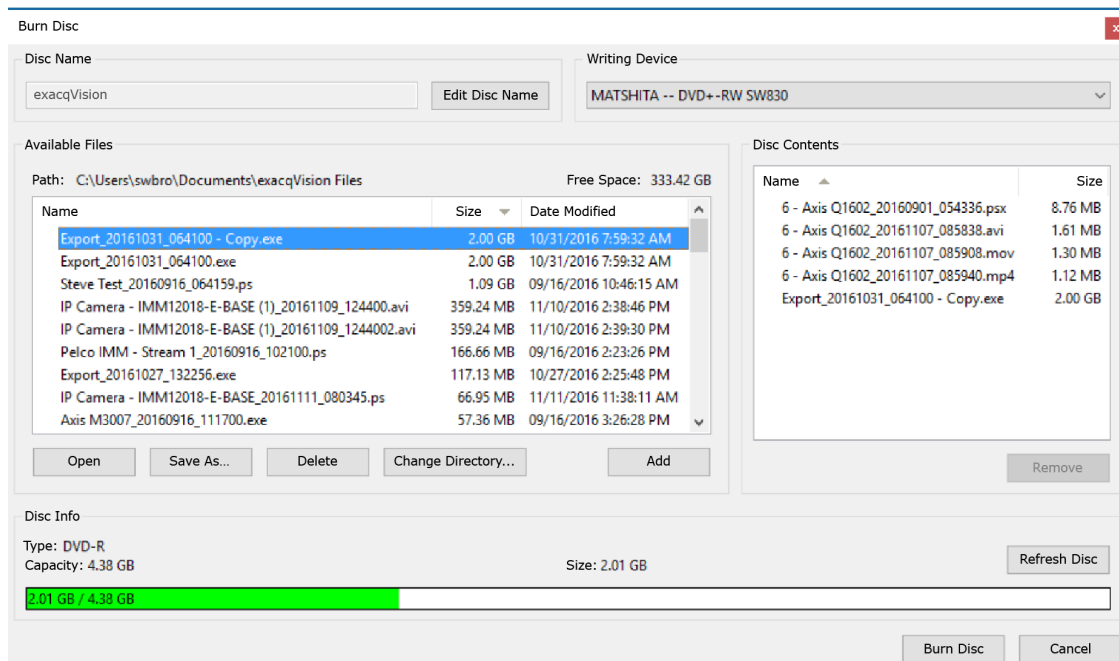


Table 78: Burn Disc window

Interface element	Description
Edit Disc Name button	To edit the discs name, click Edit Disc Name .
Available Files list	Displays the video clips in your directory.
	To add a video clip to a disk, select the video clip and then click Add .
	To delete a video clip from the directory, select the video clip and then click Delete .
	To open a video clip, select the file and then click Open .
	To change the directory, click Change Directory...
Disc Contents list	Displays the contents that you select from the available files list for burning.
	To remove a video clip from the disc, select the video clip and click Remove .
Disc Info pane	Displays information about the discs capacity.
	The loading bar displays the capacity of the disc and indicates the amount of space that it requires to burn the contents of the Disc Contents list. If no disc is present, the loading bar displays zero. If you insert or replace a disc, click Refresh Disc .
Burn Disc button	Opens the Disc Burning Progress window.
	To start the disc burning process in the Disc Burning Progress window, click Burn Disc , and then click Burn .

File Manager window

In the **File Manager** window, you can view, open, save and delete content that you export from a file directory. This feature is useful for system users that have access restrictions, and for computers that do not have suitable media drives to burn discs. To open the **File Manager** window, click the **Manage Files** icon in the toolbar. For information on the functionality of the **File Manager** window, see Table 79.

Figure 47: File Manager window

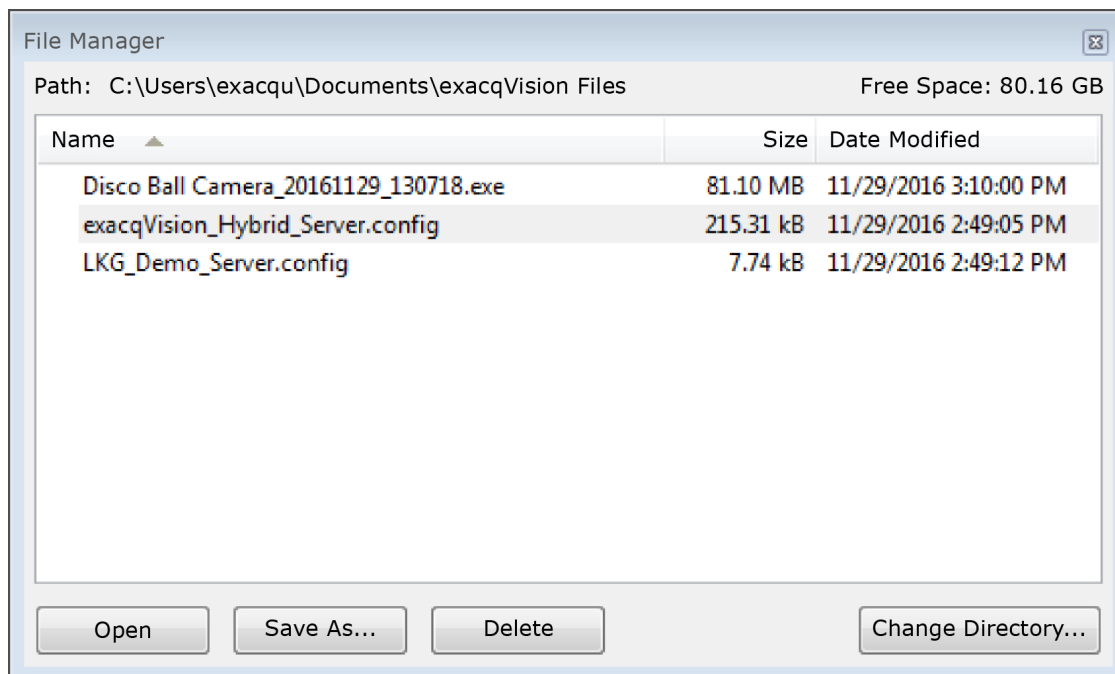


Table 79: File Manager window

Interface element	Description
Directory File list	Displays a list of files from a directory. To change the directory, click Change Directory...
Open button	To open a file from the directory, select the file from the Directory File list and then click Open .
Save As... button	To save a file from the directory, select the file from the Directory File list and then click Save .
Delete button	To delete a file from the directory, select the file from the Directory File list and then click Delete .

Technical support

Exacq Technologies is committed to providing exceptional technical and engineering support. When you need help with your exacqVision product, please be ready with a complete description of the problem, including any error messages or instructions on re-creating the error.

Technical support can be contacted as follows:

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11955 Exit Five Parkway, Bldg 3

Fishers, IN 46037 USA

Phone: +1-317-845-5710

Fax: +1-317-845-5720

Email support@exacq.com

Web: www.exacq.com

Regulatory notice

Federal Communications Commission (FCC)

Radio Frequency Interference Statement

The Exacq Product contains incidental radio frequency-generating circuitry and, if not installed and used properly, may cause interference to radio and television reception. This equipment has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of the Federal Communications Commission (FCC) Rules. These limits are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area may cause interference to radio and television reception, in which case users will be required to correct the interference at their own expense. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, users are encouraged to try to correct the interference by one or more of the following measures: Reorient the television or radio receiving antenna, and/or relocate the Exacq product and the radio or TV with respect to each other. If necessary, users should consult the manufacturer or an experienced radio/television technician for additional suggestions. Users may find helpful the following booklet prepared by the Federal Communications Commission: "How to Identify and Resolve Radio-TV Interference Problems," which is available from the Government Printing Office, Washington DC, 20402 (stock #004-000-00345-4).

CE Notice

Marking by the CE symbol indicates compliance of this device to the EMC directive of the European Community. Such marking is indicative that this device meets or exceeds the following technical standards:

- EN55022: Conducted Emissions
- EN55022: Radiated Emissions
- 61000-4-2 Electrostatic Discharge
- 61000-4-3 Radiated Immunity
- 61000-4-4 Electrical Fast Transients
- 61000-4-5 Surge Immunity
- 61000-4-6 Conducted Immunity

Electromagnetic compatibility (EMC) requires the use of shielded cable and ferrite cores for all wiring added by the user. Good shielding techniques should be applied in the user's system.

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