tyco | Exacq

exacqVision Client User Manual

www.exacq.com

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Version 21.12

Johnson Controls

Contents

New in version 21.12

- Support for Cloud Drive 2.0. to include configuration, subscriptions, and cold storage.
- Support for cropped exports with RVWs.
- Updates to the rules for intrusion status icons and colors to handle more states.
- Improvements to image quality when downsampling images from higher resolutions.
- Option for users to perform manual ingest on still or clip.
- Ability for security integrations to set the controller type display string.
- Updates to security integrations to have a more complex hierarchy.
- Support for importing cameras with multiple inputs.
- Support for RVW fisheye cameras.
- Options for user to upload multiple images and update images for an existing person to send to Tyco AI.
- New status strings for security integrations.
- Support for additional Tyco AI analytics
- Changes to the access control prompts.
- General improvements and bug fixes.

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.
Network	For the most reliable system and performance, the network administrator must observe the following best practices: • 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.

   ⓘ **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**.

   ⓘ **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

exacqVsion 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. 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 *IP Camera Setup Quick Start guide*.
Configure usernames and passwords	To configure usernames and passwords, refer to the *IP Camera Setup Quick Start guide*.

Getting started

exacqVision software overview

When you install an exacqVision server you are prompted in create a Username and password.

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

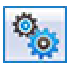
1. When you log on to a server, type your user name and the server password.

2. Configure a new user on the server.
3. Restrict user privileges and change the exacqVision client settings for the operating system user account. For more information on user configuration, 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

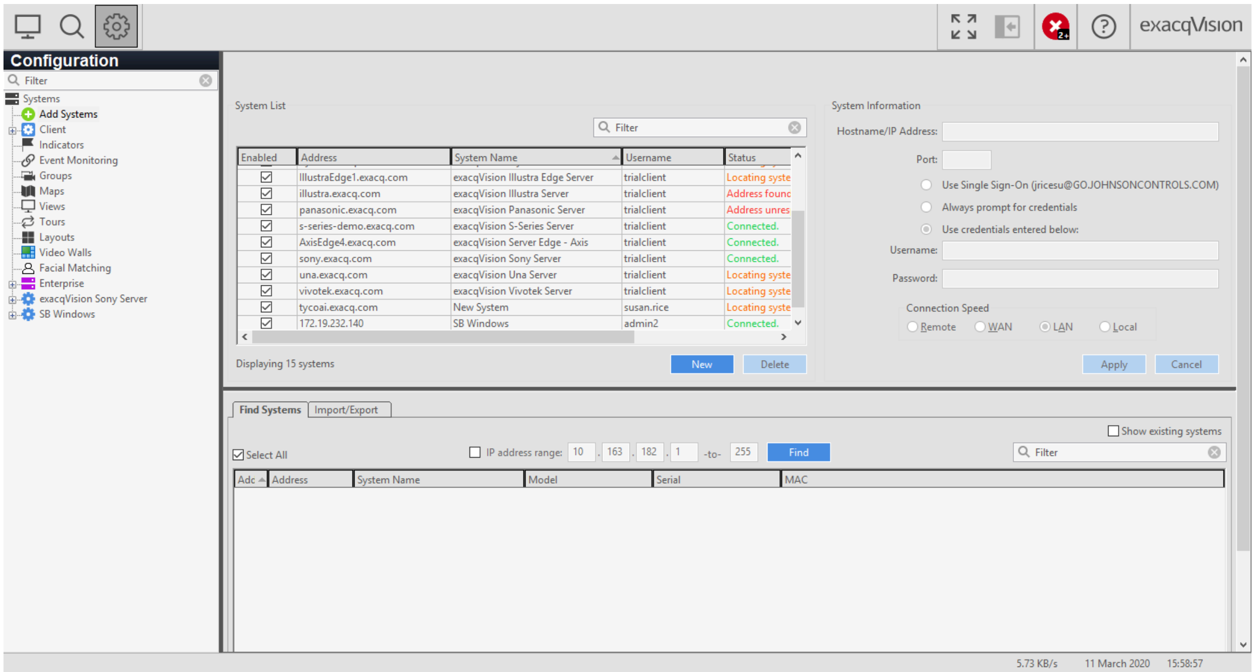


Table 5: Add Systems window

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 on exacqVision Enterprise users, see Enterprise Users window.

- **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.
   - **Synchronize with exacqVision Enterprise Manager**: For more information, see Synchronizing the System list with exacqVision Enterprise Manager.
3. In the **URL** field, enter a URL.
4. Click **Apply**.

Synchronizing the system list with exacqVision Enterprise Manager

About this task:
Synchronizing with exacqVision Enterprise Manager ensures that the exacqVision client continuously uses the same **System List** as the exacqVision Enterprise Manager.

To synchronize with exacqVision Enterprise Manager, complete the following steps:

1. In the **Import/Export** tab, select **Enable**.
2. Select Synchronize with exacqVision Enterprise Manager.
3. In the **URL** field, enter the URL for the exacqVision Enterprise Manager system.
4. Select one of the following options:
   - Use Single Sign-On
   - Always prompt for credentials
   - Use credentials entered below: If you select this option, enter a valid exacqVision Enterprise Manager username and password.
5. 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

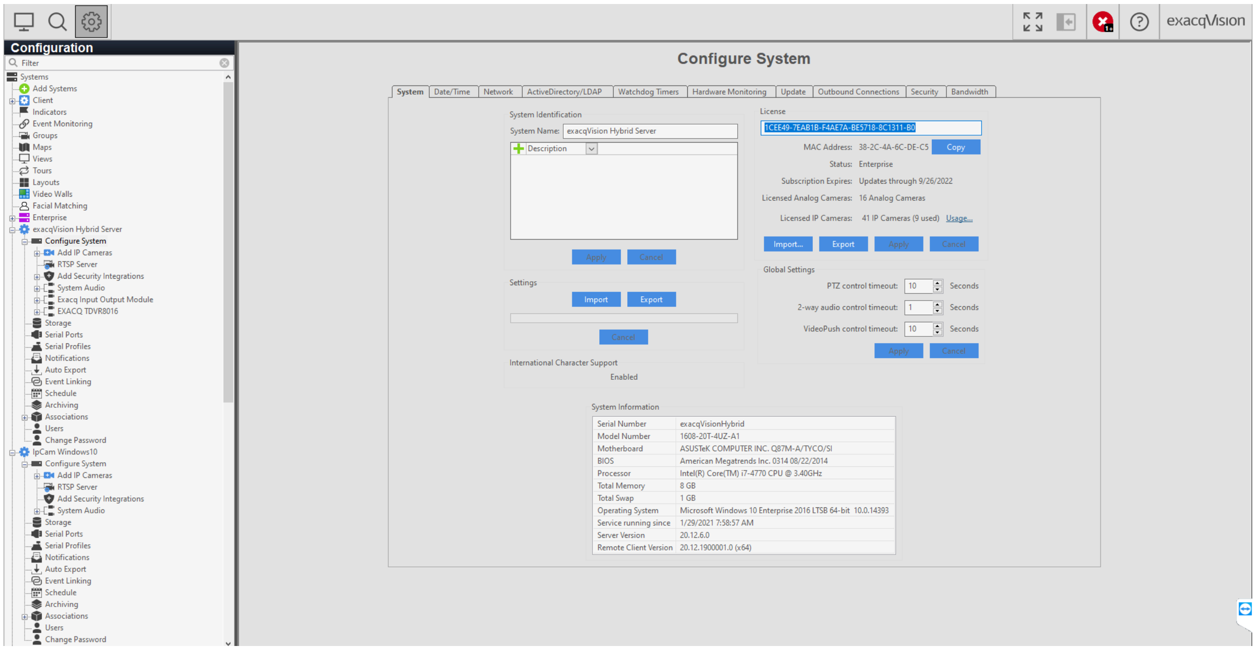


Table 6: System tab in the Configure System window

Interface element	Description
License pane	Displays the system's license information including subscription expiration and license usage.
	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.

Table 6: System tab in the Configure System window

Interface element	Description
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

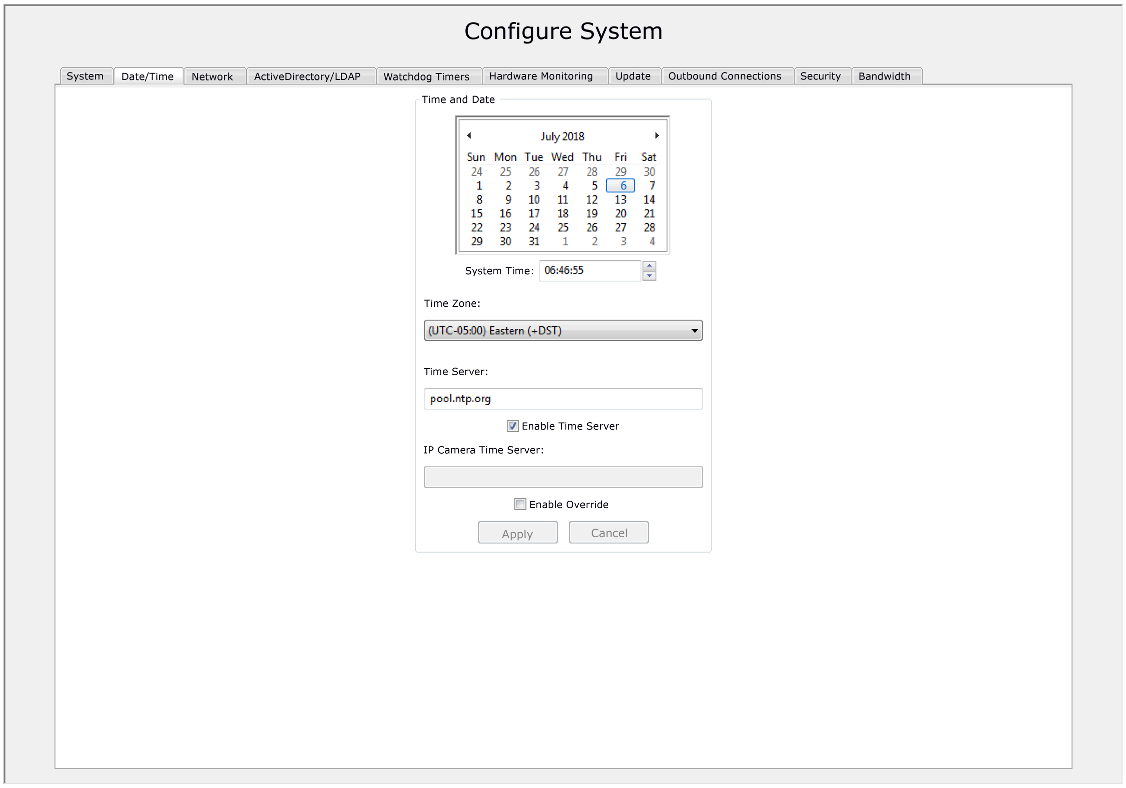


Table 7: Date/Time tab in the Configure System window

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

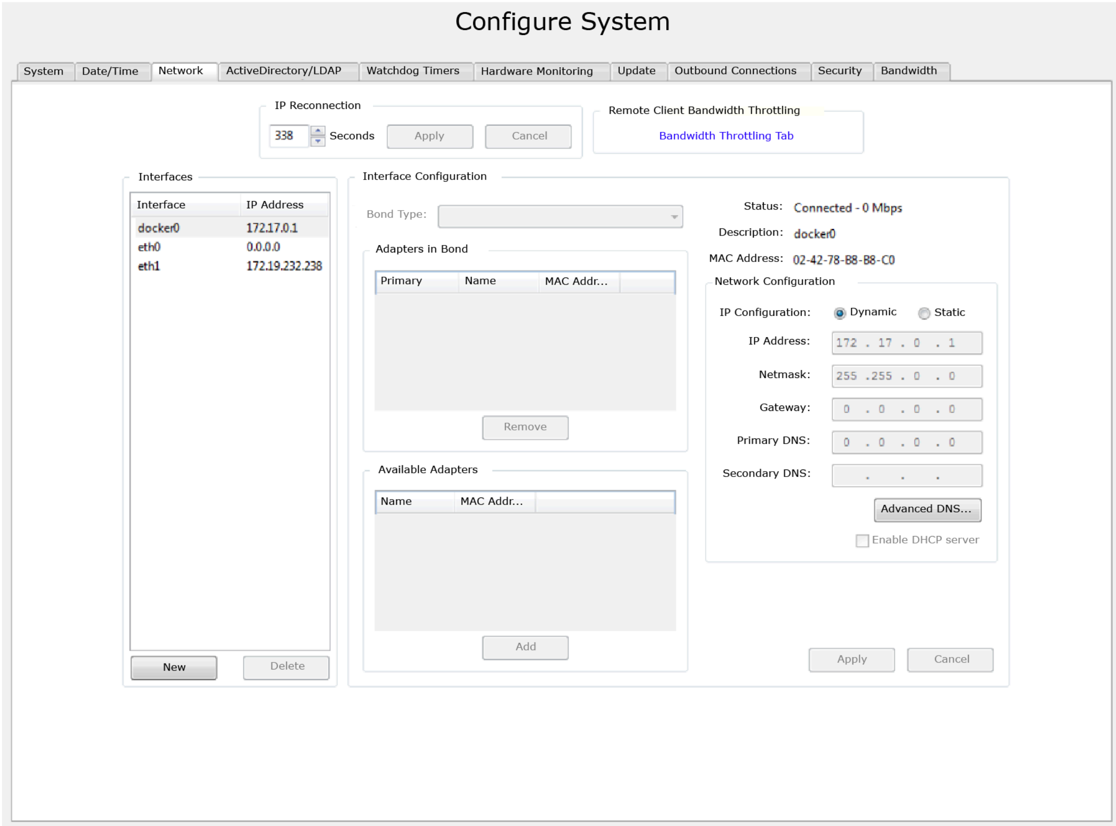


Table 8: Network tab in the Configure System window

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.
Remote Client Bandwidth Throttling pane	Adjusts the bandwidth throttling. For more information on bandwidth throttling, see Bandwidth tab.
	To adjust bandwidth throttling, click **Bandwidth Throttling** Tab.
IP Reconnection pane	Sets the IP Reconnection time. IP Reconnection is the time in seconds that the exacqVision system attempts to take to reconnect with an IP camera that has lost its connection with the exacqvision server. The default value is 300 seconds. If you lower this value, it can help you to troubleshoot camera connections on the network. However, lowering the value increases network traffic and unnecessary log entries.
	To set the IP Reconnection time, select the number of seconds you want from the **seconds** list, and then click **Apply**.

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.

Active Directory/LDAP tab

On the **ActiveDirectory/LDAP** tab, you can modify the directory service settings. You can only access the **ActiveDirectory/LDAP** tab with exacqVision Enterprise. For more information, see: https://cdnpublic.exacq.com/LDAP/index.html . For more information on the functionality of the **ActiveDirectory/LDAP** tab, see Table 10.

Figure 5: Active Directory/LDAP tab in the Configure System window

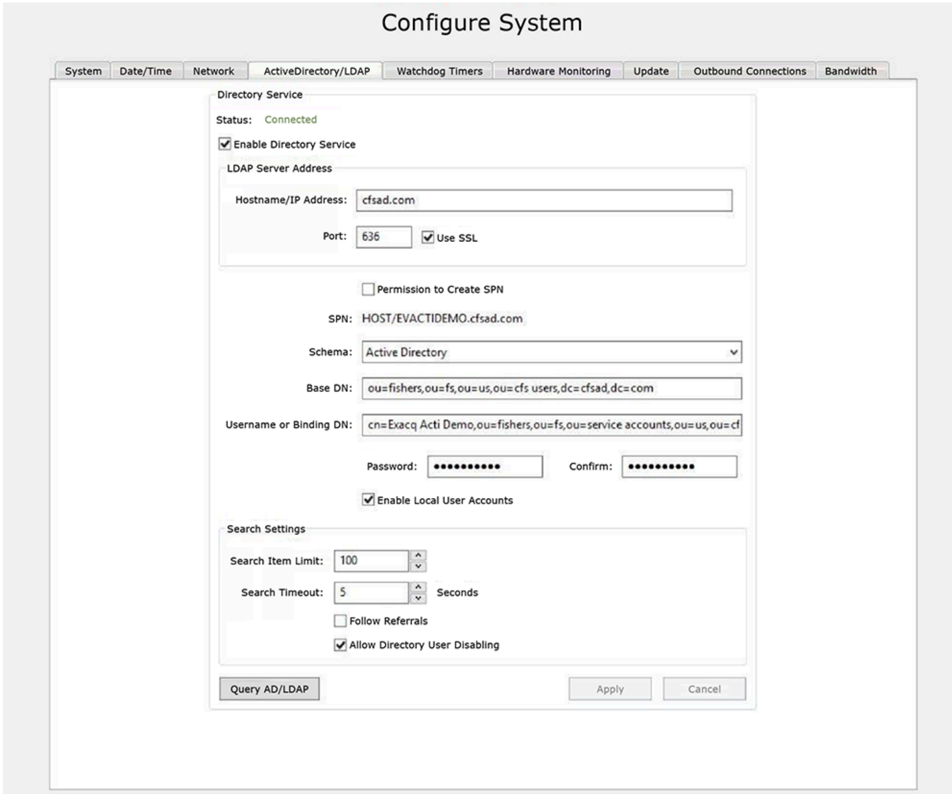


Table 10: Active Directory/LDAP tab in the Configure System window

Interface element	Description
Enable Directory Service check box	Modifies the directory service settings.
Port field	To modify the port number, enter the port number into the **Port** field. The default port number is 389.
Use SSL check box	To use port 636 over the LDAPS Secure Sockets Layer (SSL), select the **Use SSL** check box.
Permission to Create SPN check box	To create a Service Principle Name (SPN) with the LDAP Server, select the **Permission to Create SPN** check box. The name that the LDAP Server creates displays in the **SPN** field.
Enable Local User Accounts check box	To give local user accounts access to the exacqVision server, select the **Enable Local User Accounts** check box.
Search Item Limit list	Specifies the maximum number of items that the system can return in a search.
Search Timeout list	To select the number of seconds that the server waits for a response from the LDAP search, select the **Search Timeout** check box.
Follow Referrals check box	If the LDAP responds with referrals, you can select the **Follow Referrals** check box to follow them.

Table 10: Active Directory/LDAP tab in the Configure System window

Interface element	Description
Active Directory User Disabling check box	If the LDAP server determines that the Binding DN account has had too many log on account failures, select the **Active Directory User Disabling** check box to enable the LDAP server's lockout feature.
Query AD/LDAP button	Tests the connectivity and queries the LDAP server.

Modifying the directory service settings

To modify the directory service settings, in the **Config Setup** window, complete the following steps:

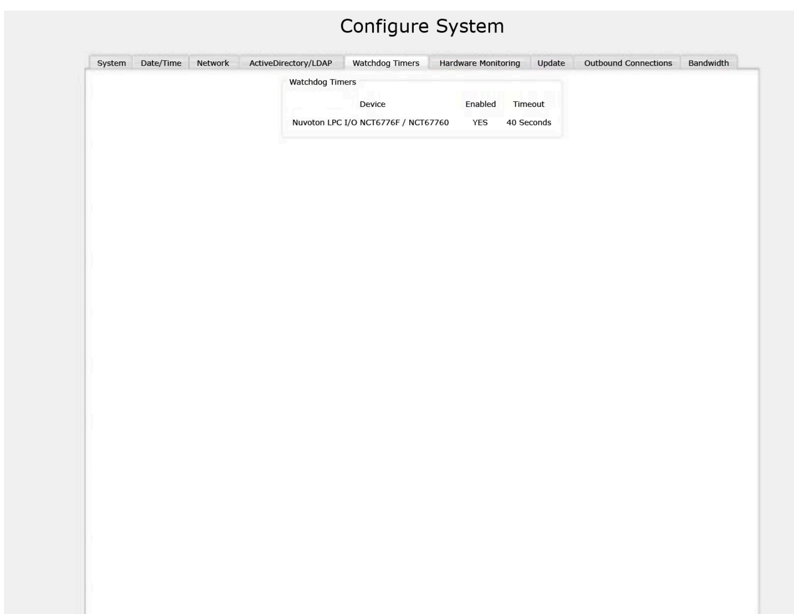
1. From the navigation tree, expand the relevant server node and select **Configure System**.
2. On the **ActiveDirectory/LDAP** tab, select the **Enable Directory Service** check box.
3. Enter the IP address or hostname of the LDAP server in the **Hostname/IP Address** field.
4. From the **Schema** list, select **LDAP Schema**.
5. Enter a password for the LDAP server in the **Password** field, and then confirm the password in the **Confirm** field.
6. Click **Apply**.

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.

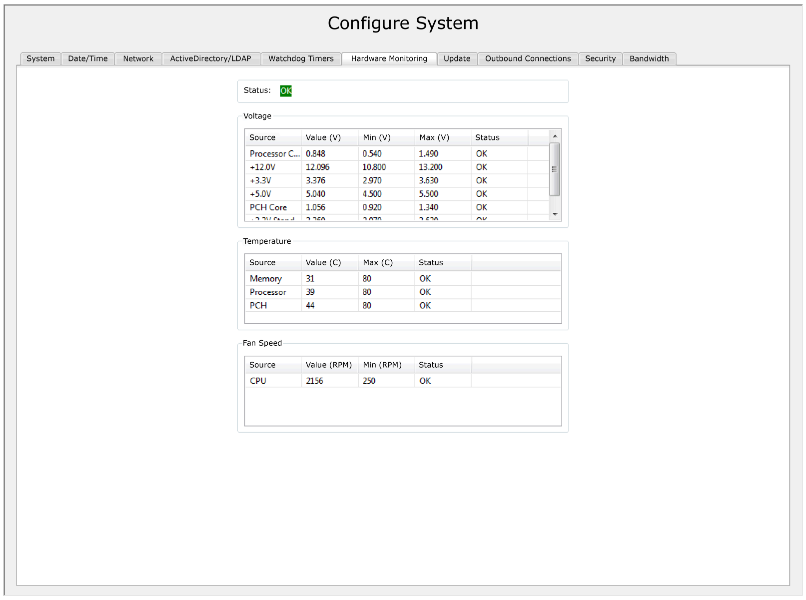
Figure 6: Watchdog Timers tab in the Configure System window



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 7: 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 11.

Figure 8: Update tab in the Configure System window

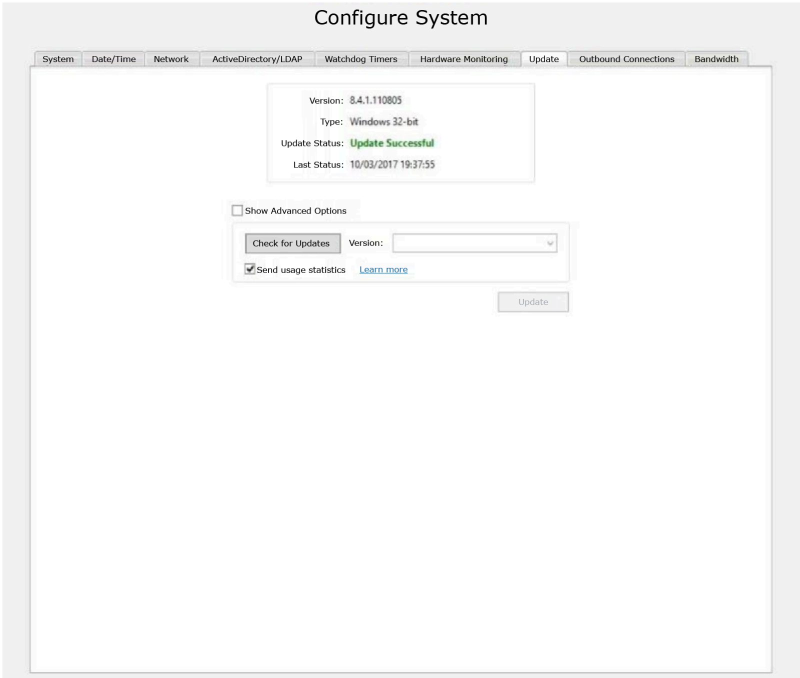


Table 11: Update tab in the Configure System window

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 excaqVision 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.

Outbound Connections tab

On the **Outbound Connections** tab, you can connect to services outside the system's network, such as exacqVision Enterprise Manager or exacqVision Integrator Services Portal.

Connecting to services outside the system’s network

To connect to a service outside the system’s network, in the **Config (Setup)** window, complete the following steps:

1. From the navigation tree, expand the relevant server node and select **Configure System**.
2. On the **Outbound Connections** tab, select the **Enabled** check box.
3. Enter the address of the service.

    Note: If you enter a domain name in the **Address** field, the exacqVision server attaches the system’s serial number automatically and identifies the system.

4. Click **Apply**.

Configuring multiple connections on a system

To configure multiple connections on a system, in the **Config (Setup)** window, complete the following steps:

1. From the navigation tree, expand the relevant server node and select **Configure System**.
2. On the **Outbound Connections** tab, select the **Show Advanced Configuration** check box.
3. Click **New**.
4. Enter an address and port number.
5. Select the **Enabled** check box.
6. Click **Apply**.

    Note: You can also use this procedure to configure a port for a connection.

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 9: Security tab in the Configure System window

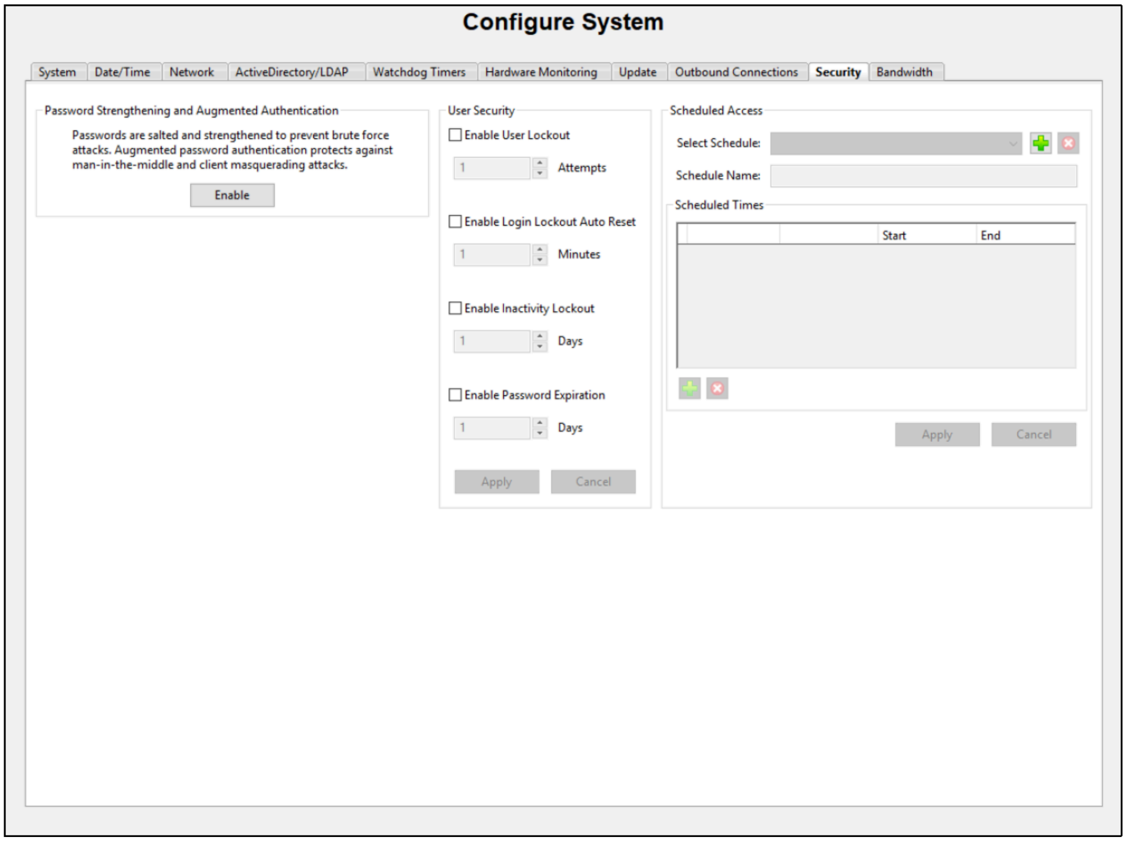


Table 12: Security tab in the Configure System window

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**.

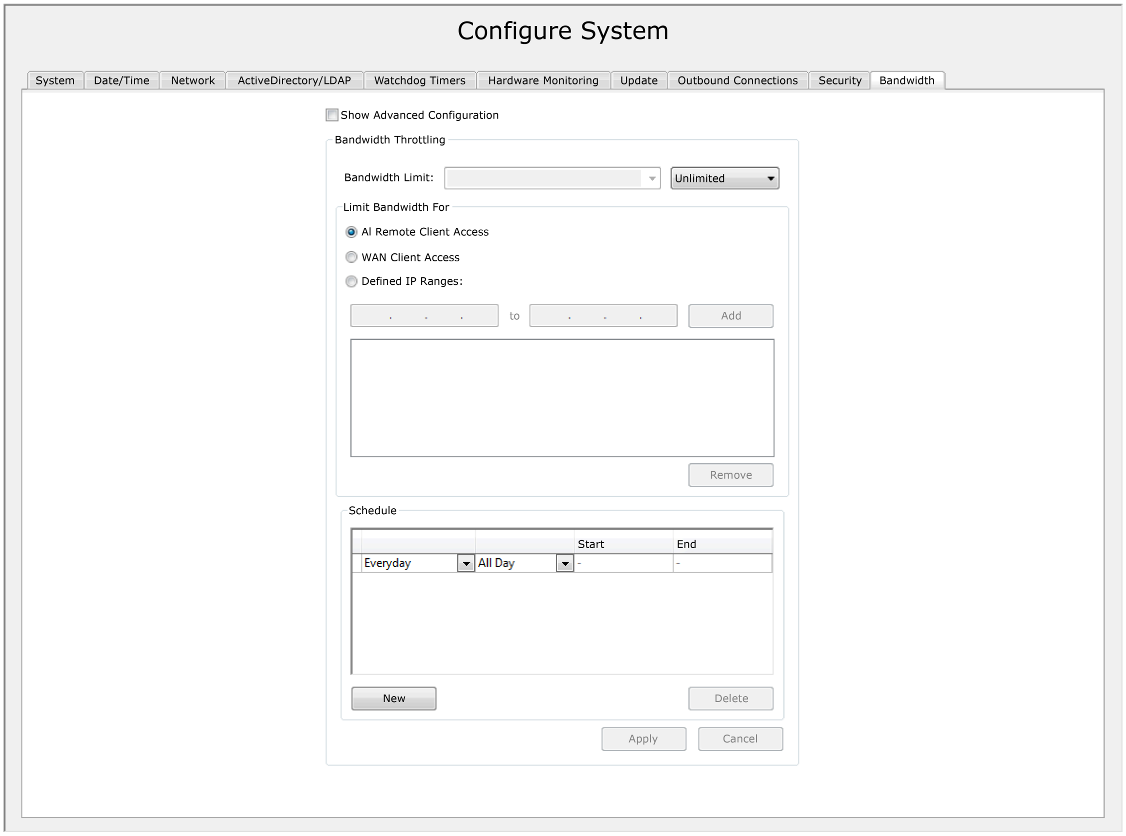
Bandwidth tab

On the **Bandwidth** tab, you can create a bandwidth throttling profile. Bandwidth throttling limits the outbound network throughput between the exacqVision server and the remote exacqVision client computers. The bandwidth throttling profile applies to all network interface cards (NIC) in the system.

The exacqVision server evenly splits the bandwidth allocated by the profile **Bandwidth Limit** between all clients matching that profile. For example, where a profile with a limit set to 4 Mbps is created, and four connected clients match this profile, each connection is limited to 1 Mbps. If two clients disconnect, the remaining clients are then limited to 2 Mbps each.

ⓘ **Note:** The **Bandwidth** tab is only available in exacqVision Professional and exacqVision Enterprise. In exacqVision Enterprise you can create multiple bandwidth throttling profiles.

Figure 10: Bandwidth tab in the Configure Systems window



Creating a bandwidth throttling profile

To create a bandwidth throttling profile, in the **Config Setup** window, complete the following steps:

1. From the navigation tree, expand the relevant server node and select **Configure System**.
2. On the **Bandwidth** tab, select the **Show Advanced Configuration** check box.
3. From the **Data transfer speed** list, select the range of throughput to throttle.
4. From the **Bandwidth Limit** list, select a range between one and 512.
5. Enter a name for the profile in the **Name** field. The system creates a default name.
6. Select one of the following options:
   - **All Remote Client Access** This option limits the bandwidth for clients that connect remotely.
   - **WAN Client Access** This option limits the bandwidth for all WAN clients that are not on the same subnet as the exacqVision server.
   - **Defined IP Range**: This option limits the bandwidth to a specific IP range. If you select **Defined IP Range**, enter the IP range and then click **Add**.
7. In the **Schedule** area, select a day of the week.
8. Select **Between** or **All Day**, and then select a start and end time.
9. Click **Apply**.

   Note: Do not overlap IP ranges or times when you create multiple bandwidth profiles. The server always enforces the first entry in the IP range or time lists.

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:

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.

   Note: When you configure the second reviewer feature, you disable the archiving, auto export jobs, and email notification attachment features.

Add IP Cameras window

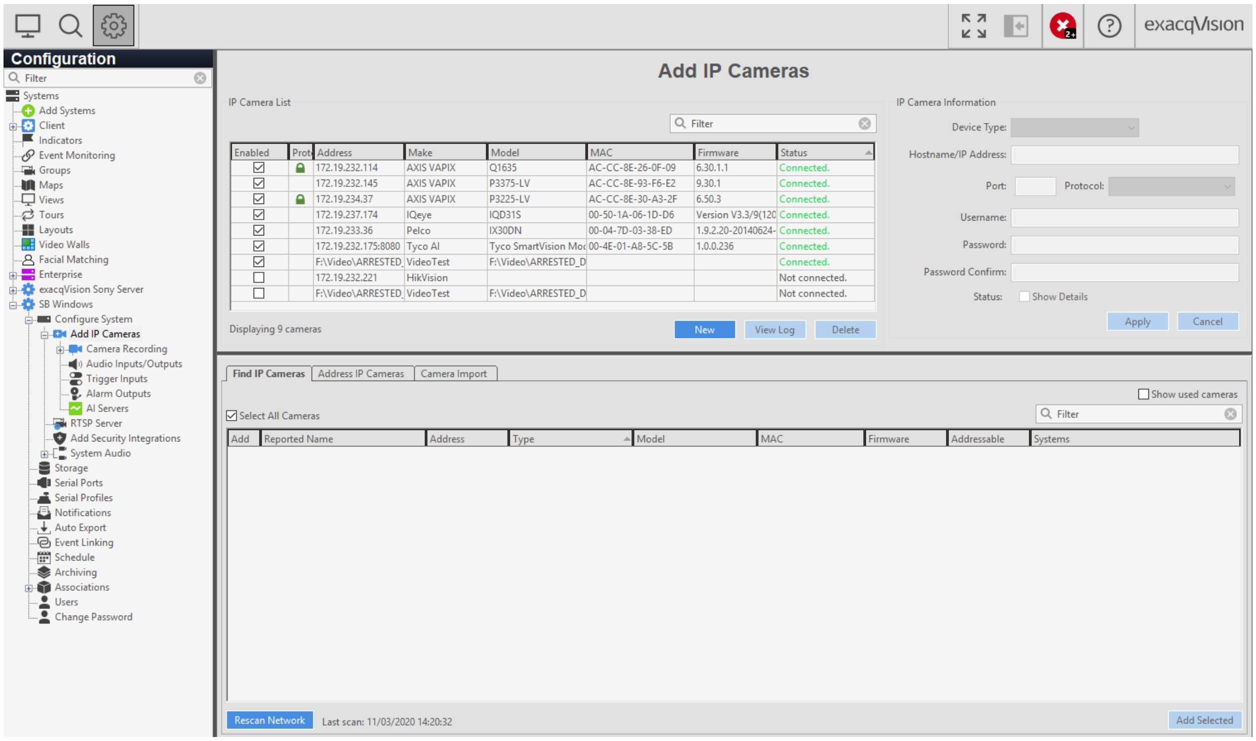
You can use the **Add IP Cameras** window to add and delete IP cameras and devices from the system. For information on how to open the **Add IP Cameras** window, see Opening the Add IP Cameras .

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 11: 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 13: 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 14: 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 ONIF 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.

   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 15: 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 16: 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 17: 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 18: 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 16.

   Note: If you select **Static**, modify the **IP address range**field.

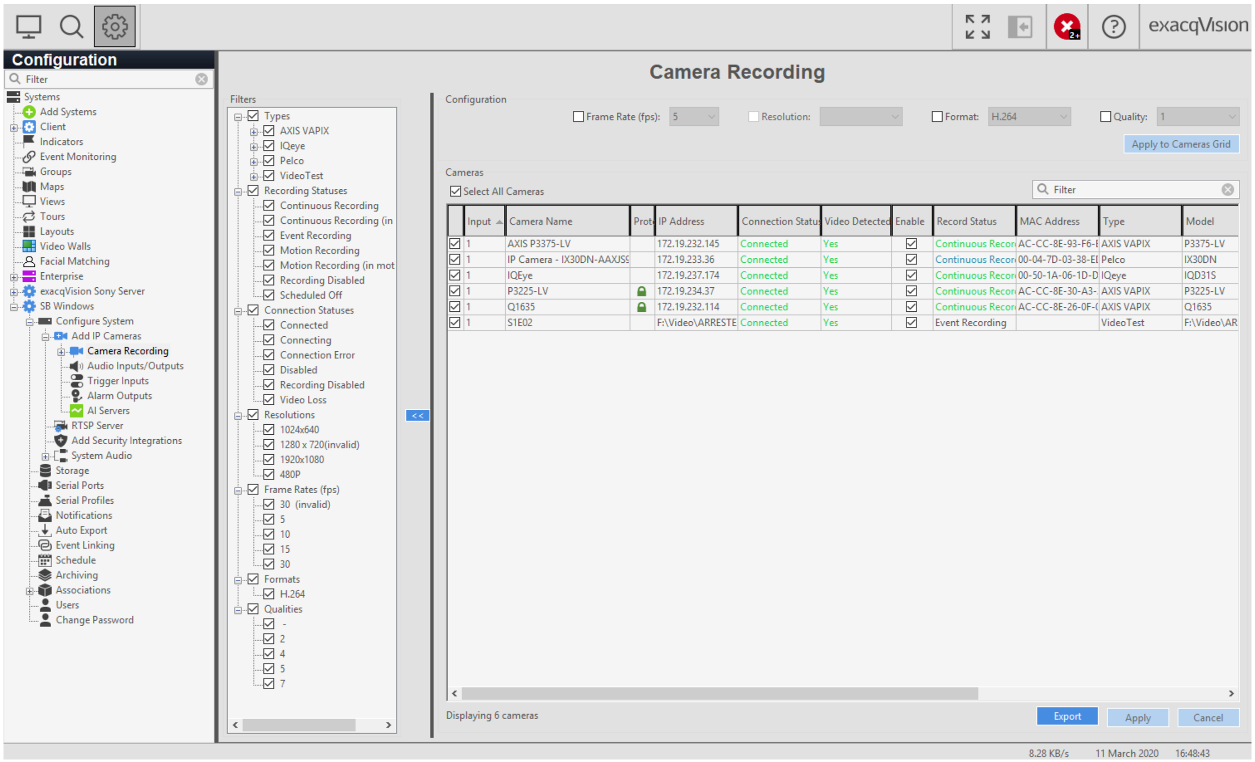
3. Click **Apply to Grid**.
4. Click **Apply**.

   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 12: 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 19: 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 columns 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 gray, 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 20: 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 gray, 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**.

Edge Storage

If a camera disconnects from an exacqVision server, the server can use the Edge Storage feature to retrieve and store video from a camera's storage device (SD) card, after the camera reconnects to the server. The server can retrieve video that is either continuous or event based.

The **Edge Storage** column in the **Camera Recording** window displays whether Edge Storage is active on the camera. To display the **Edge Storage** column, see Table 19.

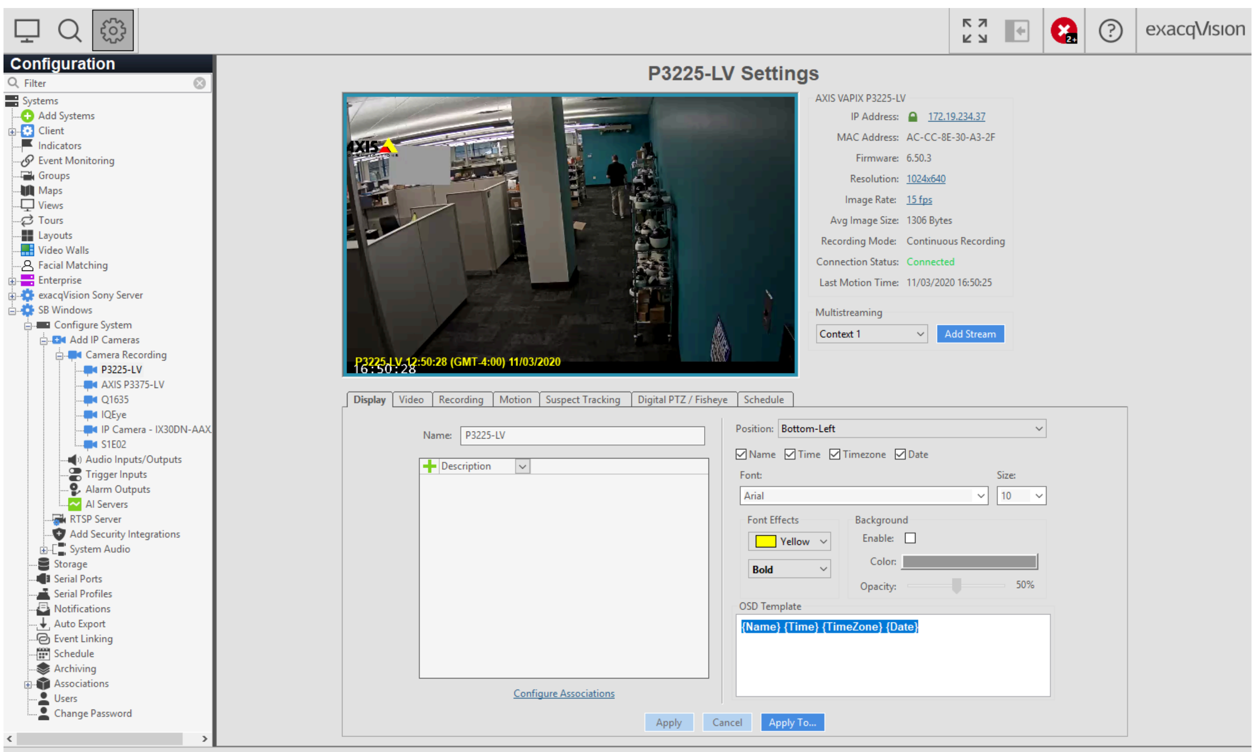
ⓘ **Note:** The Edge Storage feature is available only on Illustra cameras that supports TrickleStor, and TrickleStor must be active on the camera for Edge Storage to function.

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.

ⓘ **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 13: Camera Settings window



Multistreaming

You can use the multistreaming feature to stream a multiple of videos, with different settings or from different regions, to a multiple of users from a single camera view. For example, you can limit the video quality for remote users, and at the same time display the same video in high quality for local users. Each camera has a different limit to the number of streams you can add, and for each video you stream, you can apply custom settings for recording schedules, archiving, and event triggers. For more information on the functionality of the **Multistreaming** pane in the **Camera Settings** window, see the following table.

Note: The multistreaming feature is not available in exacqVision Start, and it only available on camera models that support multistreaming.

Table 21: Multistreaming pane in the Camera Settings window

Interface element	Description
Multistreaming list	Displays the next context stream number available.
	To view all the streams on a camera, expand the camera in the navigation tree. In the **Live** window, a stream with a specific region of interest lists as a separate camera in the navigation tree. A camera that has streams with different settings is recognized with a yellow star in the navigation tree, and its streams with the different settings display as children in the navigation tree.
	To delete a stream, in the Multistreaming area, click **Delete Stream**.
Add Stream button	To name the new context stream, adjust the quality settings, and create a region of interest, and then click **Add Stream**.

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. They 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 22.

Figure 14: Display tab in the Camera Settings window

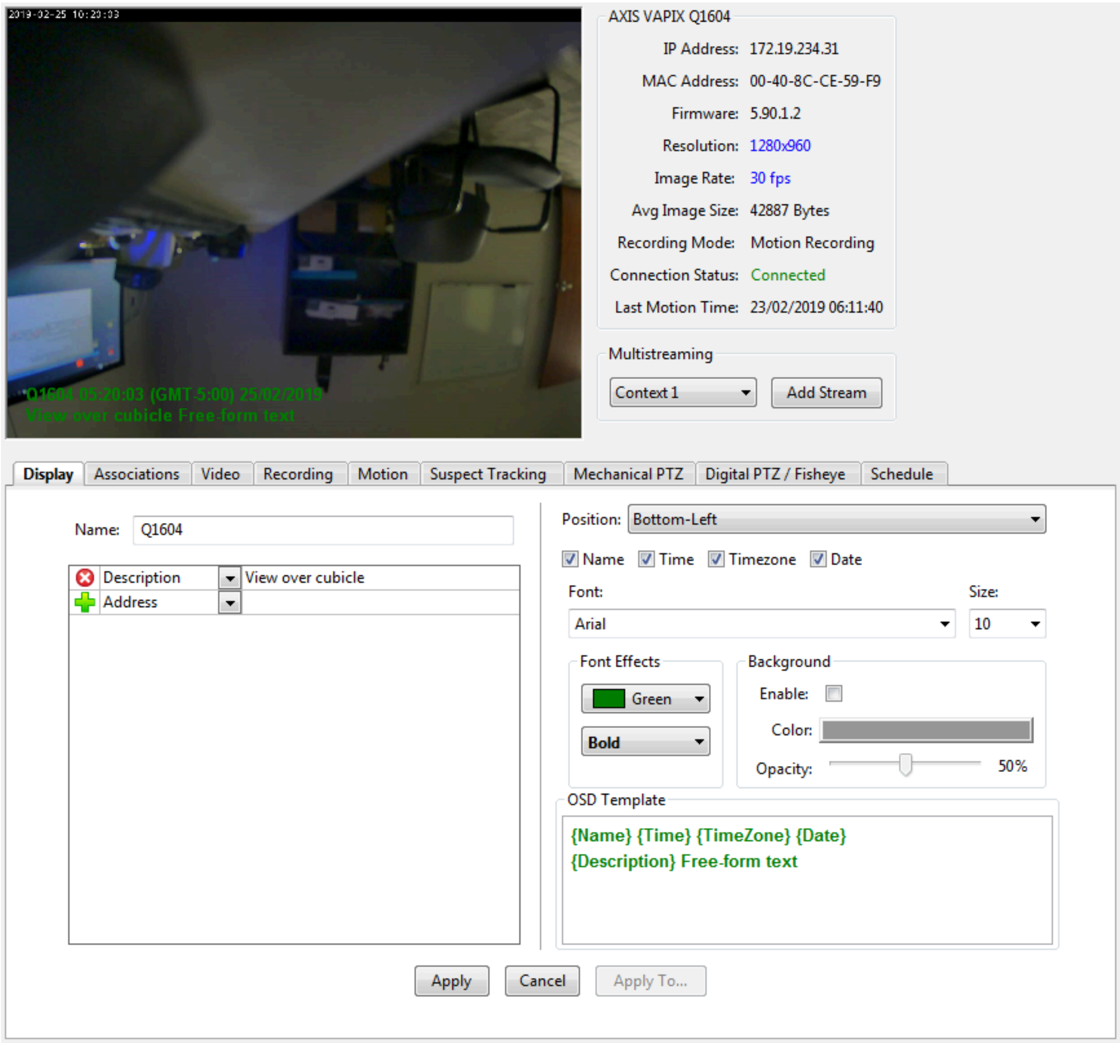


Table 22: Display tab in the Camera Setting window

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.

Table 22: Display tab in the Camera Setting window

Interface element	Description
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.
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 23.

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

Figure 15: Video tab in the Camera Settings window

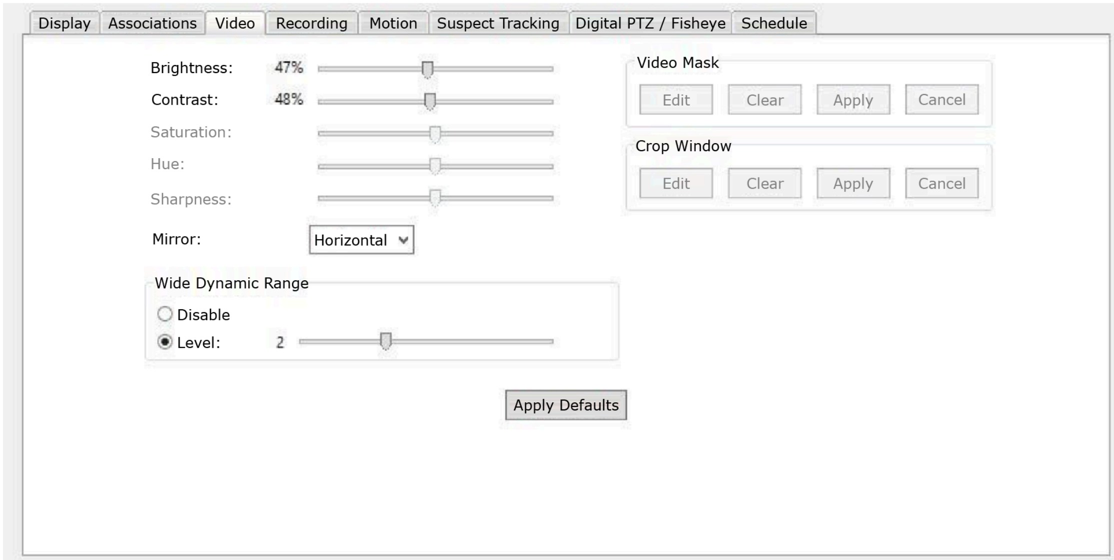


Table 23: Video tab in the Camera Settings window

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 gray 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 24.

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

Figure 16: Recording tab in the Camera Settings window

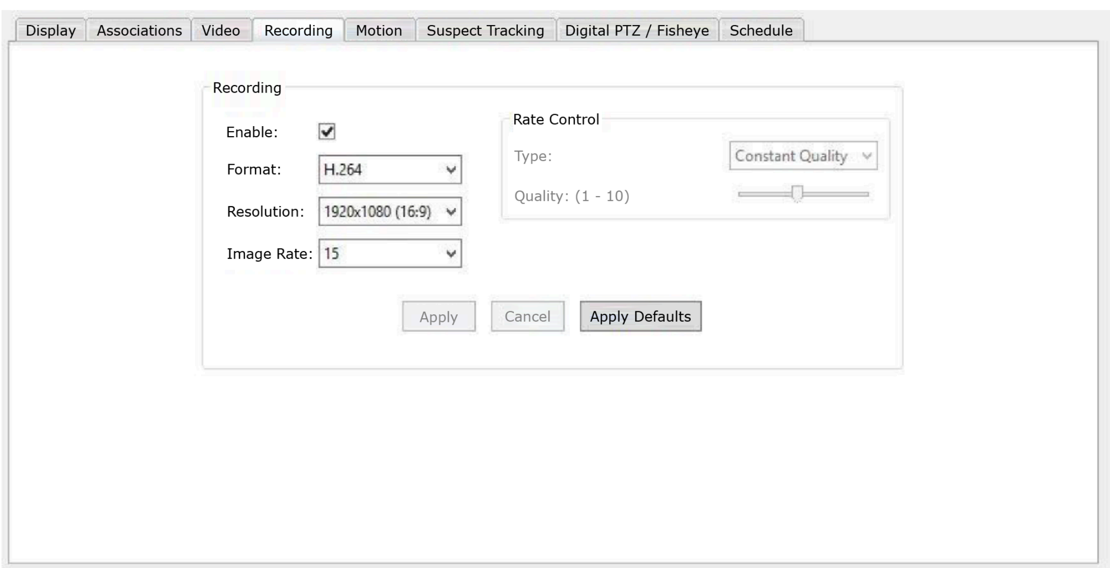


Table 24: Recording tab in the Camera Settings window

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.

Region of Interest

Exacq supports the Region of Interest (ROI) feature available with certain Illustra cameras.

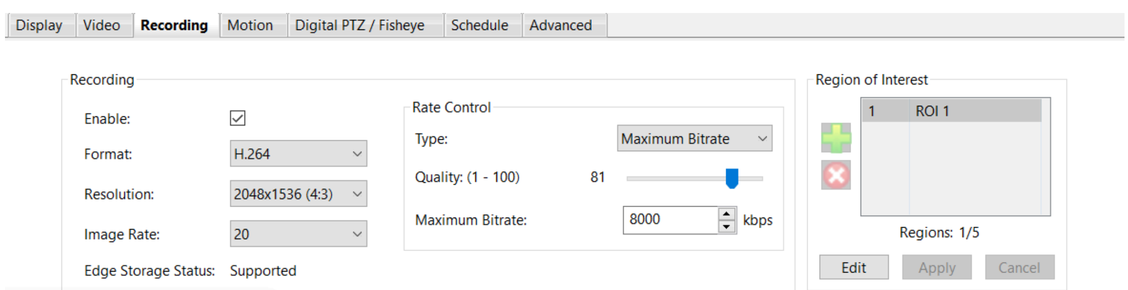
An ROI is a defined area of the camera view which considered to be higher priority than areas of non-interest, for example, areas of potential activity such as specific doors or windows. ROIs are specified by drawing a rectangular overlay on the video stream. You can configure up to five regions of interest.

The following Illustra camera series support this feature:

- Flex Gen 2
- Pro Gen 3

You can view and edit configured regions of interest in the Region of Interest pane.

Figure 17: Recording tab with active Region of Interest pane



For further information, refer to the *Illustra Flex Series Installation and Configuration Guide*.

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 18: Motion tab in the Camera Settings window with masking

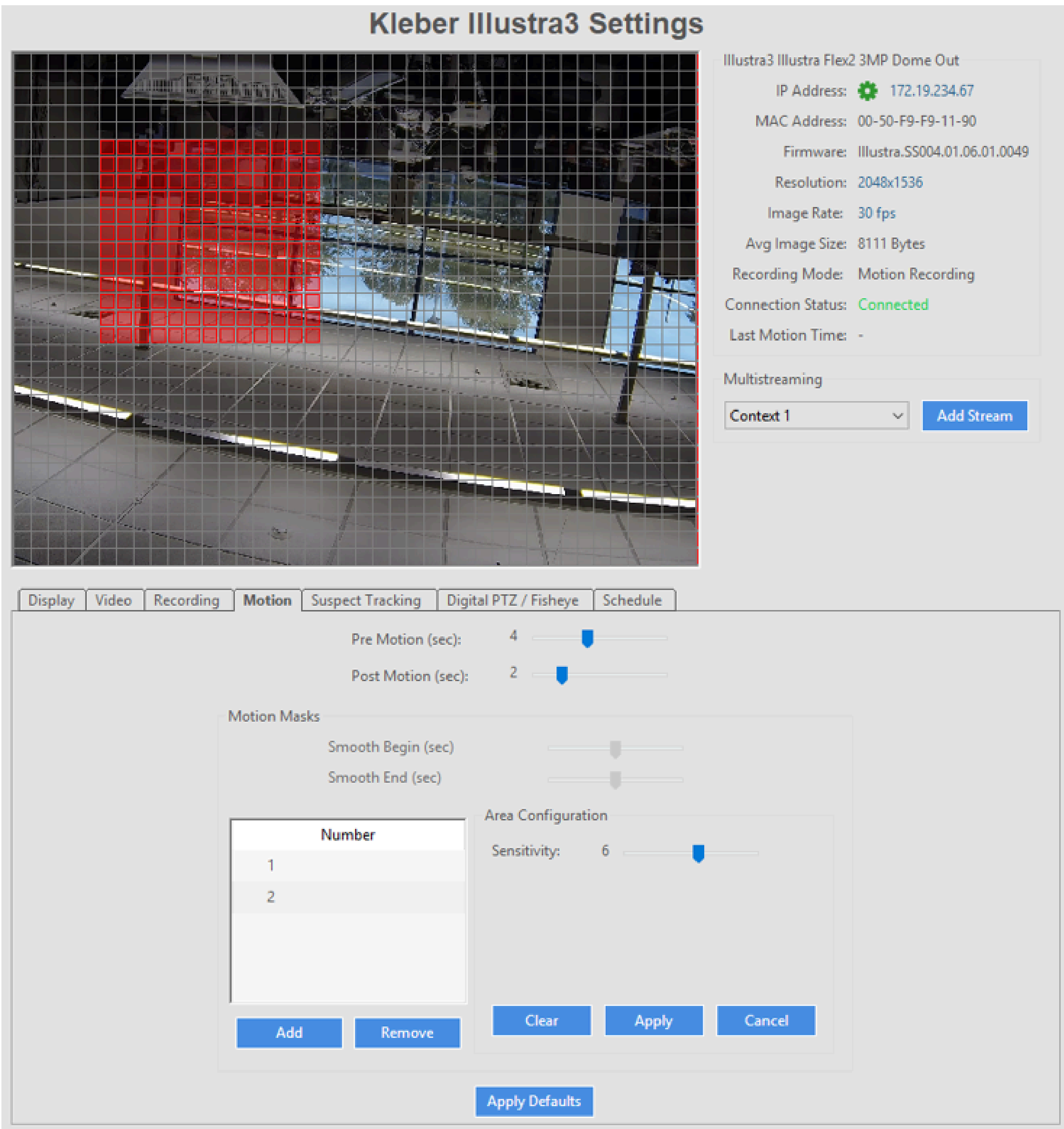


Table 25: Motion tab in the Camera Settings window with masking

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 occurs 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 19: Motion tab in the Camera Settings window with nested windows

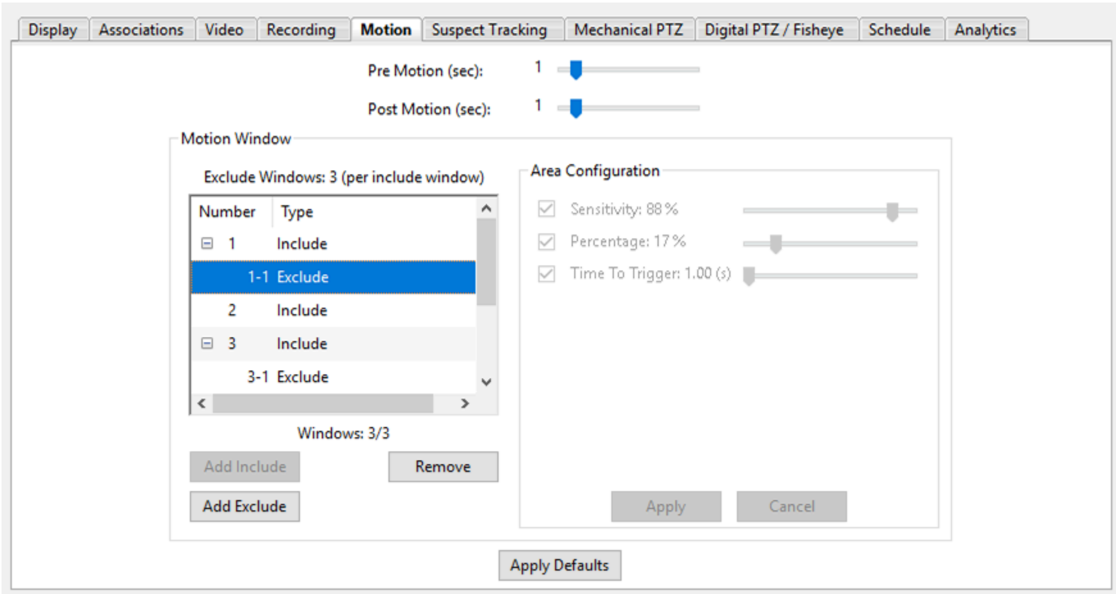


Table 26: Motion tab in the Camera Settings window with nested windows

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.

Table 26: Motion tab in the Camera Settings window with nested windows

Interface element	Description
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: • 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, `Windows: 2/3`. 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.

   ⓘ **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.
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. ⓘ **Note:** You can have a maximum of three exclude windows per include window.

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

Suspect Tracking tab

The suspect tracking feature links specific areas of a live video panel with other cameras, and can track a suspect or object as they move in and out of camera viewpoints. In the **Live** window, cameras with the suspect tracking feature display an icon on their live video panel. The areas of the video panel with the suspect tracking feature are marked by a color overlay. After you apply the suspect tracking feature to a camera, you can then switch to the linked camera by double-clicking the color overlay on the camera's video panel. To set up suspect tracking, see Setting up suspect tracking. For more information on the functionality of the **Suspect Tracking** tab, see Table 27.

Figure 20: Suspect Tracking tab in the Camera Settings window

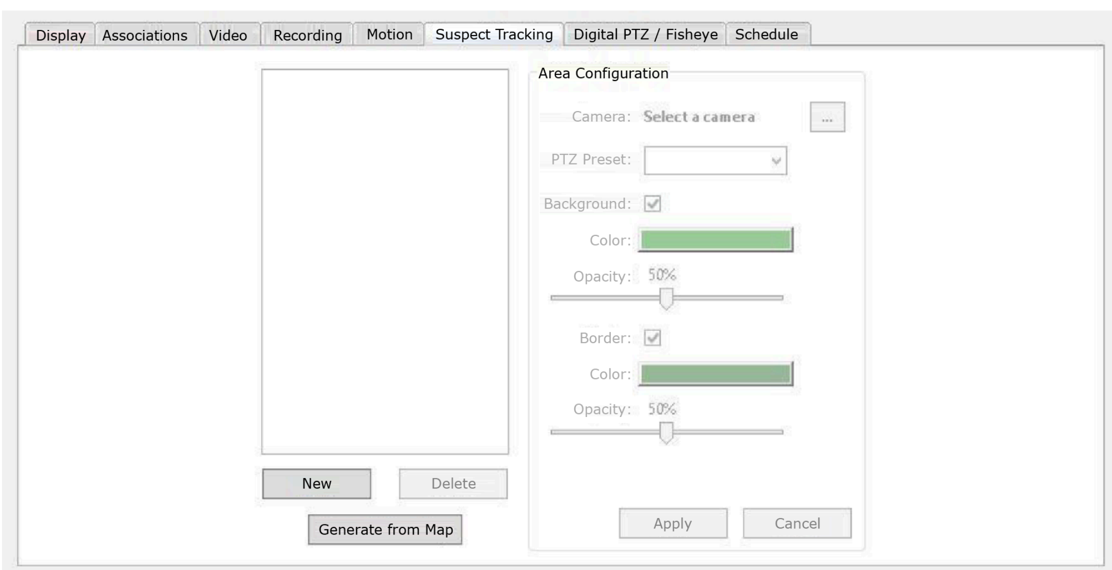


Table 27: Suspect Tracking tab in the Camera Settings window

Interface element	Description
PTZ Preset list	To add a preset of a linked camera, in the **Area Configuration** area select a preset from the **PTZ Preset** list.
Background area	Changes the background color and opacity of the area where you want to add a link to another camera.
Border area	Changes the border color and opacity of the area where you want to add a link to another camera.
Generate from Map button	Imports cameras that are associated with a map. For more information, see Maps window.
	For one or more cameras to appear on an imported map there must be one or more cameras within the angle of the field of view of the camera you want to configure.

Setting up suspect tracking

To set up suspect tracking, 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 relevant camera.
3. On the **Suspect Tracking** tab, click **New**.
4. Left-click the video panel and drag the cursor diagonally until you have drawn a box around the area where you want to add a link to another camera.
5. In the Area Configuration pane, click **Browse...**.
6. Select the camera that you want to link to the area, and then click **Apply**.

   ⓘ **Note:** You can also add a digital or mechanical PTZ preset for the linked camera. For more information, see Table 27.

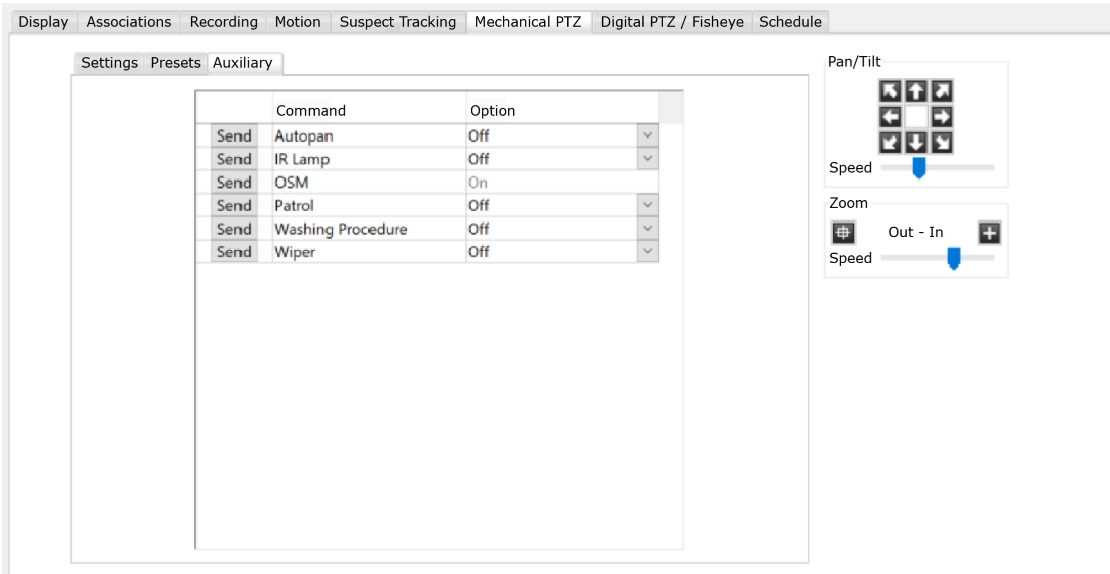
7. In the Area Configuration pane, click **Apply**.

   ⓘ **Note:** You can apply the suspect tracking feature to a multiple of areas in a video panel.

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 21: 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 28: 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.
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 29: 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.
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:

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.

   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 30.

Figure 22: Digital PTZ/Fisheye tab in the Camera Settings window

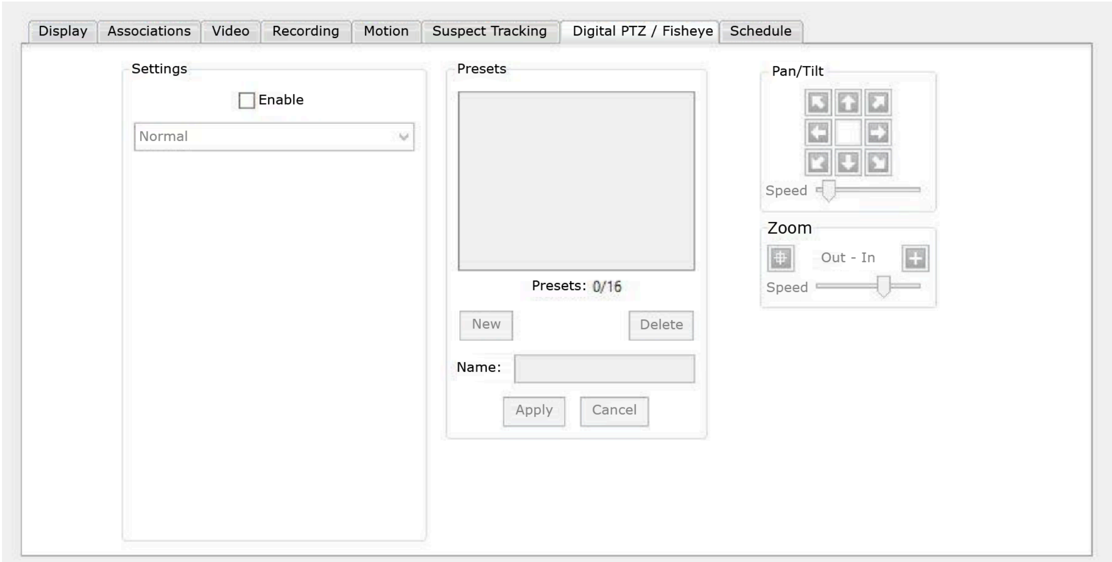


Table 30: Digital PTZ/Fisheye tab in the Camera Settings window

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 31.

Figure 23: Schedule tab in the Camera Settings window

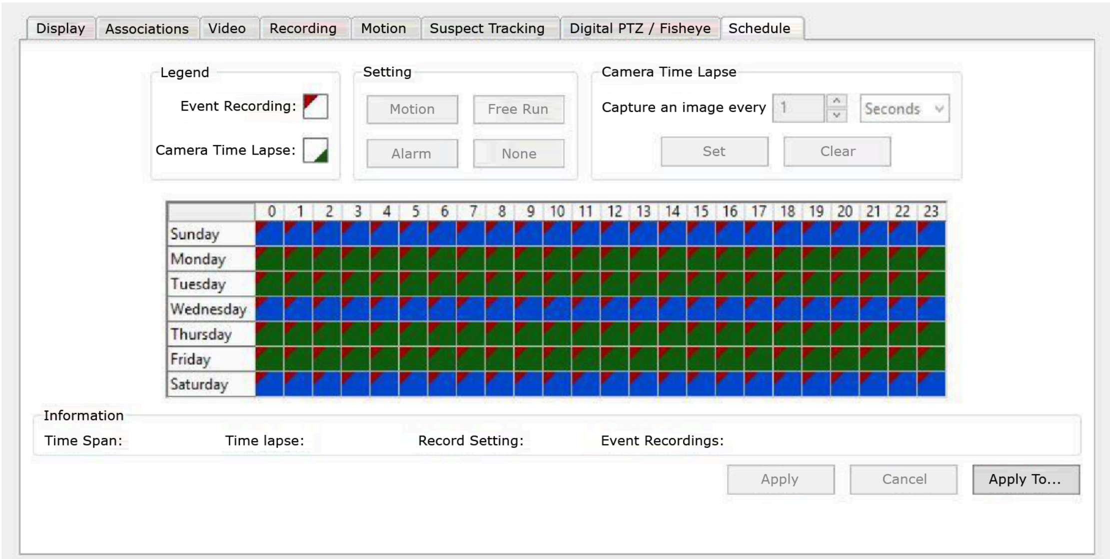


Table 31: Schedule tab in the Camera Settings window

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 24: Analytics tab in the Camera Settings window

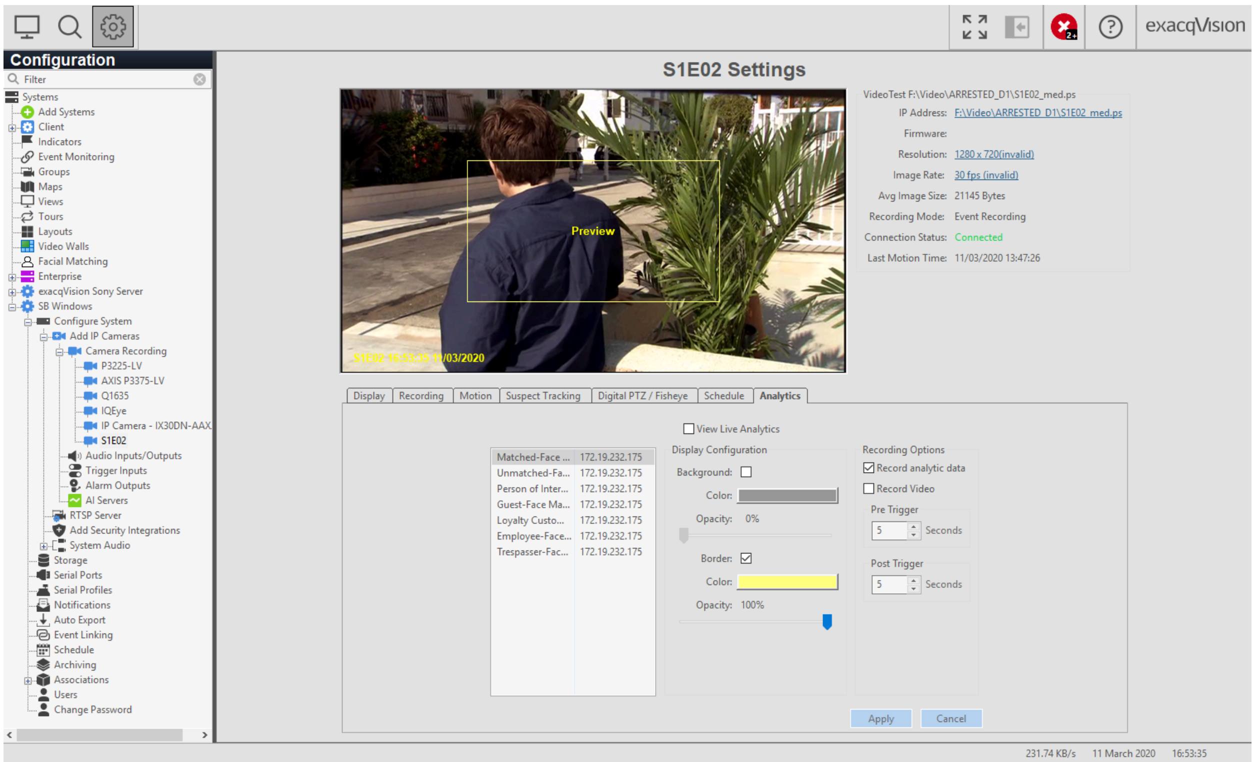


Table 32: Analytics tab in the Camera Settings window

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.

Table 32: Analytics tab in the Camera Settings window

Interface elements	Description
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.
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 cameras **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 33 and Configuring a camera's profile.

Table 33: 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**.

Restricted View tab

Depending on the camera type, in the camera's Settings window, you can use the **Restricted View** tab to specify one or more areas of the video panel to be obscured, and to associate a password with that view. When the video for that camera is displayed, you can temporarily hide the obscuring boxes by entering the password.

When video is exported, `.psx` and `.exe` file types only will be permitted for cameras with Restricted View enabled, and the video and metadata will be encrypted. Restricted View data will be included in the data for these files, and will be displayed in ePlayer by default. You can enter the associated password to temporarily hide the obscuring boxes.

For more information on the functionality of the Restricted View tab, see Table 34 and Creating a Restricted View

Table 34: Restricted View tab in the Camera Settings window

Interface elements	Description
Restricted View pane	In the **Restricted View** list you can view, add and delete Restricted Views.
	Enter an **Override Password** to set the password required to display content restricted by an obscuring box.
Restricted Area pane	Select the **Enabled** check box to change the background color, border color and opacity of the Restricted View overlays. Changing the background color and opacity does not affect how the camera captures data.
Display Message pane	In the **Display Message** pane you can add a message to display on the Restricted View overlay.
	In the **Font** area, select the font and size.
	In the **Font Effects** area, select the font color and style effects, for example, bold.
	In the **Background** area, you can enable a message background and set the color.

Creating a Restricted View

To create a Restricted View, 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 relevant camera.
3. On the **Restricted View** tab, click **New**.
4. Left-click the video panel and drag the cursor diagonally until you have drawn a box around the area you want to obscure.
5. Add an Override Password and optional Display Message.

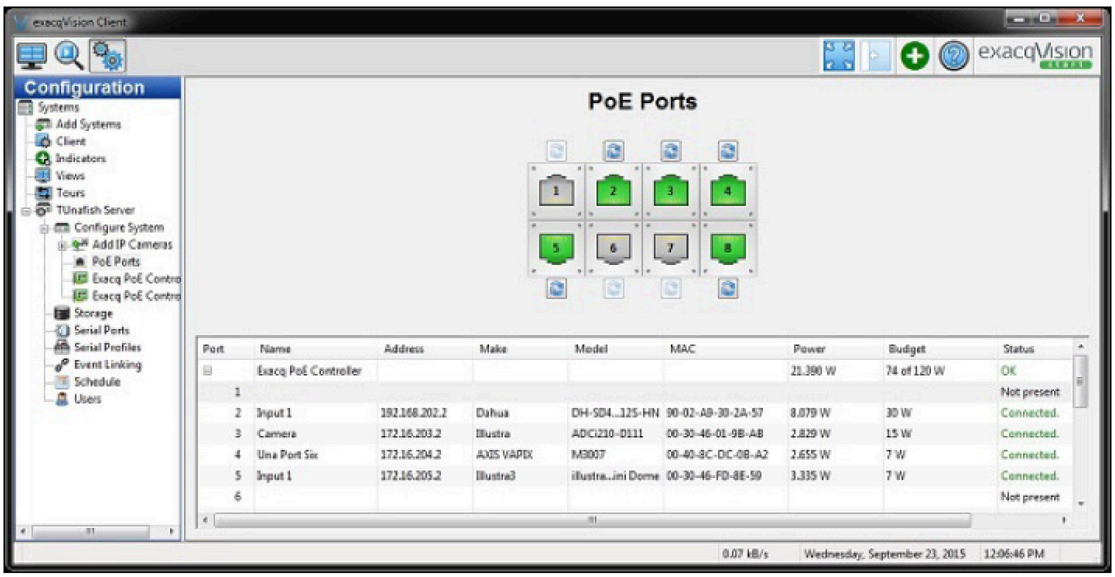
   ⓘ **Note:** You can also edit the appearance of the Restricted Area and Display Message. For more information, see Table 34

6. 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 35.

Figure 25: 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 35: 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 an 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.

Table 35: PoE Ports window

Interface element	Description
Model column	Displays the camera model.
MAC Address column	Displays the camera’s MAC address.
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. • Gray 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 36 and Configuring the RTSP server.

Figure 26: RTSP Server window

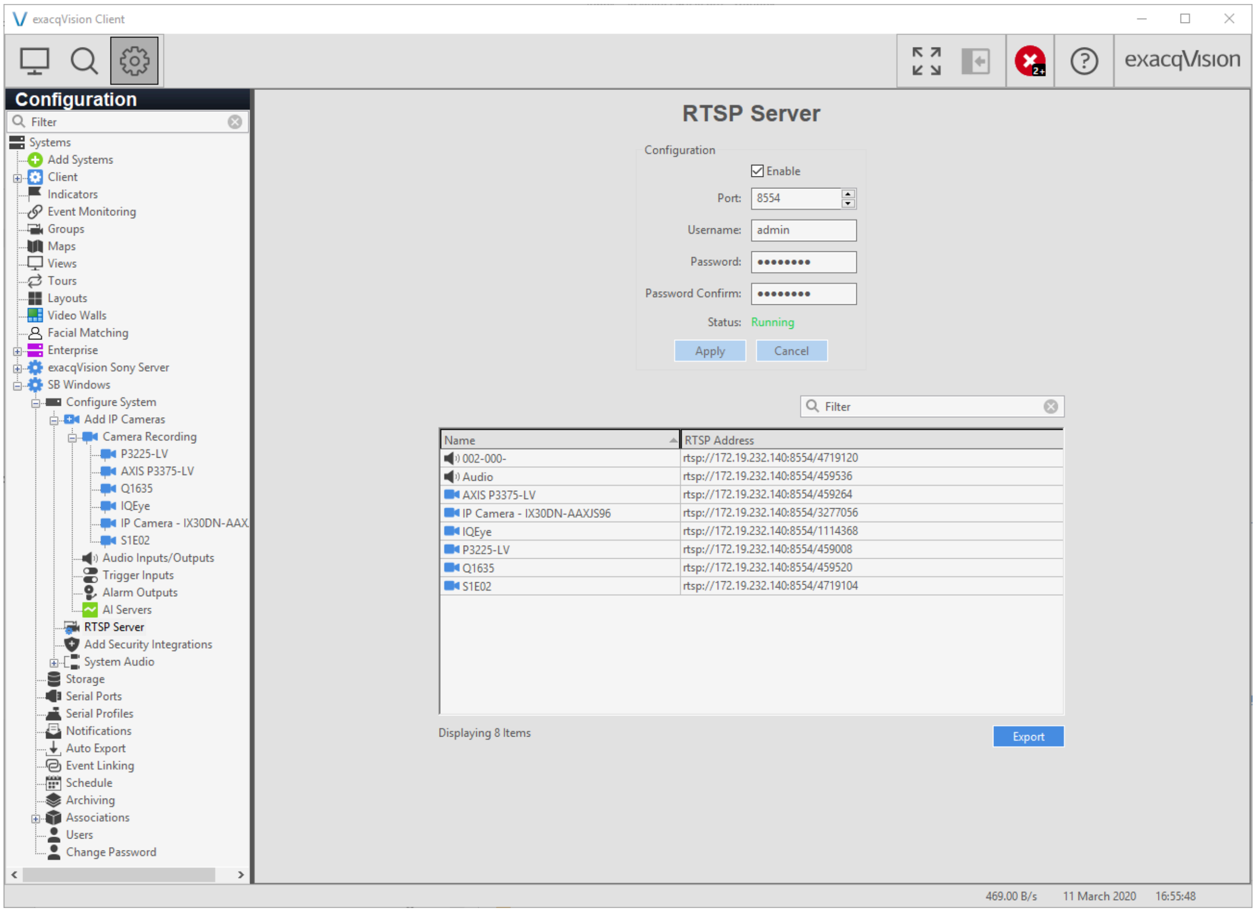


Table 36: Configure System window

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 `csv` 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:

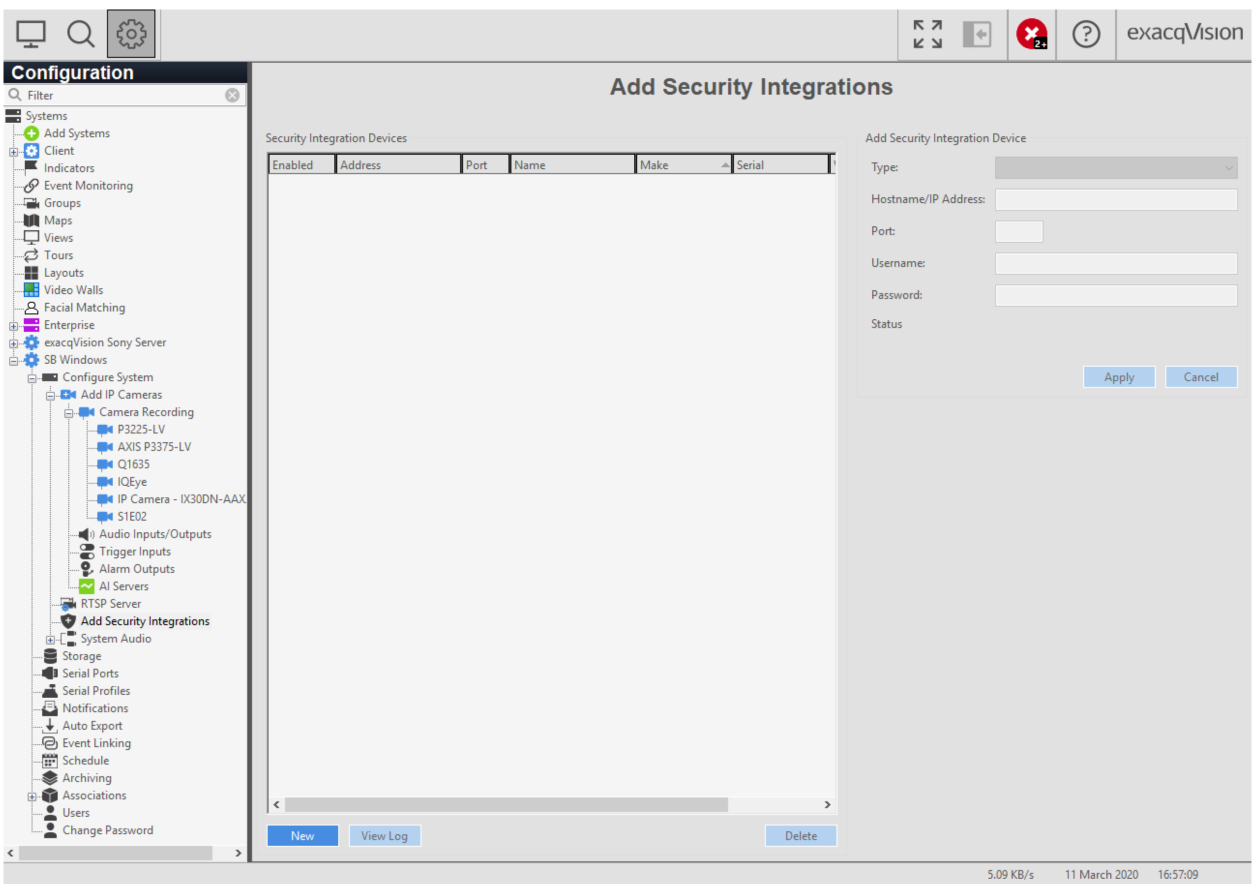
1. In the navigation tree, expand the server node.
2. Expand the **Configure System** and then select the **RTSP Server**.
3. In the **Configuration** pane, select the **Enable** check box.
4. In the **Ports** field, click the arrows to configure the port number.
5. Enter a username for the RTSP server.
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.

> **Note:** You may have to adjust the RTSP URL based on on whatever address is reachable from the client you attempt to connect with.

Security integrations window

In the **Add Security Integrations** window, you can add security devices to an exacqVision server, and view the status of the integration. For more information, see the *Integration's User Manual*. You can only add security devices that the exacqVision system supports. For more information, see www.exacq.com.

Figure 27: Add Security Integrations window



Adding a security device

To add a security device to a server, in the **Config (Setup)** window, complete the following steps:

1. From the navigation tree, expand the relevant server node.
2. Expand the **Configure System** node, and then select **Add Security Integrations**.
3. In the **Add Security Integrations** window, click **New**.
4. In the **Add Security Integration Device** area, select a device brand from the **Type** list.
5. Enter the hostname or IP address of the security device.
6. Enter a port number for the security device.
7. Enter a username and password for the security device.
8. Click **Apply**. The device displays under the **Add Security Integrations** node in the navigation tree. You can then click on the device in the navigation tree to access a list of controls for the device.

   Note: You must configure the security device before you add it to a server. For information on how to configure the security device, see the manufacturer's user manual.

Viewing the status of a security integration

You can view the status of a security integration in the **Add Security Integrations** window. In the **Status** column, you can see if a security device is connected to the exacqVision client or not. Color coding is used to indicate the status. When the integration device connects, the text is green, and when not connected, it is red.

Security integration device window

Depending on the type of your security device integration, you can configure keywords and perform certain actions from the integration device window. Keywords are meta data terms that you use to gain more information about a device. For more information, see the *Integration's User Manual*.

For more information on the functionality of the integration device window, see the following table. However, depending on the type of integration, for example access control, analytic, and other integration devices, the description can vary.

Table 37: Integration window

Interface element	Description
Name column	Displays the name of the device, for example a zone, or partition name.
ID column	Displays the ID of the device.
Type column	Displays the type of the device, for example a door, or reader.
Enable Keywords column	Displays a check box. Clear the corresponding check box or check boxes to deactivate enable keywords. The **Enable Keywords** check box, displays only for relevant integration inputs.
Actions column	Displays a action or a list of actions that you can select depending on the device type.
Status column	Displays the status of the device, for example normal, or deactivated.

Deactivating keywords

Keywords are meta data terms that you can use to gain more information about a device. By default, the system records any keywords that you add. This can impact the performance of the system. You can deactivate keywords in the security integration device window.

To deactivate the system from recording a keyword, complete the following steps:

1. From the navigation tree, expand the **Security Integration** node and select the security integration.
2. In the **Enable Keywords** column, clear the corresponding check boxes of the keywords you want to deactivate.
3. Click **Apply**.

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 38 and Table 39 .

Figure 28: Serial Profiles window

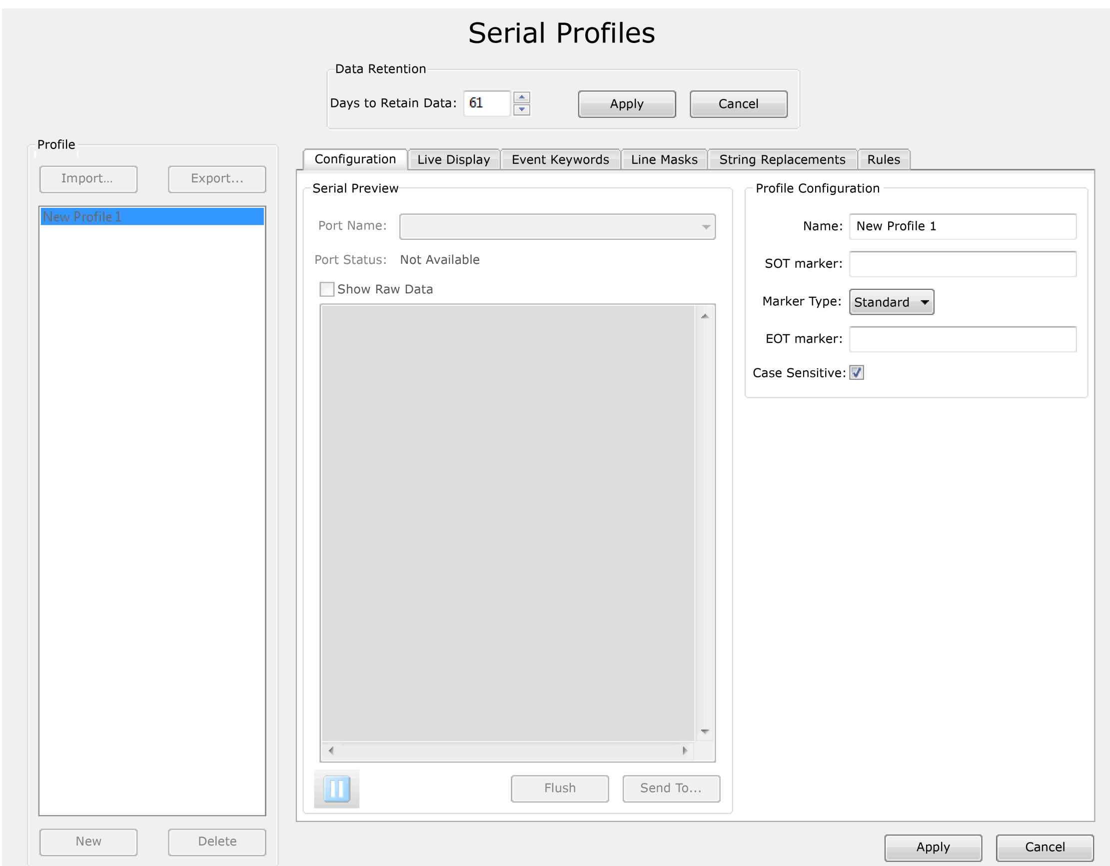


Table 38: Serial Profiles window

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 39.
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**.
Event Keywords tab	Sets alarms that you can trigger through key words. The **Event Keywords** tab is not available in exacqVision Start.
	To set an alarm that you can trigger, click **New** and then enter key words in the string field. After you enter data in the **Event Keywords** tab, you then need to link the profile to the appropriate action in the **Event Linking** window by selecting **Serial Profile** in the **Event Type** list. For more information, see Event Linking window.
	To apply case sensitivity to all strings or key words, select the **Case Sensitive** check box.
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 39: 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

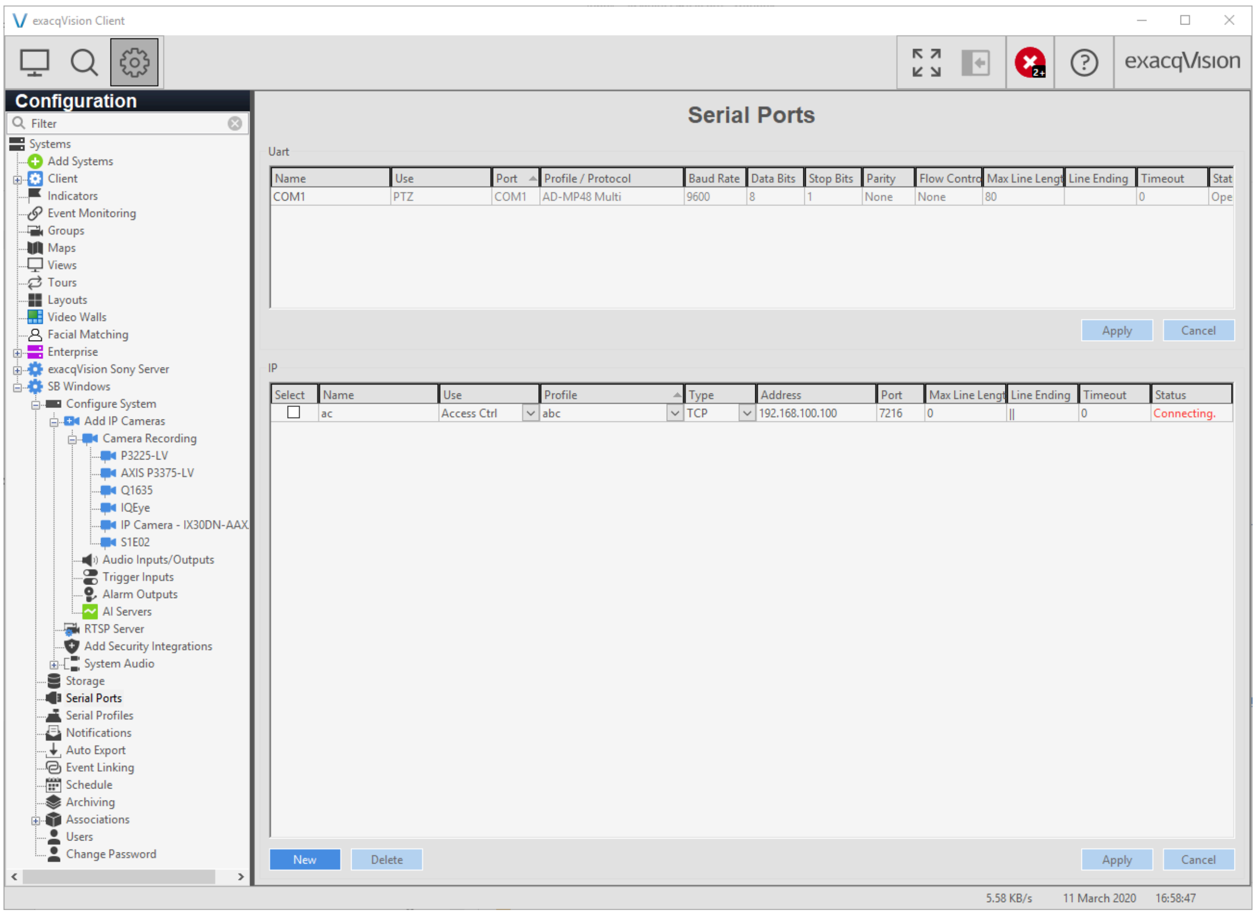
About this task:
To create a serial data string condition, complete the following steps:

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 29: 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 40: 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.

Table 40: UART pane in the Serial Ports window

Interface element	Description
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.
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 41: 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.

Table 41: IP pane in the Serial Ports window

Interface element	Description
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.
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 42 .

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 30: Audio Inputs/Outputs window

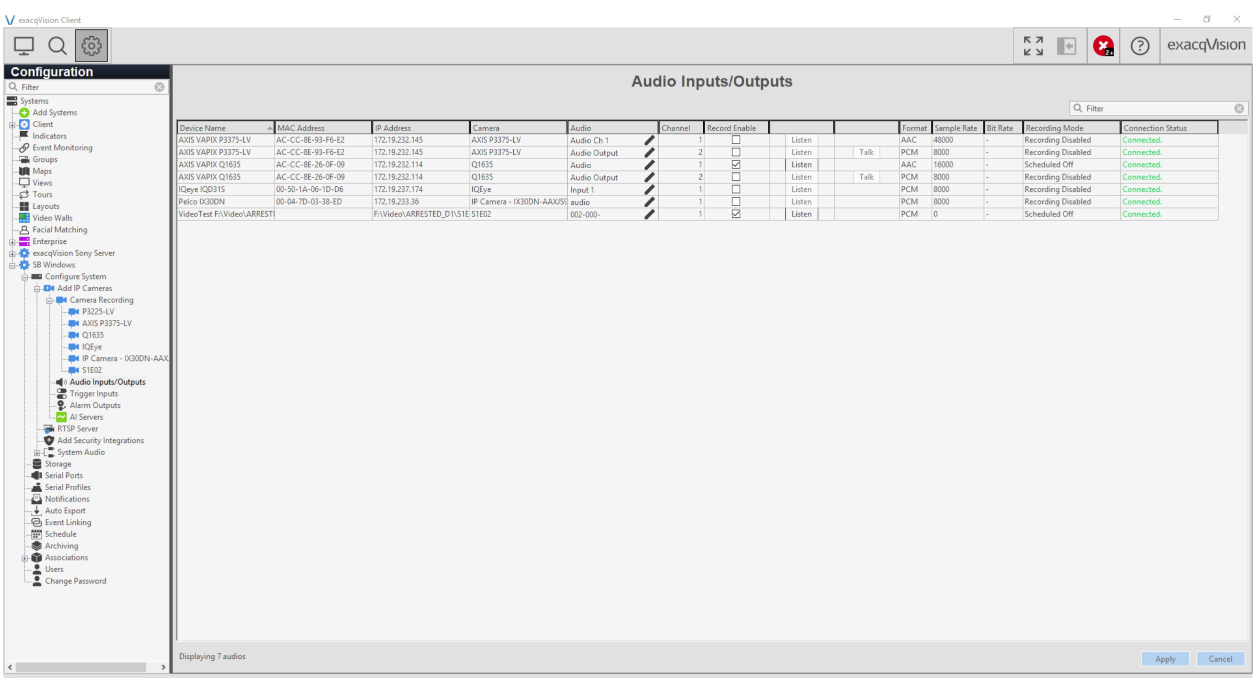


Table 42: Audio Inputs/Outputs window

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 43.

Figure 31: Trigger Inputs window

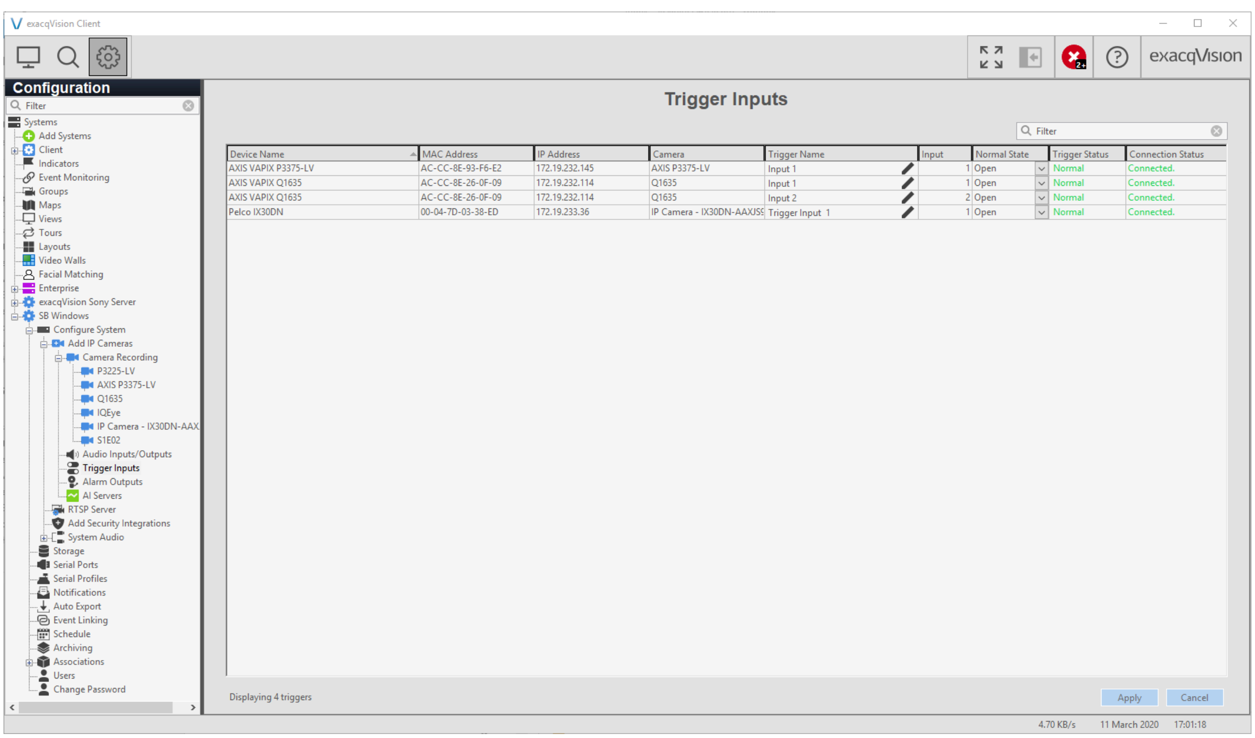


Table 43: Trigger Inputs window

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 44.

Figure 32: Alarm Outputs window

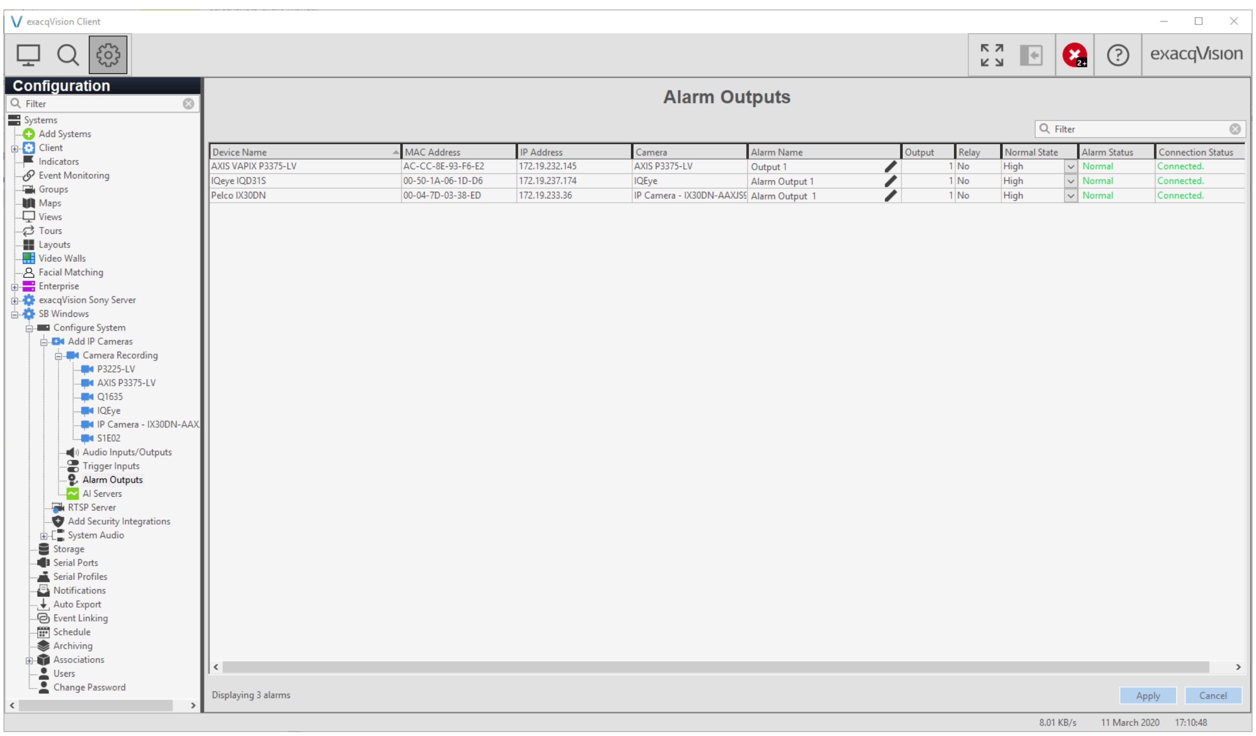


Table 44: Alarm Outputs window

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

Use the facial matching tab on the AI servers window to register faces on events and detect faces across multiple cameras after an event. Use the analytics tab to view and create analytic rules.

Table 45: 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.

For information on creating analytic rules, see AI servers analytics tab.

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

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 **Analytics** 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**.
   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**check box 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.

AI servers analytics tab

The analytics tab shows the following analytic types in a hierarchical view. You can expand to view the individual rules that are assigned to each analytic type:

- Intelligent perimeter

  The Tyco AI user configures the protected area and the perimeter area on the camera. When Tyco AI detects an object in the perimeter area and then the object enters the boundary area, the exacqVision client receives and alarm event. To view the event see, Performing an analytic metadata search.

- Object classification

  Object classification shows events categorized by object. For example, when you define an object category is vehicle the you can create object types such as car, truck, and motorbike. To configure an object, see the camera settings Analytics tab. You can view the objects in the analytic search window, see Performing an analytic metadata search.

- Social distancing

  Social distancing identifies two or more people walking close to each other. The Tyco AI user configures a region of interest on the camera. When configured this shows as a red alert in the events tab in exacqVision Client, see Performing an event search.

- Mask Detection

  Use the mask detection event rule to view registered faces for events where a face mask is either detected or not detected. Use the camera setup pane to configure registered faces with or without masks on events. For more information, see Registering faces on events and Registering faces with or without face masks .

Configuring analytic rules

Before you begin:
All rules except the object classification rule require additional configuration on Tyco AI.

1. In the **AI Server** window, click the **Analytics** tab.
2. In the **Camera Setup** area, in the list menu, select an available rule:

   - Intelligent perimeter
   - Object classification
   - Social distancing
   - Mask Detection

   Note: The list menu only shows the options that you have available licenses for.

3. In the **Select Camera** list that displays, select the check boxes for the cameras you want to apply the rule to. The number of available licenses is displayed for each camera.
4. Click **Select**.
5. In the **Take this action**: area, click **Log Event** to open the **Select Action Type** list. Choose from the following options:

    - Log Event
    - Record Video
    - Record Audio
    - Output Trigger
    - Notify
    - Auto export
    - PTZ Preset
    - Security Trigger
    - Webhook

6. Click the arrow to move to the **Select Target For:Log Event** and choose an option.
7. Select the target and click **Select**.
8. Under **Generate events for these rules:**, select a rule and click **Select**.
9. Click **Apply**. A message is displays and notifies you that additional configuration is needed on Tyco AI to run the rule.
10. To connect to Tyco AI, navigate to the rule you created which is highlighted on the screen. Click the **Gear** icon to open the **Tyco AI Web configuration Camera** page to complete the configuration.

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 46. To manually add an analytic appliance that provides analytics for an existing camera, see IP Camera Information pane.

Figure 33: Analytic Appliances window

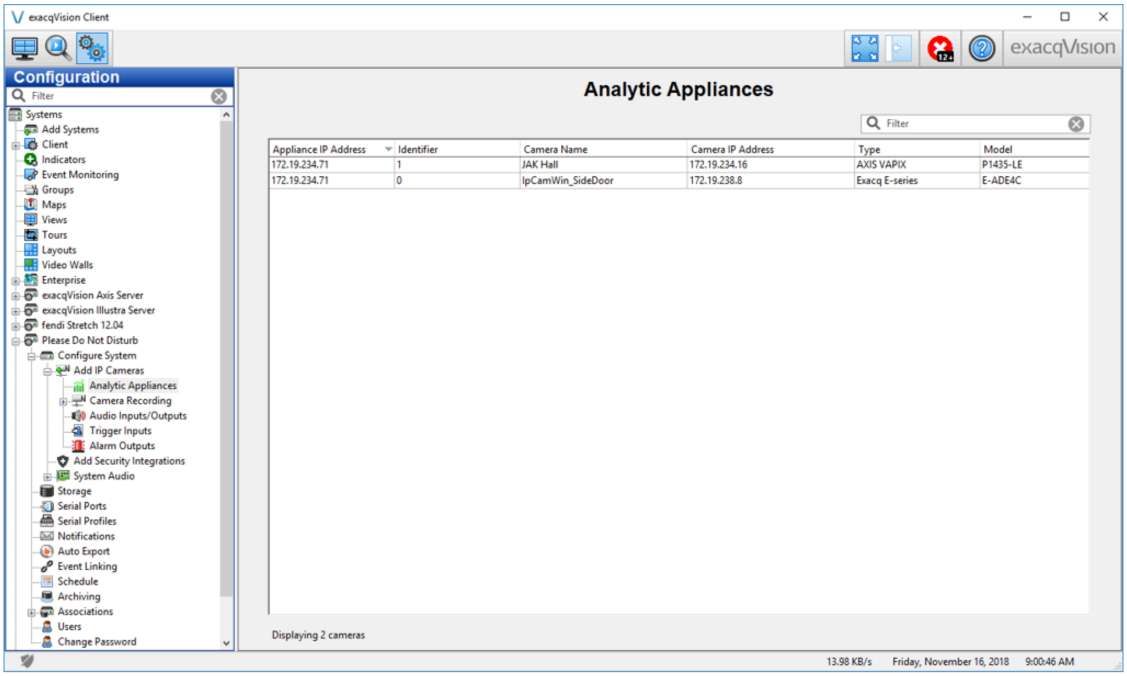


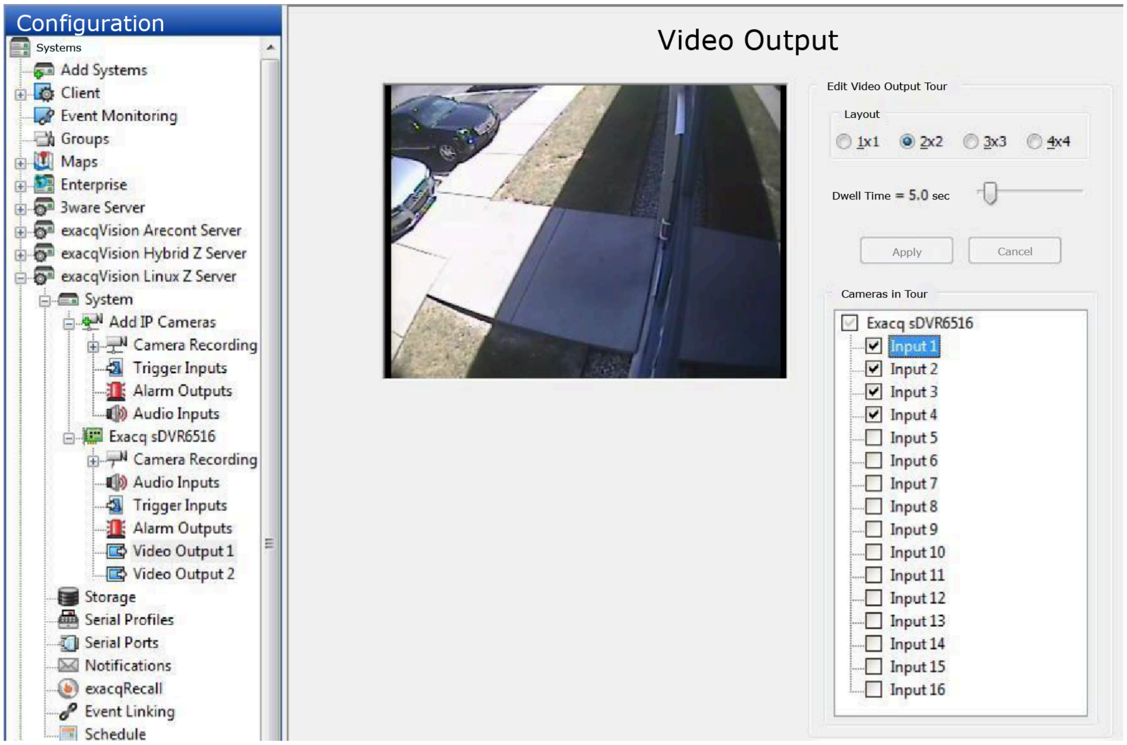
Table 46: Analytic Appliances properties

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 34: 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 47 and Table 48.

Figure 35: Drive tab in the Storage window

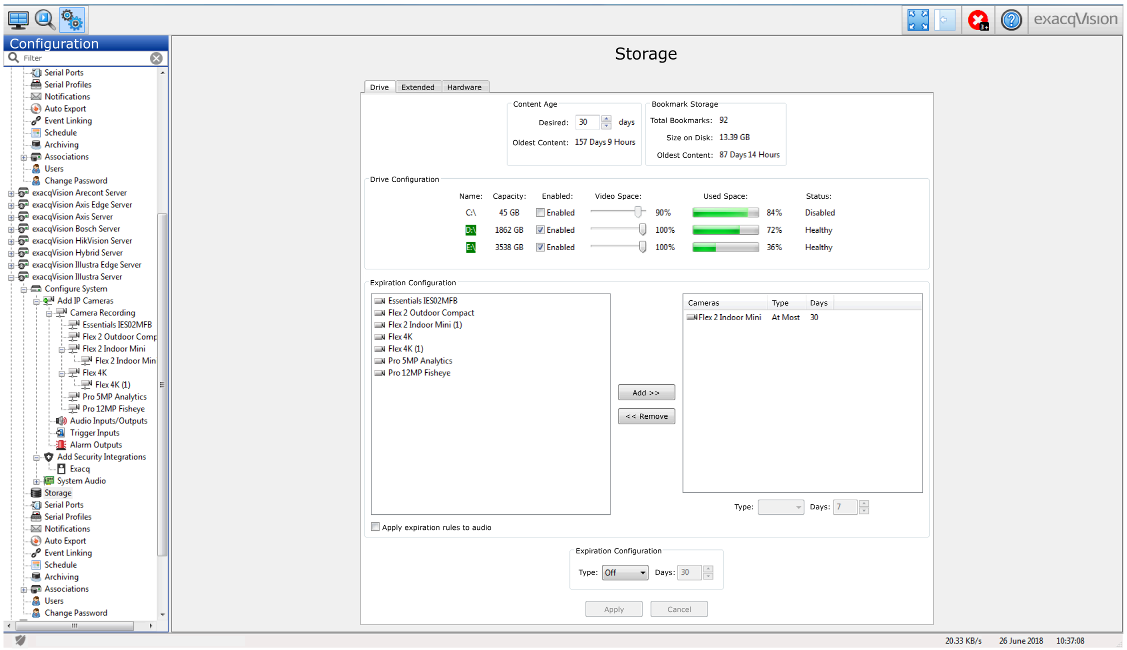


Table 47: Drive tab in the Storage window

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.
Bookmark Storage pane	Displays the number of saved bookmarks, the total storage requirements for the bookmarks, and the age of the oldest content on the system. Bookmarks do not delete automatically, unless the size of all the bookmarks exceeds the total storage capacity.
Drive Configuration pane	Displays information about the drives you install on the system. For more information, see Table 48.
Expiration Configuration pane	Sets the minimum or maximum time period that the system stores video from each camera. To set a time period for storing video, see Setting a time period for storing video.
	To apply the video storage options to audio, select the **Apply expiration rules to audio** check box.
	If you enable the System-wide feature on an exacqVision Professional or Enterprise system, the expiration configuration feature disables.
	Use the expiration configuration feature only when the law requires you to delete video after a specific period of time, as it can affect the performance of the system.

Table 48: 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.

Setting a time period for storing video

To set a time period for storing video, complete the following steps:

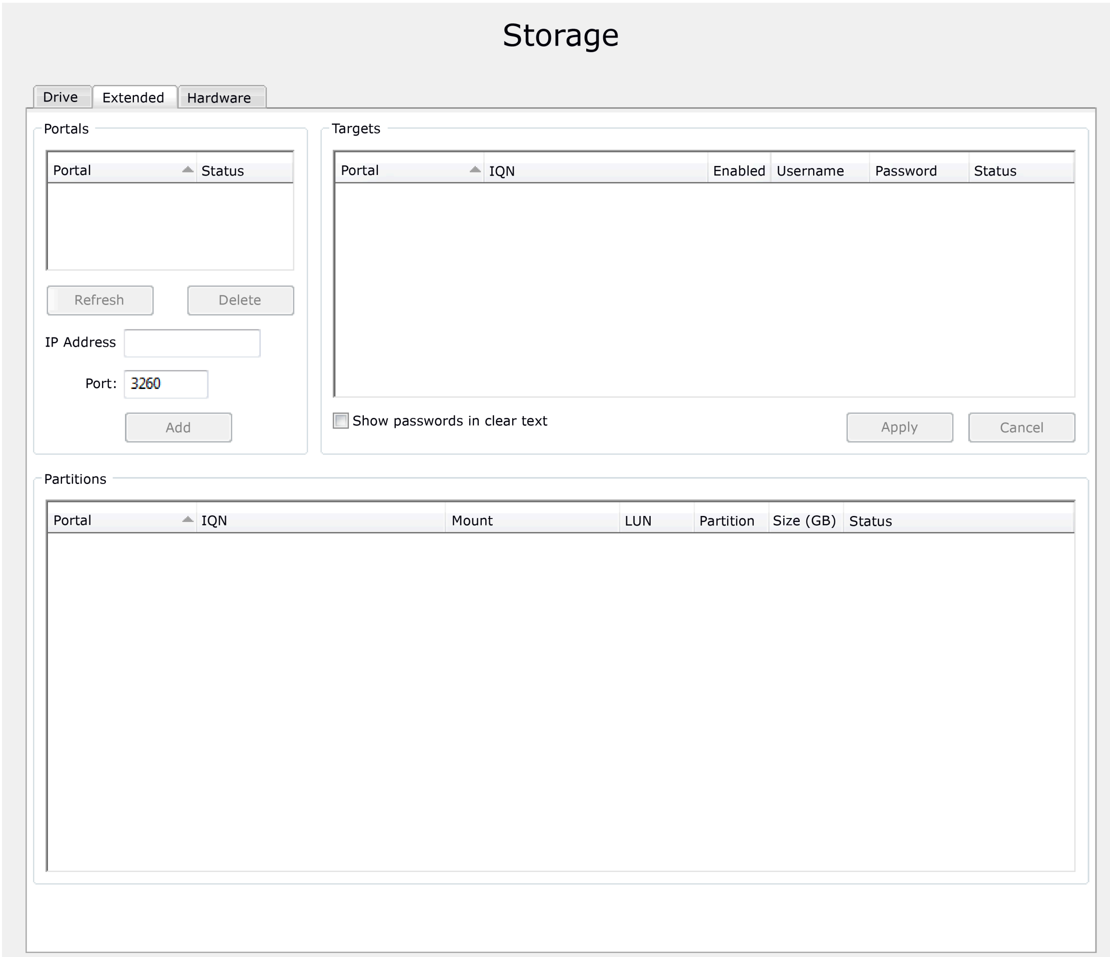
1. In the **Expiration Configuration** list, select a camera and then click **Add**.
2. From the Added Cameras list, select a camera.
3. From the **Type** list, choose one of the following options:
    - To delete a video after a period of time, select **At Most**. If you select **At Most**, you cannot select the camera for archiving, or delete bookmarked video from the camera.
    - To save a video for a minimum period of time, select **At Least**. If you select **At Least**, the system attempts to save video from that camera for the set period of time. However, if necessary the system reduces the amount of time for other cameras that are also set to save data on the servers. The system can stop recording video from all cameras to avoid violating the expiration configuration setting.
4. From the **Days** list, select a period of time.

    Note: To apply a time period to all the cameras in the system, use the Type and Days list in the **Expiration Configuration** area.
5. Click **Apply**.

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 36: 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**.

Hardware tab

On the **Hardware** tab, in the **Tree** view, you can prepare hard disks for use and find information on each hard drive and RAID controller in the system. Under the **Graphic** view, you can visualize and physically locate a drive if it needs to be replaced. For more information on the functionality of the **Hardware** tab, see Table 49.

Figure 37: Hardware tab - Tree view in the Storage window

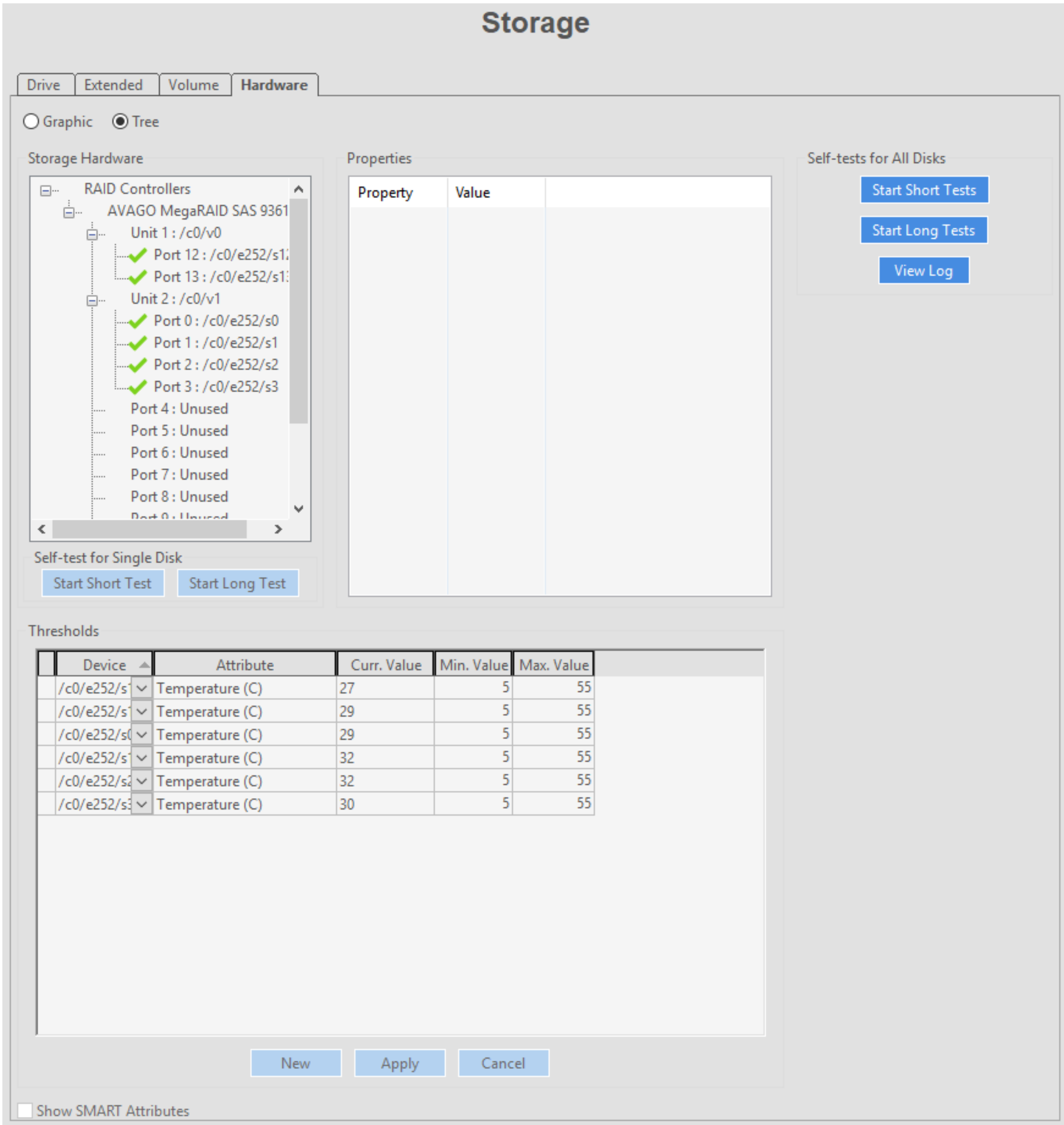


Figure 38: Hardware tab - Graphic view

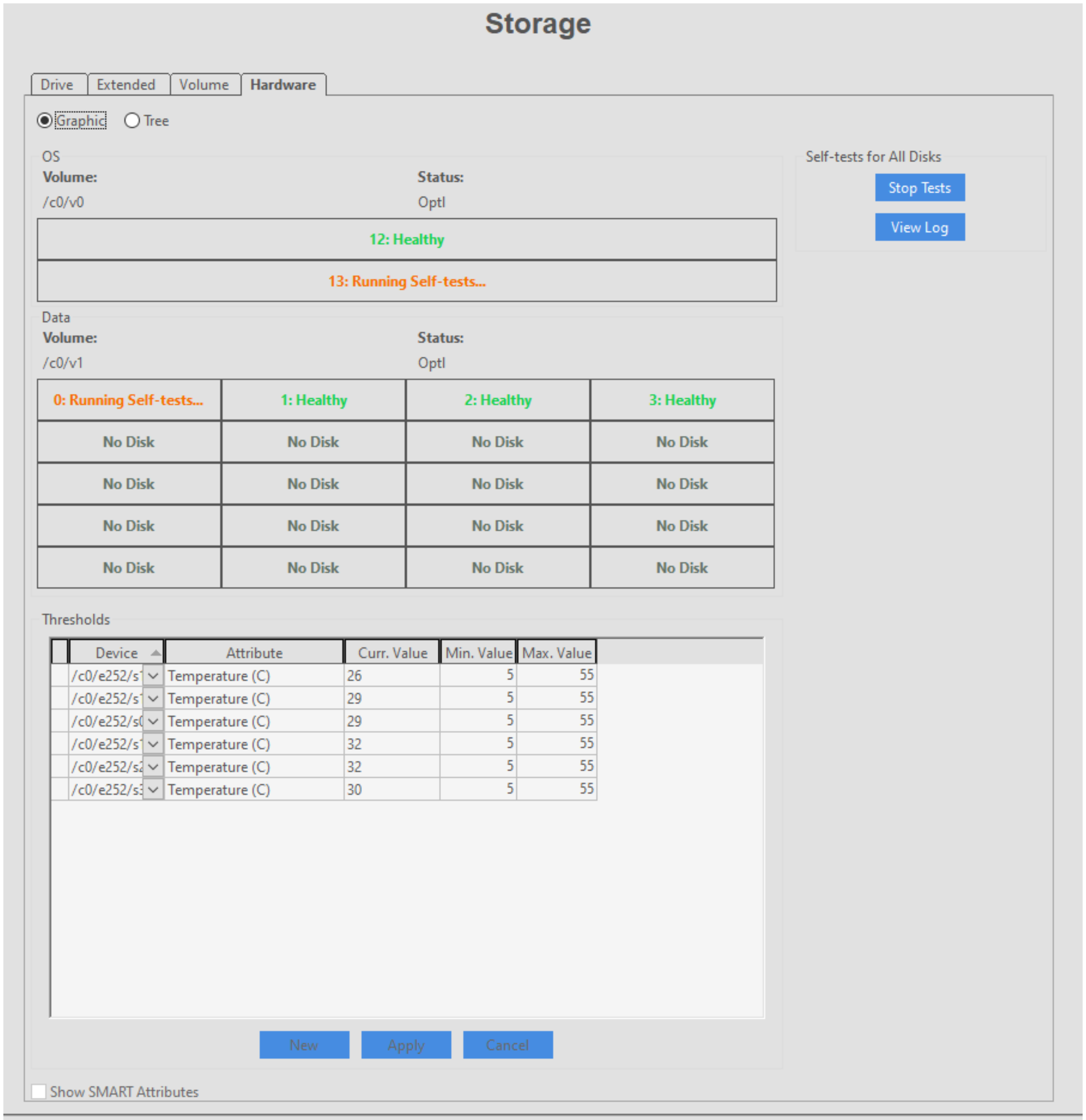


Table 49: Hardware tab - Tree view

Interface element	Description
Storage Hardware pane	Displays a list of all the RAID controllers and hard drives that are installed on the system.
	If a drive or a controller is in an alarm state, it displays in red. Alarm states include rebuilding an array, high drive temperature, drive verification failure, drive removal, and a new drive.
	For new systems with RAID storage arrays, you can view the drive information in a tree or graphic format.
Self-test for Single Disk pane	Performs a self-test for individual drives. Hot Spare drives that connect through LSI RAID cards fail the test.
	To perform a short test, click **Start Short Test**.
	To perform a long test, click **Start Long Test**.
Properties pane	Lists the properties of the drive or controller that you select from the **Storage Hardware** list.
Thresholds pane	Modifies the temperature threshold for a hard disk.
	To modify the temperature of a hard disk, select a hard disk from the **Device** list, enter a minimum and maximum temperature in **Min. Value** and **Max. Value** fields, and then click **Apply**.
SMART Attributes pane	Displays the current values and operating threshold of attributes that the hard drive manufacturer provides.
Self-tests for All Disks pane	Launches a short or long test for Western Digital hard drives.
	A short test runs for 2 to 3 minutes and does not significantly impact performance. It performs electrical and mechanical tests, and verifies the write and read actions to and from the disk.
	A long test runs for 1 or more hours, depending on the disk activity, and does not significantly impact performance. It performs electrical and mechanical tests, and verifies the write and read actions to and from the disk.
Prep All Disks pane	To prep all disks in the server for use, click **Start Prep**. Prepping a hard drive deletes all data on the drive.
View Log button	Displays a log of the short or long test results.

Table 50: Hardware tab - Graphic view

Interface element	Description
OS pane	Select and hover over the drive to view system information.
Data pane	View disk information.
Thresholds pane	View threshold information. Click **New** to create a threshold.

Table 50: Hardware tab - Graphic view

Interface element	Description
Self-tests for All Disks pane	Launches a short or long test for Western Digital hard drives.
	A short test runs for 2 to 3 minutes and does not significantly impact performance. It performs electrical and mechanical tests, and verifies the write and read actions to and from the disk.
	A long test runs for 1 or more hours, depending on the disk activity, and does not significantly impact performance. It performs electrical and mechanical tests, and verifies the write and read actions to and from the disk.

Prepping hard drives

About this task:
After you replace a hard drive in a server, you must prep the hard drive for use.

⚠ **CAUTION:** Prepping a hard drive deletes all data on the drive.

ⓘ **Note:** This feature is not available in exacqVision Start.

To prep a hard drive for use, complete the following steps:

1. From the navigation tree, expand the relevant server node and select **Storage**.
2. On the **Hardware** tab, in the **Storage Hardware** pane, select the drive that you want to prepare.
3. In the **Properties** pane, click **Start Prep**.
4. Click **OK**.

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 51: 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.
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.

Notifications window

In the **Notifications** window, you can access the **E-mail Message Profiles**, **E-mail Servers**, **Web Server**, and **Webhooks** tabs. On these tabs, you can configure the exacqVision system to send an e-mail or text-message notification when an event occurs. Similarly, you can notify an external services when an event occurs. To configure when the system sends the notification, see the Event Linking window.

ⓘ **Note:** The **Notifications** window is not available in exacqVision Start.

E-mail Message Profiles tab

On the **E-mail Message Profiles** tab, you can create and configure email notifications. For more information see Creating an email. For more information on the functionality of the **E-mail Message Profiles** tab, see Table 52.

Figure 39: E-mail Message Profiles tab in the Notifications window

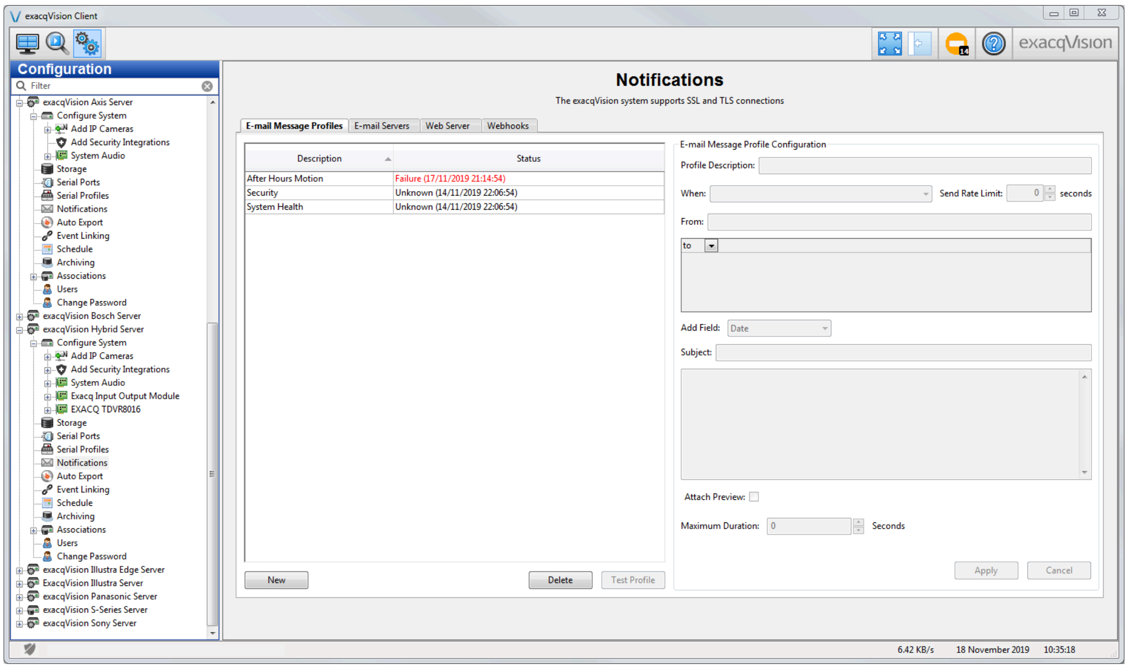


Table 52: E-mail Message Profiles tab in the Notifications window

Interface element	Description
Test Profile button	To test the notification email, select a profile email from the list and click **Test Profile**.
When list	Determines when the notification email is sent. The default state is **Alarm Starts**.
	To send a notification email when an event starts, select **Alarm Starts**.
	To send a notification email when after an event, select **Alarm Ends**.
	To send a notification email when an event starts and after the event ends, select **Alarm Starts and Ends**.
Send Rate Limit list	To adjust the minimum number of seconds between sent email notifications, use the **Send Rate Limit** list. Adjusting the number of seconds between email notifications can reduce unnecessary emails. For example, if you configure a notification email to be sent every time a motion event occurs, during a thunderstorm thousands of emails can be sent. Adjusting the **Send Rate Limit** reduces those notifications.

Table 52: E-mail Message Profiles tab in the Notifications window

Interface element	Description
Attach Preview	Attaches video clips or images of the event to the email notification.
	A video clip is sent with the email notification instead of an image if the camera is streaming in a H.264 or MPEG-4 format.
Message field	In the **Message** field, you can insert camera names, dates, times, serial information, Mac addresses, and links to video.

Creating an email notification profile

To create an email notification profile, in the **Config (Setup)** window, complete the following steps:

1. From the navigation tree, expand the relevant server node and select **Notifications**.
2. On the **E-mail Message Profiles** tab, click **New**.
3. In the **Profile Description** field, enter a brief description of the email's content.

   ⓘ **Note:** This description will also appear in the **Action Target** field in the **Event Linking** window.

4. In the **From** field, enter the email address of the person sending the email, and then in the **To** field, enter the email addresses of the recipients.
5. Enter a subject for the email, and then type the email message in the **Message** field. For more information, see Table 52.
6. Click **Apply**.

E-mail Servers tab

On the **E-mail Servers** tab, you can configure an outgoing Simple Mail Transfer Protocol (SMTP) mail server to send notifications. To configure an outgoing SMTP mail server, see Configuring an outgoing SMTP mail server. For more information on the **E-mail Servers** tab, see Table 53. For more information on your mail server options, contact the network administrator.

Figure 40: E-mail Servers tab in the Notifications window

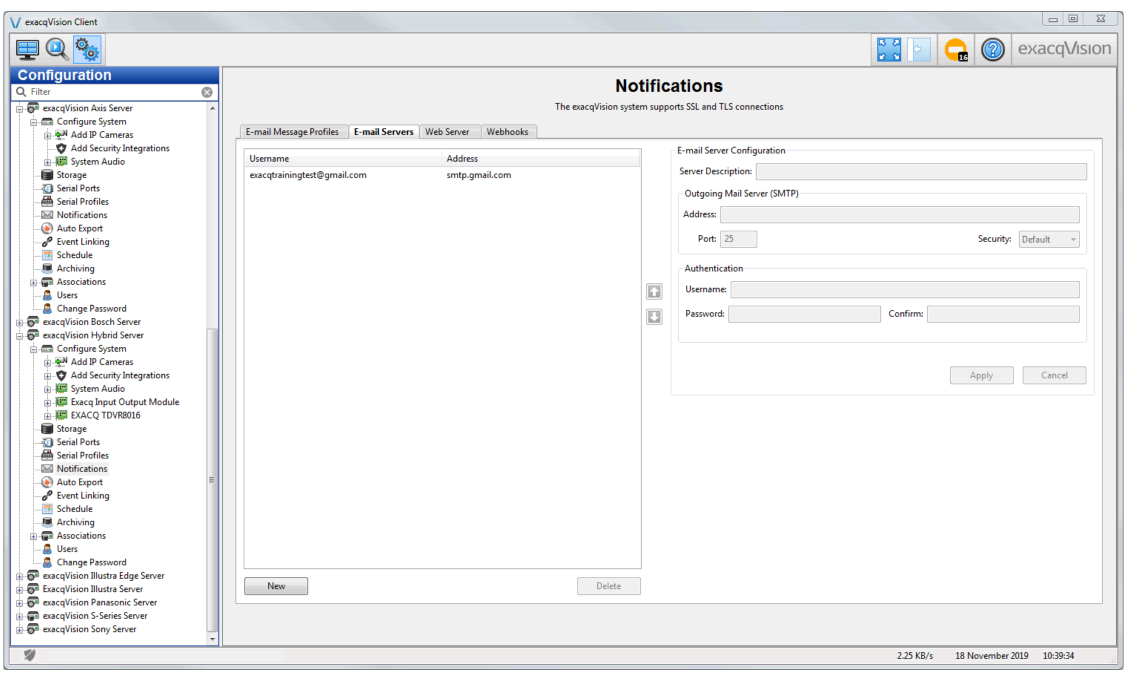


Table 53: E-mail Servers tab in the Notifications window

Interface element	Description
Authentication area	To authenticate your email server, enter a username and password in the **Username** and **Password** fields, and then confirm the password by entering it again in the **Confirm** field.
Email servers list	Displays a list of the email servers.
	If you configure more than one email server, the exacqVision system will send a notification to the first email server in the list. If the notification fails to reach the email server, the exacqVision system sends another notification to the next server in the list, and so on until the notification is successfully sent.
	To change the order of the email server list, select a server from the list and then use the Arrow icons.

Configuring an outgoing SMTP mail server

To configure an outgoing SMTP mail server, complete the following steps:

1. From the navigation tree, expand the relevant server node and select **Notifications**.
2. On the **E-mail Servers** tab, click **New**.
3. In the **Server Description** field, enter a name for the server.
4. In the **Outgoing Mail Server (SMTP)** area, enter the IP address and port number of the outgoing mail server. The default port number is 25.
5. Select one of the following options:

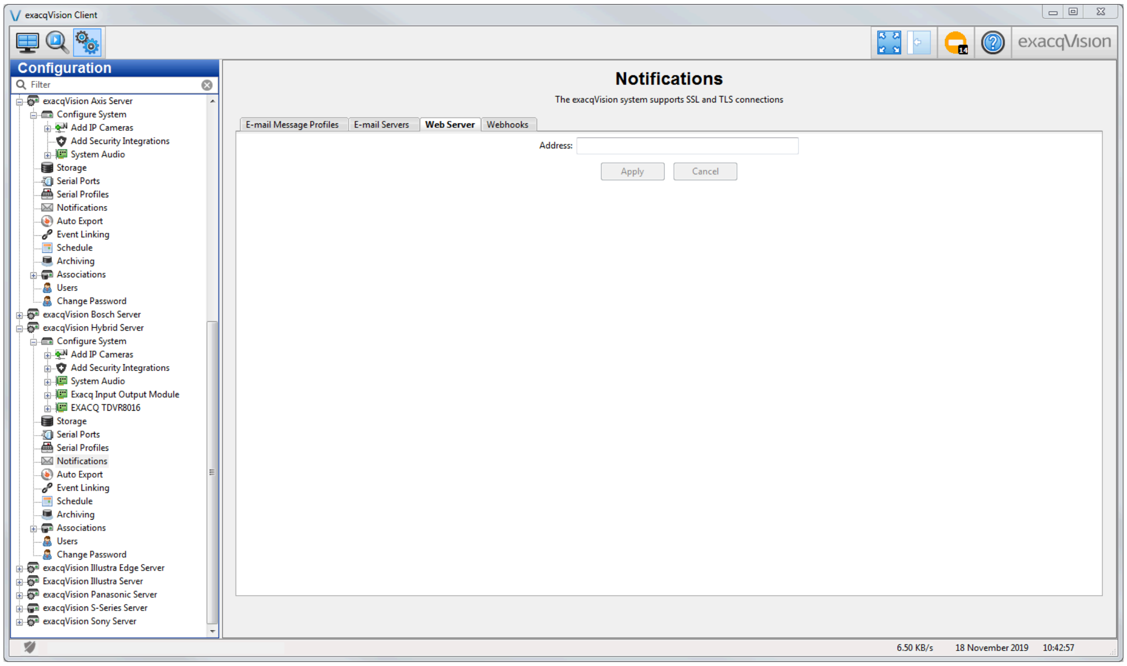
   - **SSL/TLS**
   - **STARTTLS**

   Note: If you use Microsoft Office 365, select **STARTTLS**.
6. Click **Apply**.

Web Server tab

On the **Web Server** tab, you can configure email notifications to include a direct link to video that is associated with the email notification. To include a direct link in an email notification, enter the IP address of your web service in the **Address** field, and then click **Apply**.

Figure 41: Web Server tab in the Notifications window



Creating a text-message notification

About this task:
exacqVision systems can also send automated text-message notifications.

To create a text-message notification, complete the following steps:

1. Create a list of all the phone numbers and their service providers that you want to notify.
2. Obtain the service provider's email-to-text service gateway address. This address can be found on the service provider's public website.
3. Test the existing email server connection by, creating an email server and notification profile for your email address, and then configuring an event link to send a notification when an event occurs. For information on how to create an email server and message profile, see Notifications window. For information on how to configure an event link, see Event Linking window.
4. Add a new profile in the **Notifications** window. For more information on how to add a new profile, see Creating an email.

   ⓘ **Note:** In the **Recipients** field, enter the recipient's phone-numbers using the following format: phonenumber@vnet.net. Some service providers do not display the subject line of the message, but you still must enter at least one character in the subject field.

5. In the **Event Linking** window, configure one or more events for the new text-message profile. For more information on how to configure an event, see Event Linking window.

Webhooks tab

Webhooks allow external services to be notified when certain events happen. On the **Webhooks** tab, you can create and configure the HTTP end points.

Fore more information on the functionality of the **Webhooks** tab. see Table 54. To configure a webhook, see Configuring a webhook connection.

Figure 42: Webhooks tab in the Notifications window

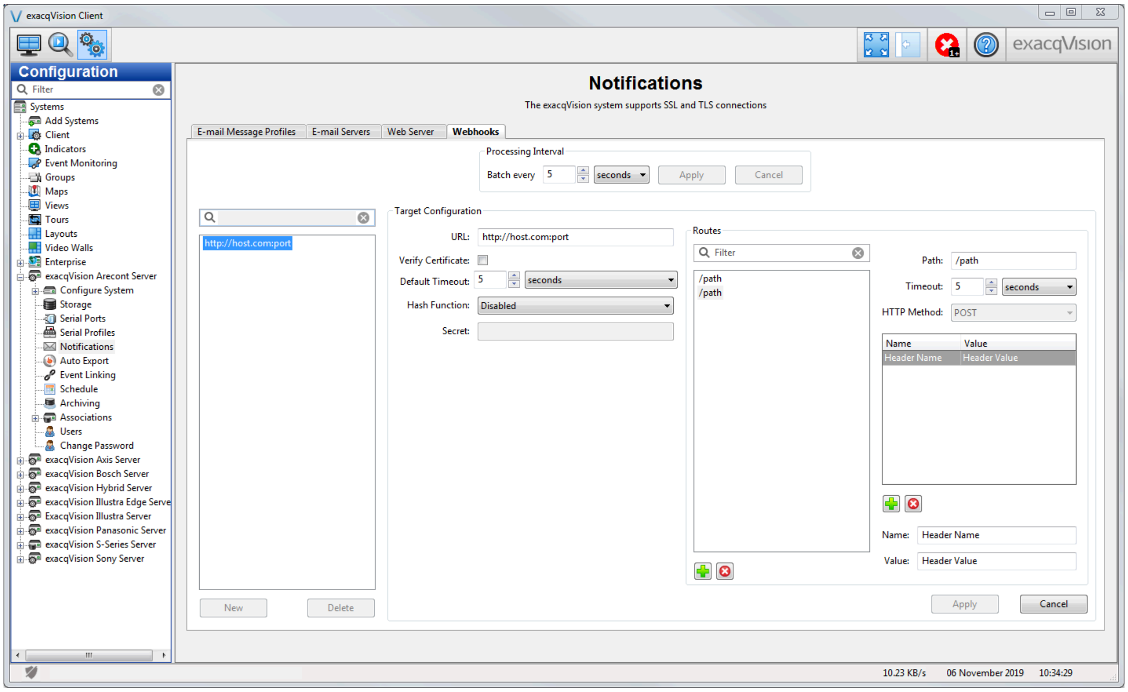


Table 54: Webhooks tab in the Notifications window

Interface element		Description
Processing Interval pane		Events are batched and sent at regular time intervals to the target URL. The default value is 5 seconds. You can change the value in the **Batch every** field.
Filter field		Search for a specific URL.
URL list		URLs to receive event messages. To create a new end point URL, click **New**. To delete an URL, select the URL, and click **Delete**.
Target Configuration pane		Configure a new target server or host URL.
	URL field	URL of the target server or host end point. For example, `https://myserver.com`.
	Verify Certificate check box	Verify target's certificate before posting events.
	Default Timeout field	The timeout value after which exacqVision stops trying to post the event to the URL. The default value is 5 seconds. You can change the value in the **Default Timeout** field.
	Hash Function list	Enable the hash function and select the specific hash function to use for data integrity.
	Secret field	Shared secret phrase to verify the origin of an event message.
Routes pane		Lists existing routes for multiple event types. To create a new route for an event type, click the **Add Route** button. To delete a path, click the **Remove Route** button.

Table 54: Webhooks tab in the Notifications window

Interface element		Description
	Filter field	Filter to find a specific route.
	Path field	The path for an event type. You can create multiple paths to associate with different event types for the same server or host. For example, to configure two URLs one for soft triggers and one for video loss on the same host `http://myserver.com`, you enter two paths, `/softtriggers` and `/videoloss` to create two URLs: • https://myserver.com/softtriggers • https://myserver.com/videoloss
	Timeout	The timeout value after which exacqVision stops trying to post the event to the URL for a specific route. The default time interval is 5 seconds. You can change the value for a route in the **Timeout** field. Each route can be assigned its own timeout value.
	HTTP Method	HTTP request method to use such as **POST**.
Header information table		Additional data to include with the HTTP request. To add a row to the table click the **Add Header** button. You can repeat this action to add multiple rows. To delete a row, select the row, and click the **Remove Header** button.
	Name field	Specify the name of the header to include in the request.
	Value field	Specify the additional information to send.

Configuring a webhook connection

To configure a webhook connection, complete the following steps:

1. From the navigation tree, expand the relevant server node and select **Notifications**.
2. On the **Webhooks** tab, click **New**.
3. **Optional:** In the **Processing Interval** pane, change the value in the **Batch every** field, select the unit of time from the list, and click **Apply**. The default value is 5 seconds.
4. In the **Target Configuration** pane, in the **URL** field, enter the URL to receive the event message. For example, `http://host.com:port`.
5. To verify the target's certification, select the **Verify Certificate** check box.
6. **Optional:** Change the value in the **Default Timeout** field, and select the unit of time from the list.
7. From the **Hash Function** list, select the algorithm that you want to use to authenticate. Then enter a phrase to verify the origin of an event message.
8. In the **Routes** pane, click the **Add Route** button and in the **Path** field, enter the path for a specific event.
9. **Optional:** To specify a route timeout, change the value in the **Timeout** field, and select the unit of time from the list.
10. From the **HTTP Method** list, select the request method to use.
11. Click the **Add Header** button, in the **Name** field, enter the header name and in the **Value** field, specify the additional information to send.
12. Click **Apply**.

What to do next:
In the Event Linking window, associate the event with the webhook target.

Auto export window

In the **Auto Export** window, you can create an auto export profile, and export data from specified inputs the local servers using a CD, DVD, hard drive, or removable drive. For more information, see Creating an auto export profile and Exporting data to a CD, DVD, or drive. For more information on the functionality of the **Auto Export** window, see Table 55 and Table 56.

Note: The Auto Export window is not available in exacqVision Start.

Figure 43: Auto Export window

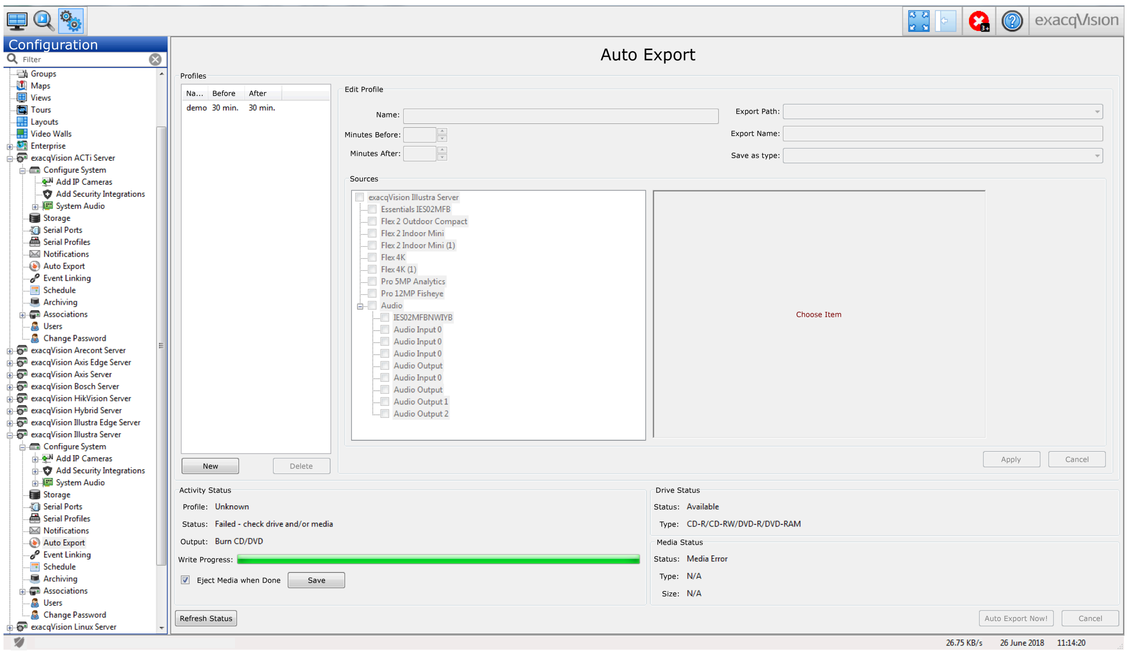


Table 55: Edit Profile pane in the Auto Export window

Interface element	Description
Minutes Before list	To select the number of minutes of video to include in the profile export before the auto export starts, use the **Minutes Before** list.
Minutes After list	To select the number of minutes of video to include in the export after the auto export starts, use the **Minutes After** list.
Export Name field	To generate different automated names for exports, enter `{date format}` and a combination from Table 57 . Example: {date format = "video automatically exported on %x at %X"}or {date format = "%H, %M, %S, %x"}
Export PS file only check box	Exports files greater than 4GB and up to 137GB. The system only supports .ps files. If you do not select the **Hostname/IP Address** check box, the file exports in an .exe format.

Table 56: Activity, Drive and Media Status panes in the Auto Export window

Interface element	Description
Drive Status pane	Displays whether the system has a writable CD/DVD drive with compatible formats.
Media Status pane	Displays whether a blank disc is in the drive, and the blank disc's format and storage size.
Eject Media when Done check box	Configures the CD/DVD drive to open automatically when the system finishes exporting data to the disc. If the drive door on the physical system is latched, the drive cannot open. To configure the CD/DVD drive to open automatically, select the **Eject Media when Done** check box and then click **Save**.
Refresh Status button	Refreshes the information in the **Activity Status** pane.
Auto Export Now button	Initiates the exporting of data to the specified output.
Activity Status pane	Displays the status and burn progress of the export.

In the following table, you can find a list of variables that you can use to generate automated names for exports.

Table 57: Variables

Variable	Description
%a	Weekday abbreviation
%A	Weekday name
%b	Month abbreviation
%B	Month name
%c	Full date/time
%d	Day of month
%H	Hour (24h format)
%I	Hour (12h format)
%j	Day of year
%m	Month (01-12)
%M	Minute
%p	AM/PM
%s	Second
%U	Week of year (start Su)
%w	Day of week (Su=0, Mo=1)
%W	Week of year (start Mo)
%x	Date (xx/xx/xx)
%X	Time (xx:xx:xx)
%y	Last two digits of a year
%Y	Year (20xx)
%Z	Time zone abbreviation
%%	Percent symbol

Creating an auto export profile

To create an auto export profile, complete the following steps:

1. Click **New**.
2. In the **Edit Profile** area, enter a name for the profile in the **Name** field.
3. Select a number of minutes from the **Minutes Before** list.
4. Select a number of minutes from the **Minutes After** list.
5. In the **Export Path** list, select a destination for the export files. If you select **Drive**, enter a name for the drive in the **Export Name** field.

   ⓘ **Note:** Windows shared directories are not included in the list.
6. From the **Sources** list, select the cameras to include in the auto export profile.
7. Click **Apply**.

   ⓘ **Note:** The system cannot use the profile until you link the profile to an event in the **Event Linking** window. For more information see Event Linking window.

Exporting data to a CD, DVD, or drive

To export data to a CD, DVD, or drive complete the following steps:

1. In the **Auto Export** window, click Auto Export Now.
2. From the **Items to Export** list, select a device.
3. Select a start and end date and time for the export.
4. Select an export destination and enter a path.
5. Click **Start Export**.

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 58.

Figure 44: Event Linking window

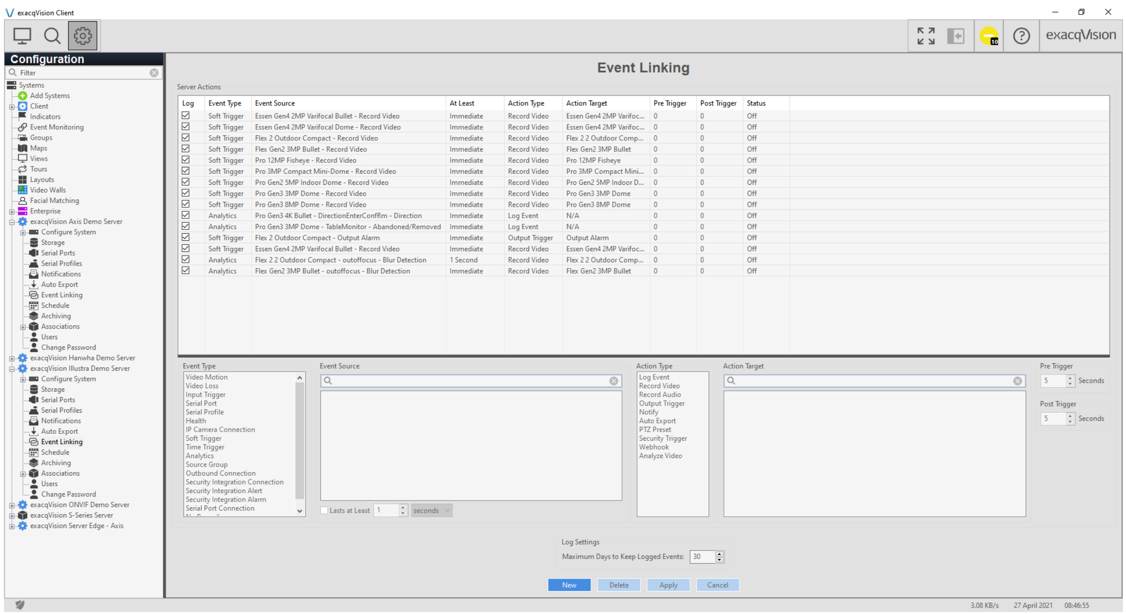


Table 58: Event Linking window

Interface element	Description
Server Actions list	Displays a list of events.
Event Type list	Displays a list of possible events. For more information, see Table 59.
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 60.
Action Target list	Displays a list of possible targets. For more information, see Table 60.
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

Before you begin:
To see a list of event type and sources, see Table 59. See Table 60, for a list of the action types and targets.

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.

   ⓘ **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**.

In the following table, you can find descriptions of the options that display in the **Event Type** and **Event Source** lists in the **Event Linking** and **Event Monitoring** windows.

Table 59: Event types and event sources

Event Type	Event Type description	Event Source
Video Motion	A camera detects motion.	Any camera that connects to the exacqVision server.
VIDEO LOSS	The analog video signal disconnects.	Any analog camera that connects to the exacqVision server.
Input Trigger	Activates triggers on the server or IP cameras with an alarm input.	Any input trigger on the back of a server or IP camera that connects to the server. You can customize the default device and input number in the Trigger Inputs window.
Serial Port	The system detects a key word on a preselected port entered in the **Serial Profile** window.	Any serial port that you configure on the server. For more information, see Serial Ports window.
Serial Profile	The system detects a key word on any serial port with that profile.	Any serial profile that you configure. To select all the key words and rules associated with a serial profile, select the profile's name.
Health	The system detects a problem with the health of the exacqVision server hardware, access control devices, intrusion devices, and inputs.	Any security integration that connects the exacqVision server. For information on the status of the device, see Security integrations window.
IP Camera Connection	The network cannot connect to the IP camera.	Any IP camera that connects to the exacqVision server.

Table 59: Event types and event sources

Event Type	Event Type description	Event Source
Soft Trigger	A signal is sent from the client to the server.	To create a new soft trigger with a default name, select **New** You can also select pre-configured soft triggers from the list.
		To rename the soft trigger, double-click its name.
		To delete the soft trigger, click **Delete**.
Time Trigger	An event reaches its time period.	To set a start and end time and date for the trigger, click **New**.
Analytics	Analytic events such as object direction.	Camera name and actual analytic rule occurrence, for example Parking Log Camera - Object Direction.
Source Group	A multiple of event types for advanced event linking.	To select a combination of event types and event sources, and to determine whether they trigger, select **New**.

In the following table, you can find descriptions for the options that display in the **Action Type** and **Action Target** lists in the **Event Linking**window.

Table 60: Action types and action targets in the Event Linking window

Action Type	Action Type description	Action Target
Log Event	No action is performed. The system logs the event in the event database and you can search for it in the Search window.	No action target available.
Record Video	Records video.	Any camera that connects to the exacqVision server.
Record Audio	Records audio.	Any audio input that connects to the exacqVision server.
Output Trigger	A wired output trigger on the back of the server or IP camera is activates.	Any output trigger on the back of the exacqVision server or IP Camera.
Output Video 1	The analog monitor switches to a full-screen view of the camera you select.	Any of the analog cameras that connect to the exacqVision server.
Notify	An email notification is sent according to the profile you create in the **Notifications** window.	Any of the profiles that you configure in the **Notifications** window.
Auto Export	Data is saved to a CD/DVR device in an auto export profile. For more information, see Auto export window.	Any of the profiles that you configure in the **Auto Export** window.

Table 60: Action types and action targets in the Event Linking window

Action Type	Action Type description	Action Target
PTZ Preset	The camera points in a specific direction. For more information, see Mechanical PTZ tab.	Any of the presets that you associate with the camera in the **Mechanical PTZ** tab in the **Camera Settings** window.
Security Trigger	Activate triggers (or virtual zones) on security integrations. **Note:** This is currently supported on Neo only.	Any Neo camera that connects to the exacqVision server.
Webhook	Posts the event to a URL. For more information, see Webhooks tab.	A URL that you configure in the **Webhooks** tab in the **Notifications** window.
Analyze Video	Recorded video from specific cameras is analyzed. Profiles are created for any persons found. See Facial matching window.	Any camera that connects to the Tyco AI server.

Event Monitoring window

In the **Event Monitoring** window, you can configure the exacqVision client to react to events that occur in connected servers. Before you configure the exacqVision client to react to an event, you must create an event monitoring profile. An event monitoring profile is a set of actions, such as displaying live video or triggering a sound, that are triggered by an event such as motion or trigger inputs. After you create an event monitoring profile, you must activate it and assign a camera to it using the **Live** window. To create an event monitoring profile, see Creating an event monitoring profile. For more information on the functionality of the **Event Monitoring** window, see Table 61 and Table 62 .

Note: The **Event Monitoring** window is not available in exacqVision Start.

Figure 45: Event Monitoring window

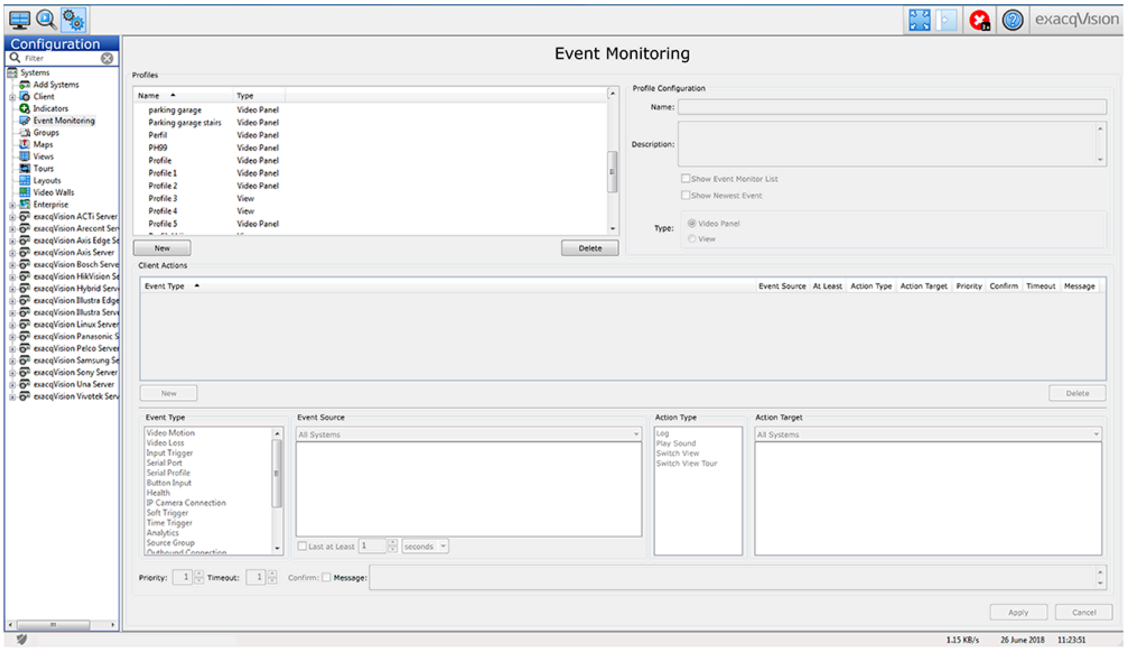


Table 61: Profile pane in the Event Monitoring window

Interface element	Description
Profiles list	Displays a list of event monitoring profiles.
Show Event Monitor List check box	To automatically display a window in the **Live** window to review an event when one or more events that you are monitoring occur, select the **Show Event Monitor List** check box.
Show Newest Event check box	To ensure that the most recent event displays, unless another event with a higher priority occurs simultaneously, select the **Show Newest Event** check box. For more information, see Table 62.
Type area	To display a single camera in the **Live** window when a specific event occurs, select **Video Panel**.
	To display a preconfigured view when a specific event occurs, select **View**.

Table 62: Client Actions pane in the Event Monitoring window

Interface element	Description
Client Actions list	Displays a list of events that the exacqVision client reacts to when they occur.
Event Type list	Displays a list of possible events. For more information, see Table 59. Input triggers and soft triggers are the only event types available in exacqVision Start.

Table 62: Client Actions pane in the Event Monitoring window

Interface element	Description
Event Source list	The content of the **Event Source** list varies depending on what option you select in the **Event Type** list, and how it is configured. For more information see, Table 59.
	If events are similar to each other and you do not want to create separate profiles for each event, select **Any** from the **Event Source** list and then select **Switch Video** from the **Action Type** list. The **Action Type** list then contains an option to create an action on the same event source.
Action Type list	Displays a list of actions that can occur when the event from the **Event Type** list occurs. When you select an action from the list, a list of target actions displays in the **Action Target** list.
	The content of the **Action Target** list varies depending on what profile type option you select in the **Type** area in the Profile Configuration pane. For more information on the options in the **Type** area, see Table 61.
Action Target list	Displays a list of possible targets. For more information, see Table 63.
Priority list	Assigns a priority level to the action. The highest priority is 1 and the lowest priority is ten. If different event types occur simultaneously, the event with the higher priority level displays until it is acknowledged. Then the events with lower priorities display.
Timeout list	Determines how long an event displays in the **Live** window. This option is only available if you select **Show Event Monitor List** in the **Profile Configuration** pane.
	If you select **0**, the event displays in the list until it is acknowledged.
Confirm check box	To confirm the deletion of the event before the event is removed from the list, select the **Confirm** check box. This option is only available if you select **Show Event Monitor List** in the **Profile Configuration** pane.
Message field	Enter the message that you want to display when the event occurs This option is only available if you select **Show Event Monitor List** in the **Profile Configuration** pane.

Creating an event monitoring profile

To create an event monitoring profile, in the **Config (Setup)** window, complete the following steps:

1. From the navigation tree, select **Event Monitoring**.
2. In the **Profiles** pane, click **New**.
3. In the **Profile Configuration** pane, enter a name and description for the profile.
4. Select one of the following profile types:
   - Video Panel
   - View
5. From the **Event Type** list, select an event. For more information on the available options in the **Event Type** list, see Table 59.
6. From the **Event Source** list, select an event source. For more information on the available options in the **Event Source** list, see Table 59.

Note: You can select **Any** as the event source if you do not want to create a separate profile for every source. If you select **Any** as the event source and **Switch Video** as the action type, the **Action Type** list displays an event source option to create an action on the same event source.

7. From the **Action Type** list, select an action. For more information on the available options in the **Action Type** list, see Table 63.
8. From the **Action Target** list, select a target. For more information on the available options in the **Action Target** list, see Table 63.
9. Click **Apply**.

   In the following table, you can find descriptions of the available options that display in the **Action Type** and **Action Target** lists in the **Event Monitoring** window.

Table 63: Action Types and Action Targets in the Event Monitoring window

Action Type	Action Type description	Action Target options
Acknowledge (video panel or view)	All entries in the **Event Monitor List** window are automatically removed from the event monitor list, if the event source matches the acknowledge action target.	Any event source used as a client action in the profile.
Log (video panel or view)	A notification of the event saves in the system log file.	No action target available.
Play Sound (video panel or view)	Plays sound.	A list of sounds.
Switch Audio (video panel)	Plays audio from a camera.	All the cameras that you configure on all connected systems that support audio, or on the system that you select from the list.
Switch Video (video panel)	Displays video from a camera.	All the cameras that you configure on all connected systems, or on the system that you select from the list.
Digital Preset (video panel)	Displays PTZ presets that you configure on a camera.	All the PTZ presets that you configure on all connected systems, or on the system that you select from the list.
Switch View (view)	Displays a single view until a specific event occurs.	Any view that you configure in the exacqVision client. This view automatically displays when the event occurs.
Switch View Tour (view)	Displays a tour until a specific event occurs.	Any tour that you configure in the exacqVision client. This tour automatically displays when the event occurs.

Viewing an event profile in the Live window

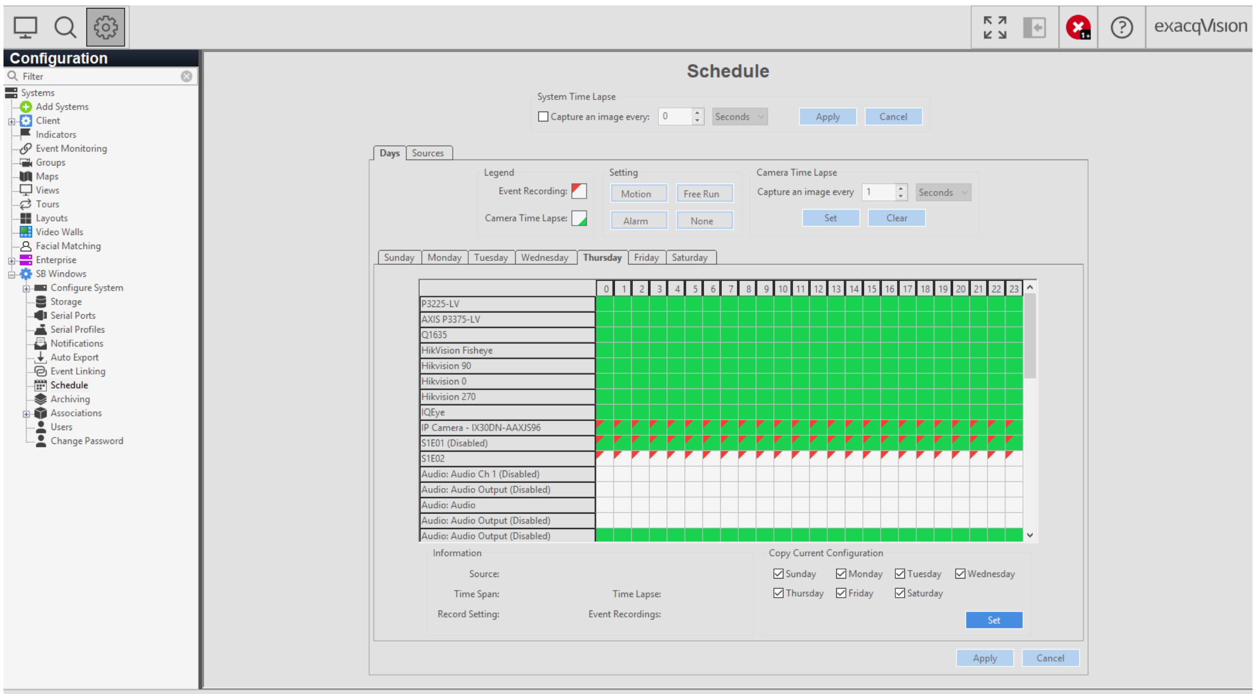
To view an event profile in the **Live** window, complete the following steps:

1. Click the **View live cameras** icon.
2. In the **Live** window, select **Views**.

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 46: 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 64: 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 65: 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 64.
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 64 .
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 66: 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 64.
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**.

Archiving window

Archiving is a process of storing recorded video and audio data for quick access and retrieval. When you archive bookmarks and case data, archiving only supports audio and video sources. Serial data and events are not supported and remain on the exacqVision server. While archiving is running, it can cause video recording rates to throttle, especially if the system is on a wide area network with limited bandwidth. To avoid throttling video recording rates, you can schedule archiving when video recording rates are low, such as during the night or during closed hours.

Note:

- The archiving window is not available in exacqVision Start.
- Depending on the option you choose the configuration options vary.

In the archiving window, you can create an archive for video and other data on the following drives:

- Server Message Block: (SMB) shared network drive.
- Amazon S3 Cloud Storage:
- Network File System: (NFS) shared network drive.

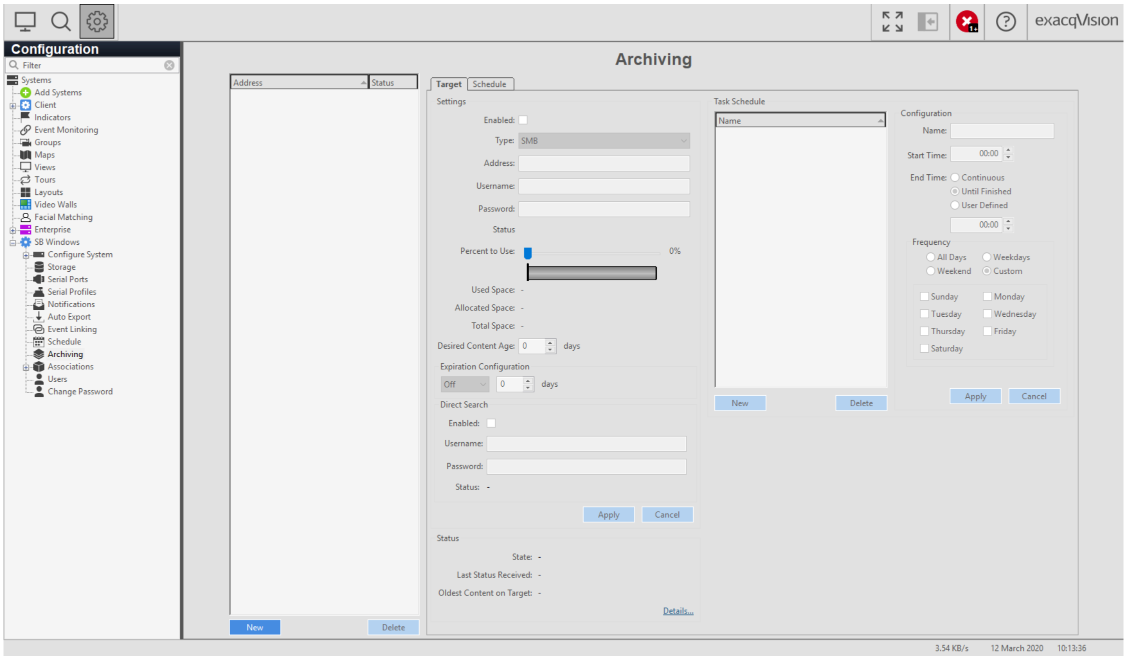
  The server must support the NFS archiving feature to use this option..
- Cloud Drive:

  Cloud Drive is supported on exacqVision Server and exacqVision Client version 21.09.861114 or later. The server must support Cloud Drive for this option to be available.

  From Cloud Drive, you can perform a video, thumbnail, list, multi-camera, and offline search. In addition, you can retrieve download and export video, or replay video that is in cold storage from Cloud Drive.
- Cloud Drive Legacy:

  Cloud Drive Legacy features apply to exacqVision Server and exacqVision Client versions prior to version 21.09.861114. For Cloud Drive Legacy you can perform a video, thumbnail, list, multi-camera, or, offline search. Cloud Drive Legacy only supports hot storage archiving and continuous archiving uploads.

Figure 47: Archiving window



Target tab

On the target tab, you can configure the following shared network drives for data retrieval and configure the task schedule for the target. The configuration steps vary depending on the configuration option you select. For more information see the following sections:

- SMB and NFS: See Configuring the target tab for SMB and NFS.
- Amazon S3: See Configuring the target tab for Amazon S3.
- Cloud Drive: See Configuring the target tab for Cloud Drive.

Configuring the target tab for SMB and NFS

About this task:
Use this task to configure the SMB or NFS drives for data retrieval. To configure data retrieval for Cloud Drive or Amazon S3, see Configuring the target tab for Cloud Drive and Configuring the target tab for Amazon S3 respectively.

1. Select the **Enabled** check box to enable archiving. Clear the check box to disable archiving.
2. From the **Type** list, choose one of the following archive media options:

   - **SMB**
   - **NFS**

3. In the **Address** field,type the path of the shared network folder and the sub directory.
4. In the **Username** field, type the user name to access the network shared drive targets.
5. In the **Password** field, type the password to access the network shared drive.
6. Move the **Percent to Use** slider to select a percentage of the drive to use for archiving.
   A progress bar displays different colors to indicate the current space capacity of the drive.
   - Blue indicates the amount of space in use on the drive.
   - Gray indicates the amount of unused space.
   - Red indicates the amount of space that other systems use.

Note: If you select a percentage of the drive that includes red, other systems cannot use that portion of the drive for archiving.

7. In the **Desired Content Age** field, select the number of days that you want the system to archive the data for. If you delete data before the set number of days, the system creates an event that can trigger an action.
8. In the **Expiration Configuration** area, set the limit for the number of days that you can store archived video. From the list menu, select **At Most**, then select a number of days. The default value is 30. The system deletes any video in the archive that is older than the set value.
9. In the **Direct Search** area, select the **Enabled** check box and then enter a **Username** and **Password** to connect the exacqVision client directly to the archive without having to connect to the exacqVision server. For more information, see Direct search for archiving.

Result

The **Status** field shows `Connected` when the server successfully connects to the shared network drive. Click **Details** to view additional information about the archiving task.

Configuring the target tab for Amazon S3

About this task:

Use this task to configure Amazon S3 for data retrieval. To configure data retrieval for SMB, NFS or Cloud Drive, see Configuring the target tab for SMB and NFS and Configuring the target tab for Cloud Drive respectively.

1. Select the **Enabled** check box to enable archiving. Clear the check box to disable archiving.
2. From the **Type** list, select the **Amazon S3**.

   When you select **Amazon S3 Cloud Storage** the **Amazon S3 Address Builder** populates the address field.
3. In the **Settings** pane, click the button next to the **Address** field.
4. In the **Bucket** field, enter your bucket name. From the **Region** list select your region and click **OK**
5. In the **Access ID** field, type the user access ID for the account.
6. In the **Secret** field, type the password for the access ID account.
7. In the **Expiration Configuration** area, you can set the limit for the number of days that you can store archived video. From the list menu, select **At Most**, then select a number of days. The default value is 30. The system deletes any video in the archive that is older than the set value.
8. **Optional:** If you select the **Show Advanced** check box, the **Show Advanced** area, displays cache location details.

About Cloud Drive versions

Cloud drive provides a method of archiving and retrieving video from the cloud. For more information about obtaining Cloud Drive see https://www.exacq.com/products/cloud-drive/. The following table lists the differences between Cloud Drive versions 1 (Legacy) and 2.

Table 67: Differences between Cloud Drive versions

Cloud Drive version 1 (Legacy)	Cloud Drive version 2
Supports continuous archiving which is recorded on the NVR.	Supports continuous and scheduled archiving.
Applies a Cloud Drive subscription at the NVR level.	Applies Cloud Drive subscriptions to each camera.

Table 67: Differences between Cloud Drive versions

Cloud Drive version 1 (Legacy)	Cloud Drive version 2
The Cloud Drive video schedule is independent of the recording schedule. It allows free run to Cloud Drive and only records motion locally.	Archives a subset of what is recorded locally.
Provides basic Cloud Drive archiving details including in server logs.	Provides improved logging and status descriptions.
Supports hot storage archiving only.	Supports hot and cold storage archiving.
Supports H.264 (High Efficiency Video Coding) video compression.	Supports H.264 and H.265 video compression.

Configuring Cloud Drive archiving

Before you begin:
To configure Cloud Drive archiving, you must have Tyco Cloudvue partner code and a valid user account with Cloudvue. For more information see, https://www.exacq.com/products/cloud-drive/.

The following list is a summary of the steps you need to complete to set up Cloud Drive archiving:

1. Create an archiving target. See Configuring the target tab for Cloud Drive.
2. For each camera, specify the type of recordings to archive and which days of the week video will be archived. See Creating a recording schedule for Cloud Drive.
3. In the archiving window, use the tasks schedule area of the target tab, to specify what time the archiving task is to occur each day. See Task schedule pane.

Configuring the target tab for Cloud Drive

About this task:
Use this task to configure a Cloud Drive for data retrieval. To configure data retrieval for SMB, NFS or Amazon S3, see Configuring the target tab for SMB and NFS and Configuring the target tab for Amazon S3 respectively.

Note:

- A system can have only one Cloud Drive archive target.
- Cloud Drive Legacy archiving only supports H.264 video and does not support audio.

1. Select the **Enabled** check box to enable archiving. Clear the check box to disable archiving.
2. From the **Type** list, select the archive media that you want to use:

   - **Cloud Drive**
   - **Cloud Drive (Legacy)**
3. In the **Username** and fields, type the user name to access the network shared drive targets..
4. In the **Password** field, type the password to access the network shared drive or Cloud Drive.
5. In the **Email** field, type the email address for the Cloud Drive user account.

   Note: A message is displayed the first time that the **exacqVision Client** connects to the Cloud Drive.
6. In the **Cloud Drive Info** area, in the **Partner Code** field, type the partner code that you received when you subscribed to Cloud Drive.
   You can also get this information from your dealer.
7. In the **Instances Regions** list menu, select the appropriate geographic region to store the video. North America is the default instance region.

8. Click **Apply**.

Result
The **Status** field shows as `User Not Associated`. In the Cloudvue Manager portal Video Devices page, your dealer needs to add your Cloud Drive user account to the NVR. When the dealer adds your Cloud Drive user name to the device, cameras connected to the NVR appear in the Cloudvue Manager portal and the dealer can apply your Cloud Drive subscriptions to them.

For each camera, specify the type of recordings to archive and which days of the week video will be archived. See Creating a recording schedule for Cloud Drive.

Creating a recording schedule for Cloud Drive

About this task:
On the schedule tab, you can create a recording schedule for a camera or for a multiple of cameras on a server.

1. Navigate to the **Camera Settings** window, click the **Schedule** tab.
2. 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.
3. In the **Setting** area, select a recording option.
   - 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**.
4. In the **Camera Time Lapse** area, set the number of images that you want to record for every second or minute of the selected time.
   For additional information on the options available in the schedule tab, see Table 31.
5. Click **Apply**.

Scheduling an archiving task for Cloud Drive

Create an archive task and schedule to send video to store in Cloud Drive. This is also known as cold storage.

1. From the navigation tree, expand the relevant server node and select **Archiving**.
2. In the **Target** tab, in the **Task Schedule** pane click **New**.
3. In the **Configuration** pane, in the **Name** field, type a name for the archiving task.
4. Select a **Start Time** and **End Time** to specify when archiving is to occur.
5. Choose from one of the following options:
   - **Continuous**: Video is uploaded as soon as it is recorded on the NVR. The archiving task continuously scans the system for new clips to upload.
   - **Until Finished**: The archiving task begins at the defined start time and continues to upload video until no new files are found.
   - **User Defined**: The archiving task begins at the defined start time and continues to upload video until either the end time or until all files are uploaded. If the defined archiving time period is not long enough to successfully archive all video clips the remaining video is prioritized for archiving the next day.
6. In the **Frequency** area, select the relevant option. then select the days of the weeks.
7. Click **Apply**. The **Status** field shows a green `Connected` message.
8. Click the **Schedule** tab.

9. On the **Sources** tab, select a device from the available list of cameras that are subscribed to Cloud Drive.

Task schedule pane

In the task schedule pane on the target tab, you can schedule archiving tasks. If there is insufficient time in a task to archive all the video ready for upload, any video that is unarchived is prioritized for upload during the next archiving task. If there is extra time remaining in the task, the system archives any applicable data recorded while the archive task is in progress. To schedule an archiving task, see Scheduling an archiving task on a server and Scheduling an archiving task for Cloud Drive.

Scheduling an archiving task for a server

1. From the navigation tree, expand the relevant server node and select **Archiving**.
2. In the **Target** tab, in the **Task Schedule** pane click **New**.
3. In the **Configuration** pane, in the **Name** field, type a name for the archiving task.
4. Select a **Start Time** and **End Time** to specify when archiving is to occur.
5. Choose from one of the following options:

    - **Continuous**: Video is uploaded as soon as it is recorded on the NVR. The archiving task continuously scans the system for new clips to upload.
    - **Until Finished**: The archiving task begins at the defined start time and continues to upload video until no new files are found.
    - **User Defined**: The archiving task begins at the defined start time and continues to upload video until either the end time or until all files are uploaded. If the defined archiving time period is not long enough to successfully archive all video clips the remaining video is prioritized for archiving the next day.

    Note: The oldest data that meets the criteria on the schedule tab archives first. If the status area displays a message indicating that the archiving did not complete, change the end time of the archiving task.

6. In the **Frequency** area, select the relevant option. then select the days of the weeks.
7. Click **Apply**.

Direct search for archiving

The direct search feature connects exacqVision clients directly to an archive without connecting to the exacqVision server. This can speed up video downloads, reduce network bandwidth consumption, and enable recorded video to be available when its associated exacqVision server is offline. To use the direct search feature, you must use the credentials of an archive store account or you must be connected to a Cloud Drive.

If direct search is enabled, all sources for a camera are searched. You can select the preferred source, if a conflict occurs. When you download and view a video, there is a seamless transition between the video and each camera source.

When you perform a direct search, you can select from one of the following options:

- Direct Search Enabled – Prefer Cloud Video
- Direct Search Disabled
- Direct Search Enabled – Prefer System Video
- Direct Search Enabled – Prefer Archive Video

The **Status** area in the **Direct Search** pane displays information about the connection between the exacqVision client and the network shared drive archive. For more information, see the following table.

Table 68: Direct search status messages in the Direct Search pane

Status message	Description
Invalid Address	The address is not in a valid format. Use the following format when entering the address: `\\ipaddress or hostname\share\folder`.
Path Not Found	The target server is reachable, but the folder cannot be found on the shared network drive.
Disconnected	The system cannot connect to the shared network drive because of an invalid address, username, or password.
Connected	The system is connected to the target server.

Configuring network drive-based archiving

1. In the **Config (Setup)** window, in the navigation tree, expand the relevant server node and select **Archiving**.
2. On the **Target** tab, click **New**.
3. Enter the path of the shared network folder and the sub directory in the **Address** field.
4. Enter a **Username** and **Password** for the shared network drive.
5. Move the **Percent to Use** slider to adjust how much of the drive you want to use for archiving.
6. In the **Direct Search** area, enter a username and password that the exacqVision client uses to log on to the archive.
7. Click **Apply**.

Schedule tab in the archiving window

The schedule tab in the archiving window has a days tab and a sources tab. On the days tab, you can create an archiving schedule for all devices on a server or all cameras with Cloud Drive subscriptions. On the sources tab, you can create a schedule for a single device on a server with a Cloud Drive subscription.

For more information see the following pages:

- Creating an archiving schedule for all devices in a server
- Creating an archiving schedule for a single device in a sever

For information on the functionality of the **Schedule** tab, see Table 69.

Figure 48: Schedule tab in the archiving window

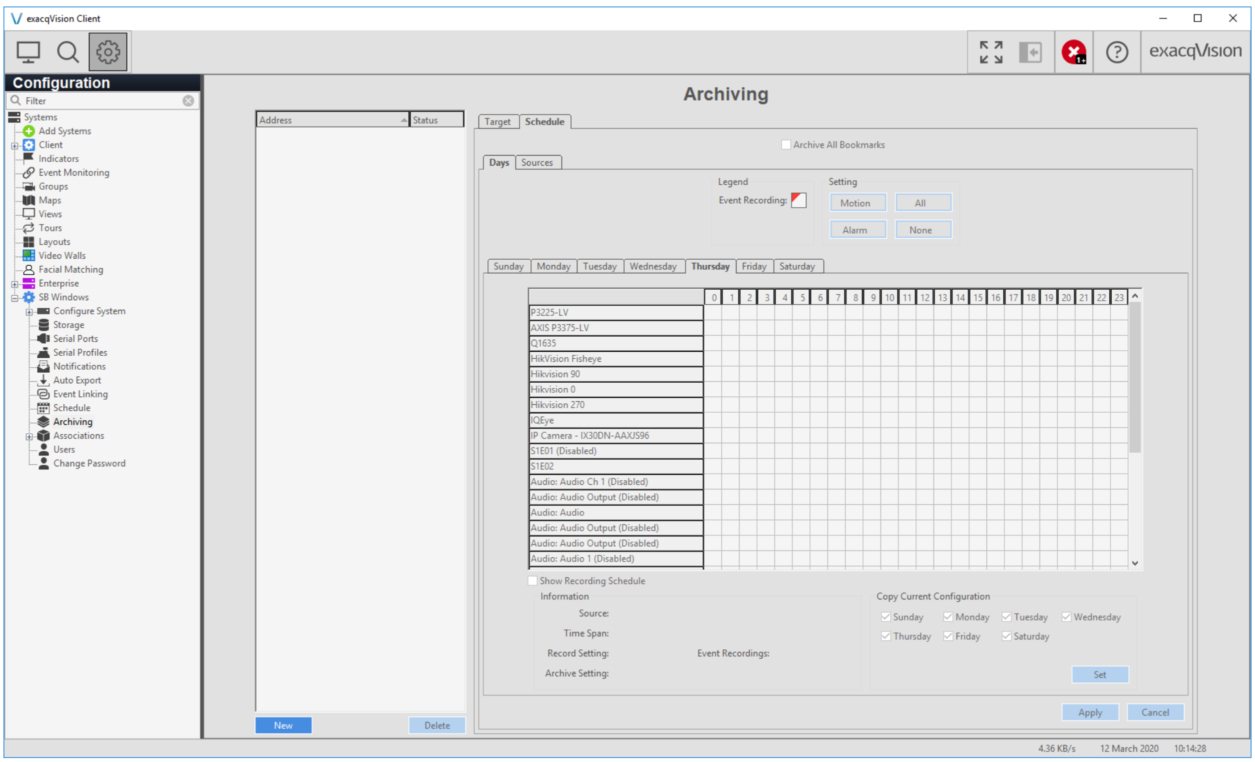


Table 69: Days tab on the schedule tab in the archiving window

Interface element	Description
Archive All Bookmarks check box	Archives all video and audio that you include in bookmarks even if it is not in the archiving schedule.
Legend pane	Displays how Event Recordings display in the schedule grid.
Setting pane	Displays the modes of recording settings. For more information, see Table 64.
Show Recording Schedule check box	Displays the recording schedule behind the archiving schedule to act as a reference.

Table 69: Days tab on the schedule tab in the archiving window

Interface element	Description
Information pane	Displays details of the cameras settings for a selected time. To display a camera's settings for a selected time, hover the cursor over a corresponding square in the schedule grid.
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 an archiving schedule for all devices in a server

To create an archiving schedule for all devices on a server, complete the following steps:

1. From the navigation tree, expand the relevant server node and select **Archiving**.
2. Click the **Schedule** tab.
3. On the **Days** tab, select the appropriate tab for the day of the week.
4. Left-click the grid and drag the cursor to draw a box over the days and corresponding hours that you want to schedule archiving.
5. In the **Setting** pane, select a recording mode. For more information on the recording modes, see Table 31.
6. Click **Apply**.

   ⓘ **Note:** A Cloud Drive archive schedule is independent of the recording schedule.

Creating an archiving schedule for a single device in a server

To create an archiving schedule for a single device in a server, complete the following steps:

1. From the navigation tree, expand the relevant server node and select **Archiving**.
2. Click the **Schedule** tab.
3. On the **Sources** tab, select a device from the **Device** list.

   ⓘ **Note:** Any device that is not supported is unavailable or marked as disabled.

4. 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 archiving.
5. In the **Setting** pane, select a recording mode. For more information on the recording modes, see Table 31.
6. Click **Apply**.

Associations window

In the **Associations** window, you can link audio inputs, event triggers, event links, auxiliary commands and manual recording controls to a camera, and edit their display settings. You can control a camera association by clicking on the overlay icon that displays on the camera's live video panel. In addition, you can control a camera association from a joystick. For more information on the functionality of the **Associations** window, see Table 70.

Figure 49: Associations window

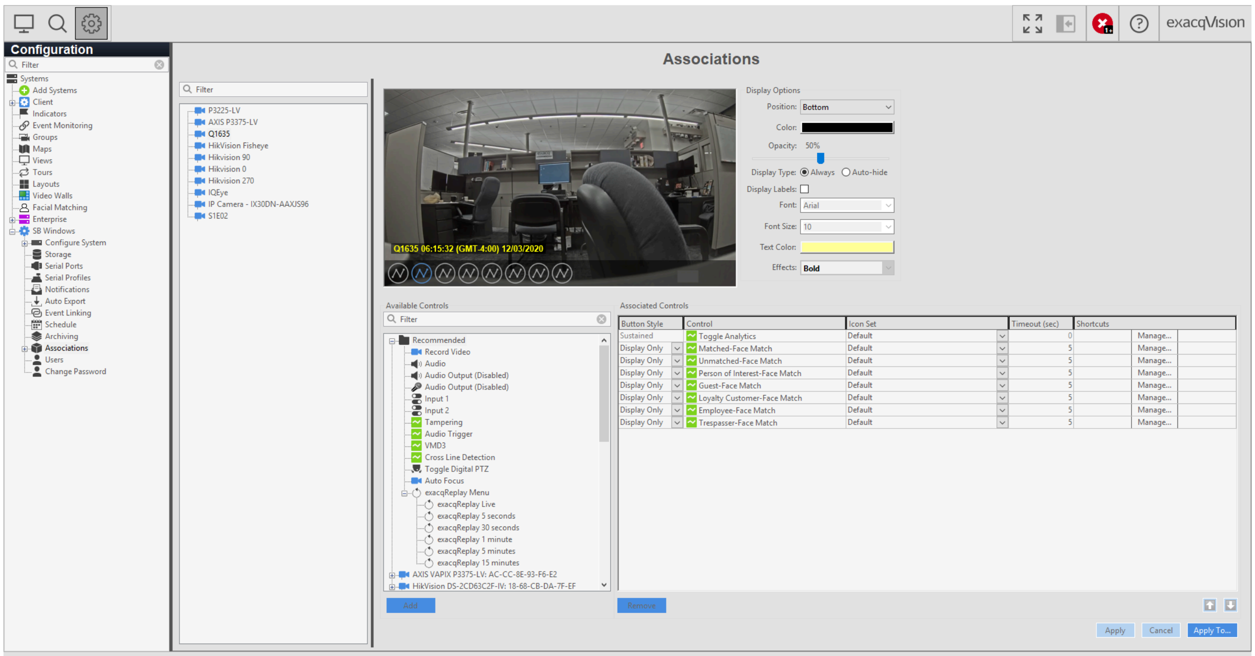


Table 70: Associations window

Interface element	Description
Camera list	Displays a list of cameras that you can configure with an association.
Available Controls list	Displays a list of controls that you can associate with a camera. The **Recommended** section of the list includes all inputs and outputs of the camera.
	To move a control into the Associated Controls pane, select the control from the **Available Controls** list and click **Add**.
Associated Controls pane	Displays a list of controls that you associate with the camera.
	To change the order of the controls in the list, select the control and in the lower-right corner click the up or down **Arrow** icons.
	To remove a control, select the control and click **Remove**.
	To change the icon style, select one of the following options from the **Button Style** list: • **Display Only**: No action can be made. • **Sustained**: When you click the icon, the association stays active until you click it again. • **Momentary**: For the association to activate, you must click and hold the icon. • **Confirm**: When the association alarms, the association stays in an alarm state until it is acknowledged.
	The **Icon Set** column displays the custom icons that the association uses. For more information, see Custom Icons window.
	The **Timeout** column displays the number of seconds the association displays when it is in an alarm state. This column is available only for **Display Only** associations.
	To assign a key or joystick button shortcut to a camera association, from the **Shortcuts** column click **Manage**. For more information, see Assigning joystick shortcuts.
Display Options pane	Changes the association icons position and display settings.
	To display an association icon only when you place the cursor over the video panel, in the **Display Type** area, select **Auto-hide**.
	To apply the display settings to a multiple of cameras, click **Apply to**.

Assigning joystick shortcuts

To assign a key or joystick button to a camera association, you must first configure the key or joystick button to use for each association.

To assign a key or joystick button to an associated control, in the **Config (Setup)** window, complete the following steps:

1. From the navigation tree, expand the relevant server node and select **Associations**.
2. Select a camera from the Camera list.
3. In the **Associated Controls** pane , click **Manage** for the control that you want to assign a shortcut to.

4. In the **Manage Shortcuts** window, press a key or joystick button on the joystick, and click **Add**.
5. Click **OK**.
6. In the **Associations** window, click **Apply**.

   ⓘ **Note:** In the **Associations** window preview pane, you can test the shortcut.

   In the **Live** window, when you trigger a shortcut, the action is applied to video panels in the following order:

   - Panel with a PTZ focus camera
   - First video panel with the shortcut association applied

Custom Icons window

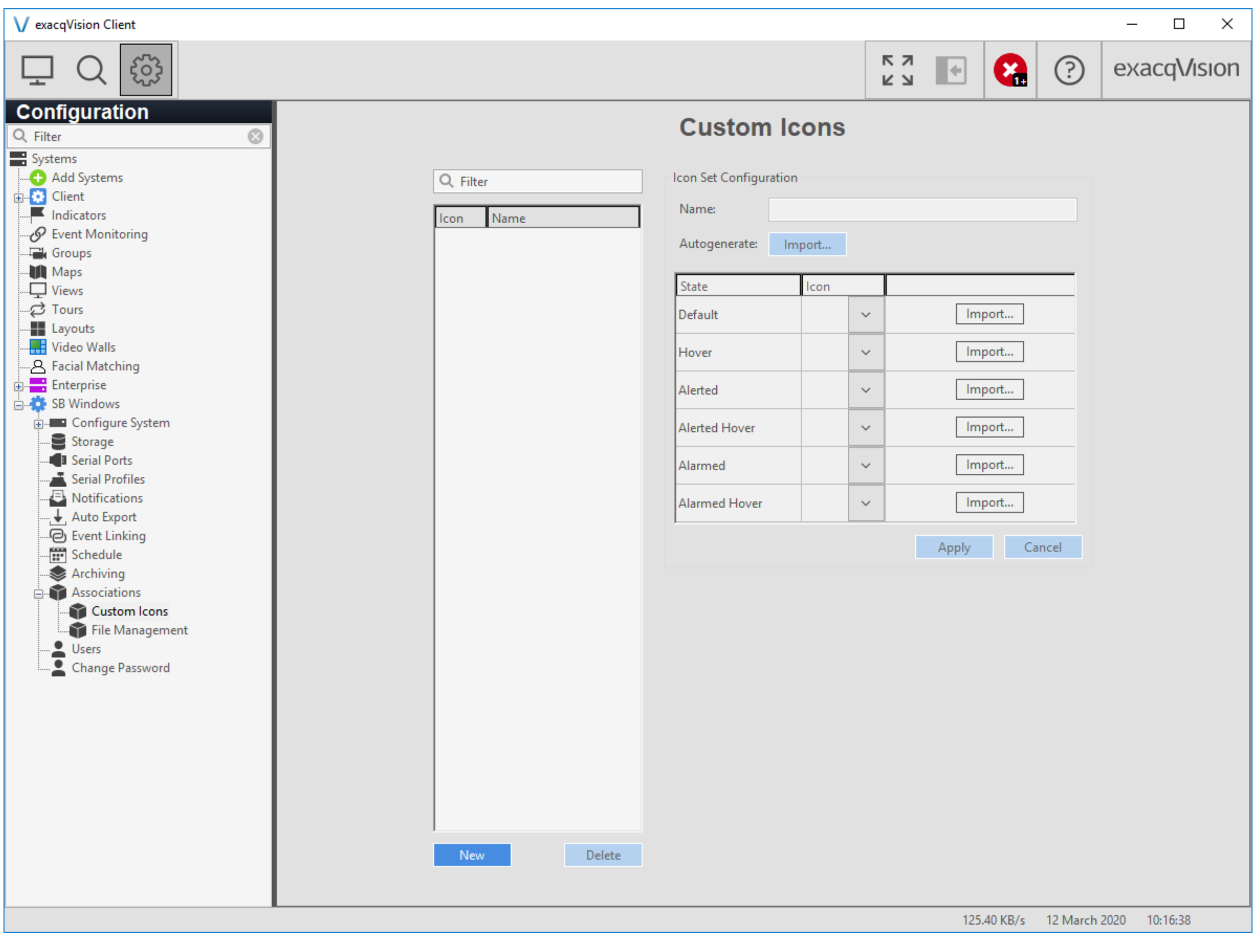
In the **Custom Icons** window, you can create custom icons for associations.

Opening the Custom Icons window

To open the **Custom Icons** window, in the **Config (Setup)** window, complete the following steps:

1. From the navigation tree, expand the server where you want to create custom icons.
2. Expand the **Associations** node, and select **Custom Icons**.

Figure 50: Custom Icons window



Creating custom icons for an association

To create custom icons for an association, complete the following steps:

1. In the **Custom Icons** window, select **New**.
2. In the **Name** field, enter a name for the custom icon.
3. In the **Autogenerate** area, click **Import**.
4. Navigate to the icon, and click **Open**. The system populates the associations with the icon you select.
5. **Optional:** To change an icon for an association, select **Import** next to the association you want to change.
6. Click **Apply**.

File Management window

In the **File Management** window, you can manage image files on a server. You can download, open, and view images such as association icons, group icons, map icons, map backgrounds, and video panel backgrounds. Any image file that is not in use can be deleted from the server.

Opening the File Management window

To open the **File Management** window, in the **Config (Setup)** window, complete the following steps:

1. From the navigation tree, expand the server where the image files are stored.
2. Expand the **Associations** node, and select **File Management**.

Figure 51: File Management window

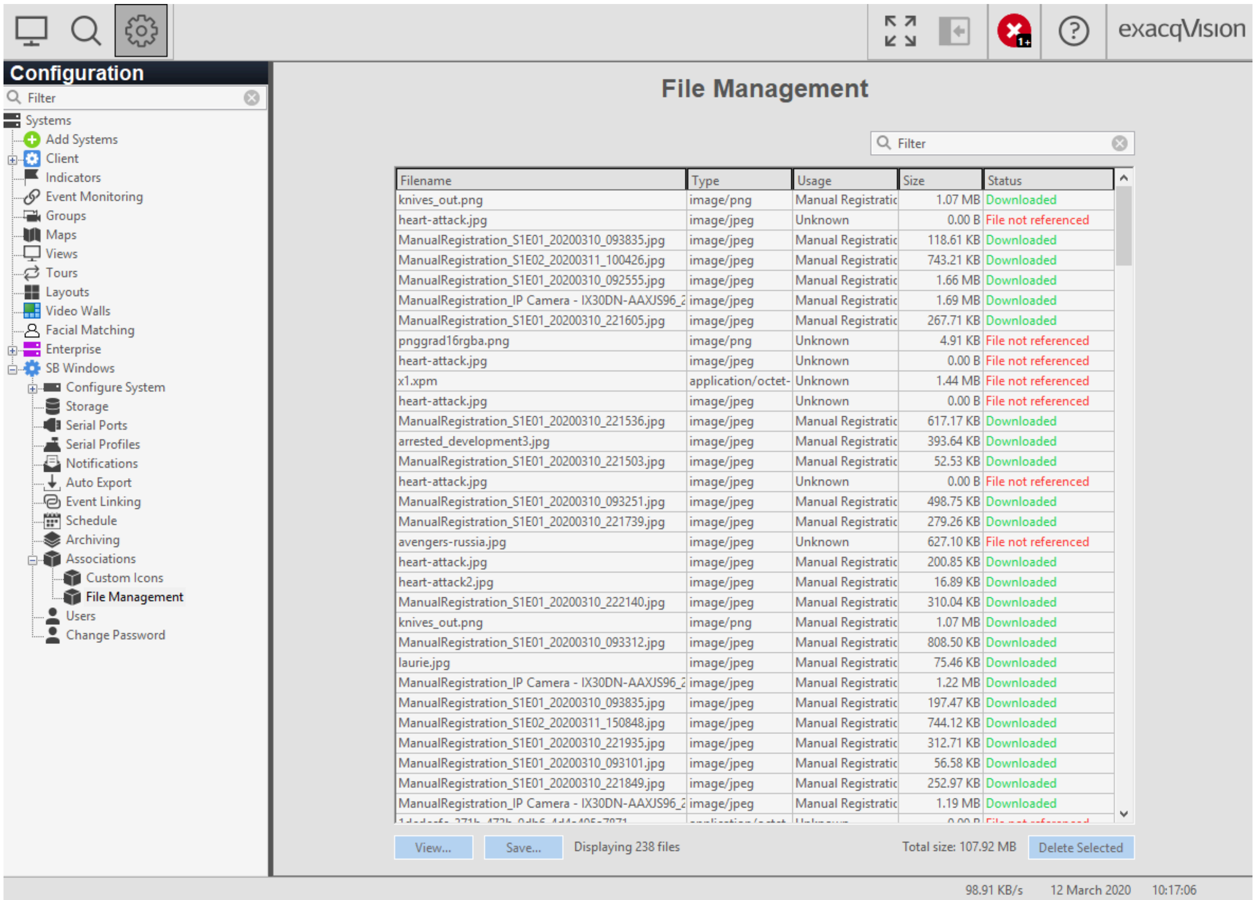


Table 71: File Management window

Interface element	Description
Filename list	Displays a list of file names.
Type list	Displays the image file format, for example portable network graphic (.png) format.
Usage list	Displays how the images are used, for example association icon, group icon, map icon, map background, or video panel background.
Size list	Displays the file size of the image in kilobytes (KB).

Table 71: File Management window

Interface element	Description
Status list	Displays the status of the file, The following list describes the possible values for the status of a file: • **Downloading...**: The file is currently downloading from the server. • **Downloaded**: The file is downloaded. • **File not referenced**: The file exists on the server but is not in use. • **File not found**: The file does not exist on the server.
Filter field	To search the file management information table, enter the relevant information in the Filter field.

Viewing an image file

To view an image file, in the **Config (Setup)** window, complete the following steps:

1. From the navigation tree, expand the server where the image files are stored.
2. Expand the **Associations** node, and select **File Management**.
3. In the **File Management** window, select the file that you want to view.

   Note: The file must show a status of **Downloaded** to view the image file.

4. Click **View**, and select one of the following options:

   - To view the image file, select **File**.
   - To view the metadata associated with the image file, select **Metadata**.
   - To view the Associated window for the image file, select **Usage**.

Saving an image file

To save an image file, complete following steps:

1. From the navigation tree, expand the server where the image files are stored.
2. Expand the **Associations** node, and select **File Management**.
3. In the **File Management** window, select the file that you want to save.

   Note: The file must show a status of **Downloaded** to save the image file.

4. Click **Save**.
5. Type the file name, select the location, and click **Save**.

Deleting an image file

To delete an image file, complete the following steps:

1. From the navigation tree, expand the server where the image files are stored.
2. Expand the **Associations** node, and select **File Management**.
3. In the **File Management** window, select one or more image files to delete.

   Note: You cannot delete an image that is in use.

4. Click **Delete Selected**.
5. A confirmation message appears, click **YES** to delete the image files.

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 72.

Figure 52: Users window

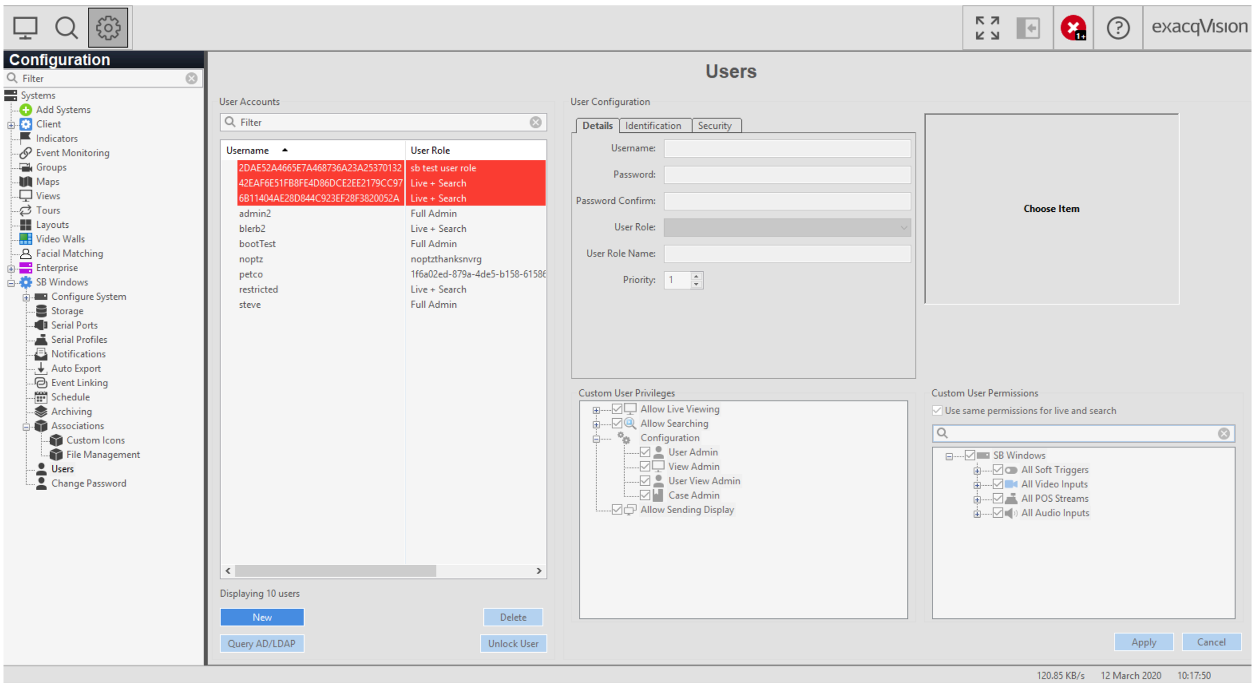


Table 72: Users window

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 73.
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.

Table 72: Users window

Interface element	Description
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 Privileges list	Displays a list of devices that you can select so that users or user role can operate them in the exacqVision client.
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 73, Table 75, Adding a user to the system and Adding a user role to the system.

Table 73: 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 74.
User Role list	The **User Role** list displays a list of permission levels for users. For more information, see Table 74. The **New User Role** option is not available in exacqVision Start.
User Role Name field	In the **User Role Name** field, you can enter a name for the user role.
Priority list	The **Priority** list displays the PTZ priority levels. The **Priority** list is not available in exacqVision Start.
	When two users attempt to control the PTZ functions of the same camera simultaneously, the user with the higher priority level is granted PTZ control. If a second user attempts to control the PTZ functions on a camera that is already controlled by a user with the same priority, the controls remain with the first user.
	Administration users automatically have PTZ priority over any other user, and power users have priority over all users except administration users.

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

Table 74: 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.
Live Only	The user can only view live video from all cameras.
Search Only	The user can search for recorded video.
Live + Search	The user can view live video and search for recorded video from all cameras.
Restricted	A custom set of permissions that allows you to edit permissions for cameras.
New User Role	A custom set of permissions that you create for a user or role.

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 74.
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 74.
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 74.
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.

   ⓘ **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 75: 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.

Table 75: Security tab in the Users window

Interface element	Description
User Must Change Password check box	Requires a user to change their password. A user with Full Admin privileges cannot select or clear 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.
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**.

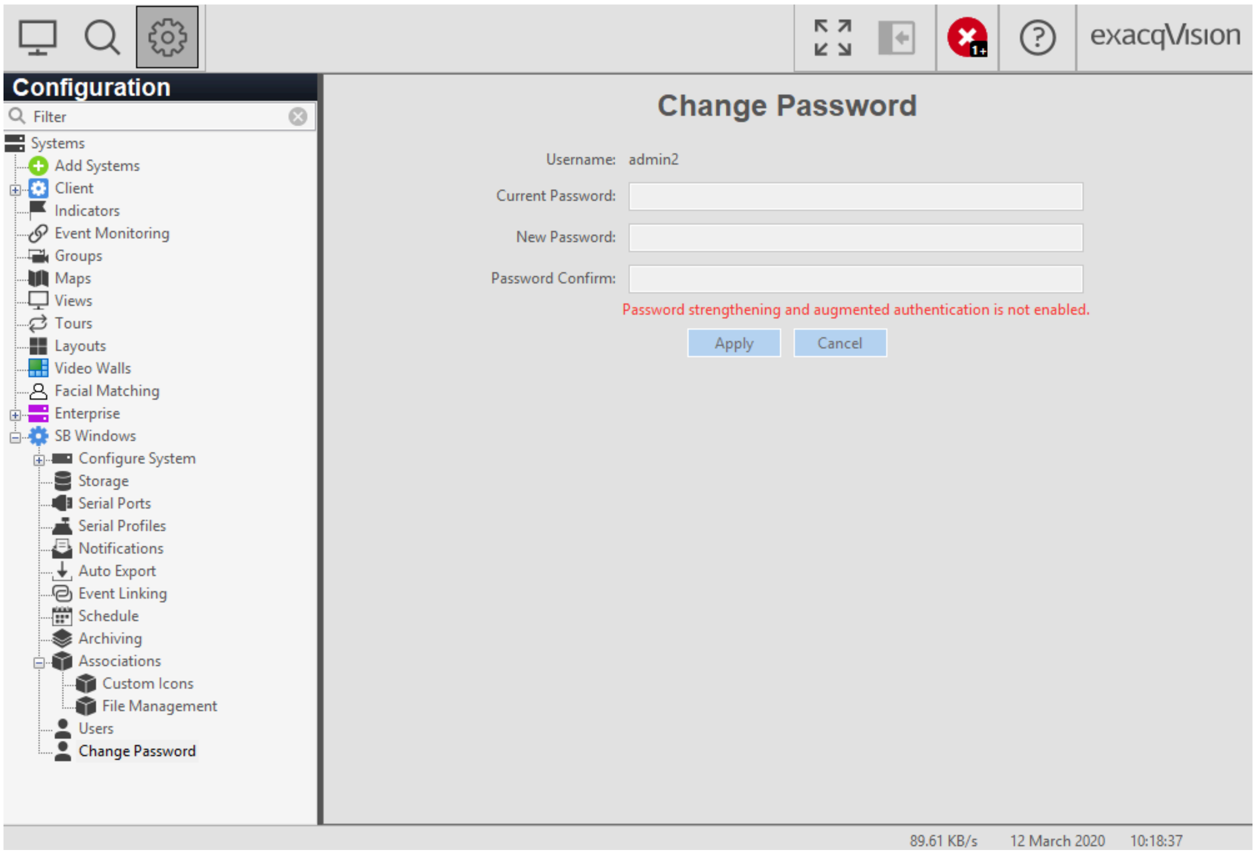
Change Password window

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 53: 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 you 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 76.

Figure 54: Systems window

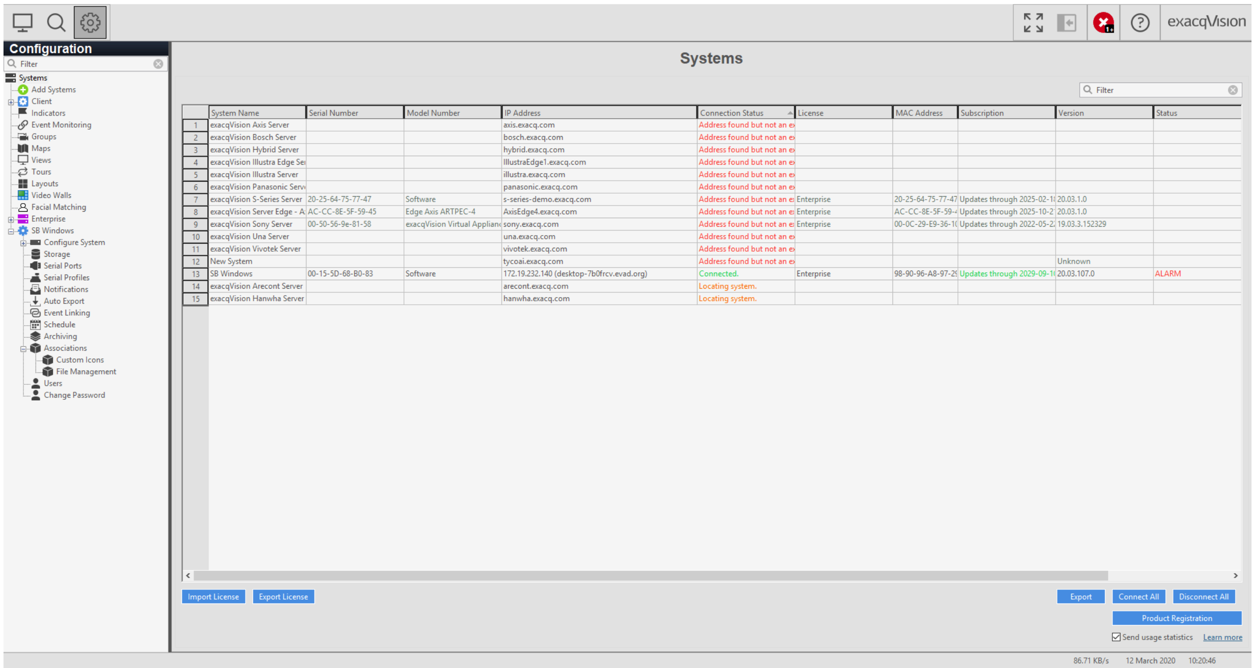


Table 76: Systems window

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.

Table 76: Systems window

Interface element	Description
Connection Status column	To connect or disconnect a single server from the exacqVision 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 exacqVision 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.
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 77.

Figure 55: Device window

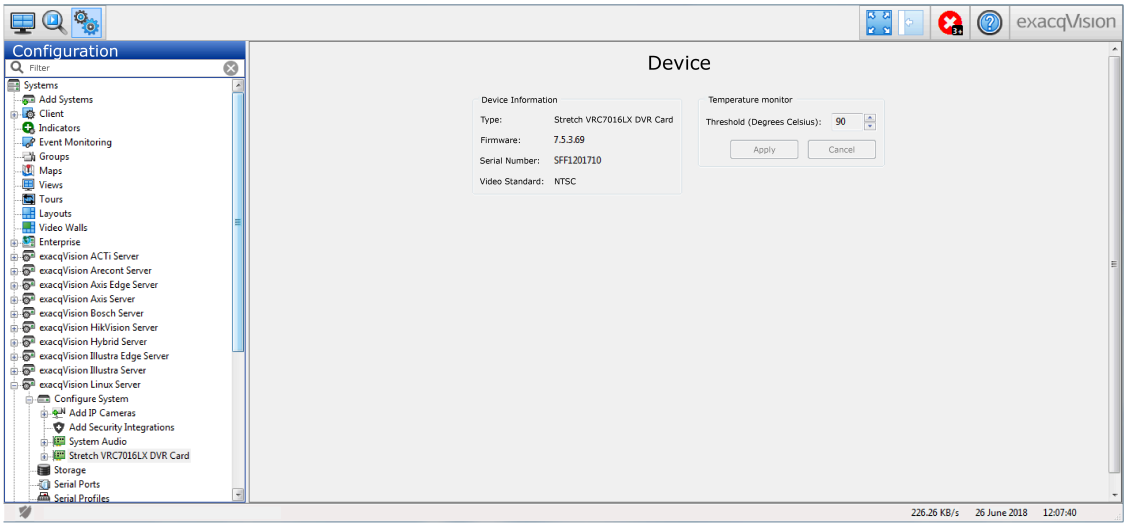


Table 77: Device window

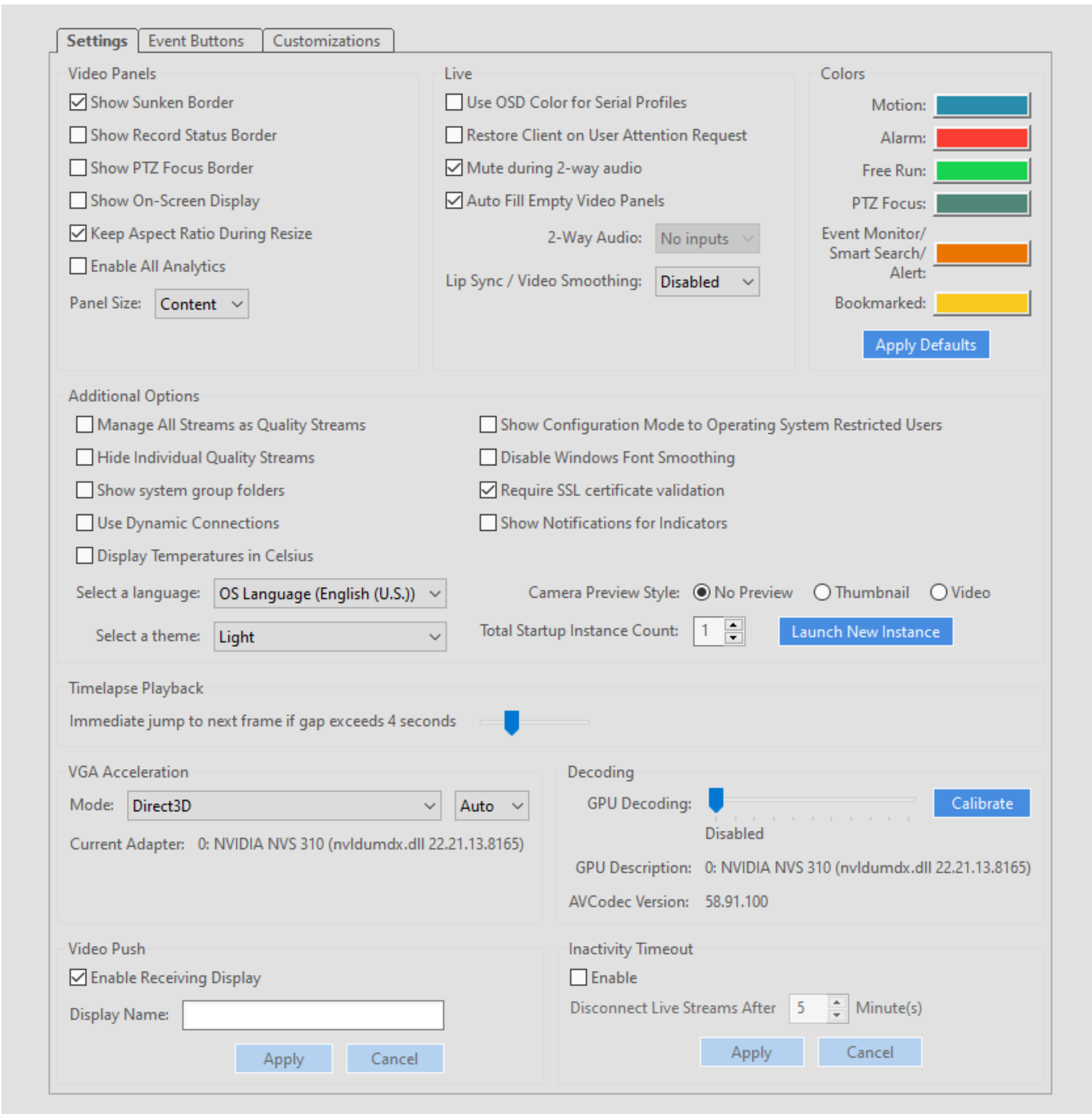
Interface element	Description
Device Information pane	Displays the eDVB device type and the serial number of the compression board in an exacqVision server.
Temperature Monitor pane	To set the temperature threshold of the e compression board and link it to an event, select a temperature from the **Threshold**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

Client window

In the **Client** window, you can access the **Setting**, **Event Button**, and **Customizations** tabs to customize the exacqVision client's settings. For more information, see Table 78 , Table 79, and Table 80.

In the **Client** window, you can customize the exacqVision client's settings. For more information, see Table 78 , Table 79, and Table 80.

Figure 56: Client window



Settings tab in the Client window

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

Table 78: Settings tab in the Client window

Interface element	Description
Video Panels pane	To modify the window display settings on the **Live** window, see Table 79.
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.
Colors pane	Change the default border colors on video panels for: Motion, Alarm, Free, Run, PTZ Focus, and Event Monitor events. To change an event color, click the color next to the event name, select a new color, and click **OK**.

Table 78: Settings tab in the Client window

Interface element	Description
Additional Options	To ensure all secondary streams are treated as if they are quality streams, select the **Manage All Streams as Quality Streams** check box.
	To hide camera secondary streams in the **Live** window, select the **Hide Individual Quality Streams** check box.
	To show system folders in the navigation tree in the **Live** window, select the **Show system group folders** check box. These folders are generated by the exacqVision Enterprise Manager system.
	To enable dynamic connections, so a server automatically connects when required and disconnects when no longer required, select the **Use Dynamic Connections** check box. In the navigation tree, a red X over a server icon indicates a failure to connect to the server.
	To change the temperature display from Fahrenheit to Celsius, select the **Display Temperatures in Celsius** check box.
	From the **Select a language** list, click the language that you want to use. A confirmation message is displayed. You must restart the client before the changes are applied.
	To hide the **Config (Setup) Page** icon for users with Window settings restrictions, clear the **Show Configuration Mode to Operating System** check box. By default, this option is selected. This feature is not available in exacqVision Start.
	To disable font smoothing to sharpen text, select the **Disable Windows Font Smoothing** check box. By default this option is selected.
	To require the client to use secure sockets layer (SSL) authentication, select the **Require SSL certificate validation** check box.
	To quickly identify a camera, use the **Camera Preview Style** feature. Select one of the following options: • To turn off the camera preview feature, click **No Preview**. • To display an image of a camera view when you place the cursor over the camera, click **Thumbnail**. • To display a video stream from a camera when you place the cursor over a camera, click **Video**.
	To change the exacqVision client color scheme, select an option from the **Select a theme** list.
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.
Timelapse Playback pane	Controls the video gap intervals that are a result of time-lapse recording or discontinuous motion. By default, the system automatically jumps to the next video frame after a one-second gap. To increase or decrease this gap, move the **Immediate Jump To Next Frame If Gap Exceeds One** slider. The **Timelapse Playback** pane is not available in exacqVision Start.

Table 78: Settings tab in the Client window

Interface element	Description
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.
Decoding pane	Improves the visual quality of video in the exacqVision client. For more information, see Table 80.
Video Push pane	For the exacqVision client to receive items from another exacqVision client with an Enterprise license, select the **Enable Receiving Display** check box.
	If you enter a name for the exacqVision client in the **Display name** field, it displays on the exacqVision client title bar that it connects to remotely.
	For more information about the Video Push feature, see VideoPush window.
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 79: 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 80: 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**.
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.

Event Buttons tab in the Client window

On the **Event Buttons** tab you can create a shortcut for a soft trigger. This tab is not available in exacqVision Start.

Creating a shortcut for a soft trigger

To create a shortcut for a soft trigger, in the **Config (Setup)** window, complete the following steps:

1. From the navigation tree, select **Client**.
2. Click the **Event Buttons** tab, and then click **New**.
3. Enter a description of the soft trigger in the **Tool Tip** field.
4. Click **Change Icon...**, and upload a default or custom icon.
5. **Optional:** Enter a keyboard shortcut key.
6. Select one of the following button styles:

   - **Sustained** Asserts the command once or creates a latching effect when applicable.
   - **Momentary** Asserts a brief on effect for as long as you click the icon.
7. From the list, select a soft trigger.
8. Click **Apply**.

Customizations tab in the Client window

On the **Customizations** tab you can change and delete the default video panel image. This image displays in the panel until you populate the video panel.

Changing the default video panel image

To change the default video panel image, complete the following steps:

1. From the navigation tree, select **Client**.
2. On the **Customizations** tab, click **Browse...** and navigate to the directory that contains the image file. You can import an image file with a file type of bmp, jpg, jpeg, png, gif, or xpm.
3. Select the image, and click **Open**.
4. Click **Apply**.
5. To apply the image to a system, choose one of the following options:

   - To select all systems, select the **Select All** check box.

- To select one or more systems, select the check boxes next to the systems name that you want to apply the image to.

6. Click **Apply**.

Deleting the default panel image

To delete the default video panel image, in the **Config (Setup)** window, complete the following steps:

1. From the navigation tree, select **Client**.
2. On the Customization tab, click **Clear Image**.
3. A confirmation message appears, click **YES** to delete the image.

Joystick window

In the Joystick window, you can configure standard USB joysticks with the exacqVision system. For more information, see the following tables.

Note: The **Joystick** window is not available in exacqVision Start.

Table 81: Joystick window

Interface element	Description
Current Joystick list	Displays a list of currently configured joysticks and previously configured joysticks.
	If a joystick is drifting while in a resting position, click **Calibrate** to regain control.
Joystick Configuration area	Modifies the position control, zoom, and playback speed of the joystick. For more information, see Table 82.
Position Control Source area	If the joystick has a Point of View (POV) source, you can switch the joysticks functionality from X/Y Axis to POV by selecting **POV**.
Buttons	Displays a list of actions that you can use to program the joystick. The actions vary depending on the model of joystick.
Reset to Defaults button	Applies the factory default settings.

Table 82: Joystick Configuration area in the Joystick window

Interface element	Description
X/Y Axis area	To increase or decrease the position control sensitivity, move the **Sensitivity** slider.
	To invert the directional movement of the camera or view, select the **Invert Y Axis** check box.
	To adjust the joystick to a starting point, move the joystick to the position you want and then click **Calibrate**.
Z Axis area	To increase or decrease the zoom sensitivity, move the **Sensitivity** slider.
	To invert the zoom direction, select the **Invert Z Axis** check box.
	When you adjust the cameras zoom, the Z Axis box in the **Z Axis** area turns green to indicate the direction of the zoom.
X Position area	To increase or decrease the playback speed, move the **Sensitivity** slider.
	To invert the playback speed direction, select the **Invert X Position** check box.
	When you adjust the playback speed, the X Axis box in the **X Position** area turns green to indicate the direction of the zoom.

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 83 and Table 84.

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 57: Indicators window

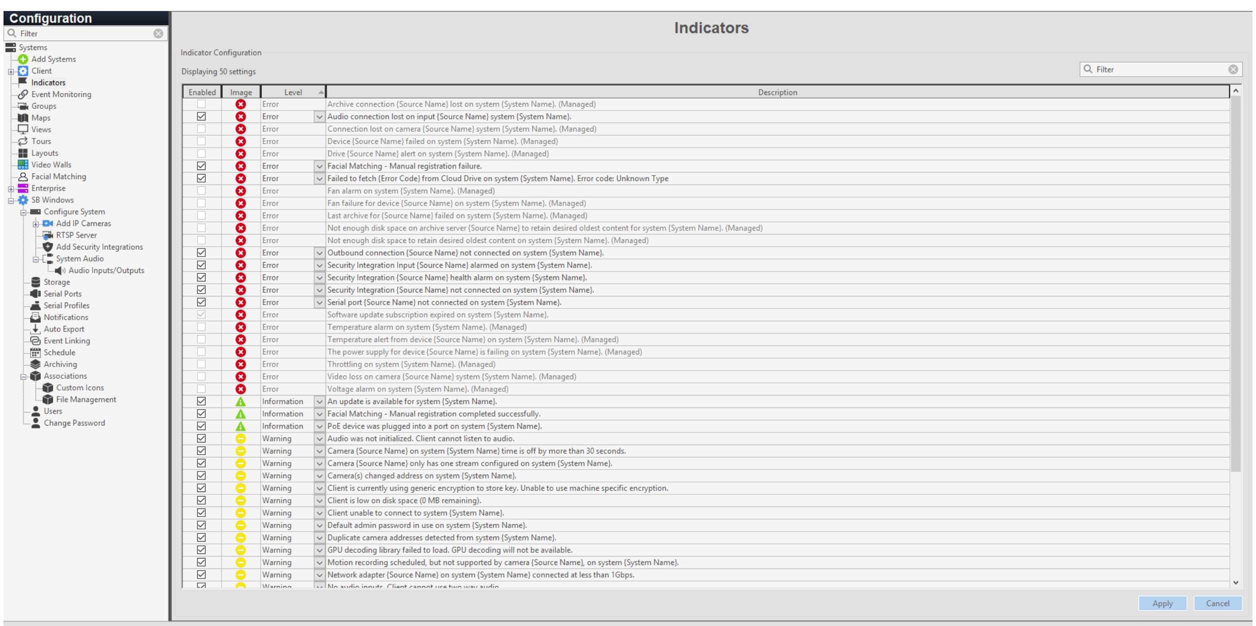


Table 83: Indicators window

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 84.
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 84: 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**.

Groups window

In the Groups window, you can create groups of cameras and devices from a multiple of servers, and search for video and data in groups. After you create a group, in the **Live** window you can display live or recorded video from all the items in the group in the same video panel layout. To create a group, see Creating a new group. For information on the functionality of the Groups window, see Table 85.

Note: The Groups window is not available in exacqVision Start.

Figure 58: Groups window

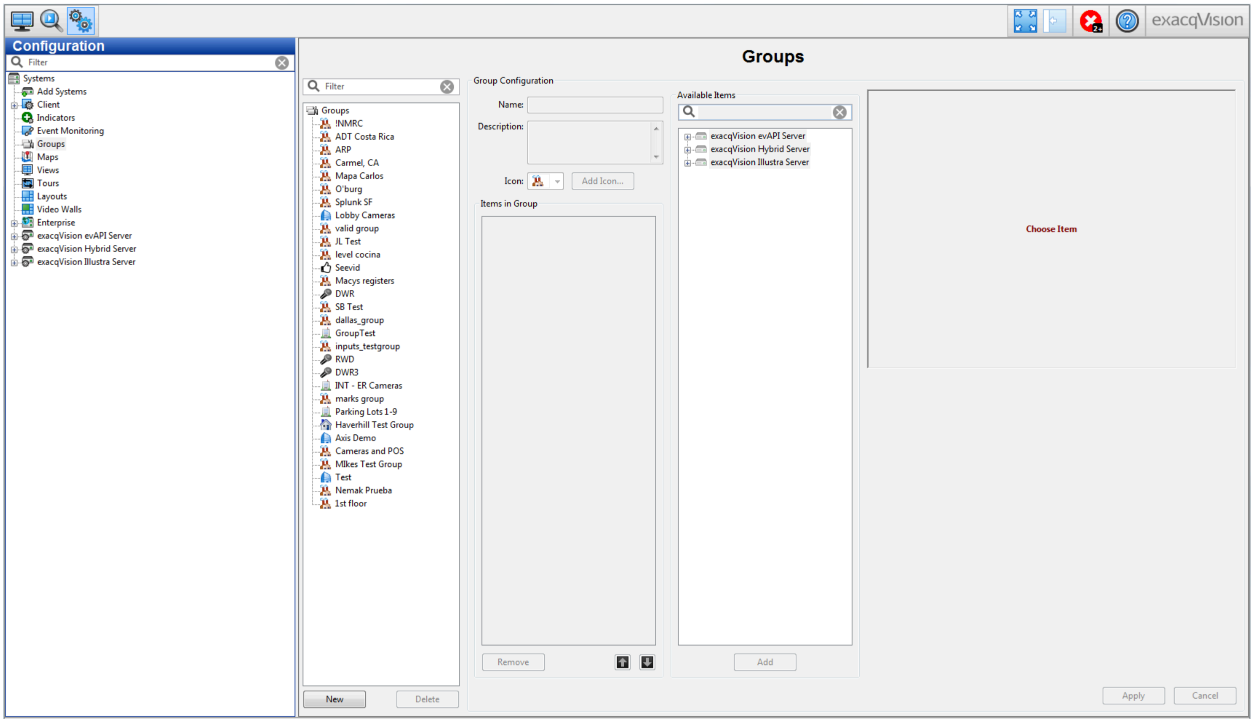


Table 85: Lists in the Group window

Interface element	Description
Group list	Displays a list of created groups.
	To add a group to the Groups list, see Creating a new group.
	To delete a group from the Groups list, select the group and then click **Delete**.
Items in Group list	Displays a list of items in the group you select or are creating.
	To remove an item from the Items in **Group** list, select the item and click **Delete**.
	To change the order of items in the list, select the item and then click the Arrow icons.
Available Items list	Displays a list of available devices that you can add to a group. To add a device to a group, select the device from the **Available** Items list and then click **Add**.

Creating a new group

To create a new group, in the **Config Setup** window, complete the following steps:

1. From the navigation tree, select **Groups**.
2. In the **Groups** window, click **New**.
3. In the **Group Configuration** pane, enter a name and description for the group.
4. From the Icon list, select an icon to represent the group. This icon appears in the navigation tree.

   Note: You can also select a custom icon by clicking **Add Icon...**.

5. Select a camera, server, or device from the **Available Items** list, and then click **Add**. Repeat this step to add more items to the group.

   ⓘ **Note:** If you select a server, all the cameras and devices in the server are added to the group.

6. Click **Apply**.

Maps window

In the **Maps** window, you can upload a map image of a location or building and associate cameras, soft triggers, and other devices to it to create a custom map. To create a custom map, see Creating a custom map. For information on the functionality of the Maps window, see Table 86.

ⓘ **Note:** The **Maps** window is not available in exacqVision Start.

Figure 59: Maps window

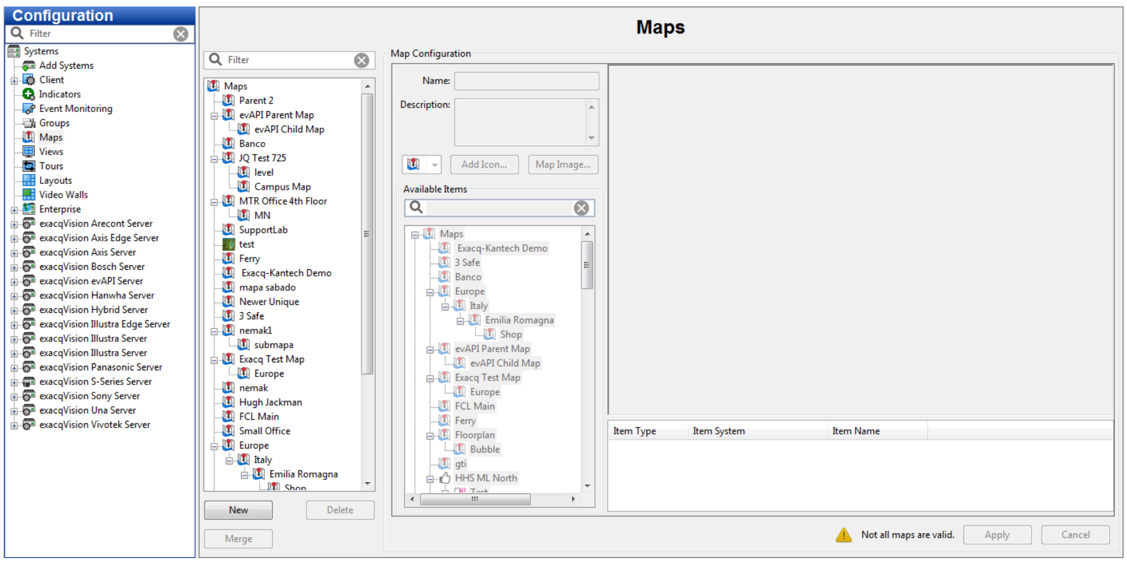


Table 86: Maps window

Interface element	Description
Map list	Displays a list of custom maps and their servers.
	To create a child map for an existing map, select the map from the **Map** list before you click **New**. After you create the map, the icon for the child map displays on top of the map.
Map Image	To remove an item from a map, right-click the item's icon on the map and select **Remove selected item**.
	To reverse the direction of an item on a map, right-click the icon and select **Mirror** icon.
	To rotate a device on the map, click the devices icon and select **Icon Rotation**.
	To change the appearance of an icon on the map, select the icon and then click **Icon Balloon**.
Item list	Displays a list of items and their servers that the map currently contains.
Merge button	To merge maps where updates are made by different users on the same map, from the **Map** list, select the map you want to keep, and click **Merge**.

Creating a custom map

To create a custom map, in the **Config (Setup)** window, complete the following steps:

1. From the navigation tree, select **Maps**.
2. In the **Maps** window, click **New**.
3. In the **Map Configuration** pane, enter a name and description for the map.
4. Click **Map Image** to upload a graphic file of the map you want to use.

   Note: To improve the response time, use PNG or JPEG files.
5. From the Icon list, select an icon to represent the map.

   Note: You can also select a custom icon by clicking **Add Icon...**.
6. Associate items to the map, by selected them from the **Available Items** list and dragging them onto the map.
7. Click **Apply**.

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 87. For information on the functionality of the **Views** window, see Table 88.

Figure 60: Views window

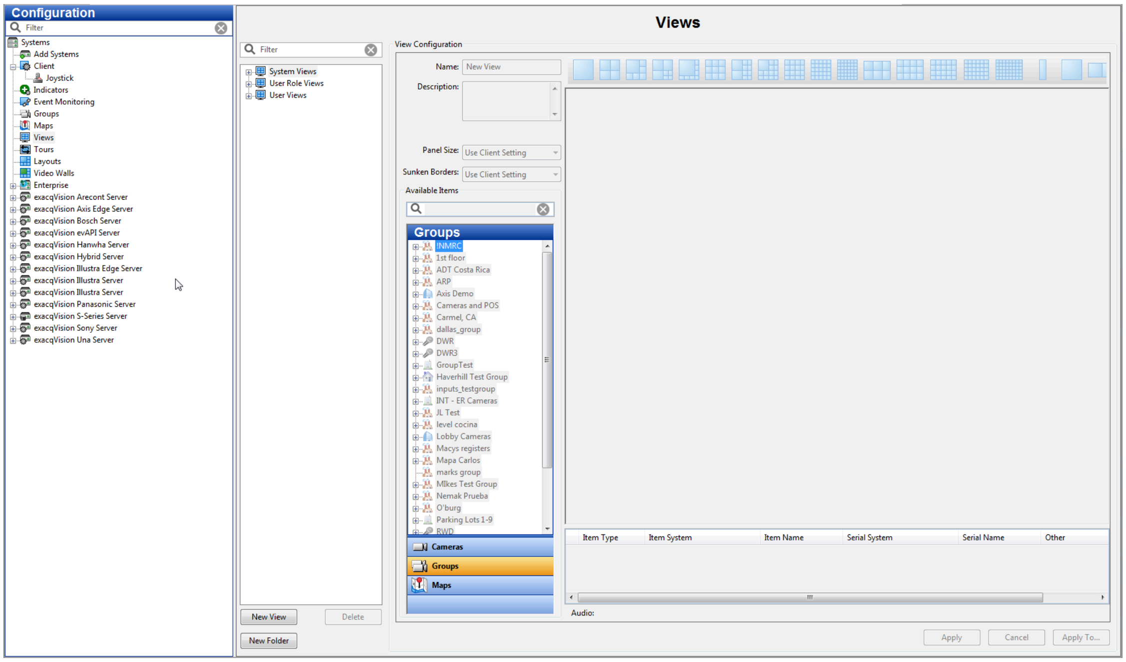


Table 87: View categories

Interface element	Description
System Views	Available to all users that connect to the server.
User Role Views	Only Full Admin users and Power Users can assign a user role view to other users. For more information, see Assigning a view. The user role views are not available in exacqVision Start.
User Views	Only Full Admin users and Power User can assign a view to other users. For more information, see Assigning a view. The User views option is not available in exacqVision Start.

Table 88: 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. You can add devices from the **Cameras**, **Groups**, or **Maps** lists.

5. **Optional:** To add an event monitor profile, right-click the video panel and select **Event Monitor**.
6. Click **Apply**.

Assigning a view

About this task:
In the **Views** window, you can assign a view to a user, a user role, or to a system. To assign a view, you must be an Administrator or a Power User.

To assign a view, complete the following steps:

1. In the **Views** window, from the View Category list, select the view that you want to assign.
2. In the lower-right corner, click **Apply to**.
3. From the **Apply to** dialog box, choose one of the following options:
   - Select **User**, and select a user.
   - Select **User Role**, and select a user role.
   - Select **System**, and select a system.
4. 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 89.

Figure 61: Tours window

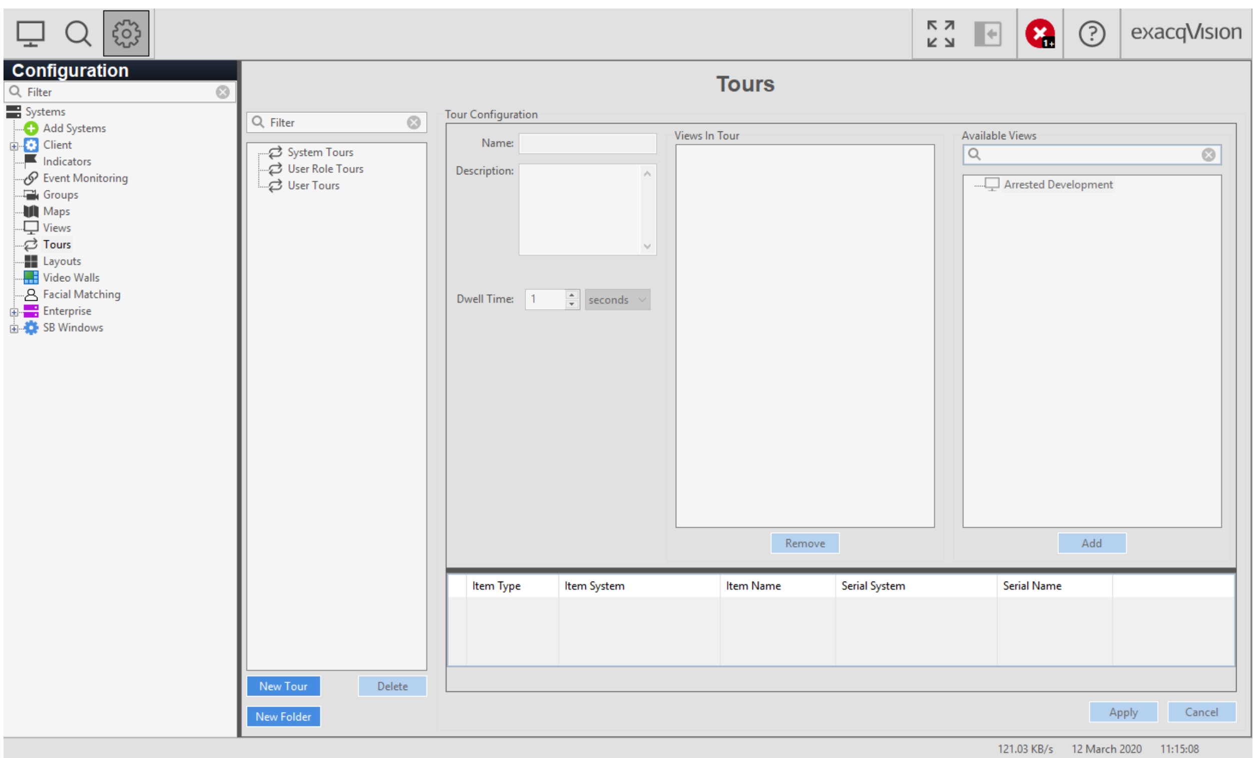


Table 89: Tours window

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**

   ⓘ **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.

   ⓘ **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 90.

Figure 62: Layout window

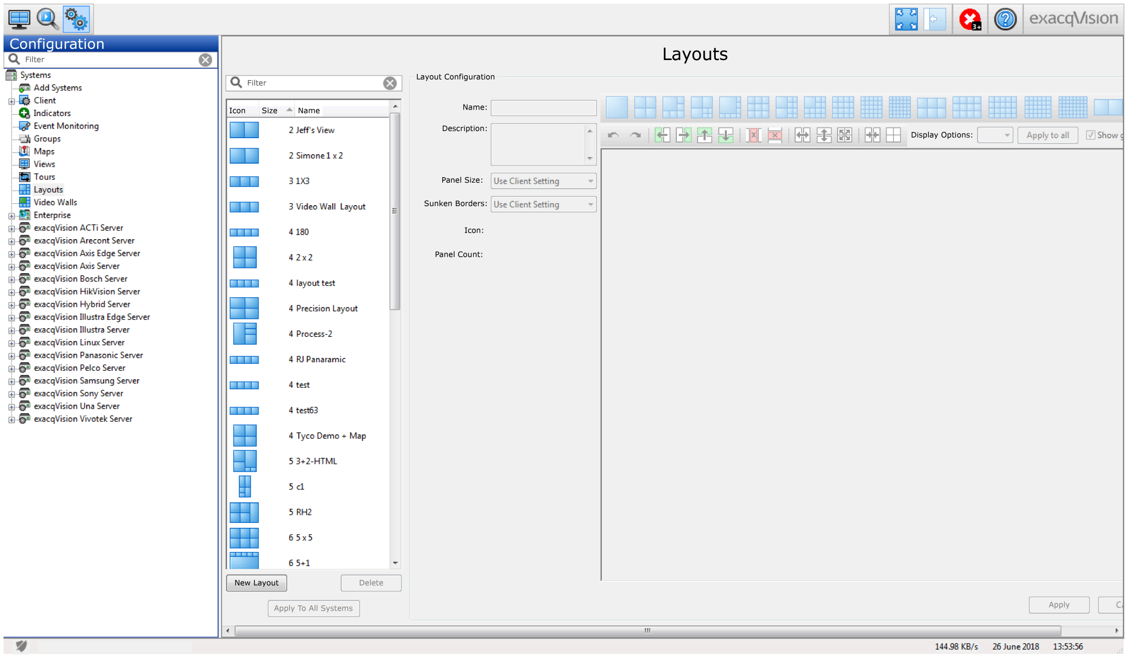


Table 90: Layout window

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.
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**.

Video Walls window

In the **Video Walls** window, you can create custom video walls so that a user can view multiple exacqVision applications in a window at the same time. For information on how to create a video wall, see Creating a custom video wall. For more information on the functionality of the **Video Walls** window, see Table 91.

Figure 63: Video Walls window

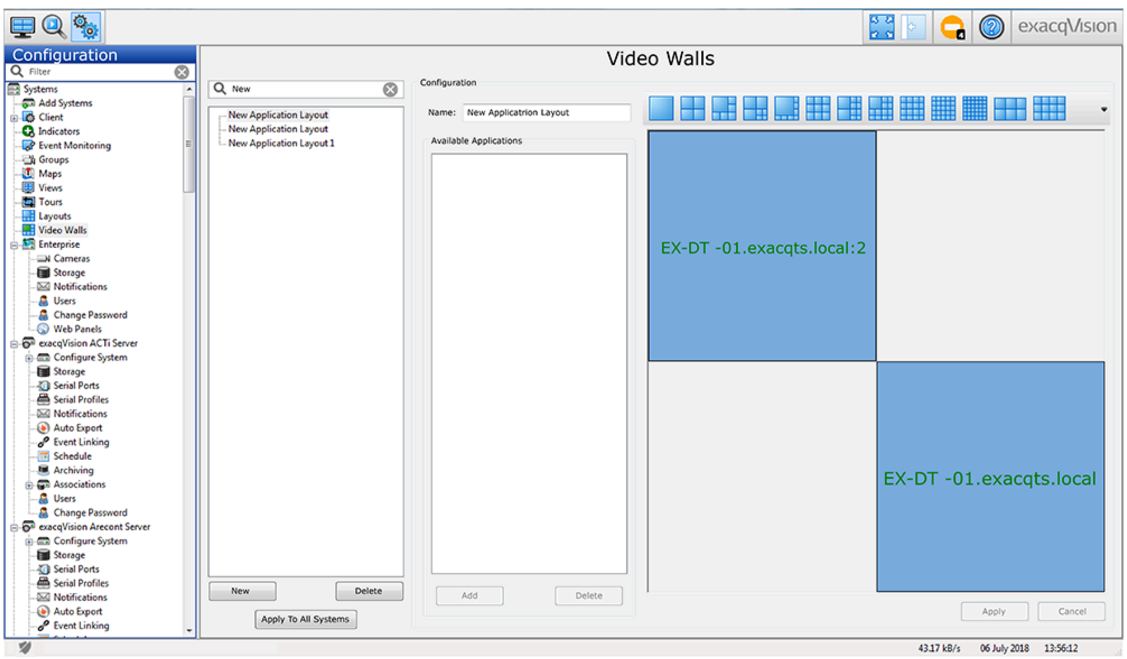


Table 91: Video Walls window

Interface element	Description
Video Wall layout list	Displays a list of custom application layouts.
Available Applications list	Displays a list of applications that are available to use when creating a custom application layout.

Creating a custom video wall

To create a video wall, in the **Config (Setup)** window, complete the following steps:

1. From the navigation tree, select **Video Walls**.
2. In the **Video Walls** window, click **New**.
3. In the **Configuration** area, in the **Name** field enter a name for the video wall.
4. In the upper part of the **Configuration** area, select a layout option.
5. From the **Available Applications** list, select and drag the applications into the panels.
6. Click **Apply**.

Deleting a video wall

To delete a video wall, in the **Config (Setup)** window, complete the following steps:

1. From the navigation tree, select **Video Walls**.
2. From the **Video Wall** layout list, select the layout you want to delete.
3. Click **Delete**.

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 92: 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**.

Table 92: Facial matching window

Interface element	Description
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

Use this feature to manually add one or more images of a person to the facial matching window.

Before you begin:
Save one or more images of the person on your local 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, choose one of the following options:
   - **None**
   - **Person of Interest**
   - **Guest**
   - **Loyalty Customer**
   - **Employee**
   - **Trespasser**
5. Click **Add Image** and browse to the image that you want to register.
   You can add more than one image.
6. Click **Apply** to register the person in the **Persons** list.

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.
4. Click **Pause** on the video when you want to register a face.
5. Select **Manual Registration** in the toolbar.
6. Click the **Person** icon
   Choose one of the following options:
   a. Click the **Add a new Person** to open the **Register as** dialog box, to register a new person.
      i. In the **Register As** dialog box, select a **Classification** option.
      ii. If registration is successful, select **Navigate to Facial Matching page**to record further details. If registration is not successful, complete the search and identify the face again.
   b. Click the **Add to Existing Person** button to update an image for an existing registered

person.

i. In the **Persons** list, select the user.

ii. From your local system, select the image that you want to upload. Click **Select**.

iii. Click **Apply**.

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 93.

Figure 64: System Information window

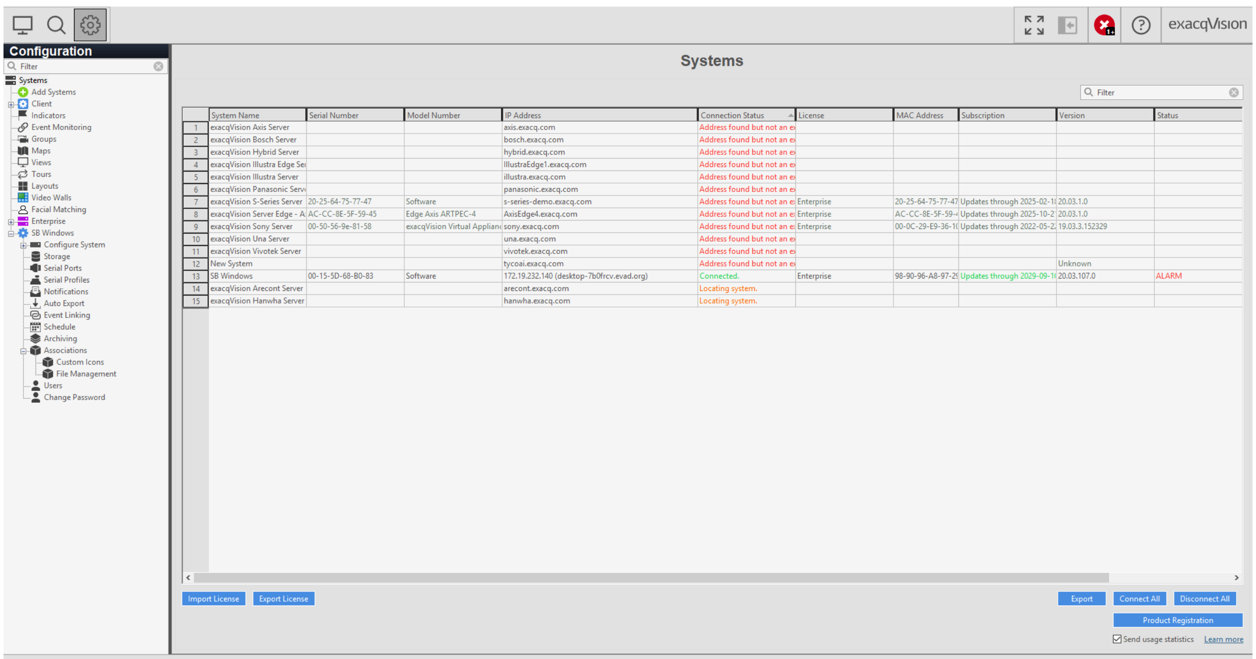


Table 93: System Information window

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.

Table 93: System Information window

Interface element	Description
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**.
Login History tab	Displays the log history of the system's users. The **Login History** tab is not available in exacqVision Start.
	To display the log history, select a start date and time, and an end date and time, and then click **Search**.
	To save the log history as a separate log file, click **Export**.
	To view the **Login History** tab, you must connect to a compatible system.
Audit Trail tab	Displays a list of actions that were performed on the system.
	To display the **Audit Trail** list, select a start date and time, and an end date and time, and then click **Search**. The **Audit Trail** tab is not available in exacqVision Start.
	To apply a time limit to the number of days you want the system to save an action, select the number of days from the **Maximum Days Storage** list, and then click **Apply**.
	To view an action in XML, double-click the entry in the Displaying records list.
	To view the **Audit Trail** tab, you must connect to a compatible system.
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 and 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**.

Navigation views and filtering using metadata

To refine what you view in the navigation panel, use metadata to dynamically filter and apply different metadata based filters. In the **Live** or **Search** window, you can filter by system or camera metadata values.

Figure 65: Navigation panel in the Live window

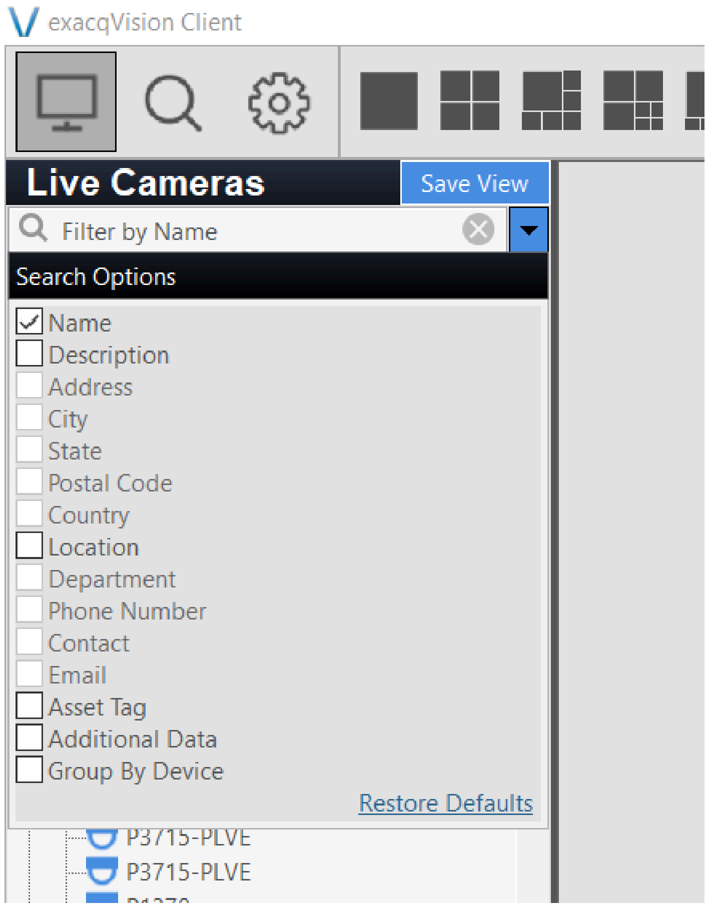
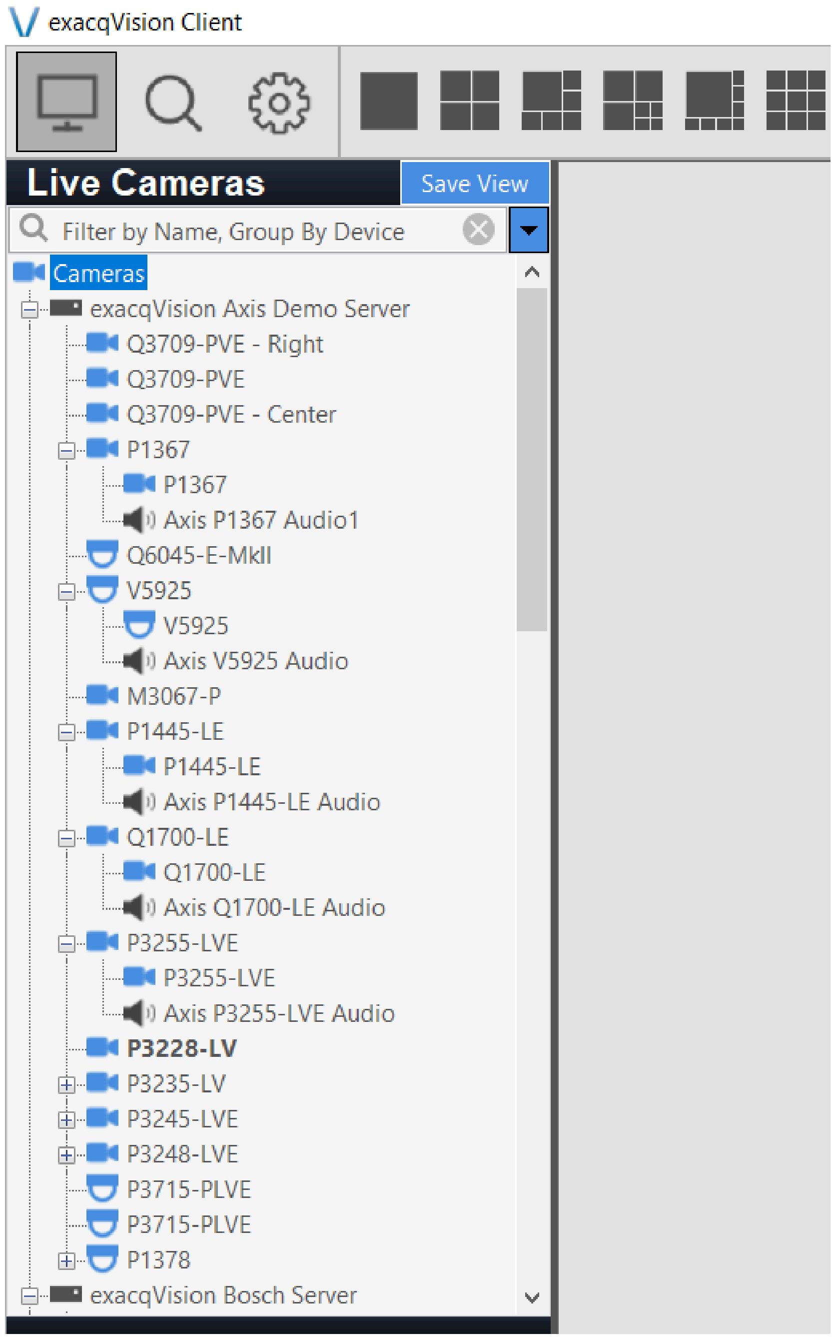


Figure 66: Cameras filtered by name and grouped by device



You add system metadata on the **System** tab in the **Configure System** window. See System tab for details. Similarly, you add camera metadata on the **Display** tab in the cameras **Settings** window. See Display tab for details.

Enabling and filtering navigation views

Before you begin:
To select and filter using metadata, you must first add metadata in the **Configure System** window or in the camera's **Settings** window.

To filter using metadata, in the **Live** or **Search** window, complete the following steps:

1. In the **Navigation** panel, select the down arrow next to the **Filter by *Name*** field.
2. From the **Search Options**list, select one or more filter check boxes (Name, Description, Address, City, State, Postal Code, Country, Location, Department, Phone Number, Contact, Email, Asset Tag, Additional Data or Group By Device).

   ⓘ **Note:** The new filters you select are assigned to the **Filter by** field in the **Navigation** panel. The default value is *Name*. To restore this value, click **Restore Defaults**.
3. In the **Navigation** panel, enter the value to filter by in the **Filter by** field.

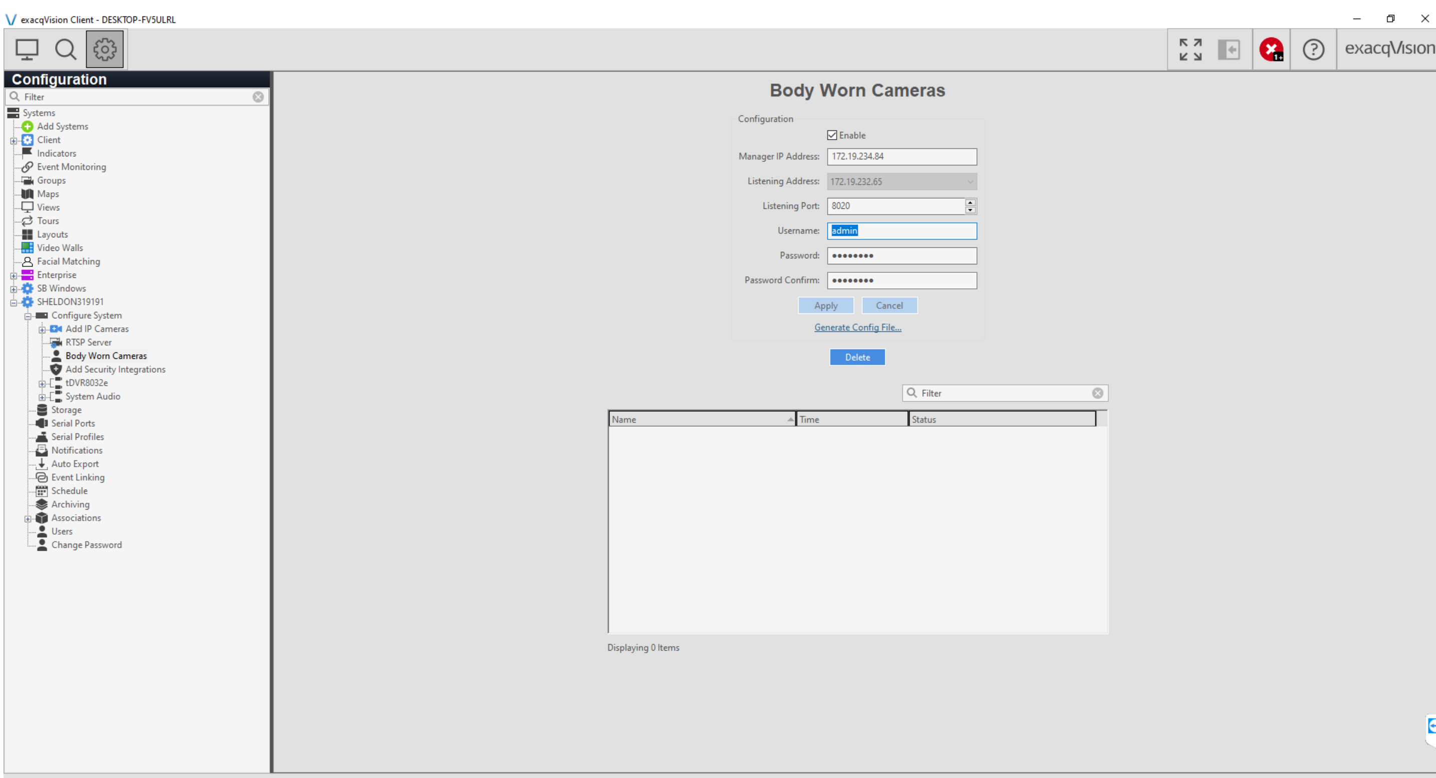
   Example:
   For example, if you select to filter by **Additional Data**, then you can enter a value such as `fan` to display only cameras that contain this value in the **Navigation** panel.

   Example 2: If you select **Group by Device**, audio streams will automatically pair with the connected camera in the tree.

Body Worn Cameras window

In the Body Worn Cameras window, you can configure Axis Body Worn Cameras. For more information about how to configure a body worn camera, see Configuring Axis Body Worn Cameras.

Figure 67: Body Worn Cameras window



Configuring Axis Body Worn Cameras

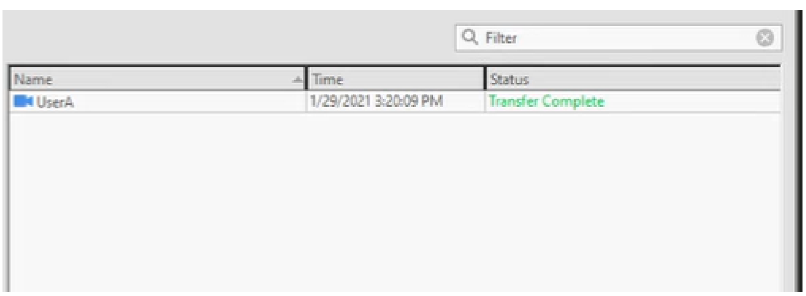
About this task:
Exacq supports Axis Body Worn Cameras. Users registered in the Axis Body Worn Manager will appear under Name in the Body Worn Cameras window. As the camera sends information to Exacq, the Time and Status columns will be populated with relevant information. To configure body worn cameras on your system, complete the following steps:

1. From the **Configuration**page, under **Configure System**, click **Body Worn Camera**.
2. Select the **Enable** check box.
3. In the **Manager IP Address** box, enter the IP address of the body worn manager.
4. From the **Listening Address** list menu, select the IP address.
5. In the **Listening Port** box enter the port number.
6. In the **Username**, **Password** and **Password Confirm** fields, enter your credentials for the Body Manager.
7. Click **Apply**. Your details are sent to the server and a JSON configuration file is generated.
8. The **Save Config** window appears with the created configuration file visible within. Click **Save**.
9. The **Next Steps** dialog box appears. Open the generated configuration file and replace the placeholder `WSUserName` and `WSPassword` strings with the credentials set during configuration.
10. Upload the file to the Axis Body Worn Manager and delete the file from your machine.

User details in Body Worn Cameras window

Users registered in the Axis Body Worn Manager will appear under Name in the Body Worn Cameras window. As the camera sends information to Exacq, the Time and Status columns will be populated with relevant information.

Figure 68: User details in Body Worn Cameras window



You can search for the users in the **Search** window. For more information, see Search window overview.

Live window

Live window overview

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

- View and manage your cameras, groups, maps, and websites.
- Bookmark live video.
- Send and receive information and audio to and from other client systems.
- 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.

   Note: Cameras that you configure for multistreaming display in the navigation tree with a yellow star. For more information on multistreaming, see Multistreaming.

Functions of the Live window

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

Table 94: Live window icons

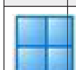
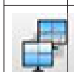
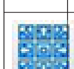
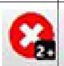
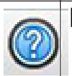
Icon	Name	Description
	**Layout**	You can use the **Layout** icons to change the layout of the video panels. For more information, see Video panels.
	**Soft Trigger**	You can use the **Soft Trigger** icon to open the **Soft Triggers** window that displays the status of soft triggers. For more information see, Soft Triggers window.
	**Video Push**	You can use the **Video Push** icon to open the **Video Push** window where you can send views and other items to another exacqVision system. For more information, see VideoPush window.
	**2 Way Audio**	You can use the **2 Way Audio** icon to open the **2 Way Audio** window where you can receive and send audio. For more information, see 2-Way audio window.
	**Bookmark**	You can use the **Bookmark** icon to create a bookmark for live video. For systems with an Enterprise license, the **Create Case** icon replaces this icon.
	**Create Case**	You can use the **Create Case** icon to create a multiple of bookmarks called a case. The **Create Case** icon is available only in systems with an Enterprise license.
	**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.

Table 94: Live window icons

Icon	Name	Description
	**Navigation**	You can use the **Navigation** panel icon to hide or expand the Navigation tree.
	**Indicators**	You can use the **Indicators** icon to open a list of tips, errors and warnings for the system's servers.
	**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 95: 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.

Viewing a group

About this task:
In the **Live** Window, you can view groups of cameras and devices from a multiple of servers. For information on how to create a group, see Creating a new group.

Note: The Groups feature is not available in exacqVision Start.

To view a group, complete the following steps:

1. In the **Live** window, click Groups.
2. From the navigation tree, double-click the first camera in a group.

   Note: If the video panel layout contains more panels than there are cameras in a group, the first cameras from the next group in the list display in the remaining panels.

Viewing auto groups

Auto groups are automatically created when metadata categories for either systems or cameras have identical values. For example, the **State:*Indiana*** auto group is created when more than one camera has *Indiana* as a value for the state category.

About this task:
In the **Live** Window, a camera or system can be present in more than one auto group depending on the metadata categories you assign.

Note: The auto groups feature is not available in exacqVision Start.

To view an auto group, complete the following steps:

1. In the **Live** window, click **Groups**.
2. In the **Navigation** panel, expand **Auto Groups**.

Creating a group from an auto group

You can create a group from an auto group.

To create a group from an auto group, complete the following steps:

1. In the **Live** window, click **Groups**.
2. In the **Navigation** panel, expand **Auto Groups**.
3. Select the auto group, right-click, and then select **Create Group**.
4. In the **Groups** window, click **Apply**.

Viewing a map

About this task:
In the **Live** window, you can view a map of a location or floor plan, and any cameras that you associate with the map. You can also view and activate soft triggers and alarms that you link to the map. Any server that has a camera or device linked to the map can access the map. Camera icons on a map can have different colors. The colors represent the recording status of the device. For more information on what the colors represent, see Table 64 table. For more information on how to create a map and associate a camera, an alarm, or soft trigger with a map, see Maps window. For information on map viewing functions, see Table 96.

Note: The Maps feature is not available in exacqVision Start.

To view a map, complete the following steps:

1. In the **Live** window, click **Maps**.

2. From the navigation tree, drag the map into a video panel.

Table 96: Map viewing functions

Functions	Description
Opening a map and cameras	To open a map and the cameras associated with the map, select a **Layout** icon, and then from the navigation tree double-click the map’s name.
Opening associated cameras	To open a camera associated with a map, in the navigation tree click the camera and drag it into a video panel.
Activating a trigger or alarm	To activate a trigger or an alarm, double-click the trigger or **alarm** icon on the map.
Opening a child map	To open a child map, double click the child map’s icon in the upper-right corner of the video panel.
Opening a list of servers that can access the map	To open a list of servers that can access the map, in the video panel right-click the map and select **Properties**.

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**.

Creating a bookmark in the Live window

About this task:
In the **Live** window, you can create a bookmark for live video. For systems with an Enterprise license, you can create a multiple of bookmarks called a case. For more information on bookmarks and cases, and on how to access them, see Bookmarks.

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

1. Ensure that the cameras that you want to bookmark are displaying in the video panels.
2. From the toolbar, click the **Create Bookmarks** icon.

   Note: In a system with an Enterprise license, the **Create Case** icon replaces the **Create Bookmarks** icon.

3. In the **Live Case** window, enter a name for the bookmark.
   When you want to end the bookmark, click **Stop Recording**. If you select another camera while the system is bookmarking the cameras in the video panels, the system records the new camera. To access the live video bookmark, see Performing a bookmark search.

VideoPush window

You can use the **Video Push** window to send views, layouts, video walls, groups, cameras, tours, maps, profiles, and entire systems to another exacqVision client on the same network. To send an item to a public-view monitor or a video wall, you must configure the receiving exacqVision client to run when you start the system. You can activate this option when you first install the client software. On the toolbar, click the **Video Push** icon in the **Live Page** or the **Search Page** to open the **Video Push** window. For information on the functionality of the **Video Push** window, see Table 97.

Note: The VideoPush feature is available only in exacqVision Enterprise.

By default, power users and full administration users can use VideoPush. For all other users, you must grant them access using the **Custom User Privileges** list in the **Users** window. For more information, see Users window.

Figure 69: VideoPush window

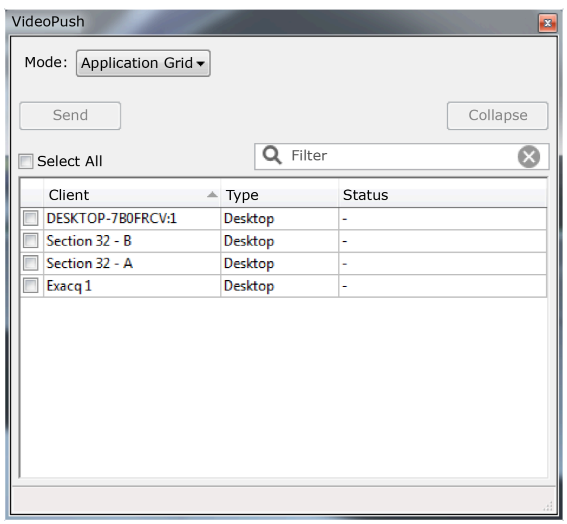


Table 97: VideoPush window

Interface element	Description
Mode list	To send an item, in the **Mode** list, select the **Application Grid** or the Video wall of your choice.
Client list	Displays a list of the available clients that you can send items to using VideoPush.
	To receive an item using the VideoPush feature, the receiving exacqVision client must be on the same network as the sender, and must select the **Enable Receiving Display** check box in the **Client** window. For more information, see Client window.
	To send an item in full-screen mode, right-click the exacqVision client from the **Client** list, and then select **Push Full Screen**.
Status list	Displays information about whether the VideoPush action was successful, and indicates how many items the exacqVision client receives successfully. If the receiving exacqVision client is not connected to a system associated with one or more of the items being sent, the client cannot receive the item.
Collapse button	Reduces the size of the **Video Push** window so that you can see the video panels in the **Live** window.
	To reduce the size of the **Video Push** window click **Collapse**. All of the exacqVision clients that you select in the **Client** list before you click **Collapse** remain selected.
Send button	Sends items to other exacqVision clients. To send an item to another exacqVision client, select a client from the **Client** list and then click **Send**.

Sending information using the VideoPush window

To send information using the **Video Push** window, in the **Live** window, complete the following steps:

1. In the toolbar, click the **Video Push** icon.
2. Choose one of the following options:
   - In the **Mode** list, ensure that you select the **Application Grid** and then select the target client or clients from the **Client** list.
   - In the **Mode** list, click the video wall layout that you want to view. From this layout, select the application that you want to send.
3. Click **Send**.

   Note: Alternatively, from the **Video Push** window, you can drag and drop the video wall to another client. If the information is sent successfully, a brief message displays in the lower-left corner of the **Live** window's status bar. The information appears in the target client's navigation tree. To return to the task you were doing, click the Back Arrow icon from the toolbar.

PTZ cameras

A Pan-tilt-zoom (PTZ) camera is a camera that you can physically adjust remotely. You can control a PTZ camera with or without a joystick. To control a PTZ camera with a joystick, see Joystick window. To control a PTZ camera without a joystick, 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 98.

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 98.

ⓘ **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 98: 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**.

ⓘ **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.

2-Way audio window

You can use 2-Way audio to receive and send audio. On the **2-Way Audio** window, you can send audio from a camera or device to another system or device through an audio output connector. To open the **2-Way Audio** window, in the **Live** window click the **Audio** icon in the toolbar.

Note: The **2-Way Audio** window is not available in exacqVision Start.

Sending and receiving audio

To send audio in the **2-Way Audio** window, complete the following steps:

1. In the **Live** window, click the **Audio** icon in the toolbar.
2. **Optional:** To display only the audio outputs from servers associated with the cameras you are currently displaying, select the **Filter relevant to live panel** check box.
3. Choose one of the following options:

   - To send audio to all available outputs in the **Output** list, click **Talk**.
   - To send audio to an individual output, from the **Output** list click **Talk**.

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 99.

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 99.

Figure 70: exacqReplay window

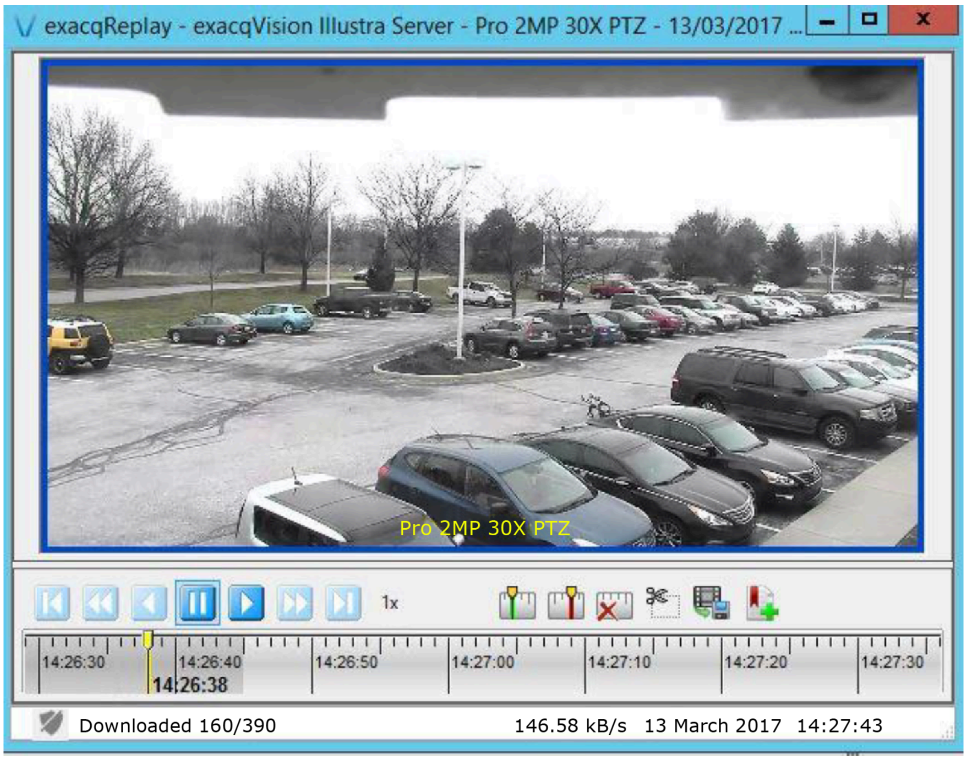


Table 99: exacqReplay video controls

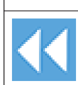
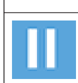
Icon	Description
	Plays video backwards one frame at a time
	Rewinds the video
	Rewinds the video quickly
	Pauses the video
	Fast-forwards the video

Table 99: exacqReplay video controls

Icon	Description
	Fast-forwards the video quickly
	Fast-forwards the video one frame at a time

Event Monitoring

In the **Live** window, you can use the Event Monitor feature to monitor events and set event triggers to activate when events occur. If you configured an event profile to display an **Event Monitoring** list, after you active the Event Monitor feature the list displays below the video panel where you want to monitor the event. When an event occurs, the event automatically displays in the list until you acknowledge the event or until the timeout range expires.

ⓘ **Note:** If you configure an event profile in Virtual Matrix mode, the **Event Monitoring** list does not display.

For more information on the **Event Monitoring** list functions, see Table 100. To create an event profile, see Creating an event monitoring profile.

ⓘ **Note:** The Event Monitor feature is not available in exacqVision Start.

Table 100: Event Monitoring list functions

Function	Description
Replaying an event	To replay an event, click the blue **Refresh** icon.
Acknowledging an event	To acknowledge an event and remove it from the list, select the red **Cancel** icon.
Removing all events	To remove all events from the list, click **Clear Shown**.
Stop monitoring an event	To stop monitoring an event, right-click the video panel and select **Disable**.

Monitoring events in the Live window

To monitor an event in the **Live** window, complete the following steps:

1. In the **Live** window, right-click the video panel where you want to monitor an event, and then select **Event Monitor**.
2. From the **Profile** list, select an event profile.

   ⓘ **Note:** An orange border displays around the video panel you want to monitor. The video does not display until an event is triggered.

Soft Triggers window

In the **Soft Triggers** window, you can activate or deactivate soft triggers for events that you create in the **Event Linking** window. To open the **Soft Triggers** window, in the **Live** window click the **Soft Trigger** icon from the toolbar. For information on the functionality of the **Soft Trigger** window, see Table 101.

Figure 71: Soft Triggers window

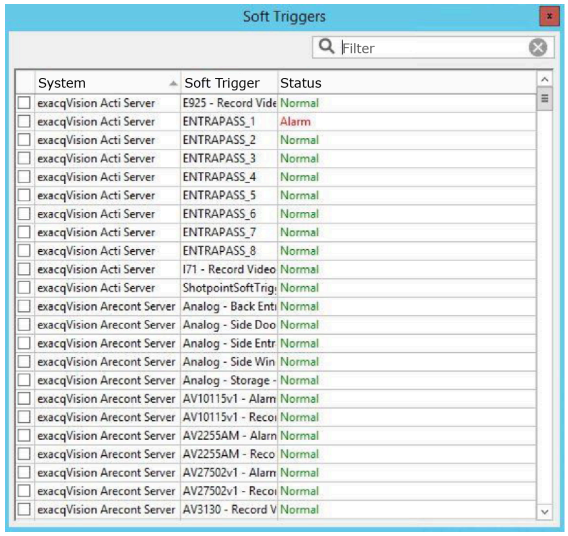


Table 101: Soft Trigger window

Interface element	Description
Soft Trigger	Displays a list of soft triggers that activate the events you create in the **Event Linking** window.
	To activate a soft trigger, select the soft trigger's check box.
	To deactivate a soft trigger, clear the soft trigger's check box.
Status	**NORMAL** indicates that the soft trigger is not active. **ALARM** indicates that the soft trigger is active.

Search window

Search window overview

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

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

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 102: Search window icons

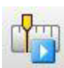
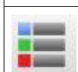
Icon	Name	Description
	**Timeline Search Mode**	You can use the **Timeline Search Mode** icon to search items using a specified time range. For more information, see Timeline search.
	**Thumbnail Search Mode**	You can use the **Thumbnail Search Mode** icon to scan video from a single camera and capture 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.
	**Report Mode**	You can use the **Report Mode** icon to create reports on recordings, event linkages, and analytic data. When you run a report, you can display the graphical information as a pie chart, bar chart, or line chart. For more information, see Report mode in the Search window.
	**Smart Search**	You can use the **Smart Search** icon to search for occurrences of motion. For more information, see Smart 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.

Table 102: Search window icons

Icon	Name	Description
	**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.
	**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.
	**Direct Search**	You can use the **Direct Search** icon to connect the exacqVision client directly to an archive without connecting to the exacqVision server. For more information, see Direct search.
	**Show/Hide Legend**	Shows and hides the timeline legend.
	**Show/Hide Analytic Overlays**	Shows and hides analytic overlays .
	**Show/Hide Keywords and Serial Data**	Shows and hides the Keywords pane.
	**Video Push**	Opens the **Video Push** window. For more information, see VideoPush in the Search window.

Timeline search

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

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 103.

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 103: 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 104.

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 104: 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 105: 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.

Searching for recordings archived on cloud drive

Use the search feature to search and retrieve recordings that are in cold storage on Cloud Drive.

1. From the main menu, click the **Search** icon.
2. Select the cloud **Server**.
3. Select the camera.
4. In the **Search range** select the **Start Time**, **End Time** and **Client time** for the recording.
5. Click **Search**.
   Right-click the gray bar at the bottom of the timeline to view the tooltip that shows that the recording is in cold storage in the Cloud Drive.
6. Click **Play** to display the following message.

   ```
   Video is currently in Cold Storage and will take time to retrieve. Would you
   like to request it now?
   ```
7. Click **Retrieve**. A message displays over the **Snowflake** icon to prompt you to select the time markers for the cold storage request.
8. After you place the markers, press the **Snowflake** icon to retrieve the cold storage video from Cloud Drive. Retrieving the recording can take a number of hours.
9. To view the status of the request, on the **Search** menu, click the **Cold Storage Requests** icon.
   When the **Status** is **Completed** the recording is available to view.
10. Click **View Video** to view the recording.
    You can also view the recording from the camera settings page as long as the camera has a subscription to Cloud Drive. A notification that the recording is available for viewing displays when the recording is retrieved from cold storage.
    - Click the link in the message to view the recording

Smart search

You can use a smart search to search for occurrences of motion in specific areas of a camera's viewpoint. You can only perform a smart search in 1x1 video panel layout.

Note: The Smart Search feature is not available in exacqVision Start.

Performing a smart search

To perform a smart search, complete the following steps:

1. From the toolbar, click the **Smart Search** icon.

   Note: For the **Smart Search** icon to be active, ensure that you select only one camera and that the video is downloading.
2. Left-click the video panel and drag the cursor until you have drawn a box over the area you want to search.
3. To adjust the motion sensitivity in the **Smart Search** window move the **Sensitivity** slider to the right.

   Note: Some cameras and server hardware also support a **Use Embedded Data** option. This option can increase the speed of smart searches by obtaining and using motion values when video is recording.
4. Click **OK**, and then click **OK** to view the frames in the timeline. When the smart search is complete, the system displays the number of frames that contain motion from the selected area.

ⓘ **Note:** The smart search frames display in orange in the timeline.

When you play back the video, the video only plays the smart search frames.

Map search

You can use a map search to find video in cameras associated with a map. For information on how to upload a map image and create a custom map, see Maps window.

ⓘ **Note:** The Map Search feature is not available in exacqVision Start.

Performing a map search

To perform a map search, complete the following steps:

1. In the **Search** window, select **Maps**.
2. From the navigation tree, select the maps you want to search.

   ⓘ **Note:** When you select a map, you also select all its child maps and cameras associated with the map. To remove child maps or cameras, clear them in the navigation tree.

3. In the **Search Range** area, select a date and time to start and end the search.
4. Click **Search**.

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.

   ⓘ **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**.

Event search

You can use an event search to narrow the search to a specific event that you previously configured in the **Event Linking** window. You can also use an event search to find video and audio that is associated with an event.

ⓘ **Note:** The event search feature is not available in exacqVision Start.

Performing an event search

To perform an event search, complete the following steps:

1. In the **Search** window, select **Events**.
2. From the navigation tree, select the events you want to search.
3. In the **Search Range** area, select a date and time to start and end the search.
4. Click **Search**.
5. **Optional:** The red bars in the timeline indicate when video or audio was triggered to record. You can search for the video that the event belongs to by selecting the camera in the navigation tree and then conducting a search with that event.

VideoPush in the Search window

In the **Search** window, you can search for recorded video and send it to another exacqVision client using the VideoPush feature. For more information on VideoPush, see VideoPush window.

Sending video using VideoPush in the Search window

To send video using VideoPush in the **Search** window, complete the following steps:

1. In the **Search** window, perform a search.
2. From the toolbar, click the **Video Push** icon.
3. In the **Video Push** window, from the **Mode** list select an option. For more information, see VideoPush window.
4. Choose one of the following options:

   - **Send** Sends the entire video.
   - **Send Frame** Sends a still frame of the video.

Bookmarks

Bookmarks are video clips that you can permanently save and access easily with the exacqVision client. To access a list of the bookmarks you create, in the **Search** window select **Bookmarks**. For information on the functionality of the **New Bookmark** tab, see the following table.

ⓘ **Note:** The Bookmark feature is not available in exacqVision Start.

Table 106: New Bookmark tab

Interface element	Description
Go to bookmark after save check box	To view a bookmark immediately after you save it, select the **Go to bookmark after save** check box.
New Case... button	Creates a collection of bookmarks.

Creating a bookmark in the Search window

To create a bookmark in the **Search** window, complete the following steps:

1. In the **Search** window, click the **Bookmark** icon in the toolbar.
2. In the Timeline pane, select the **Start Bookmark** icon or the **End Bookmark** icon. A default bookmark clip appears.
3. Adjust the cursor lines to mark the start and end of the video clip you want to bookmark.

   ⓘ **Note:** The green cursor marks the beginning of the bookmark clip and the red cursor clip marks the end of the bookmark clip.

4. In the Timeline pane, click the **Create Bookmark** icon.
5. On the **New Bookmark** tab, enter a name and description for the bookmark.
6. Click **Apply**.

Performing a bookmark search

To perform a bookmark search, complete the following steps:

1. Choose one of the following options:

   - For a system with an Enterprise license, click **Cases**.
   - For a system with a Professional license, click **Bookmarks**.

2. From the navigation tree, select the bookmarks that you want to search.
3. In the **Search Range** area, select a date and time to start and end the search.

4. Click **Search**.

Performing a case search

About this task:
Systems with an Enterprise license can create cases in the **Live** window. For more information, see Creating a bookmark in the Live window.

To perform a case search, complete the following steps:

1. In the **Search** window, click **Cases**.
2. From the navigation tree, select the case that you want to search.
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. To deactivate the system from recording a keyword, see Deactivating keywords.

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

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.

   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 search

An analytic overlay represents an area where the camera identifies an analytic event, such as Object Entered, Object Exited, and Face Detection. You can use an analytic metadata search to search for events based on preconfigured analytics. To perform an analytic metadata search, see Performing an analytic metadata search.

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.
4. Click **Search**. The search results display on the right-side of the video panel.

Table 107: 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.

Facial matching options in the search window menu

Right clicking on a search result generates a pop up menu with several options including Properties, Save Image and Print Image. Depending on the contents of the selected analytics, additional menu options may be available:

- **Configure Face:** This option is available if a face is matched with a high confidence to an existing person. Selecting the Configure Face option opens the Facial Match window with the matched person highlighted.
- **Confirm Face:** This option is available if a face is matched with low confidence. Selecting the Confirm Face option auto-merges the face with the best match person.
- **Register as New Face:** This option is available if a face is not matched to an existing person. Selecting the Register Face option allows the user to specify a name and classification and register the face as a new person.

Report mode in the Search window

You can use the Report Mode to display information to help your organization analyse data stored from recordings, event linkages, and analytic data.

You can select the objects to report on from the Reports navigation tree which is organized into three major classes: **Recording**, **Event Linkages**, and **Analytics**. For more information on the reporting options available see Table 108.

Figure 72: Report Mode window

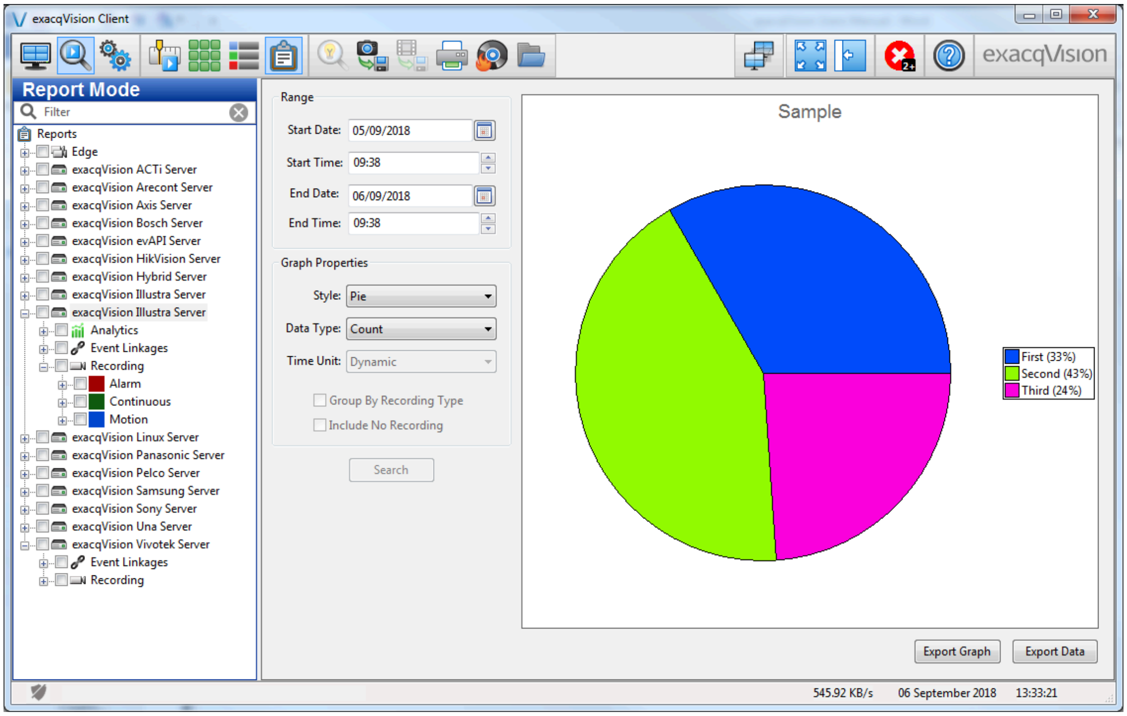


Table 108: Classification structure for reporting

Class	Type	Objects
Recording	Alarm	Cameras and Audio devices
		Serial devices for example, point of sale (POS) devices
	Continuous	Cameras and Audio devices
	Motion	Cameras
Event Linkages	Not applicable	Sources for event linkages
Analytics	Camera	Analytic types

Running and exporting a report

To run and export a report, complete the following steps:

1. In the **Search** window, click the **Report Mode** icon.
2. From the **Reports** tree, click the plus sign (+) next to the server name to expand and select the reporting options to choose from.
3. Click the plus sign (+) next to the required class.Drill down through the options to find the object or objects and select the relevant check boxes.
4. In the **Range** pane, select a start date and time, and an end date and time.
5. In the **Graph Properties** pane, select one or more of the following options:
    - From the **Style** list, select a chart type. The default graph is a pie chart.
    - From the **Data Type** list, select **Count** or **Duration**. To display the total number of occurrences, select **Count**. To display the period of time for all occurrences, select **Duration**. For bar and line charts, this option determines what is displayed on the y-axis of the graph.

- From the **Time Unit** list, select the required time interval. This option determines the time interval that is displayed on the x-axis of the graph. The **Time Unit** is not relevant for pie charts.
- Select the **Group By Recording Type** check box, to group the results by the selected recording type. Clear the **Group By Recording Type** check box to display the results for individual camera, audio, and serial devices.
- Select the **Include No Recording** check box, to show on the chart the time that no recording occurred.

6. Click **Search**.

   ⓘ **Note:** You can automatically update the graph, when related objects are selected or deselected from the tree. When you hover the cursor over any item on the graph, you can see summary information about that item.

7. **Optional:** To export the report, select one of the following options:

   - Click **Export Graph**.

     Select the folder in which to save the file, in the **File name** field enter the file name, and in the **Save as type** field select one of the following file formats, .jpg, .bmp, or .png. Click **Save**.
   - Click **Export Data**

     Select the folder in which to save the file, in the **File name** field enter the file name. In the **Save as type** field, the file format .csv is automatically selected. Click **Save**.

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.

   ⓘ **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.

   ⓘ **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**.

   ⓘ **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.

8. **Optional:** When generating .exe and .psx files, you are prompted to select an encryption method. In the **Encryption** window, select one of three encryption methods:
   - **None:** The files will be saved without encryption and will be readable by current and legacy versions of ePlayer.
   - **Default:** Default encryption is not password protected. A hard-coded key is used to encrypt or decrypt the ps/psi data.
   - **AES256GCM:** AES256GCM encryption uses a user password to encrypt or decrypt the ps/psi data.
9. Enter and confirm your password.
10. Click **Select** to confirm, or **Cancel** to exit.

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 109: 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.					

Table 109: QuickTime and AVI file export players

Video File Format	Windows Players		Linux Players		Mac Players	
	WMP [1]	VLC	MPlayer	VLC	QuickTime Player [2]	VLC
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
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 110.

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

Figure 73: Burn Disc window

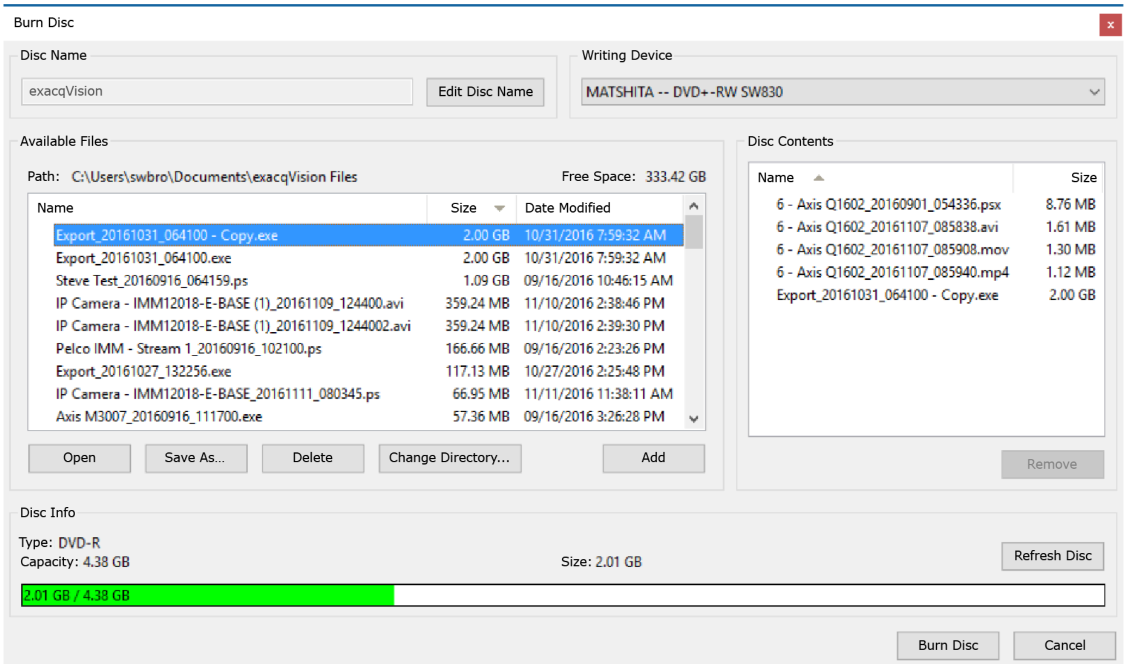


Table 110: Burn Disc window

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 capcity 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 111.

Figure 74: File Manager window

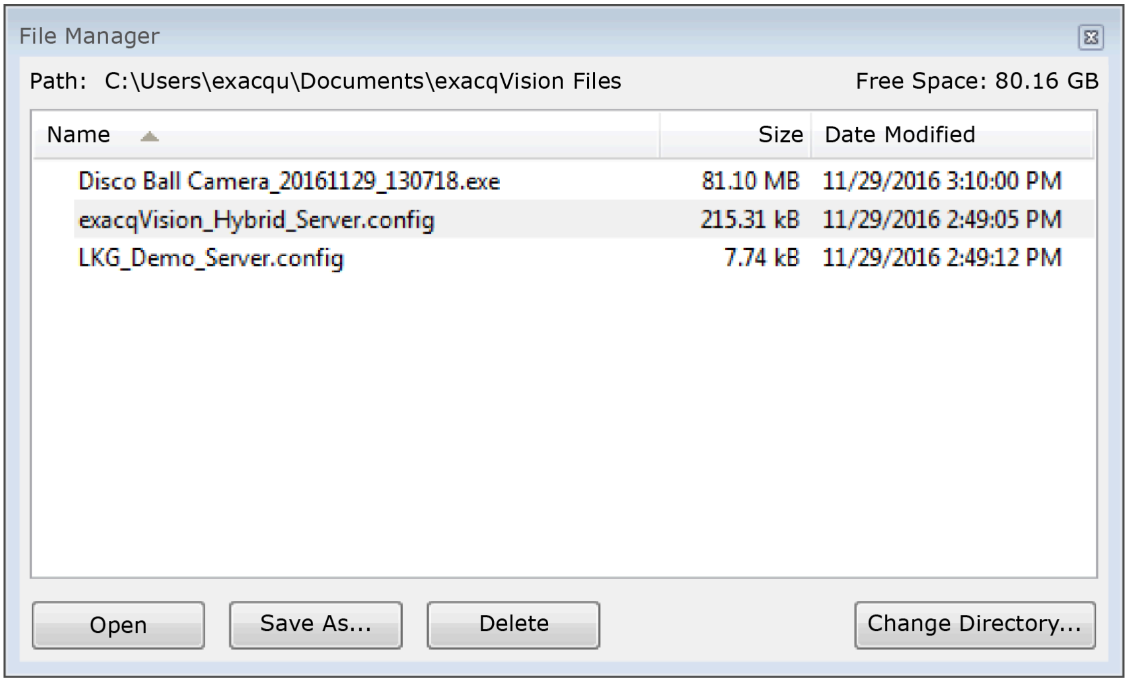


Table 111: File Manager window

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**.

Enterprise Management

Enterprise management overview

exacqVision Enterprise VMS software records surveillance video from thousands of IP camera models and displays video on Windows, Linux, or OSX client software.

Note: Enterprise management features are available only in exacqVision Enterprise.

Enterprise System window

In the **Enterprise System** window, you can send system configurations to other servers, manage outbound connections, activate the manual failover feature, and apply time services across the system.

Active Directory/LDAP tab

LDAP configuration is identical across a network or enterprise. On the **ActiveDirectory/LDAP** tab, you can load the configuration of one server and then send it to all the other exacqVision Enterprise servers. For more information, see Table 112 and Enterprise System window.

From the navigation tree, in the **Config Setup** window, select **Enterprise** to open the **Enterprise System** window.

Figure 75: Active Directory/LDAP tab in the Enterprise System window

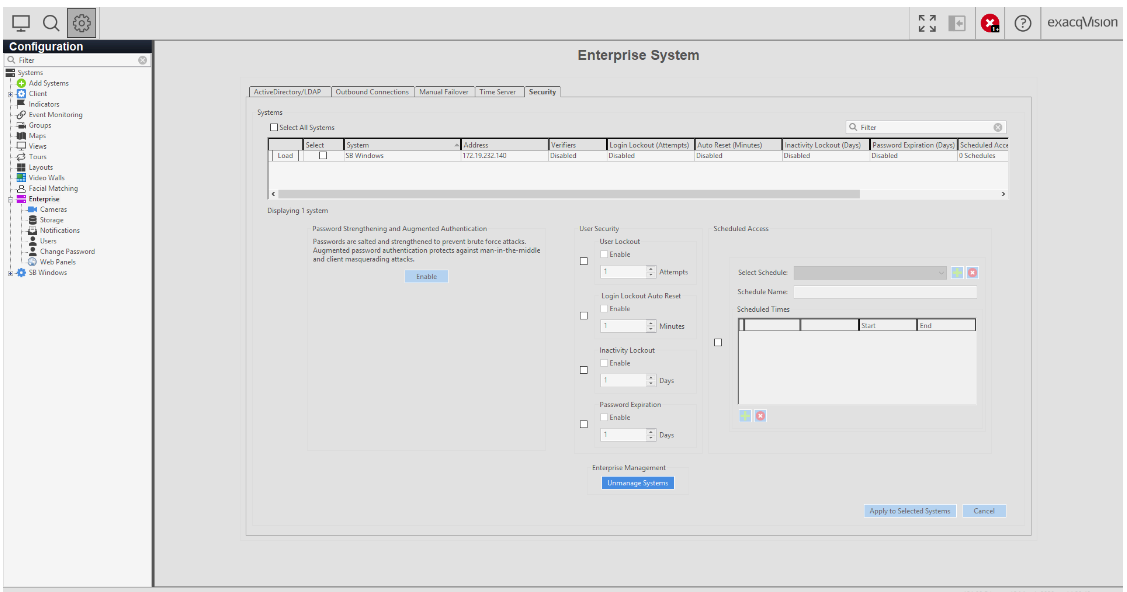


Table 112: Active Directory/LDAP tab in the Enterprise System window

Interface element	Description
Systems pane	Lists the exacqVision servers that have Enterprise licenses and that are available for LDAP configuration.
	To populate the fields in the Directory Service pane with the server’s LDAP configuration information, select the server and then click **Load**.
Directory Service pane	To send the configuration settings in the Directory Service pane to the Systems pane, select the check boxes next to each configuration area and then click **Apply to Selected Systems**.

Outbound Connections tab

On the **Outbound Connections** tab, you can manage the outbound connections configured for each server on the **Systems** window, and view the status of the connections. For more information, see Table 113 .

From the navigation tree, in the **Config Setup** window, select **Enterprise** to open the **Enterprise System** window.

Figure 76: Outbound Connections tab in the Enterprise System window

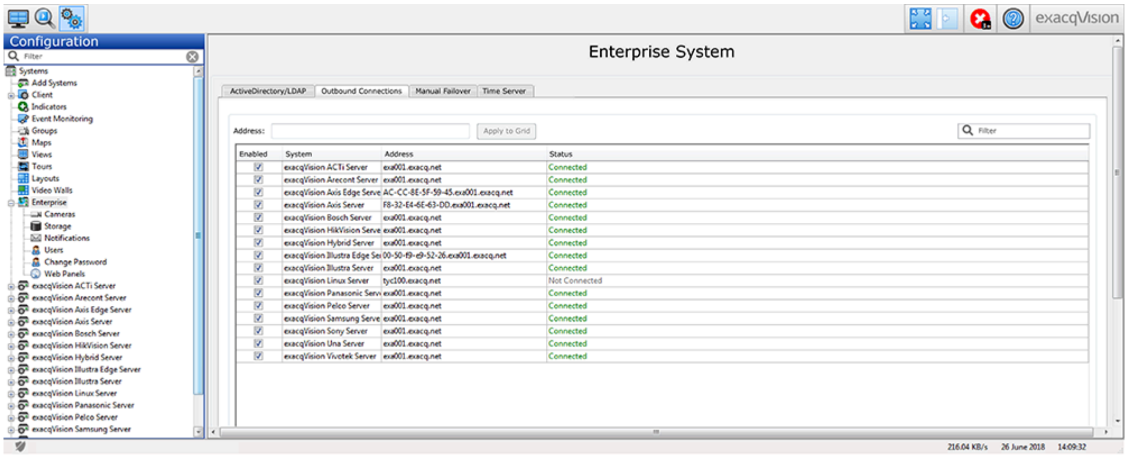


Table 113: Outbound Connections tab in the Enterprise System window.

Interface element	Description
System List	To enable a server's connection, select the **Enabled** check box.
	To disable a server's connection, clear the **Enabled** check box.
	To apply an address to a server, enter the address in the **Address** column of the system. If you enter a domain name, the exacqVision system automatically identifies the server.
Address field	To apply an address to all the systems in the **System** list, enter the address in the **Address** field and then click **Apply**.

Manual Failover tab

exacqVision Enterprise Manager is a failover function for exacqVision servers. You can configure exacqVision Enterprise Manager to automatically control this failover process across all the exacqVision servers it monitors. However, if exacqVision Enterprise Manager monitors the server but does not control the failover function for the server, you can apply failover in the **Manual Failover** tab in the **Enterprise System** window. For information, see Table 114.

Note: The **Manual Failover** tab displays if at least one server is configured for failover.

From the navigation tree, in the **Config Setup** window, select **Enterprise** to open the **Enterprise System** window.

Figure 77: Manual Failover tab in the Enterprise System window

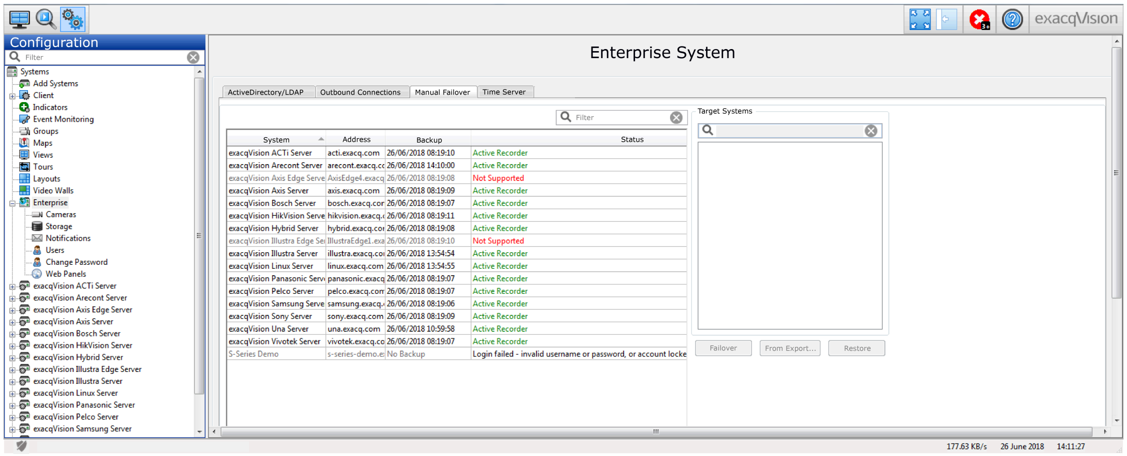


Table 114: Manual Failover tab in the Enterprise System window

Interface element	Description
System List	Lists the available servers for failover.
Target Systems pane	To apply a manual failover, select a server from the Target System pane and then click **Failover**.
	To restore the failover server, select a server from the Target System pane and then click **Restore**.
	To import a list of servers into the Target System pane, click **From Export...**.
Make Spare button	Restarts the server as a target for other servers to failover into.
Make Recorder button	Restarts the server as an exacqVision recorder.

Time Server tab

In the **Enterprise System** window, you can use the **Time Server** tab to view and apply time server and times services across the enterprise. Each server requires an Enterprise license to use the **Time Server** tab. For more information, see Table 115 .

From the navigation tree, in the **Config Setup** window, select **Enterprise** to open the **Enterprise System** window.

Figure 78: Time Server tab in the Enterprise System window

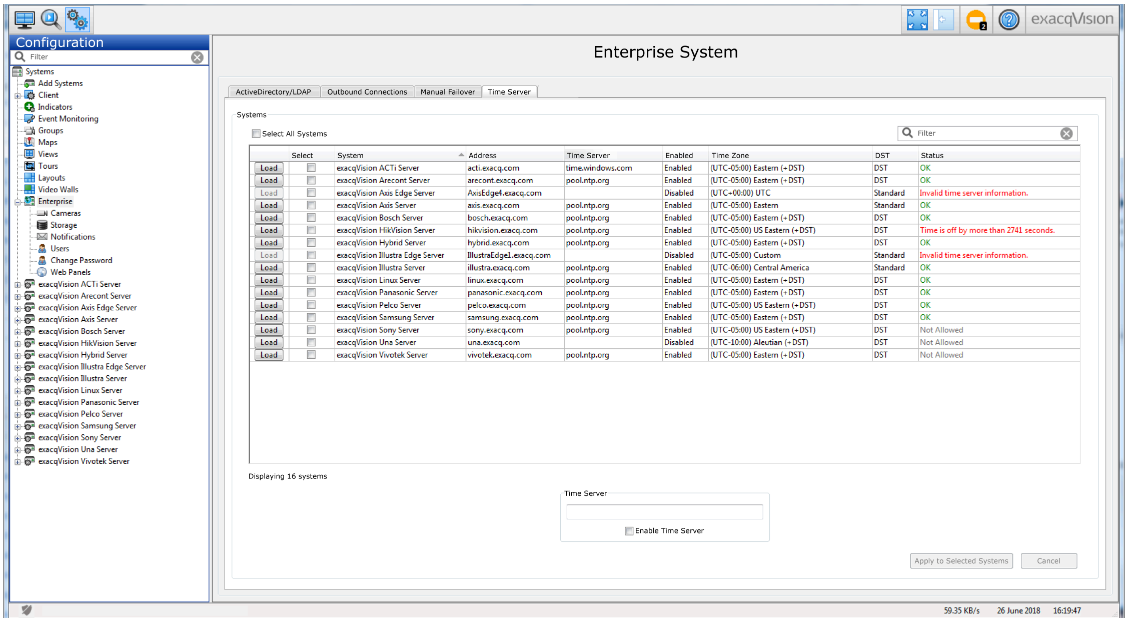


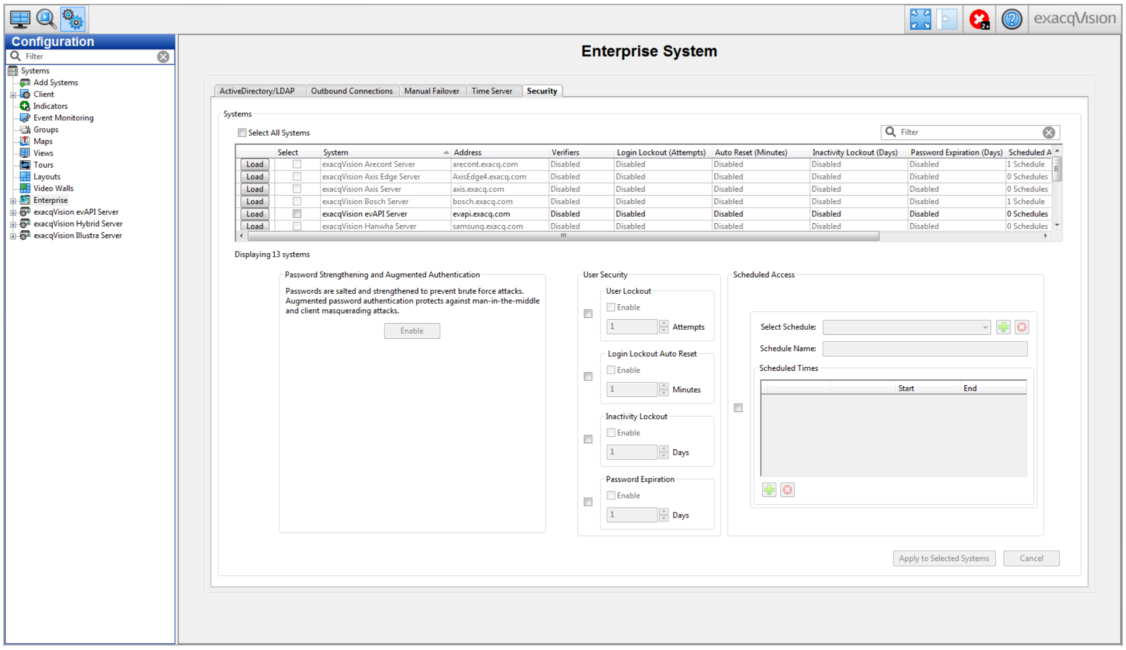
Table 115: Time Server tab in the Enterprise System window

Interface element	Description
System List	Displays a list of servers with Enterprise licenses in the system.
	To select all the servers in the system, select the **Select All Systems** check box.
	To apply a server’s time server settings to other servers, click **Load** next to the server, select the servers you want to apply the settings to and then click **Apply to Selected Systems**.
Time Server pane	Applies an internet or local network time server to the systems you select in the **Systems** list.
	To apply a time server to the systems you select in the **Systems** list, enter the time server in the **Time Server** field and select the **Enable Time Server** check box, then click **Apply to Selected Systems**.

Security tab

On the **Security** tab in the **Enterprise System** window, you can apply security settings, and modify access schedules for all the user accounts in a server.

Figure 79: Security tab in the Enterprise System window



Setting the user lockout attempts limit for a server

To set the user lockout attempts limit for a server, in the **Config Setup** window, complete the following steps:

1. From the navigation tree, select the **Enterprise**.
2. In the **Enterprise System** window, click the **Security** tab.
3. In the **User Security** pane, select the check box next to the **User Lockout** area.
4. Select the **Enable** check box in the **User Lockout** area.
5. From the **Attempts** list, select the number of password entry attempts to give the user before they are locked out of the system.
6. Click **Apply to Selected Systems**.

Setting the user lockout reset time for a server

To set the user lockout reset time for a server, in the **Config Setup** window, complete the following steps:

1. From the navigation tree, select **Enterprise**.
2. In the **Enterprise System** window, click the **Security** tab.
3. From the **Systems** list, select one or more server.
4. In the **User Security** pane, select the check box next to the **Login Lockout Auto Reset** area.
5. Select the **Enable** check box in the **Login Lockout Auto Reset** area.
6. From the **minutes** list, select how long you want a user to be locked out of the system before it resets.
7. Click **Apply to Selected Systems**.

Setting the inactivity lockout time for a server

To set the inactivity lockout time, in the **Config Setup** window, complete the following steps:

1. From the navigation tree, and select **Enterprise**.

2. In the **Enterprise System** window, click the **Security** tab.
3. From the **Systems** list, select one or more servers.
4. In the **User Security** pane, select the check box next to the **Inactivity Lockout** area.
5. Select the **Enable** check box in the **Inactivity Lockout** area.
6. From the **Days** list, select the number of days that a user must be inactive on the system before they are locked out of the system.
7. Click **Apply to Selected Systems**.

Creating a new access schedule for a server

To create an access schedule for a server, in the **Config Setup** window,complete the following steps:

1. From the navigation tree, select **Enterprise**.
2. In the **Enterprise System** window, click the **Security** tab.
3. From the **Systems** list, select one or more servers.
4. In the **Schedule Access** pane, select the check box next to the **Scheduled Times** area.
5. Click the **Plus** icon.
6. In the **Schedule Name** field, enter a name for the schedule.
7. Select the days, and the start and end time for when you want to give access to the user.
8. Click **Apply to Selected Systems**.

Releasing system management in Enterprise

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

Before you begin:
You need admin privileges to remove servers.

About this task:
To remove servers from enterprise system management, complete the following steps.

1. From the navigation tree, select **Enterprise**.
2. In the **Enterprise System** window, click the **Security** tab.
3. From the **Systems** list, select one or more servers.
4. Click **Unmanage Systems** to release systems from Enterprise Management.

Strengthening the password security on a server

To strengthen the password security on a server, in the **Config Setup** window, complete the following steps:

1. From the navigation tree, select **Enterprise**.
2. In the **Enterprise System** window, click the **Security** tab.
3. From the **Systems** list, select one or more servers.
4. In the **Password Strengthening and Augmented Authentication** pane, click **Enable**.
5. In the **Password** field, enter your password.
6. Click **Enable**.

   ⓘ **Note:** If you click **Enable**, you cannot reverse the change. exacqVision clients with an older software version cannot connect to the server until they upgrade the software.

Enterprise Cameras window

In the **Enterprise Cameras** window, you can view information about all the cameras in the servers that connect to exacqVision Enterprise Manager. For information, see Table 116.

From the navigation tree, in the **Config Setup** window, expand the **Enterprise** and select **Cameras** to open the **Enterprise Cameras** window.

Figure 80: Enterprise Cameras window

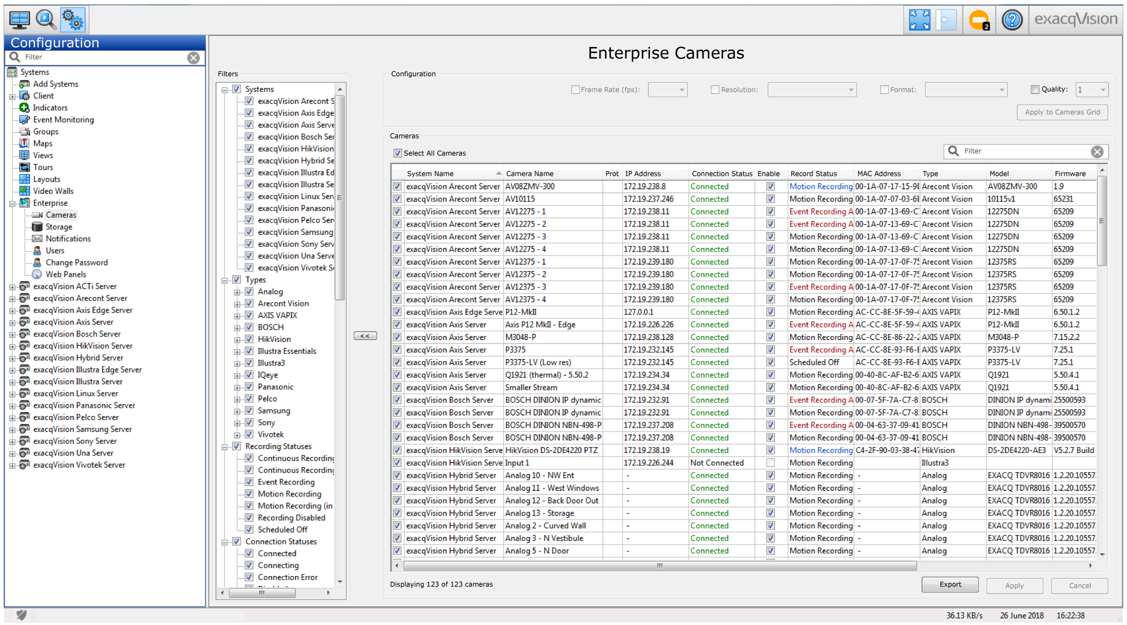


Table 116: Functions of the Enterprise Cameras window

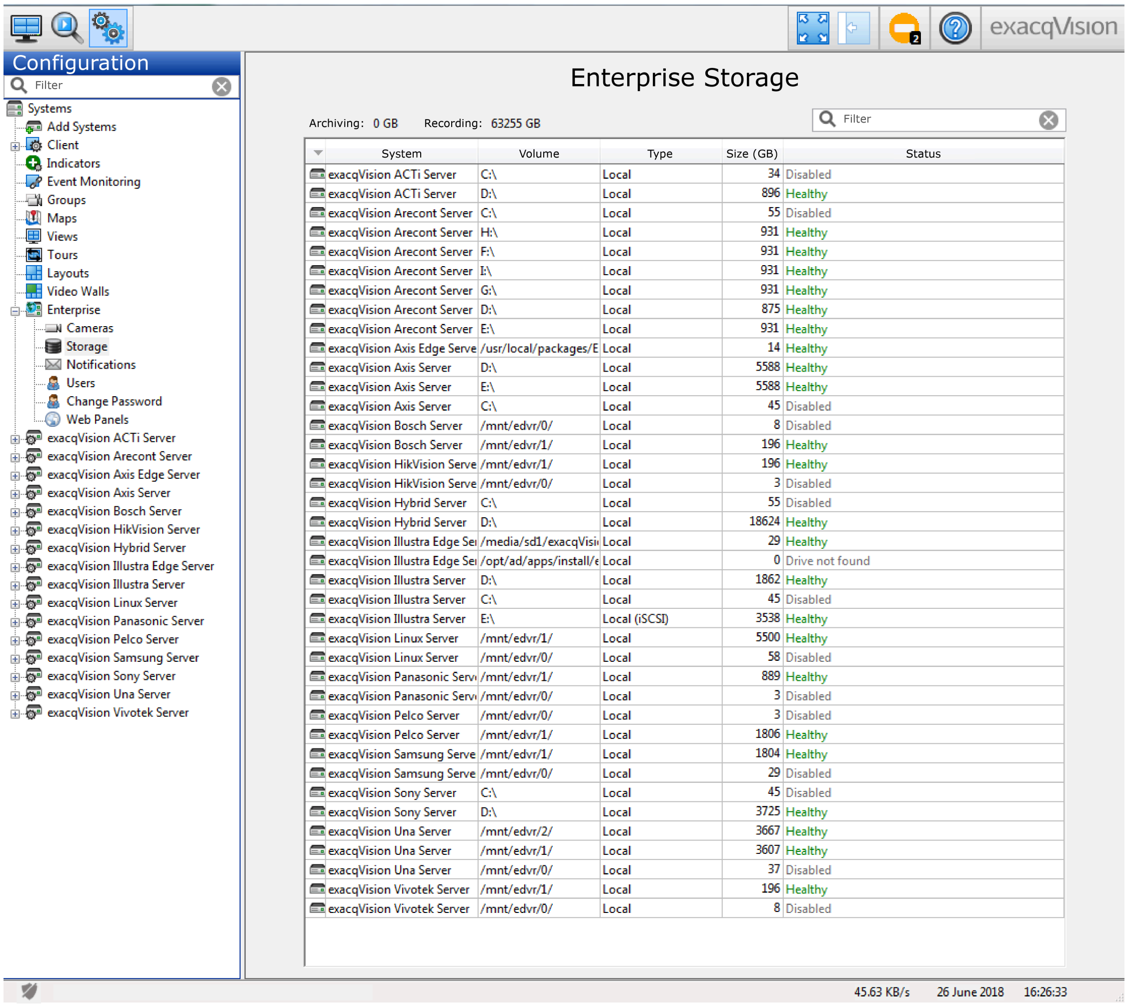
Function	Description
Setting	To view a camera's settings, double-click the camera's name.
exacqReplay	To open the **exacqReplay** window for a camera, right-click the **Record Status** column for that camera. For more information on exacqReplay, see exacqReplay window.

Enterprise Storage window

In the **Enterprise Storage** window, you can view all the storage devices and configure S-Series and server storage. You can also select an S-Series storage server and configure it for archiving, extended storage or both, and associate it with the exacqVision system.

From the navigation tree in the **Config (Setup)** window, expand the **Enterprise** and select **Storage**.

Figure 81: Enterprise Storage window

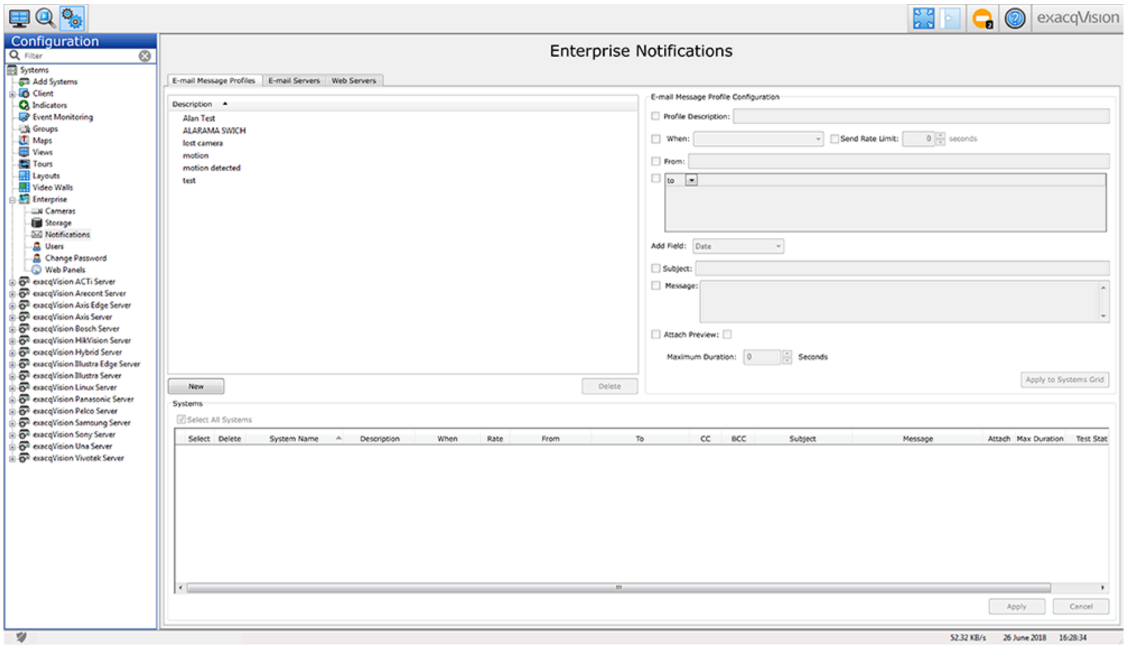


Enterprise Notifications window

In the **Enterprise Notifications** window, you can configure notification profiles and email servers on a multiple of servers simultaneously. For more information on how to create nonfiction profiles and email servers, see Notifications window.

From the navigation tree in the **Config (Setup)** window, expand the **Enterprise** and select **Notifications**.

Figure 82: Enterprise Notification window



Associating a notification profile with a server

To associate a notification profile with a server, in the **Config (Setup)** window,complete the following steps:

1. From the navigation tree, expand the **Enterprise** and select **Notifications**.
2. In the **Enterprise Notifications** window, on the **E-mail Message Profiles** tab, click **New**.
3. In the **E-mail Message Profile Configuration** pane, enter a brief description of the email's content.
4. **Optional:** From the **Send Rate Limit** list, adjust the minimum number of seconds between when email notifications are sent. For more information, see E-mail Message Profiles tab.
5. In the **From** field, enter the email address of the person sending the email, and then in the **Recipients** field, enter the email addresses of the recipients.
6. Enter a subject for the email, and then type the email message in the **Message** field.
7. Click **Apply to Systems Grid**.

Configuring an outgoing SMTP mail server

To configure an outgoing SMTP mail server, in the **Config (Setup)** window, complete the following steps:

1. From the navigation tree, expand the **Enterprise** and select **Notifications**.
2. In the **Enterprise Notifications** window, on the **E-mail Servers** tab, click **New**.
3. In the **E-mail Server Configuration** pane, enter a brief description of the email's content.
4. Select one of the following options:

   - **SSL/TLS**
   - **STARTTLS**

ⓘ **Note:** If you use Microsoft Office 365, select **STARTTLS**.

5. In the **Outgoing Mail Server (SMTP)** area, enter the IP address and port number of the outgoing mail server. The default port number is 25.
6. Click **Apply to Systems Grid**.

Enterprise Users window

In the **Enterprise Users** window, you can create user or group accounts for multiple systems simultaneously with or without LDAP integration. To create a user or user role, see Creating a user or role with LDAP integration and Creating a user or role without LDAP integration. For information on the functionality of the **Enterprise Users**, see Table 117.

Figure 83: Enterprise Users window

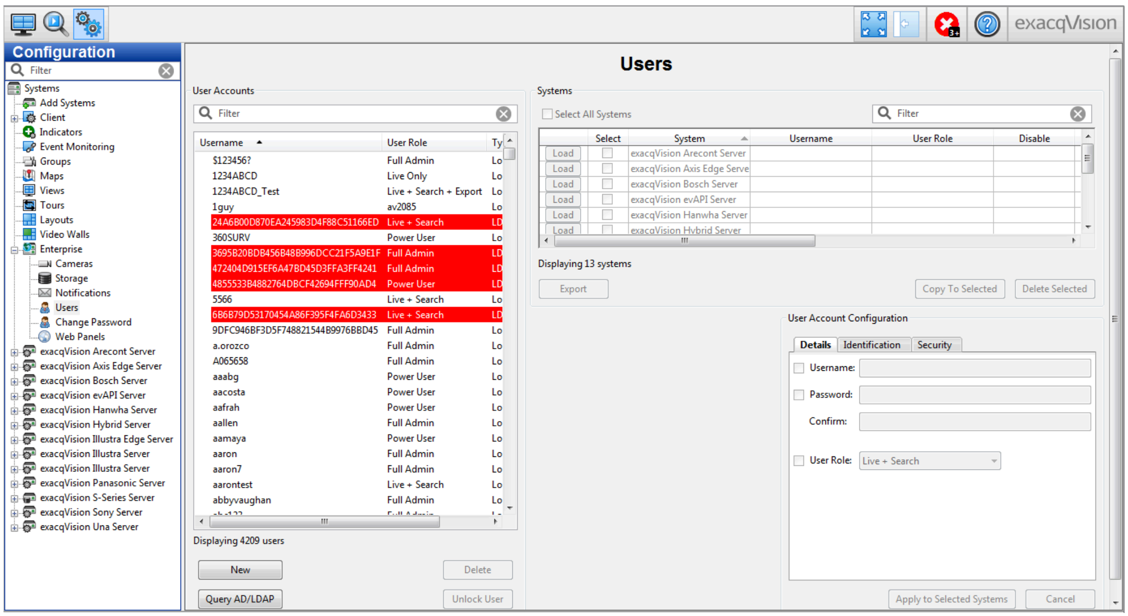


Table 117: Enterprise Users window

Interface element	Description
Unlock User button	To unlock a user, select the user from the **User Accounts** list and click **Unlock User**.
Select All Systems check box	To apply a user's account settings as the default setting for all the servers in the exacqVision**Systems** list, select the **Select All Systems** check box.
Copy To Selected button	To copy a user to a system, select the user from the **User Accounts** list, and select the system from the **Systems** list, and then click **Copy To Selected**.
Delete Selected button	To delete a user from a system, select the user from the **User Accounts** list, and select the system from the **Systems** list, and then click **Delete Selected**.
Export button	To save the enterprise user configuration file that contains a list of users, click **Export**. You can then import this file to the **Systems** list.

Table 117: Enterprise Users window

Interface element	Description
Identification tab	You can use the **Identification** tab to create data fields to refine a user search. To create a data field, click the check box next to the Plus icon, and enter the information in the corresponding fields.
Security tab	In the **Security** tab, you can create a temporary user, assign an access schedule to a user, and disable a user's account. For more information, see Disabling a user's account, Creating a temporary user in exacqVision Enterprise , and Assigning an access schedule to a user in exacqVision Enterprise .

Creating a user or group with LDAP integration

To create a user or group with LDAP integration, complete the following steps:

1. In the **Enterprise Users** window, click **Query AD/LDAP**.
2. In the **Select Users or Groups** window, select a domain for the user or group from the **Select Base DN** list.
3. In the **Enter Name to Search (include wildcards)** field, enter a username name.

   Note: The username is the username that the user or group uses to log on to the network.

4. Click **Search** to display matching users or groups.
5. Select the name of the user or group, and then click **Select**.

   Note: If the **Status** area in the **Select Users or Groups** window does not display **Connected**, contact the network administrator.

6. In the **Systems** pane, select the servers that you want the user or groups to be able to access.

   Note: Servers in the exacqVision Systems pane that are highlighted in red are configured for LDAP but are not connected.

7. Click **Apply to Selected Systems**.
8. In the **Add Systems** window, select **Use Single Sign-On**.

   Note: If you do not select **Use Single Sign-On** in the **Add Systems** window, the user or groups can fail to log on to the server. For more information, see Manually adding a system.

Creating a user or group without LDAP integration

To create a user or role without LDAP integration, complete the following steps:

1. In the **Enterprise Users** window, click **New**.
2. In the **Systems** pane, select the servers that you want the user or user groups to be able to access.
3. On the **Details** tab, enter a username.
4. Enter a password in the **Password** field, and then confirm the password in the **Confirm** field.
5. From the **User Role** list, select a role.
6. Click **Apply to Selected Systems**.

Disabling a user's account

To disable a user's account, complete the following steps:

1. From the **User Accounts** list, select a user.
2. In the **User Account Configuration** pane, click the **Security** tab.
3. On the **Security** tab, select the check box next to **Disable User**.
4. Select the **Disable User** check box.
5. Click **Apply to Selected Systems**.

Creating a temporary user in exacqVision Enterprise

To create a temporary user, complete the following steps:

1. From the **User Accounts** list, select a user.
2. From the **Systems**list, select the systems that you want the user to access.
3. In the **User Account Configuration** pane, click the **Security** tab.
4. On the **Security**tab, select the check box next to **Temporary User**.
5. Select the **Temporary User** check box.
6. From the **Access Time Start** and **Access Time End** lists, select a start and end time for the schedule.
7. Click **Apply to Selected Systems**.

Assigning an access schedule to a user in exacqVision Enterprise

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

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

   ⓘ **Note:** You cannot assign a schedule to a user with full administration privileges.

2. From the **Systems** list, select a system.
3. In the **User Account Configuration** pane, click the **Security** tab.
4. From the **Access Schedule** list, select a schedule.
5. Click **Apply to Selected Systems**.

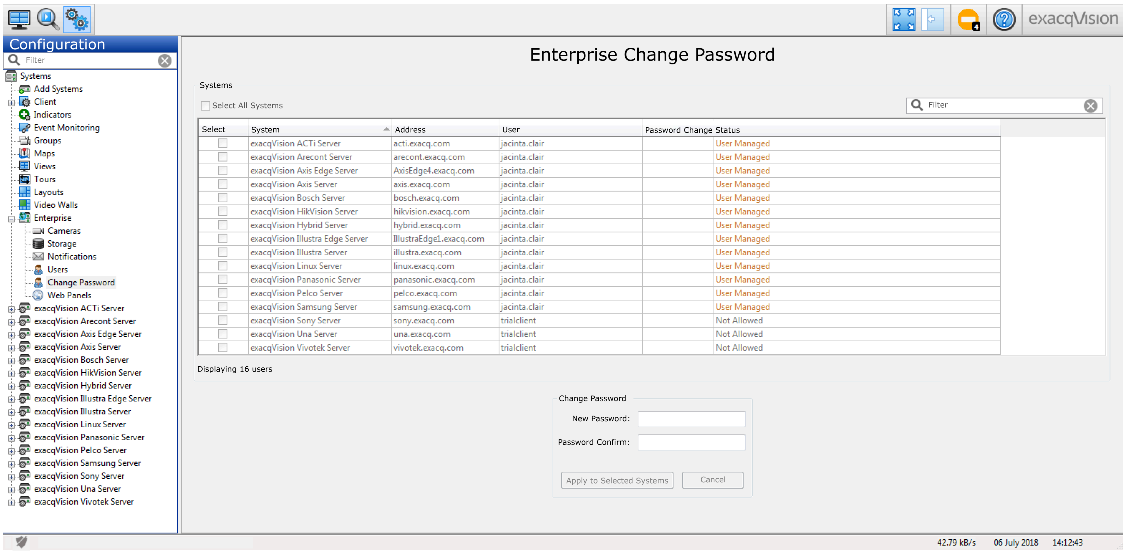
Enterprise Change Password window

In the **Change Password** window on an Enterprise system, you can change the password for the current user on one or more exacqVision client servers in an Enterprise system.

The **Enterprise Change Password** window does not display for the following conditions:

- The current user is an LDAP user.
- The user does not have permission to change their password. For more information, see Security tab in the Users window.

Figure 84: Enterprise Change Password window



Changing the password for a system

About this task:
To change the password for the current user on exacqVision client servers in an Enterprise system, complete the following steps:

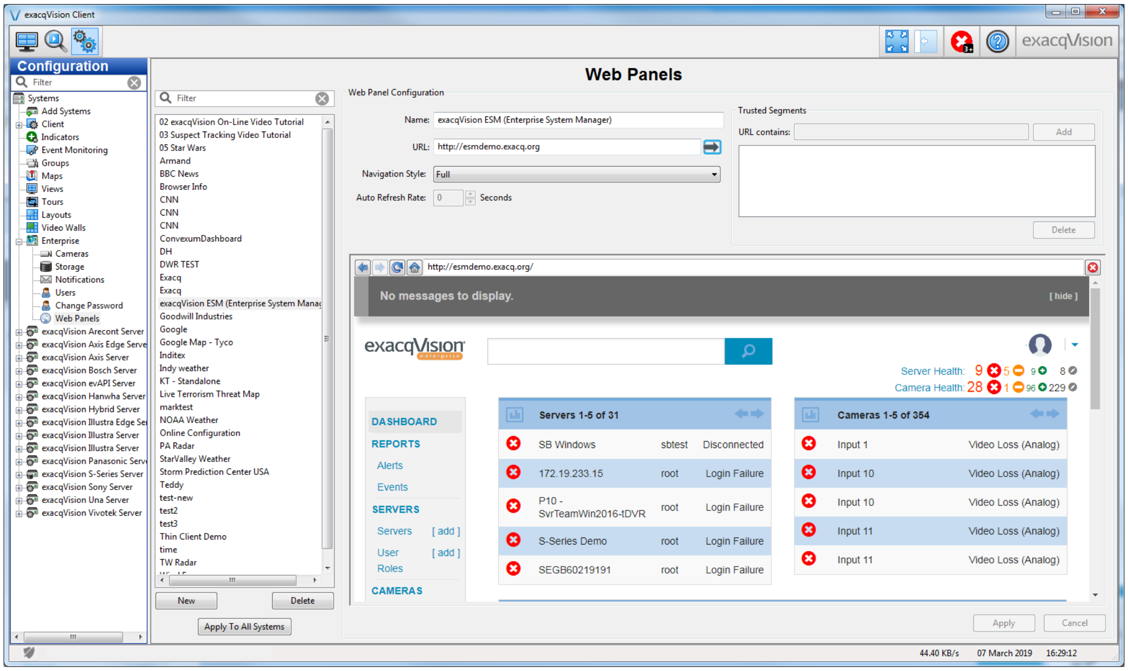
Note: A user must have permission to change their password. For more information, see Security tab in the Users window.

1. From the navigation tree, expand the **Enterprise** and select **Change Password**.
2. In the **Systems** pane, select a system.
3. In the **New Password** field, enter the new password, and then confirm the password by entering it again in the **Password Confirm** field.
4. Click **Apply to Selected Systems**.
5. Enter the old password for each system where you want to apply the new password.
6. **Optional:** If you use the same password for all the systems, you can select the **Use For All** check box.
7. Click **OK**.

Enterprise Web Panels window

In the **Web Panels** window, you can add web sites to the system that are then viewable in the video panels in the **Live** window.

Figure 85: Enterprise Web Panels window



Adding a web site

To add a web site, in the **Config (Setup)** window, complete the following steps:

1. From the navigation tree, select the **Enterprise** and then select **Web Panels**.
2. In the **Web Panels** window, click **New**.
3. In the **Web Panel Configuration** pane, enter a name of the web site that you want to add.
4. In the **URL** field, enter the IP address of the website.
5. From the **Navigation Style** list, select one of the following options:
   - **Display Only**: You can interact with the web page, but cannot redirect to another page.
   - **Filtered**: You can interact with the web page, and access any configured links. For more information on how to add a link, see Adding a web site navigation style filter.
   - **Fully Navigable**: Has the same functionality as a functioning web browser.
6. From the **Auto Refresh Rate** list, select how often you want the web site to refresh.
7. Click **Apply**.

Adding a web site navigation style filter

To add a navigation style filter, in the **Web Panels** window, complete the following steps:

1. From the Web site list, select the website in which you want to add a filter.
2. In the **Trusted Segments** pane, enter the URL you want to add.
3. Click **Add**.

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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