exacqVision®

Network Video Recorder
User Manual

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Chapter 1. System installation

Hardware and software requirements

In **Table 1**, you can find information on the hardware and software requirements for installing an exacqVision system.

Name	Requirements
Server	For information on 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 a multiple of 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 on the minimum operating system requirements, see https://www.exacq.com/products/vms_requirements.html.
	Do not port block, as 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 updating, your 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 arrangements that obscure the MAC address require an additional USB-based NIC to provide 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 on how to configure a web service, see https://www.exacq.com/kb/.

Table 1. Hardware and software requirements

Installing the server software

To install the server software, complete the following steps:

1. Choose one of the following options:

2. For Windows servers, download the latest server and web services installation software from http://downloads.exacq.com/reseller/exacqVision.exe.

3. For Linux servers, download the latest server and web services installation software from http://downloads.exacq.com/reseller/Ubuntu/Dapper/exacqVisionServer.deb.

4. Run the executable file to start the installation wizard.

   Note: You must use an administrator account to run the executable file.

5. Configure the IP address, username, and password for all cameras. For more information see the *exacqVision IP Camera Quick Start Guide* at https://www.exacq.com/downloads/ev-ip-quickstart-0311.pdf, or see the camera manufacturer's instruction guide.

6. Test the connectivity of each camera by using the ping command.

Installing the client software

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

1. Download the latest client software from https://downloads.exacq.com/downloads/exacqVisionClient.exe.

2. Run the executable file to start the installation wizard.

   Note: You must use an administrator account to run the executable file.

3. Test the connectivity with the server by using the ping command.

   Note: If the exacqVision client cannot communicate with 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. Enter a username and password in the **System Information** area.

8. Click **Apply**.

   Note: If the new server appears in the system list table with a status of **Connected**, 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 the communications 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

In **Table 2**, you can find a list of mandatory steps that you need to complete for the installation of a new exacqVision system.

Step	Task
Install the hardware	For more information, see **Table 1. Hardware and software requirements** and the hardware Quick Start guides.
Install the software	For more information, see **Installing the server software**, **Installing the client software**, and **Table 1. Hardware and software requirements**.
Establish initial communications	For information on how to establish initial communications between the client software and an exacqVision server, see the servers Quick Start guide.
Configure IP cameras	For more information on how to configure IP cameras, see the *IP Camera Setup Quick Start guide*.
Configure usernames and passwords	For more information on how to configure usernames and passwords, see the *IP Camera Setup Quick Start guide*.

Table 2. Mandatory installation steps for installing an exacqVision system

Chapter 2. Getting started

exacqVision software overview

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

1. Computer administrator

   Username: `admin`

   Password: `admin256`

2. User

   Username: `user`

   Password: `user5710`

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

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

Logging on to a server

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

1. To prevent unauthorized access or modifications to the system, change the default passwords and record them in a secure location. For more information, see **Users window**.

2. Configure a new user on the server. For more information on how to configure a new user, see **Users window**.

3. Restrict the privileges of users, and change the exacqVision client settings for the operating system user account that comes with an exacqVision server. For more information, see **Users window**.

Main windows

exacqVision systems have 3 main windows. For more information on these windows, see **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.

Table 3. Main windows

About exacqVision client window

In the **About exacqVision client** window, you can update the exacqVision client software, search for new versions of the software, and send information to the manufacturer about how you use the system. For more information, see Table 4. About exacqVision client window.

Name	Description
Connect to the Internet and check for updates button	If the system is running the latest version of the exacVision software, a message displays. Click **Yes**.
	If a new version of the 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 then follow the Setup wizard.
Automatically check for updates check box	Searches for new software updates for the exacqVision client periodically, and notifies the user when new software updates are available. If a new 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 cameras and exacqVision features.

Table 4. About exacqVision client window

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. On some platforms, the online help is context-sensitive.

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 Diagnostic** window, from the **Server** menu select a server.

3. In the **Included files** area, select the files that you want to send.

4. In the **Server Log Range** area, select a date and time range.

5. 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.

6. 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**.
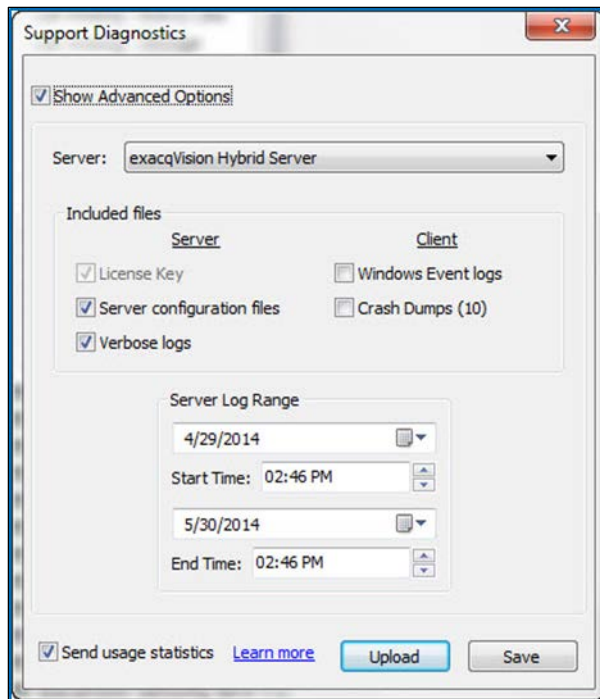
Figure 1. Support Diagnostics window

Chapter 3. 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. Add Systems window.
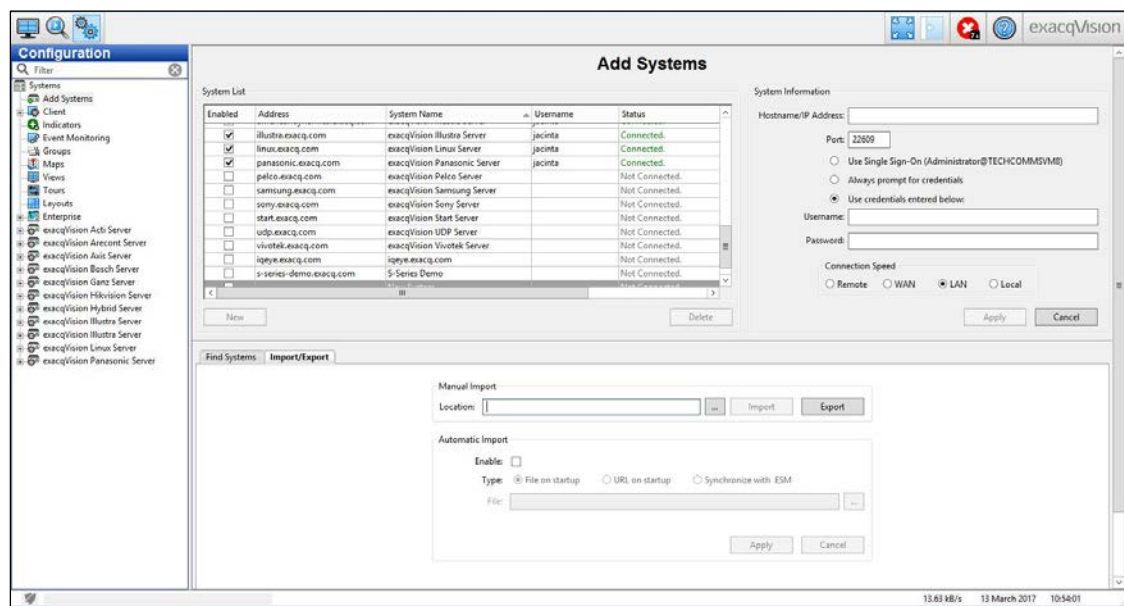
Figure 2. Add Systems window

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.

Table 5. Add Systems window

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/IPAddress** 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**.

   - **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

> **Note:** 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 Automatic Import.

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 ESM:** This option ensures that the exacqVision client continuously uses the same **System** list as the Enterprise System Manager (ESM), if available.

      Note: You need valid credentials to connect to the ESM server.

3. In the **URL** field, enter a URL.

4. Click **Apply**.

Configure System window

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

System tab

On the **System** tab, you can create a name for the system, export and import settings from other systems, import and export graphics, and manage the license for the system. For more information on the functionality of the **System** tab, see Table 6. System tab.
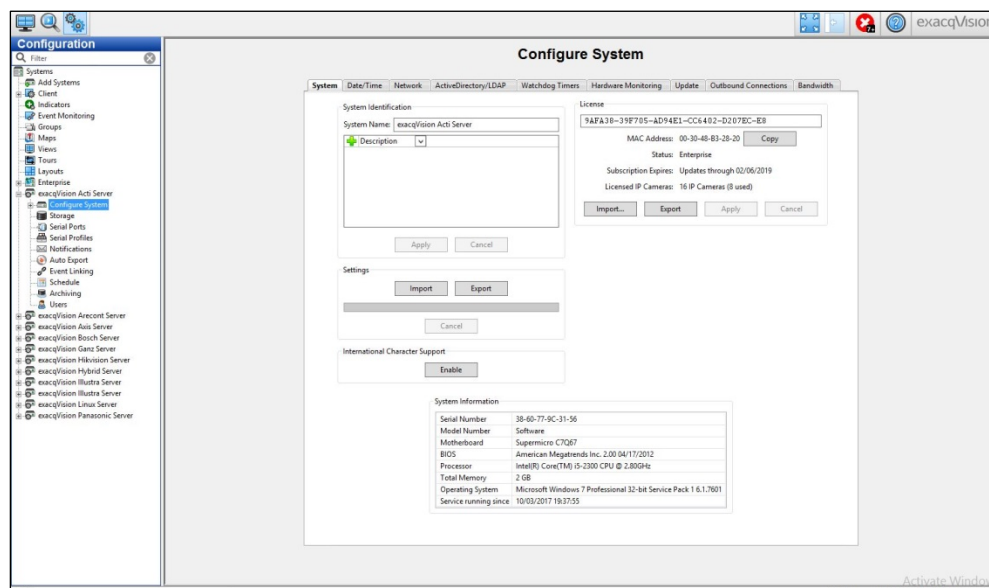
Figure 3. System tab in the Configure System window

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

Table 6. System tab in the Configure System window

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. Date/Time tab**.
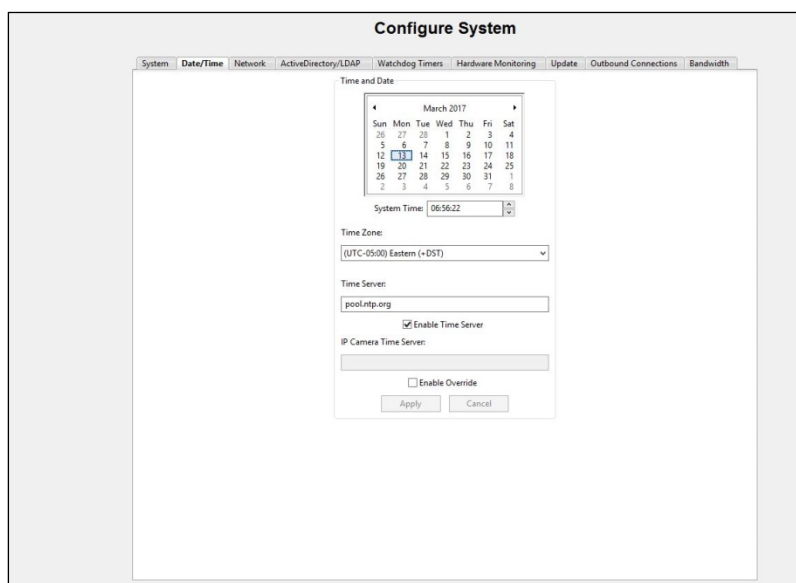
Figure 4. Date/Time tab in the Configure System window

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.

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

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. Network tab.

> **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.
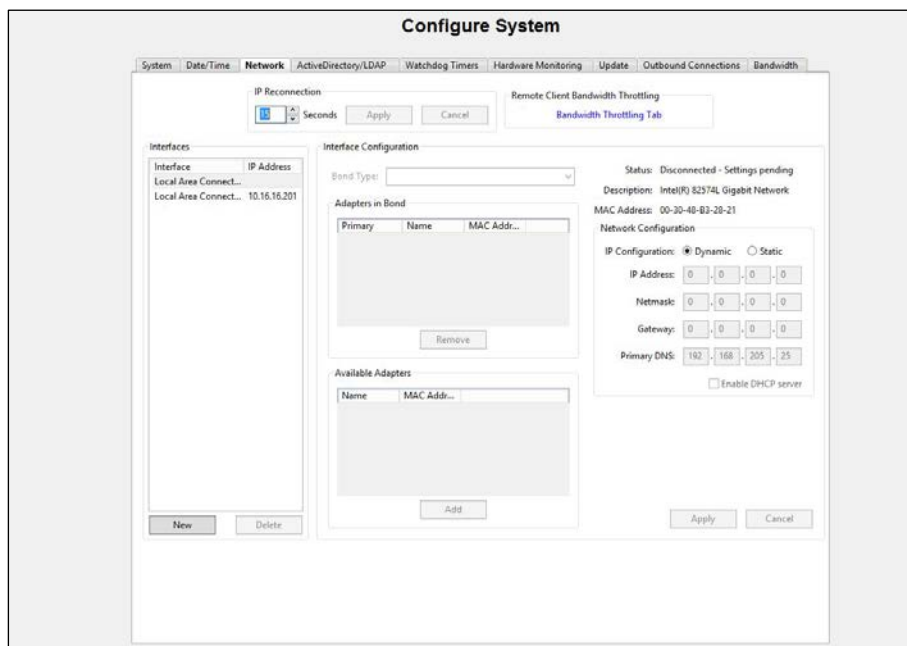
Figure 5. Network tab in the Configure System window

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 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**.

Table 8. Network tab in the Configure System window

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, **Table 8. Network tab**.

3. Click **Apply**.

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 **Table 9. Interfaces pane on the Network tab**. For more information on Una Systems, see the *LC-Series Una Server guide* and the *M-Series Una Server guide*.

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.

Table 9. Interfaces pane on the Network tab

Active Directory/LDAP tab

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

Figure 6. 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.
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.

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

Modifying the directory service settings

To modify the directory service settings, complete the following steps:

1. In the **Active Directory/LDAP** tab, select the **Enable Directory Service** check box.

2. Enter the IP address or hostname of the LDAP server in the **Hostname/IP Address** field.

3. From the **Schema** list, select **LDAP Schema**.

4. Enter a password for the LDAP server in the **Password** field, and then confirm the password in the **Confirm** field.

5. Click **Apply**.

Watchdog Timers tab

The **Watchdog Timer**s 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 Timer** tab is not configurable.
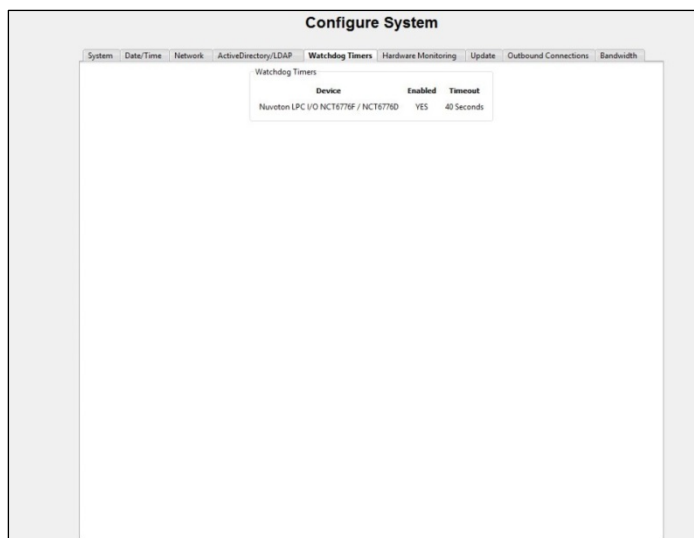
Figure 7. Watchdog Timers tab in the Configure System window

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**.
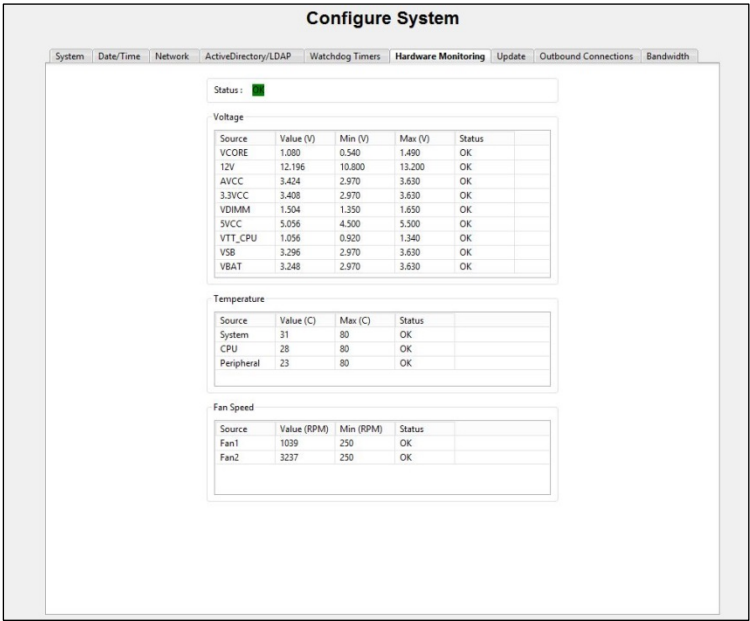
Figure 8. Hardware Monitoring tab in the Configure System window

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. Update tab.
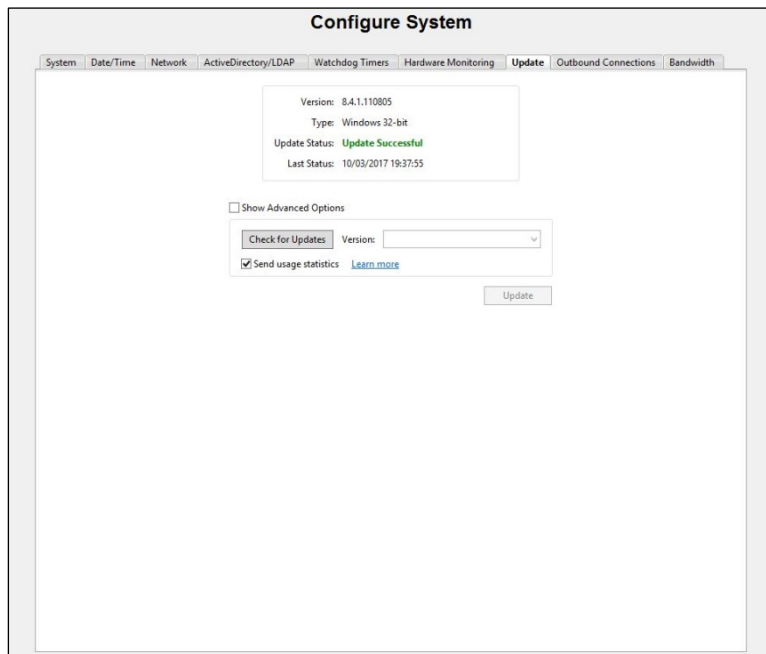
Figure 9. Update tab in the Configure System window

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 **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.

Table 11. Update tab in the Configure System window

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

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

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

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 System Manager (ESM) or exacqCloud.
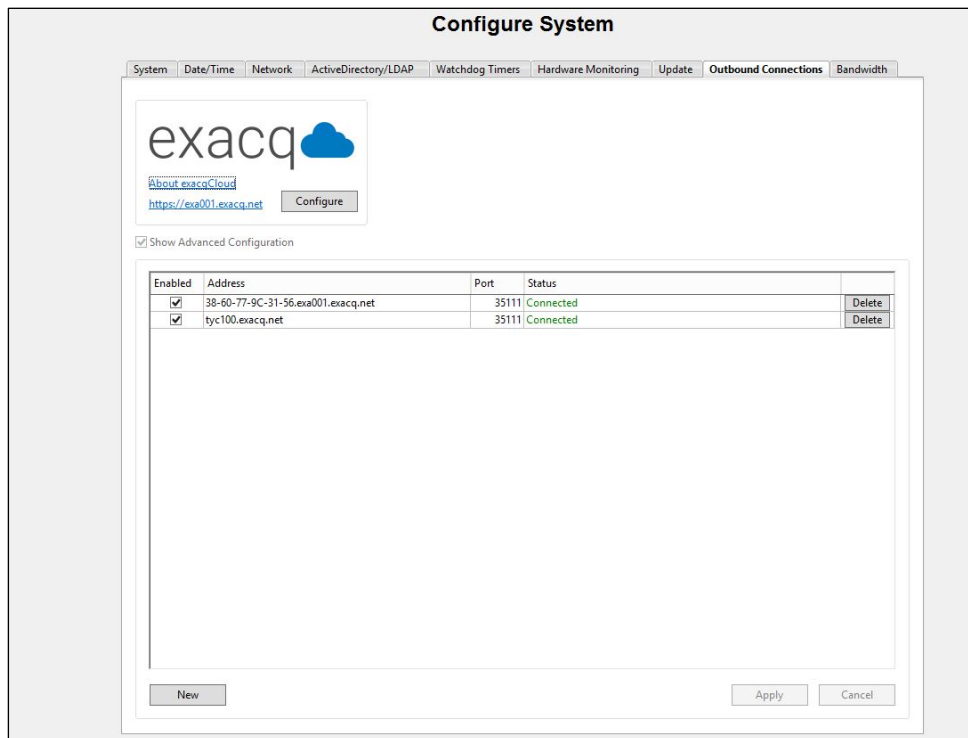
Figure 10. Outbound Connections tab in the Configure Systems window

Connecting to services outside the system's network

To connect to a service outside the system's network, complete the following steps:

1. On the **Outbound Connections** tab, select the **Enabled** check box.

2. 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.

3. Click **Apply**.

Configuring multiple connections on a system

To configure multiple connections on a system, complete the following steps:

1. In the Outbound Connections tab, select the Show Advanced Configuration check box.

2. Click **New**.

3. Enter an address and port number.

4. Select the **Enabled** check box.

5. Click **Apply**.

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

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 NICs in the system.

> **Note:** The **Bandwidth** tab is only available in exacqVision Professional and exacqVision Enterprise. In exacqVision Enterprise you can create multiple bandwidth throttling profiles.
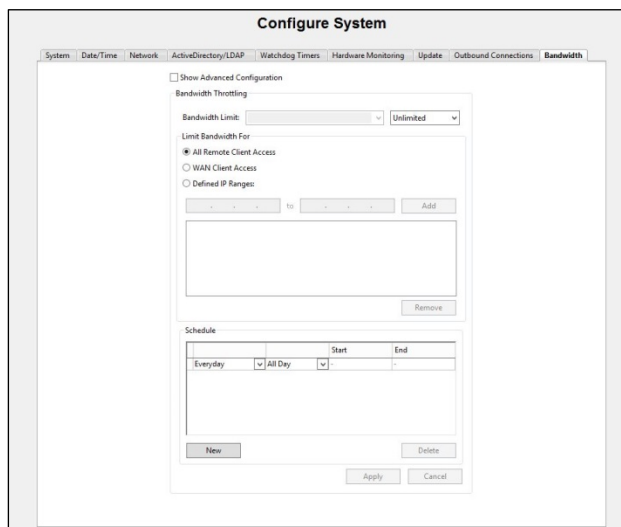
Figure 11. Bandwidth tab in the Configure Systems window

Creating a bandwidth throttling profile

To create a bandwidth throttling profile, complete the following steps:

1. On the **Bandwidth** tab, select the **Show Advanced Configuration** check box.

2. From the **Data transfer speed** list, select the range of throughput to throttle.

3. From the **Bandwidth Limit** list, select a range between one and 512.

4. Enter a name for the profile in the **Name** field. The system creates a default name.

5. 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**.

6. In the **Schedule** area, select a day of the week.

7. Select **Between** or **All Day**, and then select a start and end time.

8. 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.

Security tab

On the **Security** tab, you can configure the second reviewer feature, and set the user log in security parameters for a system. You need this 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/.
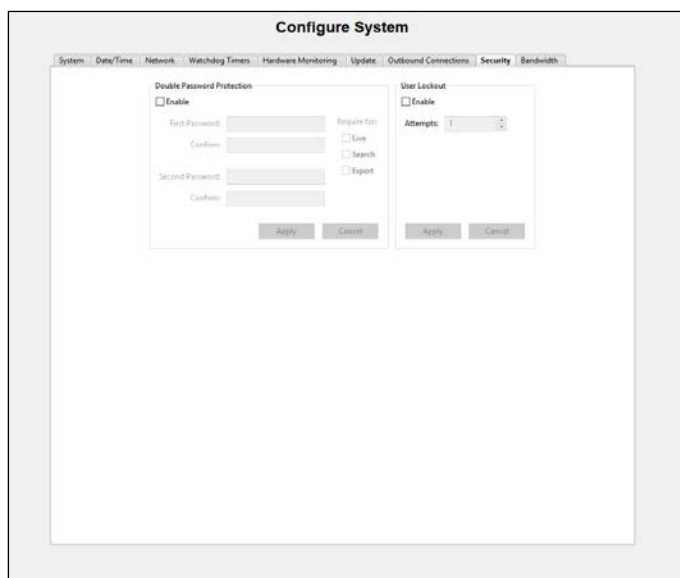
Figure 12. Security tab in the Configure System window

Configuring the second reviewer feature

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

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**.

> **Note:**
> - The exacqVision client prompts for both passwords when you perform tasks that require the second reviewer feature.
> - When you configure the second reviewer feature, you disable the archiving, auto export jobs, and email notification attachment features.
> - The second reviewer feature does not support the exacqVision web service.

Setting the user log in security parameters

To set the user log in security parameters for a system, complete the following steps:

1. On the **Security** tab, select the **Enable** check box in the **User Lockout** area.

2. From the **Attempts** list, select the number of password entry attempts that you want to give the user before they are locked out of the system.

3. Click **Apply**.

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**.
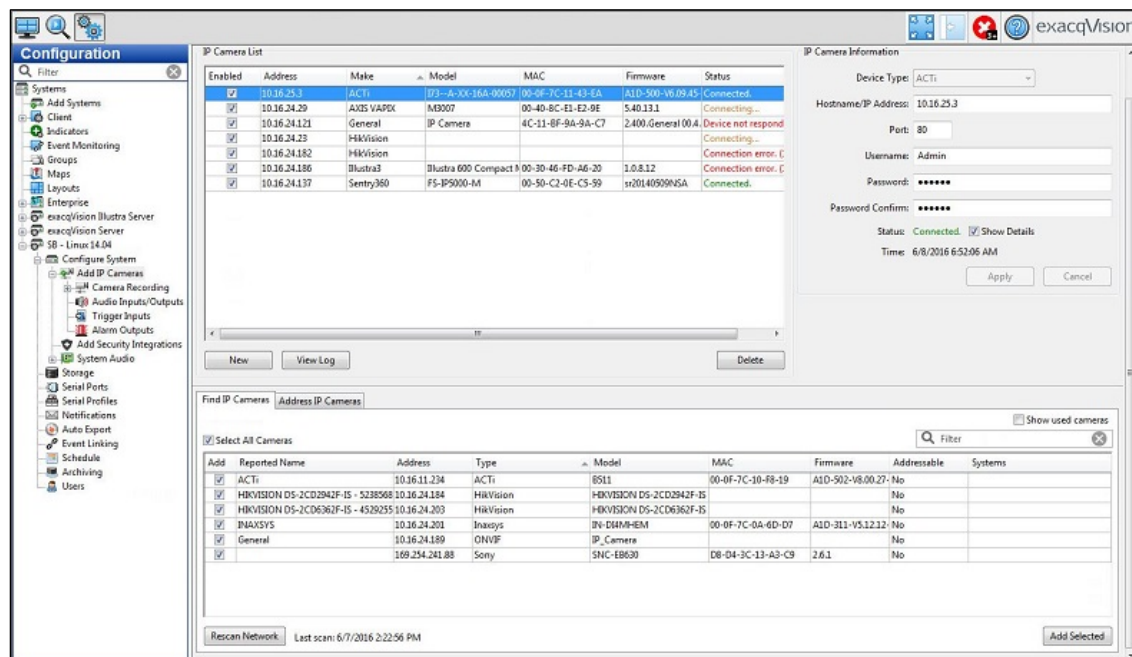
Figure 13. Add IP Cameras window

IP Camera List pane

In Table 12, you can find information on the functionality of the **IP Camera List** pane in the **Add IP Cameras** window.

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 a 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**.

Table 12. IP Camera List pane

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, access a camera online, and view the status connection of the camera and the time of that connection. For more information, see Table 13. IP Camera Information pane.

Interface element	Description
Device Types 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 a https connection.
Status area	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.

Table 13. IP Camera Information pane

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, 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 Camera** tab, you can change the IP address of cameras. The **Address IP Camera** 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 Camera** tab, see Table 14. Network Interface pane on the Address IP Camera tab, Table 15. Camera Configuration pane on the Address IP Cameras tab, and Table 16. Cameras area on the Address IP Cameras 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 14. Network Interface pane on the Address IP Camera 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 Cameras** 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 15. Camera Configuration pane 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.

Table 16. Cameras area on the Address IP Cameras tab

Changing the IP address of cameras

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

1. From the **IP Camera** list, select the cameras.

2. In the Camera Configuration area, select a configuration type. For more information on the IP configuration types, see Table 15. Camera Configuration pane on the Address IP Cameras tab.

    Note: If you select **Static**, modify the **IP Addresses 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. 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.
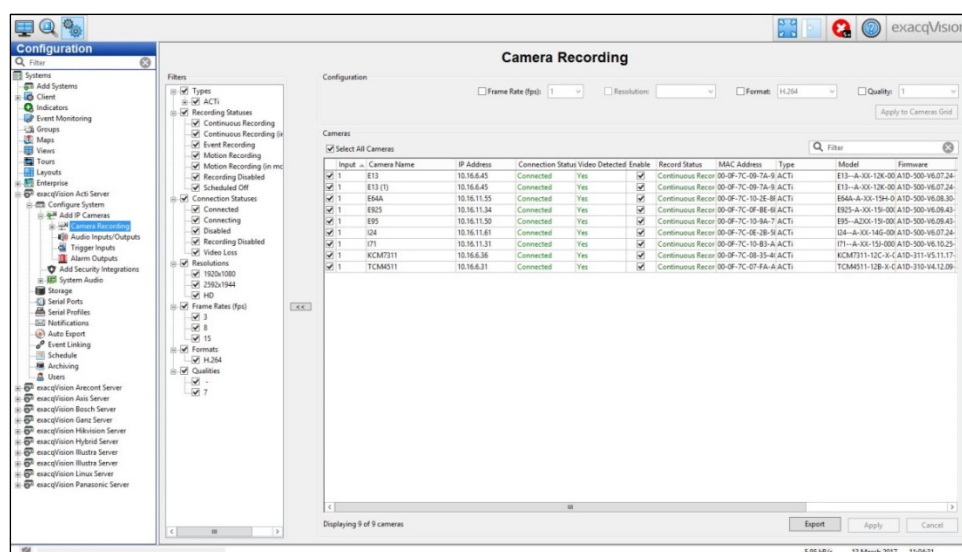
Figure 14. Camera Recording window

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 Table 17. 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.

Table 17. Cameras pane

Applying configuration settings to a multiple of cameras

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

1. On the left side of the **Cameras** list, select the check boxes of the cameras you want.

2. In the **Configuration** pane, select the check box next to configuration setting that you want to apply to the cameras.

   Note: If a setting's list is grey, the setting is not available for all the cameras that you selected.

3. 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.

4. Click **Apply to Cameras Grid**.

Analog camera recording

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

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.

Table 18. Cameras pane

Applying recording settings to a multiple of cameras

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

1. On the left-side of the **Cameras** list, select the check boxes of the cameras you want.

2. In the **Configuration** pane, select the check box next to recording setting that you want to apply to the cameras.

   Note: If a setting's list is grey, the setting is not available for all the cameras that you selected.

3. 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.

4. Click **Apply to Cameras Grid**.

Camera settings window

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

> **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.
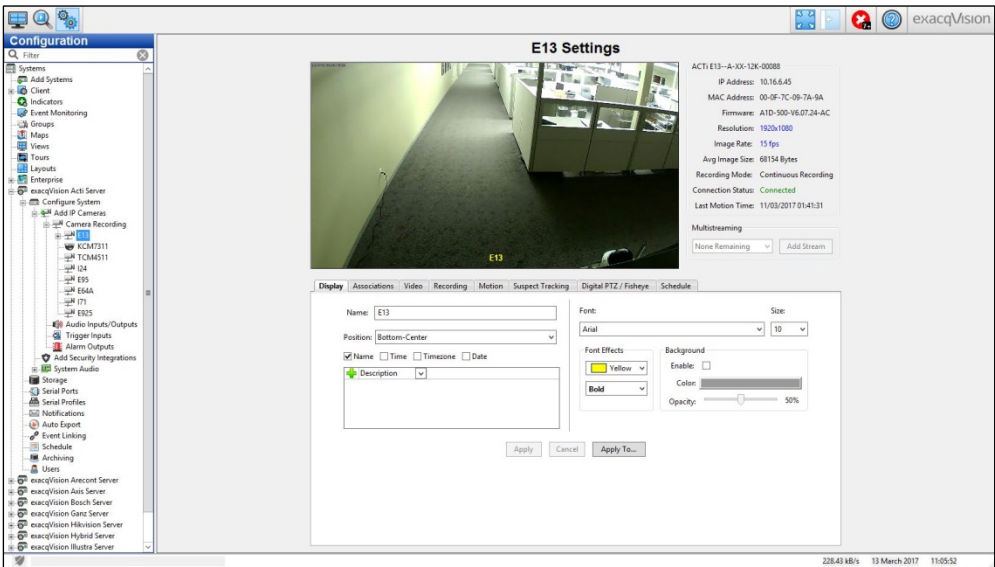
Figure 15. Camera Settings window

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 Table 19. Multistreaming pane in the Camera Settings window

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

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 recognised with a yellow start 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**.

Table 19. Multistreaming pane in the Camera Settings window

Camera setting tabs

The tabs available in the **Camera Settings** window and the options available in each tab vary depending on the model and manufacturer of the camera. 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 20. Display tab**

Figure 16. Display tab in the Camera Settings window

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

Table 20. Display tab in the Camera Setting window

Associations tab

On the **Associations** tab, you can link audio inputs, event triggers, 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. For more information on the functionality of the **Associations** tab, see Table 21. Associations tab in the Camera Settings window.
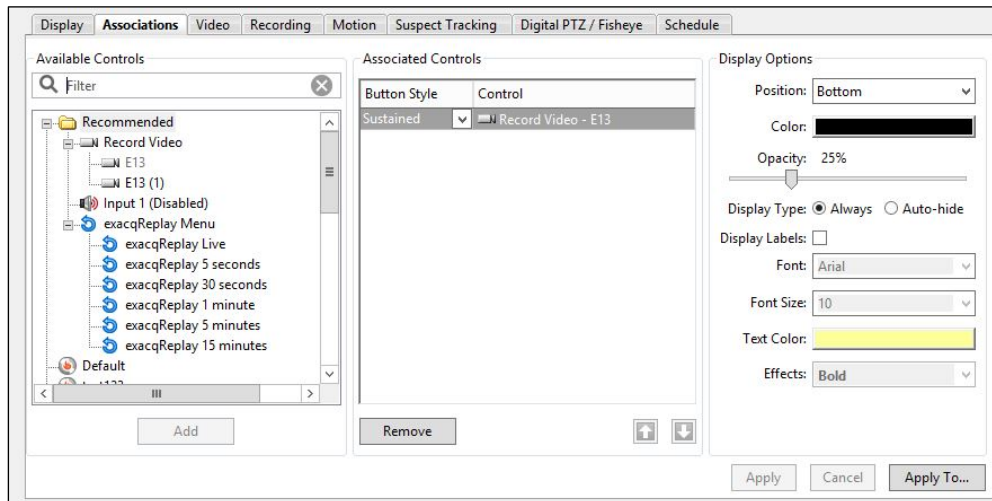
Figure 17. Associations tab in the Camera Settings window

Interface element	Description
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 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 then in the lower-right corner click the up or down arrows.
	To remove a control from the list, select the control and then 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.
Display Options pane	Changes the association icons position and display settings.
	To display an association icon only when you hover over the video panel with your cursor, in the **Display Type** area select **Auto-hide**.
	To apply the display settings to a multiple of cameras, click **Apply To**.

Table 21. Associations tab in the Camera Settings window

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 22. Video tab**.

> Note: The **Video** tab is not available on Real Time Streaming Protocol (RTSP) interfaces, some Open Network Interface Forum (ONVIF), and proprietary interfaces.
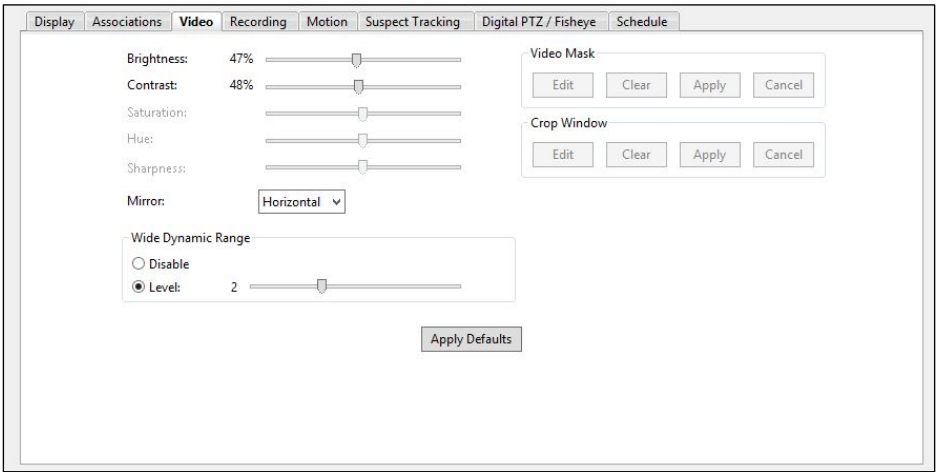
Figure 18. Video tab in the Camera Settings window

Interface element	Description
Brightness slider	Adjusts the brightness of the videos OSD.
Contrast slider	Adjusts the contrast of the videos OSD.
Saturation slider	Adjusts the amount of grey color in the videos OSD.
Hue slider	Adjusts the gradient of the colors in the videos OSD.
Sharpness slider	Adjusts the quality of the videos OSD.
Rotate and Mirror lists	Changes the orientation of the camera's video.
	To rotate the camera direction, select the number of degrees from the **Rotate** list.
	To position the camera's video horizontally or vertically, use the **Mirror** list.
Wide Dynamic Range area	Adjusts the brightness and dimness of the video that is caused by the camera's surroundings.
	To adjust the dynamic range, select **Level** and then move the **Wide Dynamic Range** slider.
Frequency list	Reduces the flicker of the OSD by matching it to the frequency of lights and electronic screens that are in use near where the camera is situated.
Video Mask area	Blocks areas of the video display that you do not want to record. For more information, see **Motion and 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.

Table 22. Video tab in the Camera Settings window

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**.

Motion and video masks

A motion mask, or motion window, can reduce unwanted video recording by ignoring motion events that occur in specified areas of a camera's view. Motion masks can save storage space, extend recording time, and make it easier to recognize motion events on the video timeline in the **Search** window. 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. A video mask hides an area of a camera's field of view so that it cannot be seen or recorded. To create a motion mask or video mask, see **Creating a motion mask** and **Creating a video mask**.

Creating a motion mask

To create a motion mask, complete the following steps:

1. On the **Video** tab, click **Edit** in the **Motion Mask** area. A blue 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**.

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 23. Recording tab.

> Note: The **Recording** tab is not available on RTSP interfaces, and some ONVIF and proprietary interfaces.
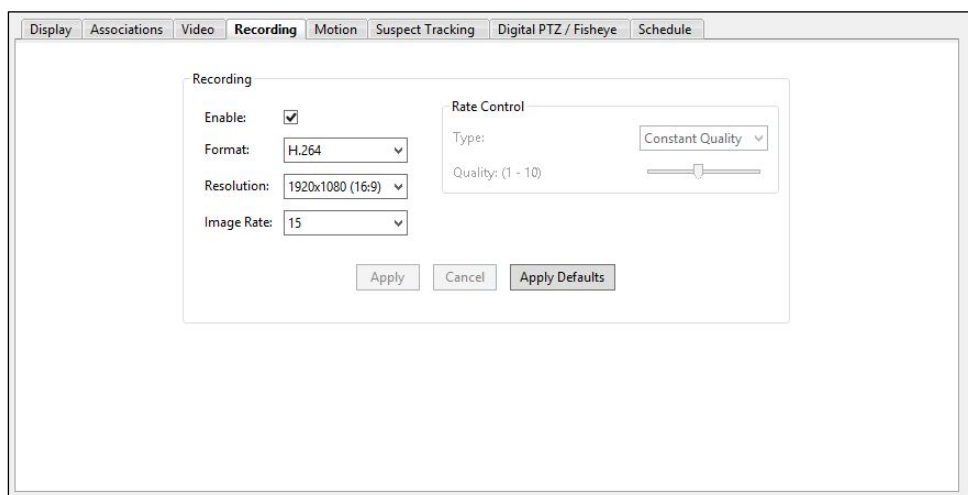
Figure 19. Recording tab in the Camera Settings window

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.

Table 23. Recording tab in the Camera Settings window

Motion tab

On the **Motion** tab, you can edit a camera's video motion settings. For more information, see **Table 24. Motion tab**.

> Note: The **Motion** tab is not available on RTSP interfaces, and some ONVIF and proprietary interfaces.
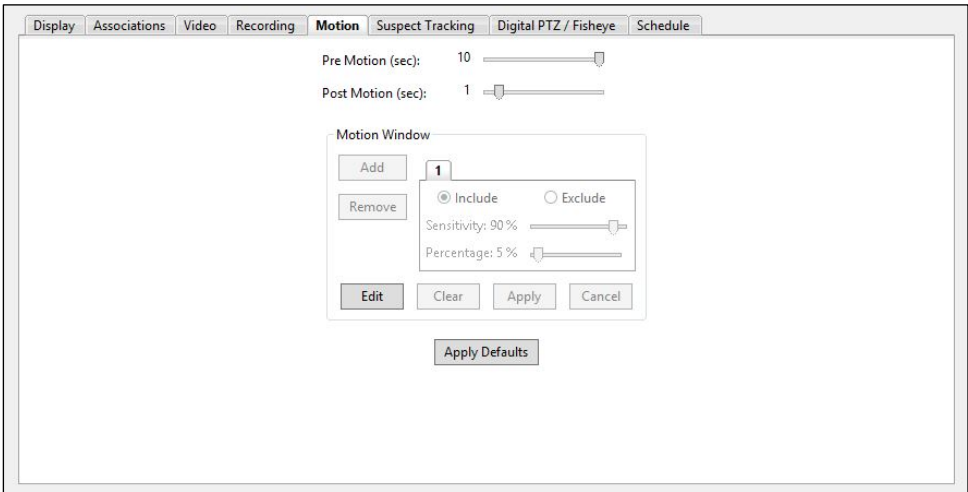
Figure 20. Motion tab in the Camera Settings window

Interface element	Description
Pre Motion slider	Adjusts the number of seconds of video that you can save before an event occurs.
Post Motion slider	Adjusts the number of seconds of video that you can save after an event occurs.
Motion Detection area	To adjust how much motion must occur in the camera's view to trigger motion recording, use the **Sensitivity** slider. A low sensitivity setting can reduce false motion, such as video noise or shadows.
	To reduce the number of motion alarm events, use 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.
Motion Mask area	Blocks areas of the video display so motion cannot be detected or recorded. For information on motion masks, see **Motion and video masks.**
Apply Defaults button	Applies the factory default settings.

Table 24. Motion tab in the Camera Settings window

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 Tacking** tab, see **Table 25. Suspect Tracking tab**.
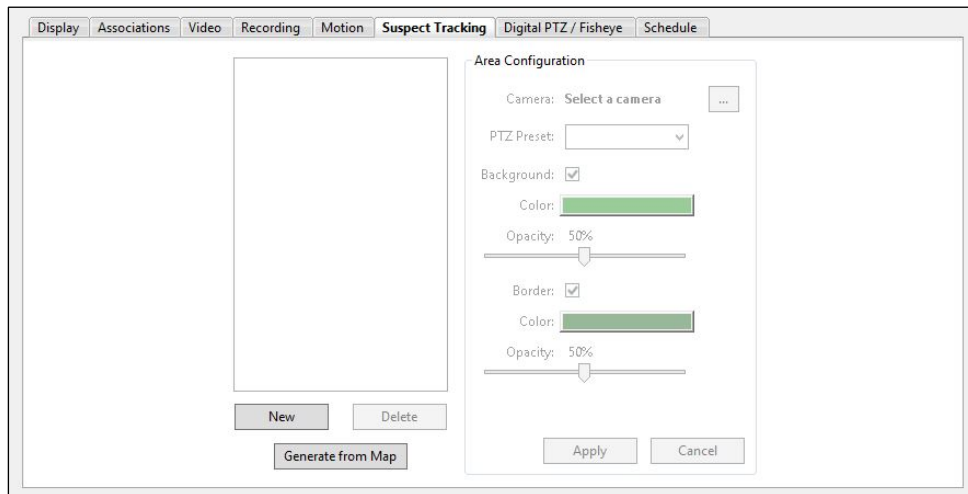
Figure 21. Suspect Tracking tab in the Camera Settings window

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.

Table 25. Suspect Tracking tab in the Camera Settings window

Setting up suspect tracking

To set up suspect tracking, complete the following steps:

1. On the **Suspect tracking** tab, click **New**.

2. 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.

3. In the **Area Configuration** pane, click the **Browse** button.

4. 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 25. Suspect Tracking tab**.

5. 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, and configure PTZ presets on a camera.
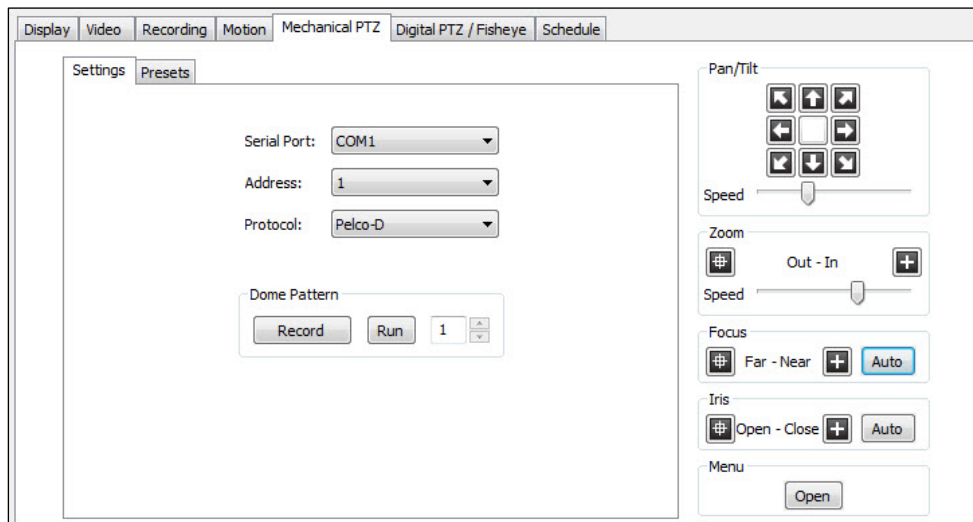
Figure 22. Mechanical PTZ tab in the Camera Settings window

On the **Settings** tab on the **Mechanical PTZ** tab, you can configure the COM port and address of a PTZ camera. For more information, see Table 26. 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.

Table 26. Settings tab on the Mechanical PTZ tab

On the **Preset** tab on the **Mechanical PTZ** tab, you can configure PTZ presets on a camera. For more information, see **Table 27. 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.

Table 27. Presets tab on the Mechanical PTZ tab

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 28. Digital PTZ/Fisheye tab in the Camera Settings window**.
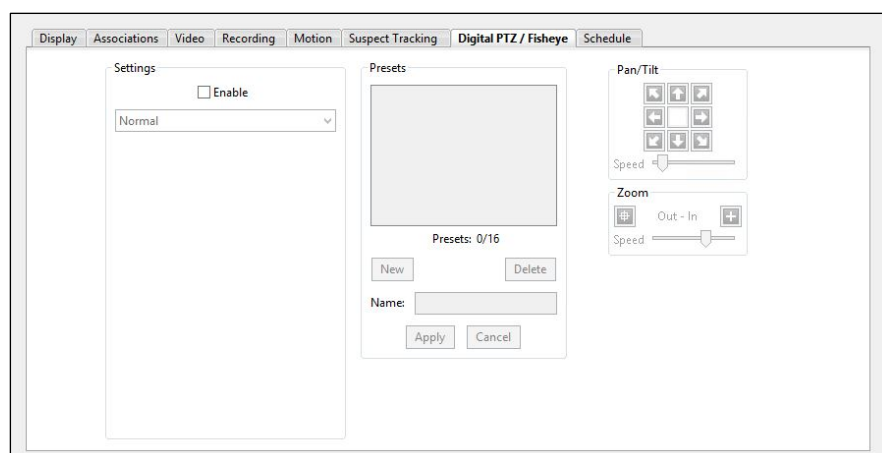
Figure 23. Digital PTZ/Fisheye tab in the Camera Settings window

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, enter a name in the **Name** field and then click **New**. 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.

Table 28. Digital PTZ/Fisheye tab in the Camera Settings window

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 29. Schedule tab**.
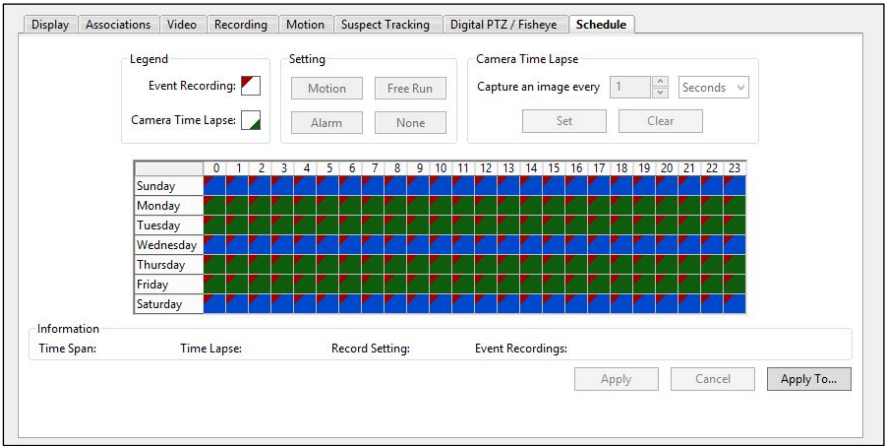
Figure 24. Schedule tab in the Camera Settings window

Interface element	Description
Legend area	Displays how **Event Recordings** and **Camera Time Lapses** display in the schedule grid.
Settings 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 Lapse Time 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.

Table 29. Schedule tab in the Camera Settings window

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 **Settings** area, select a recording option.

3. 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 30. PoE Ports window**.
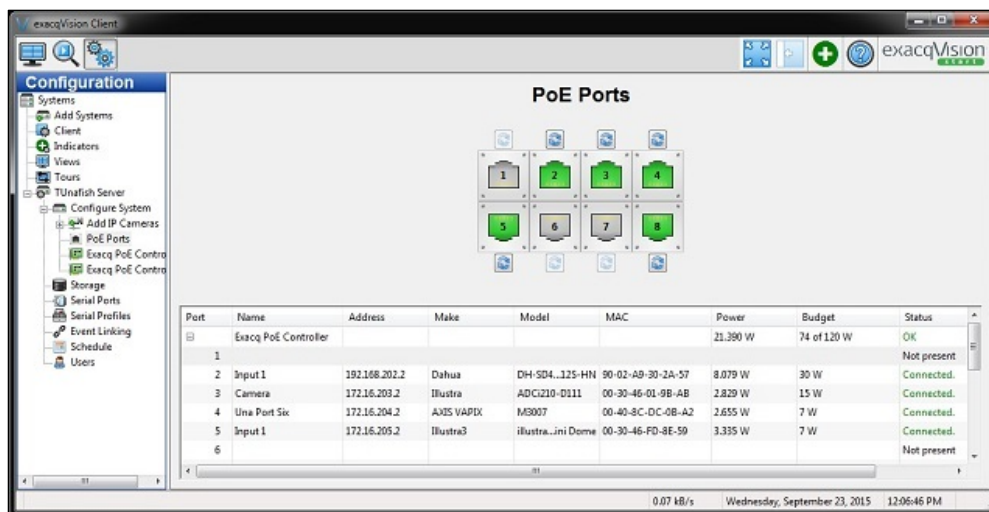
Figure 25. PoE Ports window

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**.

Interface element	Description
Port column	Displays the number of each physical Ethernet port that can be found on the back panel of a Una exacqVision recorder.
Name column	Displays the camera name that the port detects.
Address column	Displays the camera's IP address.
Make column	Displays the camera's brand.
Model column	Displays the camera model.
MAC address column	Displays the camera's MAC address.
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. Grey indicates that the port is not connected. Yellow indicates that the system is scanning for a port. Green indicates that the camera is connected. Red indicates that the camera is disconnected and is not responding.

Table 30. PoE Ports window

Security integrations window

In the **Add Security Integrations** window, you can add security devices to an exacqVision server. You can only add security devices that the exacqVision system supports. For more information, see www.exacq.com.
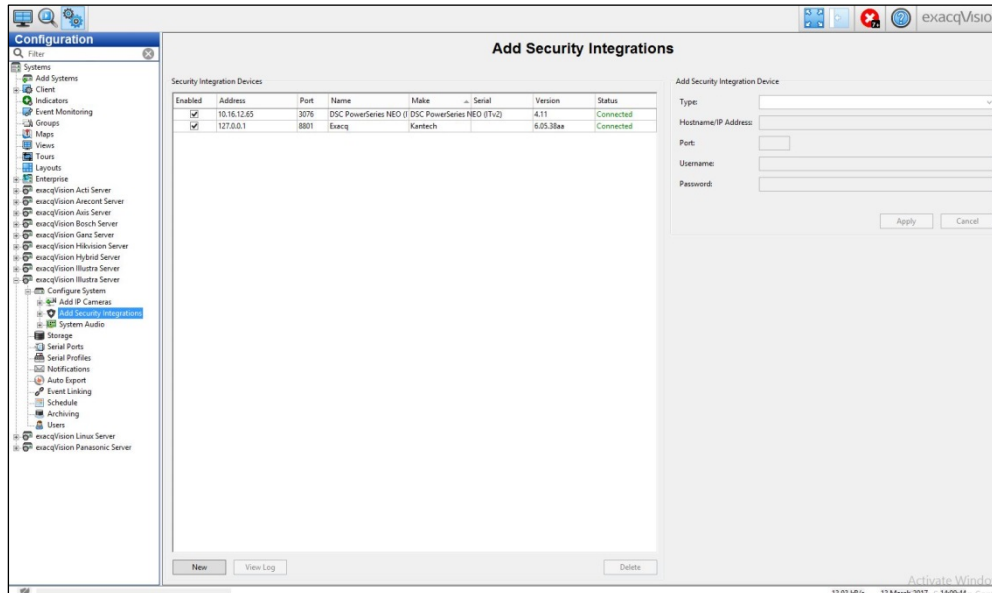
Figure 26. Add Security Integrations window

Adding a security device

To add a security device to a server, complete the following steps:

1. In the **Add Security Integrations** window, click **New**.

2. In the **Add Security Integration Device** area, select a device brand from the **Type** list.

3. Enter the hostname or IP address of the security device.

4. Enter a port number for the security device.

5. Enter a username and password for the security device.

6. Click **Apply**. The device displays under the **Add Access Control** 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.

Deactivating keywords

Keywords are metadata 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. 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 31** and **Table 32**.
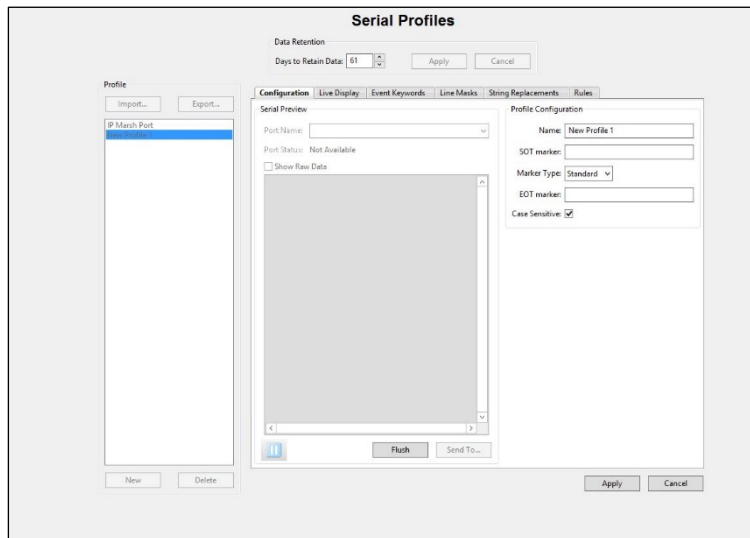
Figure 27. Serial Profiles window

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 32**.
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 31. Serial Profiles window

Interface element	Description
SOT marker field	The **Start of Transaction Marker (SOT)** 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 **End of Transaction Marker (EOT)** 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**.

Table 32. Configuration tab in the Serial Profiles window

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

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.
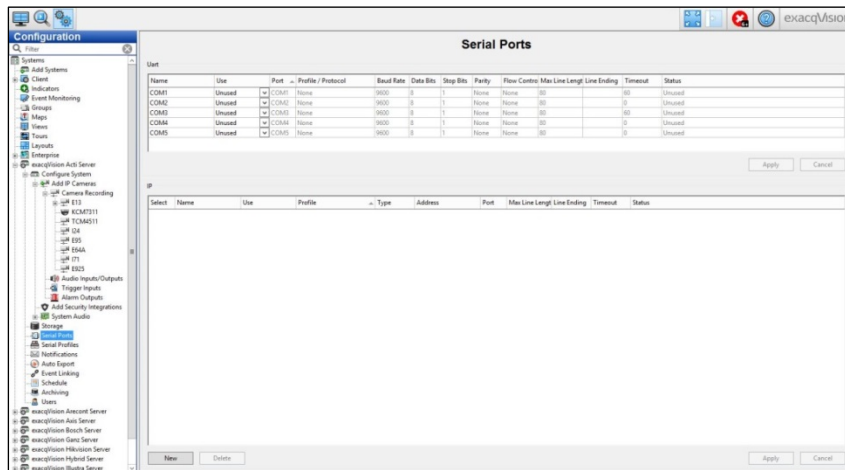
Figure 28. Serial Ports window

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 **Table 33. UART pane**.

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

Table 33. UART pane in the Serial Ports window

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 Table 34. IP pane.

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

Table 34. IP pane in the Serial Ports window

Audio Inputs/Outputs window

In the **Audio Inputs/Outputs** window, you can configure audio inputs and outputs for recording. For more information, see Table 35. Audio Inputs/Outputs window.

> **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.
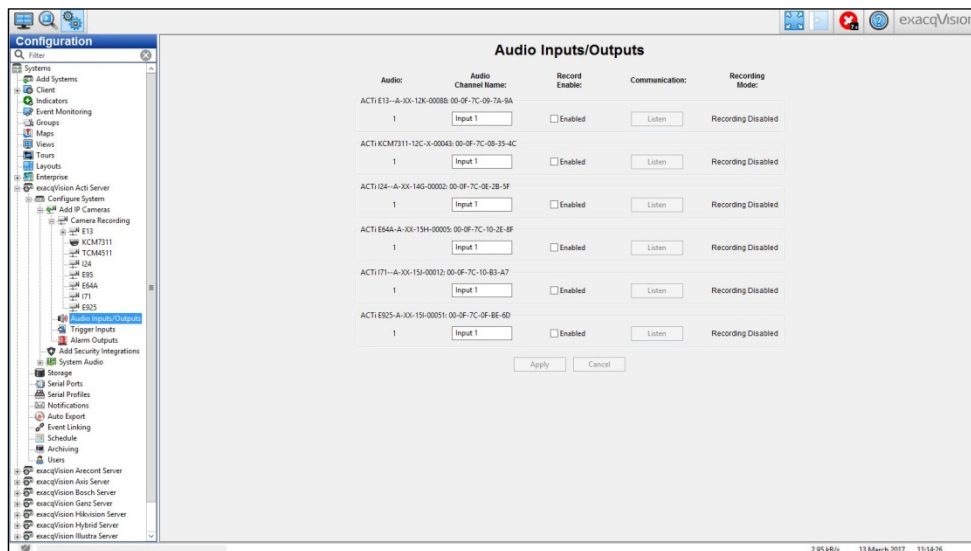
Figure 29. Audio Inputs/Outputs window

Interface element	Description
Audio area	Displays the audio number.
Audio Channel Name field	Enter a name for the audio input channel.
Record Enable check box	Select the **Record Enable** check box to enable the audio input for recording.
Communications area	Verifies that the audio input connects to a channel, and that you can send audio on 2-way audio systems.
	To verify that the audio input connects to a channel, click **Listen**.
	To verify that you can send audio on a 2-way audio system, click **Talk**.
Recording Mode area	Displays the recording mode setting for the audio input. To change the recording mode, see **Schedule tab**.

Table 35. Audio Inputs/Outputs window

Trigger Inputs window

In the **Trigger Inputs** window, you can configure alarm inputs on hybrid systems and some IP cameras to trigger video recording, or a relay. 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 36. Trigger Inputs window**.
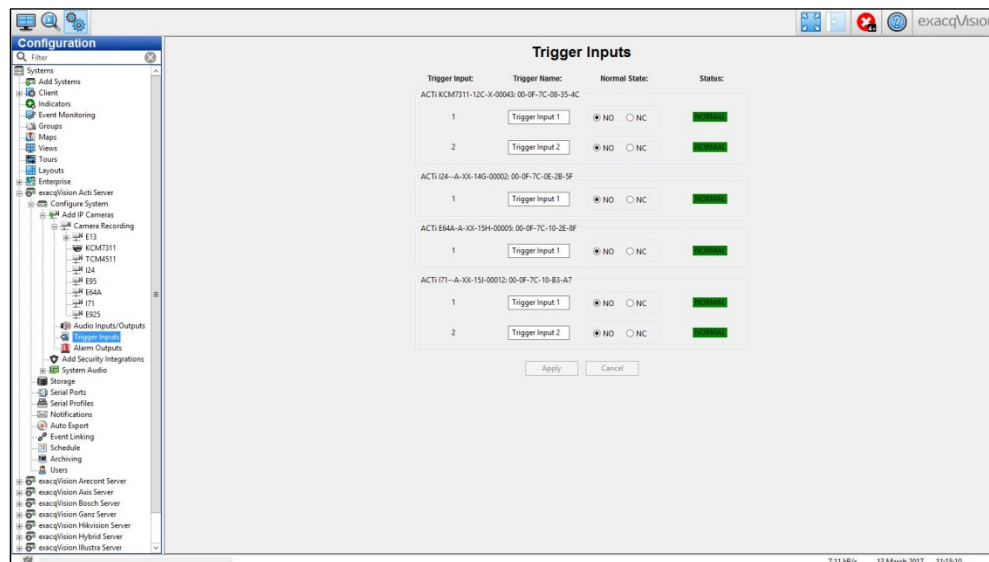
Figure 30. Trigger Inputs window

Interface element	Description
Trigger Input area	Displays the name of the camera.
Trigger Name field	Enter a name for the trigger input.
Normal State area	For **Normally Open**, select **NO**. For **Normally Closed**, select **NC**.
Status area	Displays the alarm state of the trigger.

Table 36. Trigger Inputs window

Alarm Outputs window

In the **Alarm Output** window, you can configure alarm outputs on hybrid systems and some IP cameras. For more information, see **Table 37. Alarm Outputs window**.
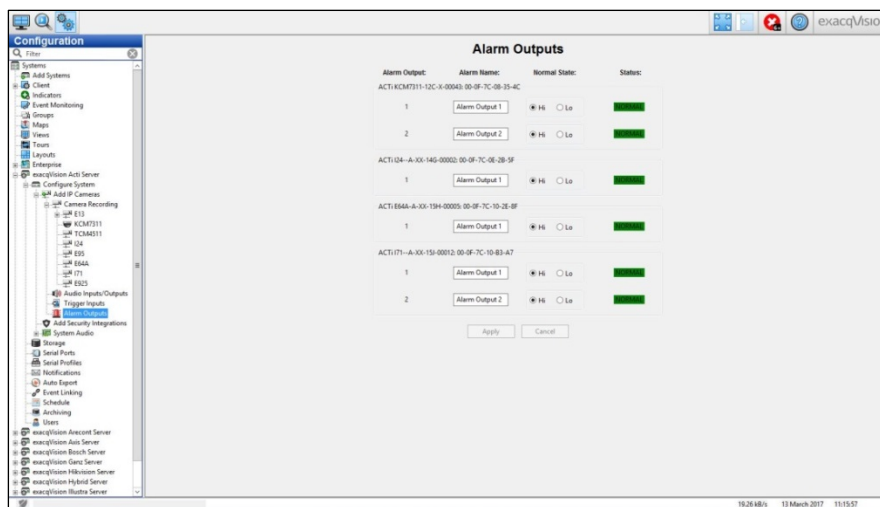
Figure 31. Alarm Outputs window

Interface element	Description
Alarm Output area	Displays the name of the system or camera.
Alarm Name field	Enter a name for the alarm output.
Normal State area	For **5VDC**, select **Hi**. For **0VDC**, select **Lo**.
Status area	Displays the status of the alarm.

Table 37. Alarm Outputs window

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**.
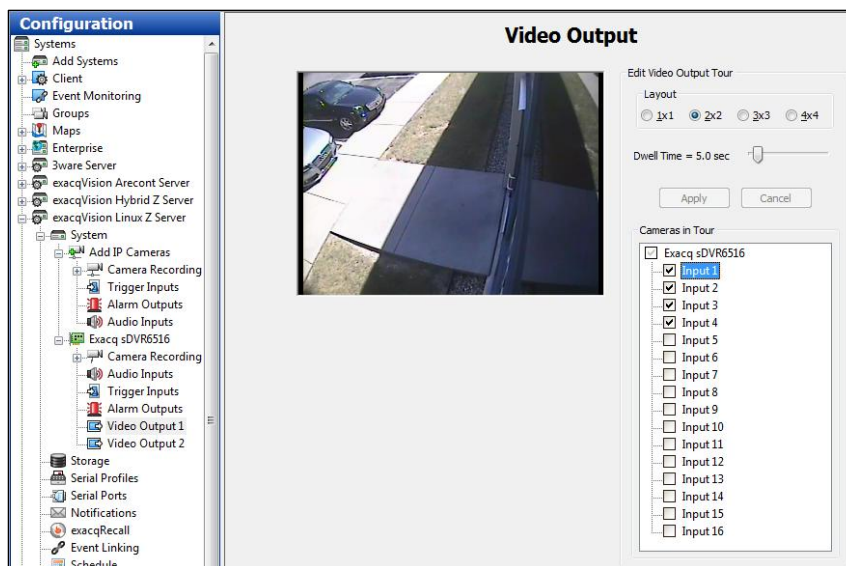
Figure 32. Video Output window

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 1 and sixty 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 38. Drive tab** and **Table 39. Drive Configuration pane**.
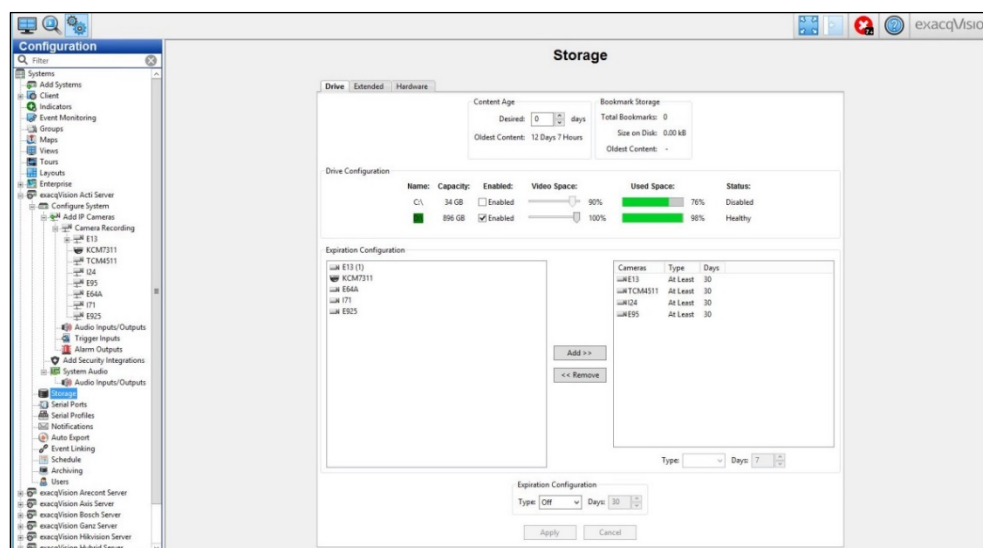
Figure 33. Drive tab in the Storage window

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 39. Drive Configuration pane.**
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**.
	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 38. Drive tab 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 maximum amount of drive space that you can use for data storage. If you adjust the video space to 85% or greater, you can decrease the performance of the system.
Used Space area	Displays the current hard drive capacity.
Status area	Displays the current health status of the hard drive.

Table 39. Drive Configuration pane in the Storage window

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**.

   - To save a video for a minimum period of time, select **At Least**.

     Note:
     - If you select **At Most**, you cannot select the camera for archiving, or delete bookmarked video from the camera.

     - 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**.
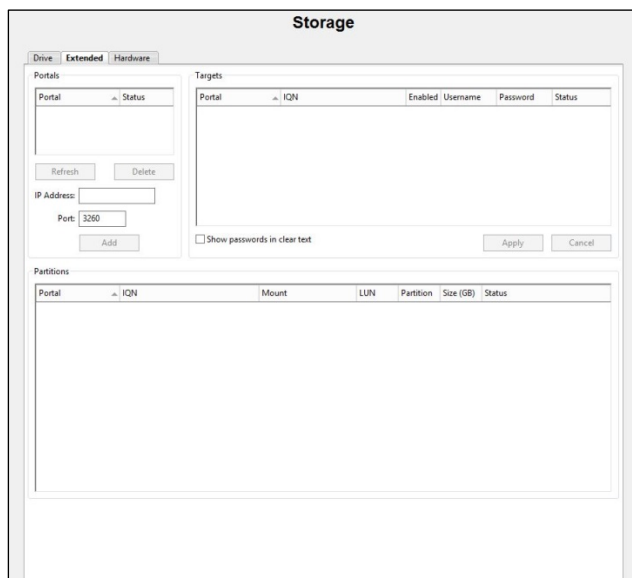
Figure 34. Extended tab in the Storage window

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

The **Hardware** tab displays attributes for each hard drive and RAID controller in the system. For more information on the functionality of the **Hardware** tab, see Table 40. Hardware tab.
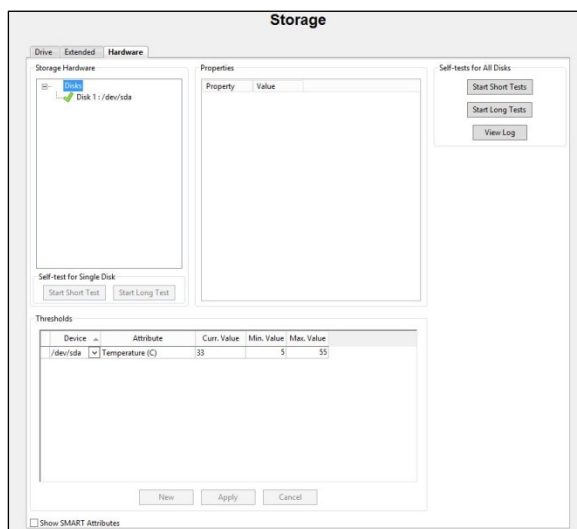
Figure 35. Hardware tab in the Storage window

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 area	Performs a self-test for individual drives.
	To perform a short test, click **Start Short Test**.
	To perform a long test, click **Start Long Test**.
	Hot Spare drives that connect through LSI RAID cards fail the test.
Properties area	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.
View Log button	Displays a log of the short or long test results.

Table 40. Hardware tab in the Storage window

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 **Table 41. 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.

Table 41. Network tab

Notifications window

In the **Notifications** window, you can access the **E-mail Message Profiles**, **E-mail Servers**, and the **Web Server** tabs. On these tabs, you can configure an e-mail server and a text-message profile to send an email when an event occurs. To configure events for an email notification, see **Event Monitoring window**.

> **Note:** The **Notification** 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 message profile**. For more information on the functionality of the **E-mail Message Profiles** tab, see Table 42. E-mail Message Profiles tab in the Notifications window.
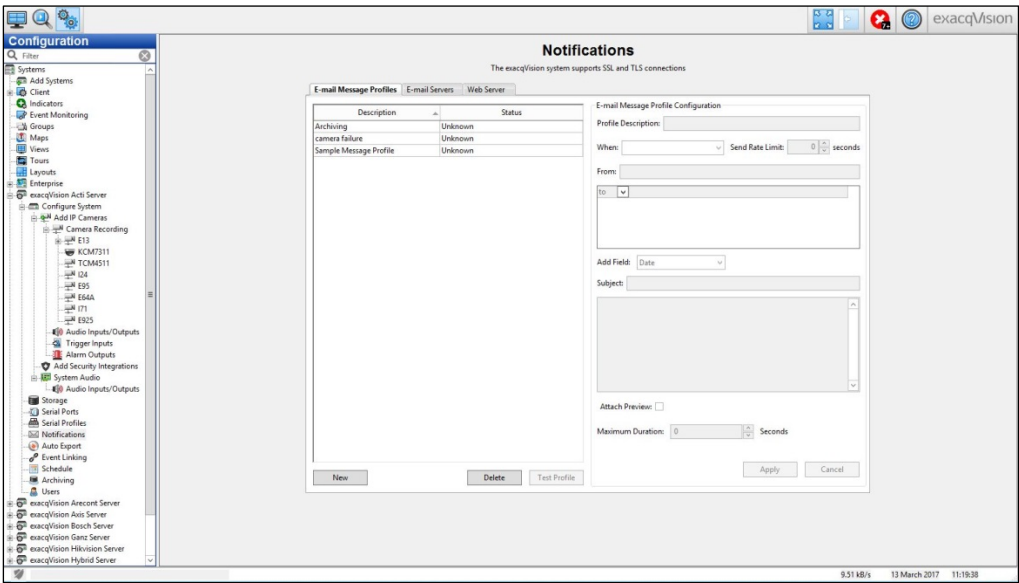
Figure 36. E-mail Message Profiles tab in the Notifications window

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.
Attach Preview check box	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.

Table 42. E-mail Message Profiles tab in the Notifications window

Creating an email message profile

To create an email message profile, complete the following steps:

1. Click **New**.

2. 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.

3. 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.

4. Enter a subject for the email, and then type the email message in the Message field. For more information, see Table 42. E-mail Message Profiles tab in the Notifications window.

5. Click **Apply**.

E-mail Servers tab

On the **E-mail Servers** tab, you can add and configure the outgoing Simple Mail Transfer Protocol (SMTP) mail server. To add a server to the SMTP mail server, see **Adding a server to the SMTP mail server**. For more information on the **E-mail Servers** tab, see Table 43. E-mail Servers tab in the Notifications window. For more information on your mail server options, contact the network administrator.
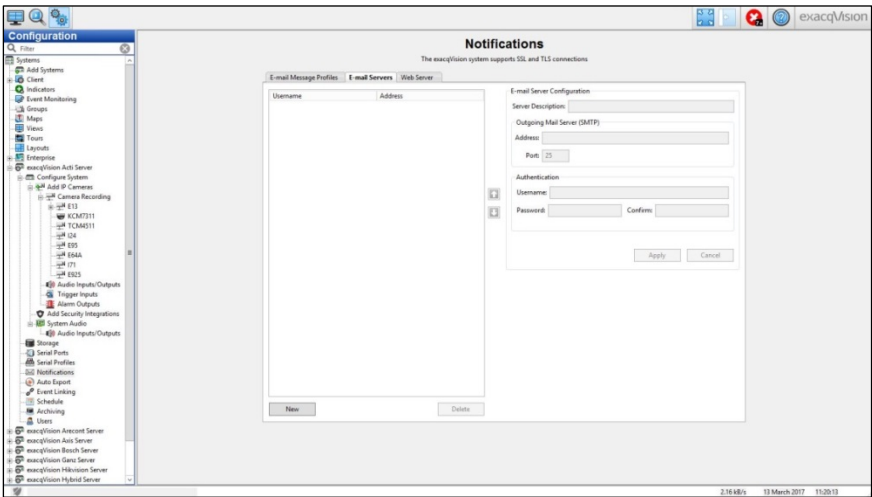
Figure 37. E-mail Servers tab in the Notifications window

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.

Table 43. E-mail Servers tab in the Notifications window

Adding a server to the SMTP mail server

To add a server, complete the following steps:

1. Click **New**.

2. Enter a name for the server in the **Server Description** field.

3. In the **Outgoing Mail Server** area, enter the IP address and port number of the outgoing mail server. The default port number is 25.

4. Click **Apply**.

Web Server tab

On the **Web Sever** 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 camera's IP address in the **Address** field, and then click **Apply**.
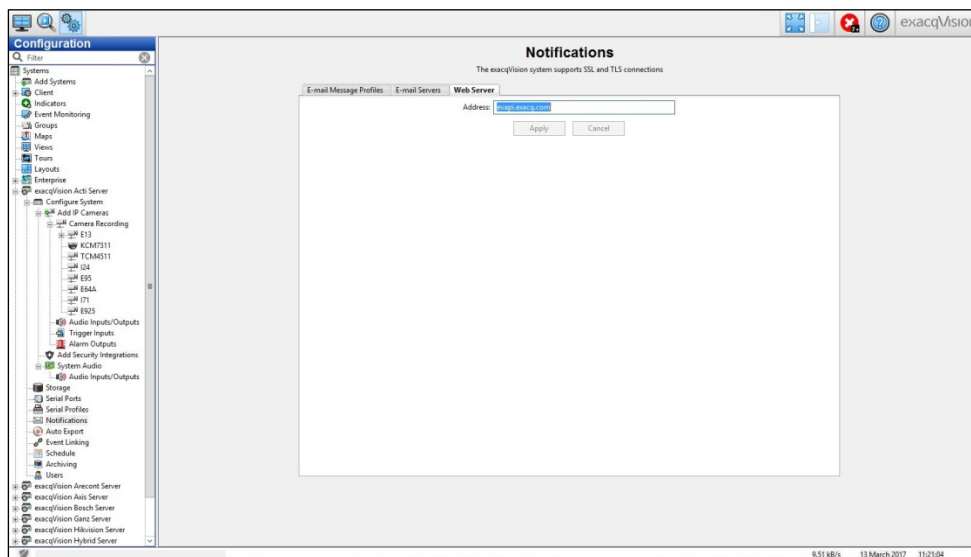
Figure 38. Web Server tab in the Notifications window

Creating a text-message notification

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 **Notification** window. For more information on how to add a new profile, see **Creating an email message profile**.

   > **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 **Even 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**.

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 44. Edit Profile pane in the Auto Export window** and **Table 45. Activity, Drive and Media Status panes in the Auto Export window**.

Note: The **Auto Export** window is not available in exacqVision Start.
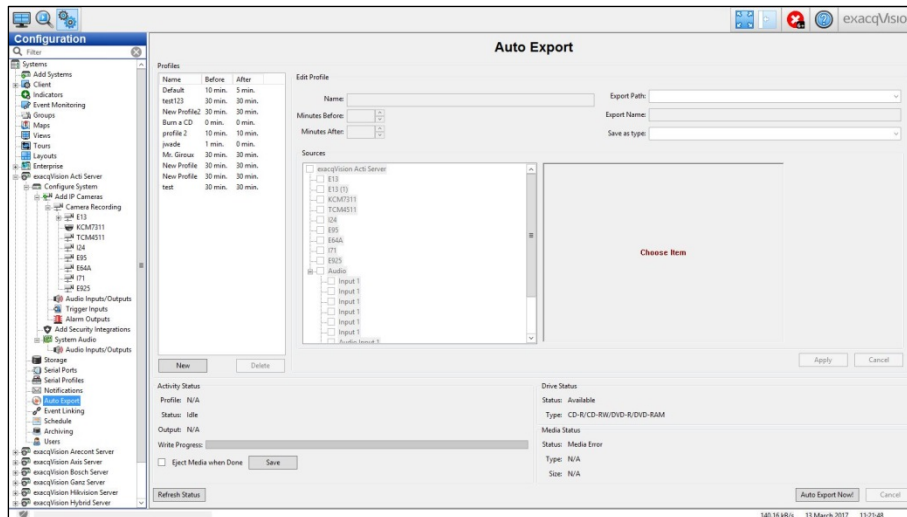
Figure 39. Auto Export window

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 46. Variables**. 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 **Export PS file only** check box, the file exports in an .exe format.

Table 44. Edit Profile pane 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.

Table 45. Activity, Drive and Media Status panes in the Auto Export window

In **Table 46,** you can find a list of variables that you can use to generate automated names for exports.

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

Table 46. Variables

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 47. Event Linking window**.
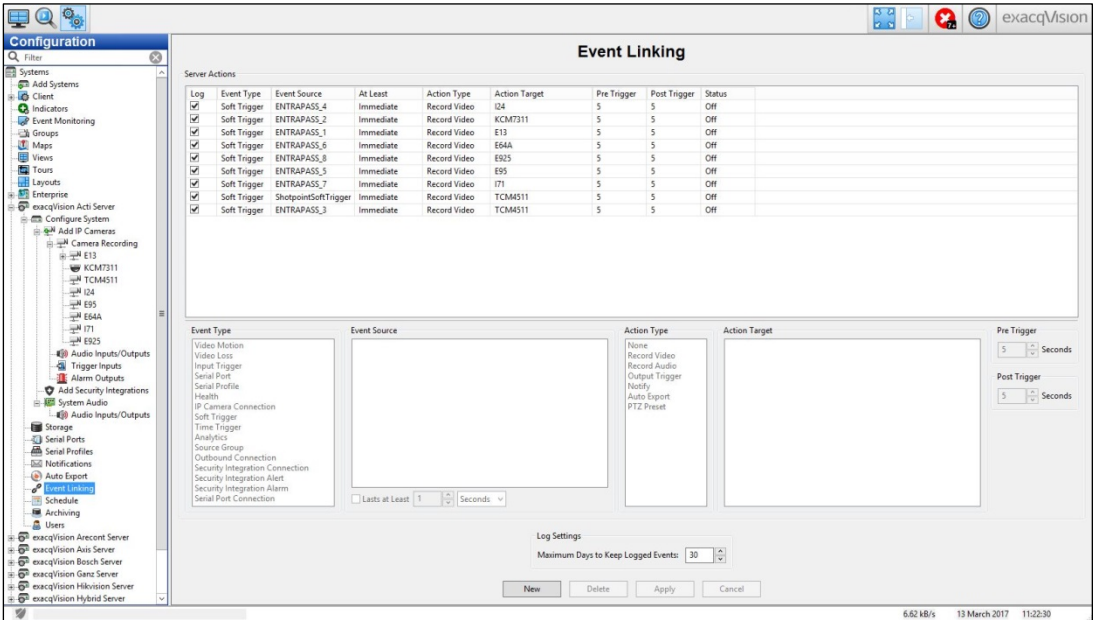
Figure 40. Event Linking window

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 48. Event types and event sources** . 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 49. Action types and action targets** .
Action Target list	Displays a list of possible targets. For more information, see **Table 49. Action types and action targets** .
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.

Table 47. Event Linking window

Creating an event link

To create an event link, complete the following steps:

1. Click **New**.

2. From the **Event Type** list, select an event. For more information on the available options in the **Event Type** list, see Table 48. Event types and event sources.

3. From the **Event Source** list, select an event source. For more information on the available options in the **Event Source** list, see **Table 48. Event types and event sources**.

   > 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. For more information on the available options in the **Action Type** list, see **Table 49. Action types and action targets**.

5. From the **Action Target** list, select a target. For more information on the available options in the **Action Target** list, see **Table 49. Action types and action targets**.

   > Note: For information on the options available in the **Event Type**, the **Event Source**, the **Action Type** and the **Action Target** lists, see **Table 48. Event types and event sources** and **Table 49. Action types and action targets** .

6. Click **Apply**.

In **Table 48**, 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.

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 customise the default device and input number in the **Trigger Inputs window**.
Serial Port	The system detects a key word on a pre-selected 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 health of the exacqVision server hardware.	Includes failures and temperature problems in a device; storage configuration problems; subscription expiration; video throttling alarms; monitoring parameter alarms on the **Hardware Monitoring** tab in the **System** window; and connection failures to shared network drives for archiving.
IP Camera Connection	The network cannot connect to the IP camera.	Any IP camera that connects to the exacqVision server.
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	The system detects a video analytic event.	A list of video analytic events.
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**.

Table 48. Event types and event sources

In **Table 49**, you can find descriptions for the options that display in the **Action Type** and **Action Target** lists in the **Event Linking** window.

Action Type	Action Type description	Action Target
None	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.
Recorded Video	Records video.	Any camera that connects to the exacqVision server.
Recorded 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 **Notification** 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.
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.

Table 49. Action types and action targets in the Event Linking window

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 50. Profile pane in the Event Monitoring window and Table 51. Client Actions pane in the Event Monitoring window.

> Note: The **Event Monitoring** window is not available in exacqVision Start.
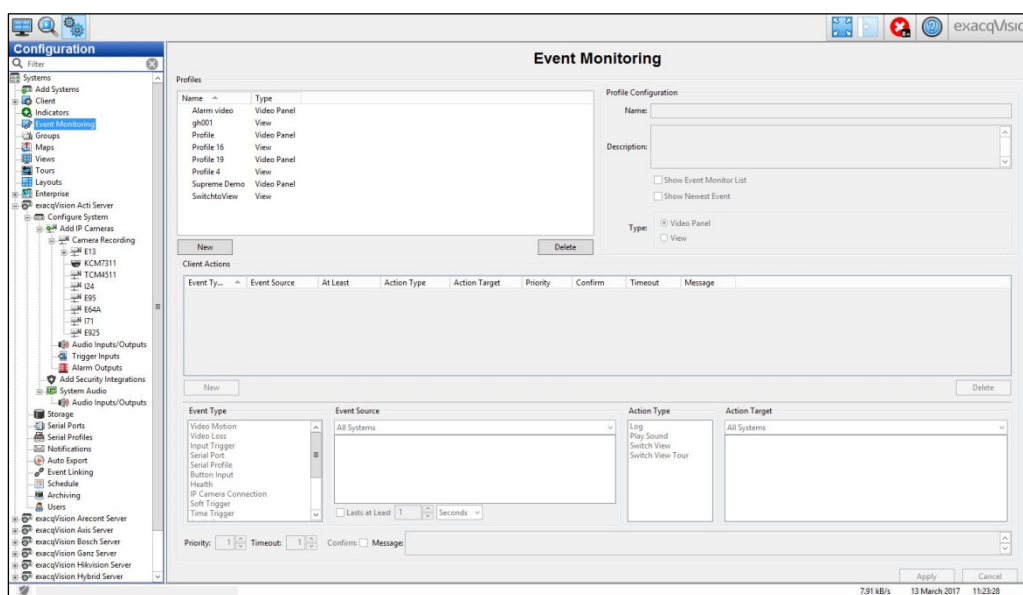
Figure 41. Event Monitoring window

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** 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 51. Client Actions pane in the Event Monitoring window.**
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 50. Profile 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 48. Event types and event sources** Input triggers and soft triggers are the only event types available in exacqVision Start.
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 48. Event types and event sources**
	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 50. Profile pane in the Event Monitoring window**.
Action Target list	Displays a list of possible targets. For more information, see **Table 52. Action Types and Action Targets in the Event Monitoring window**.
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.

Table 51. Client Actions pane in the Event Monitoring window

Creating an event monitoring profile

To create an event monitoring profile, complete the following steps:

1. In the **Profiles** pane, click **New**.

2. In the **Profile Configuration** pane, enter a name and description for the profile.

3. Select one of the following profile types:

   - Video Panel

   - View

4. From the Event Type list, select an event. For more information on the available options in the Event Type list, see Table 48. Event types and event sources.

5. From the **Event Source** list, select an event source. For more information on the available options in the **Event Source** list, see **Table 48. Event types and event sources**.

   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.

6. From the **Action Type** list, select an action. For more information on the available options in the **Action Type** list, see **Table 52. Action Types and Action Targets** in the Event **Monitoring** window.

7. From the **Action Target** list, select a target. For more information on the available options in the **Action Target** list, see Table **52. Action Types and Action Targets in the Event Monitoring window**.

8. Click **Apply**.

In **Table 52**, you can find descriptions of the available options that display in the **Action Type** and **Action Target** lists in the **Event Monitoring** window.

Action Type	Action Type description	Action Target options
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 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.

Table 52. Action Types and Action Targets in the Event Monitoring window

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.
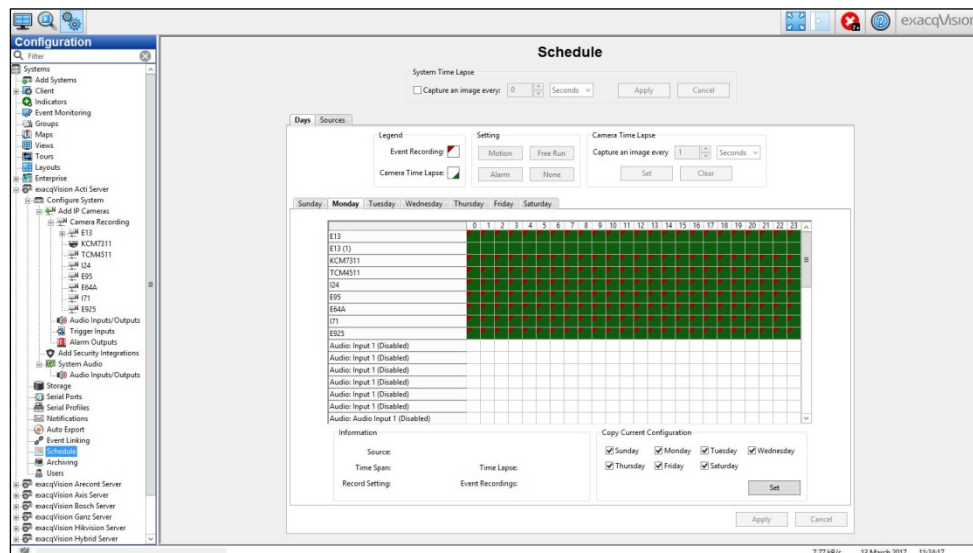

Figure 42. Schedule window

Schedule modes

When creating a schedule, you can choose from four modes of recording settings. For more information see, **Table 53. 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.

Table 53. Recording setting modes

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 **Table 54. Days tab**.

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 53. Recording setting modes**.
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**.

Table 54. Days tab in the Schedule window

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 53. Recording setting modes**.

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 Table 55. Sources tab.

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 53. Recording setting modes.**
Apply To button	Applies the camera's schedule to another device.

Table 55. Sources tab in the Schedule window

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

An archive provides storage and quick access and retrieval of recorded video and audio data. Archiving supports video and audio only with bookmarking and case data. 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 closing hours.

In the **Archiving** window, you can create an archive for video and other data on a Server Message Block (SMB) shared network drive that a multiple of exacqVision servers can use.

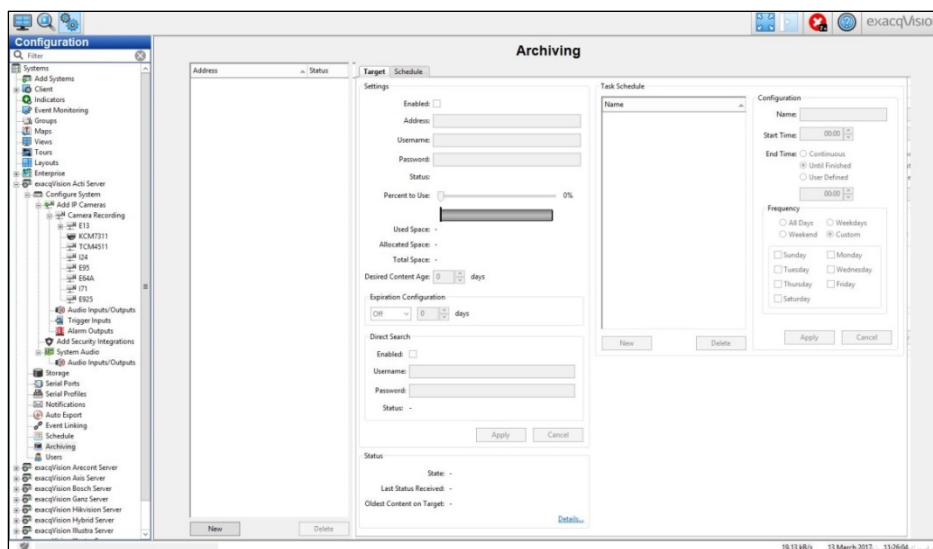> Note: The **Archiving** window is not available in exacqVision Start.

Figure 43. Archiving window

Target tab

On the **Target** tab, you can configure one or more shared network drives for data retrieval. For more information, see Table 56. Target tab in the Schedule window.

Interface element	Description
Status area	Displays whether the server successfully connects to the shared network drive.
Percent to Use slider	Adjusts how much of the drive you want to use for archiving. To select a percentage of the drive to use for archiving, move the **Percent to Use** slider.
	A progress bar displays different colors to indicate the current space capacity of the drive. Blue indicates the amount of space that the current drive you are configuring for archiving is using. Grey indicates the amount of unused space, and red indicates the amount of space that other systems use. If you select a percentage of the drive that includes red, other systems cannot use that portion of the drive for archiving.
Desired Content Age list	To select the number of days that you want the system to archive the data, use the **Desired Content Age** list. If you delete data before the set number of days, the system creates an event that can trigger an action.
Expiration Configuration area	Sets the limit for the number of days that you can store archived video. The system deletes any video in the archive that is older than the set value. To set a limit for the number of days to store data, select **At Most**, and then select a number of days from the **Days** list. The default value is 30.
Direct Search pane	Connects excqVision clients directly to the archive without having to go through the exacqVision server. To connect an exacqVision client directly to the archive, select the **Enabled** check box and then enter a username and password. For more information, see **Direct search**.
Status pane	Displays information about the current archive task.
	To view additional details about the archiving task, select **Details**.

Table 56. Target tab in the Schedule window

Configuring a drive for archiving

To configure a drive for archiving, complete the following steps:

1. In the **Target** tab, click **New**.

2. Enter the path of the shared network folder and the subdirectory in the **Address** field.

3. Enter a username and password for the shared network drive.

4. Move the **Percent to Use** slider to adjust how much of the drive you want to use for archiving. For more information, see **Table 56. Target tab in the Schedule window**.

5. In the **Direct Search** area, enter a username and password that the exacqVision client uses to log on to the archive.

6. Click **Apply**.

Direct search

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. For a direct search, you must use the credentials of an archive store account.

The **Status** area in the **Direct Search** pane displays information about the connection between the exacqVision client and the archive. For more information, see **Table 57. Direct search status messages**.

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.

Table 57. Direct search status messages in the Direct Search pane

Task schedule pane

In the **Task Schedule** pane on the **Target** tab, you can schedule archiving tasks for servers. If there is enough time remaining in the task, the system archives any applicable data recorded while the archive task is in progress. To schedule an archiving task on a server, see **Scheduling an archiving task on a server**. For more information on the functionality of the **Task Schedule** pane, see **Table 58. Task Schedule pane on the Target tab**.

Interface element	Description
End Time area	Determines the end time for the archiving task.
	To configure the system to scan the server for data to archive every 5 minutes, select **Continuous**.
	To configure the system to continue archiving until all the applicable data is archived, select **Until Finished**.
	To configure the system to stop archiving at the time you specify in the **End Time** area, select **User Defined**. If the archiving time period that you select is not long enough to archive all applicable data, the remaining data is archived during the next archiving time.
Frequency area	If you select **Until Finished** or **User Defined** in the **End Time** area, use the **Frequency** area to select when you want the archiving task to start.
	To select the days of the week individually, select **Custom**.

Table 58. Task Schedule pane on the Target tab

Scheduling an archiving task on a server

To schedule an archiving task on a server, complete the following steps:

1. Select a server.

2. In the **Task Schedule** tab, click **New**.

3. In the **Configuration** pane, enter a name for the archiving task in the **Name** field.

4. Select a start time.

5. Select an end time type and an end time. For more information on the End Time types, see **Table 58. Task Schedule pane on the Target tab**.

    Note: The oldest data that meets the criteria in 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 a frequency option, and then select the days of the week.

7. Click **Apply**.

Schedule tab in the Archiving window

The **Schedule** tab in the **Archiving** window has two tabs; the **Days** tab and the **Sources** tab. On the **Days** tab, you can create an archiving schedule for all devices on a server. On the **Sources** tab, you can create a schedule for a single device on a server. To create an archiving schedule for devices on a server, see **Creating an archiving schedule for all devices in a server** and **Creating an archiving schedule for a single device in a sever.** For information on the functionality of the Schedule tab, see Table 59. Days tab on the Schedule tab in the Archiving window.
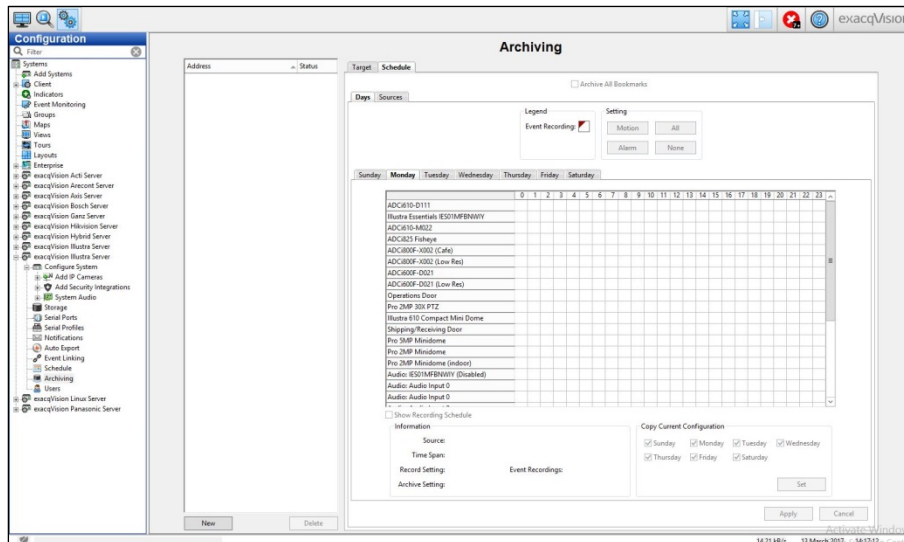

Figure 44. Schedule tab in the Archiving window

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 area	Displays how **Event Recordings** display in the schedule grid.
Setting area	Displays the modes of recording settings. For more information, see **Table 53. Recording setting modes**.
Show Recording Schedule check box	Displays the recording schedule behind the archiving schedule to act as a reference.
Information area	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 area	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**.

Table 59. Days tab on the Schedule tab in the Archiving window

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. 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 archiving.

3. In the **Settings** area, select a recording mode. For more information on the recording modes, see **Table 29. Schedule tab**.

4. Click **Apply**.

Creating an archiving schedule for a single device in a sever

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

1. In the **Sources** tab, select a device from the **Device** list.

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 archiving.

3. In the **Settings** area, select a recording mode. For more information on the recording modes, see **Table 29. Schedule tab**.

4. Click **Apply**.

Users window

In the **Users** window, you can add and delete users from the system, configure the access level of a user group, and assign permissions to view cameras. To add a user or a user group, see **Adding a user to the system** and **Adding a user group to the system**. For information on the functionality of the **Users** window, see **Table 60**.
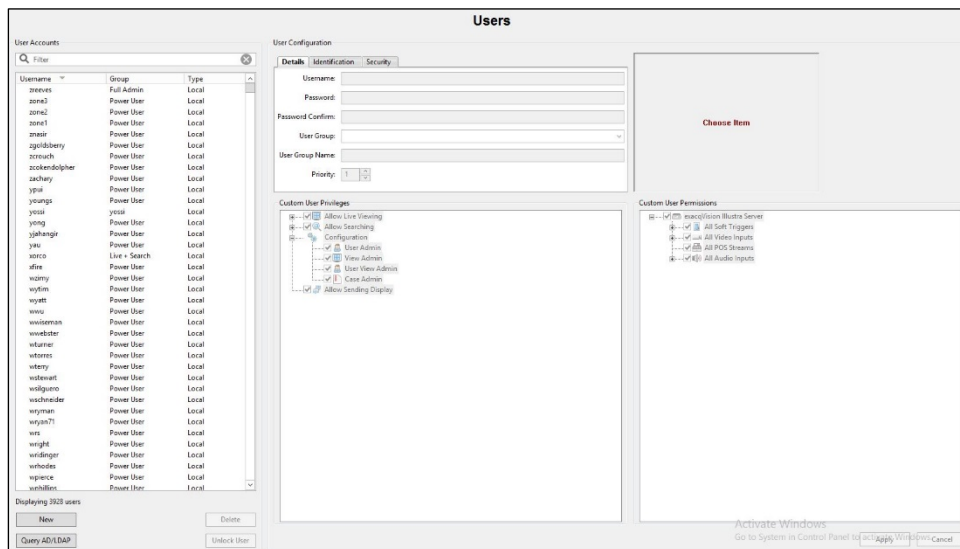

Figure 45. Users window

Interface element	Description
User Accounts list	Displays a list of system users and user groups.
	To add a new user or user group, see **Adding a user to the system** and **Adding a user group to the system**.
	To change the password or permissions for a user group, see **Users window**.
	To delete a user or user group, select the user or user group from the **User Accounts** list, and then click **Delete**.
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 log in security parameters**.
Details tab	For more information on the **Details** tab, see **Table 61. Details tab in the Users window**.
Identification tab	You can use the **Metadata** area to create data fields to refine a user search. To create a data field, click the **Plus** icon and then enter the information in the corresponding field.
Security tab	The **Security** tab is only available on systems that support its features. For more information, see **Table 62**.
Custom User Privileges list	Displays a list of devices that you can select so that users or user groups can operate them in the exacqVision client.
Custom user Permissions list	To edit the **Custom User Permissions** list, you must clear the **View Admin** and **User Admin** check boxes in the **Custom User Privileges** list.

Table 60. Users window

In the **User Configuration** pane, you can create a new user or user group and configure their access level, permission, and privileges. For more information, see, **Table 61**, **Table 62**, **Adding a user to the system** and **Adding a user group to the system**.

Interface element	Description
Username field	The username must contain at least 7 characters.
Password field	Passwords cannot contain their associated username.
User Group list	The **User Group** list displays a list of permission levels for users. For more information, see **Table 63**. The Custom Group option is not available in exacqVision Start.
User Group Name field	In the **User Group Name** field, you can enter a name for the user group.
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.

Table 61. Details tab in the Users window

Interface element	Description
Disable User check box	To disable a user, select a user from the **User Accounts** list, then select the **Disable User** check box and click **Apply**.
Lockout Status area	The **Lockout Status** area 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 log in security parameters**.
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**

Table 62. Security tab in the Users window

In **Table 63**, you can find descriptions for the available options in the **User Group** 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.
Custom group or user	A custom set of permissions that you create for a user or group.

Table 63. User Group list in the Users window

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 Group** list. For information on the permission levels, see **Table 63. User Group list in the Users window**.

5. Select a PTZ priority level from the **Priority** list.

6. Optional. From the **Custom User Privileges** list, select the privilege you want the user to access.

7. Optional. From the **Custom User Permissions** list, select the devices that you want the user to access.

    > **Note:** To edit the **Custom User Permissions** list, you must clear the **View Admin** and **User Admin** check boxes in the **Custom User Privileges** list.

8. Click **Apply**.

Adding a user group to the system

To add a user group 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 Group** list. For information on the permission levels, see **Table 63. User Group list in the Users window**.

3. Enter a name for the user group in the **User Group Name** field.

4. Select a PTZ priority level from the **Priority** list.

5. Optional. From the **Custom User Privileges** list, select the privilege you want the user group to access.

6. Optional. From the **Custom User Permissions** list, select the devices that you want the user group to access.

    > **Note:** To edit the **Custom User Permissions** list, you must clear the **View Admin** and **User Admin** check boxes in the **Custom User Privileges** list.

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 Group** list. For information on the permission levels, see **Table 63. User Group list in the Users window**.

4. Optional. From the **Custom User Privileges** list, select the privilege you want the user group to access.

5. Optional. From the **Custom User Permissions** list, select the devices that you want the user group to access.

    > **Note:** To edit the **Custom User Permissions** list, you must clear the **View Admin** and **User Admin** check boxes in the **Custom User Privileges** list.

6. 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 Error! Reference source not found.. For more information on the **Systems** window, see **Table 64. Systems window**.

Figure 46. Systems window

Interface element	Description
System Name column	Displays the name of the server.
	To view the model number and serial number information of a server, right-click the **System Name** field.
Serial Number column	Displays the serial number of the server.
IP address column	Displays the IP address and hostname of the server.
Connection Status column	To connect or disconnect a single server from the 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 **Text**. If you select **File**, you can browse to a .KEY file that contains the license information. If you select **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.

Table 64. Systems window

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 65. Device window.
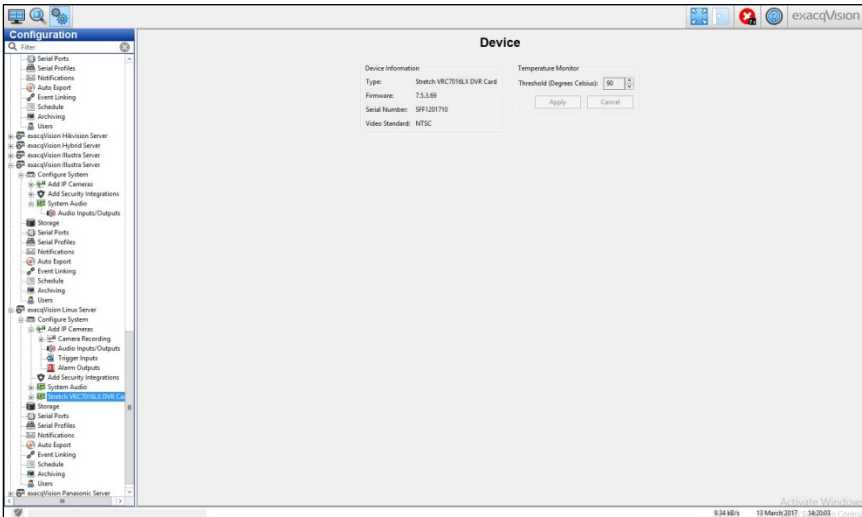
Figure 47. Device window

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**.

Table 65. Device window

Client window

In the **Client** window, you can customize the exacqVision client's settings. For more information, see **Table 66. Client window**, **Table 67. Live Video Panel pane in the Cient window**, and **Table 68. Decoding pane in the Client window**.

Figure 48. Client window

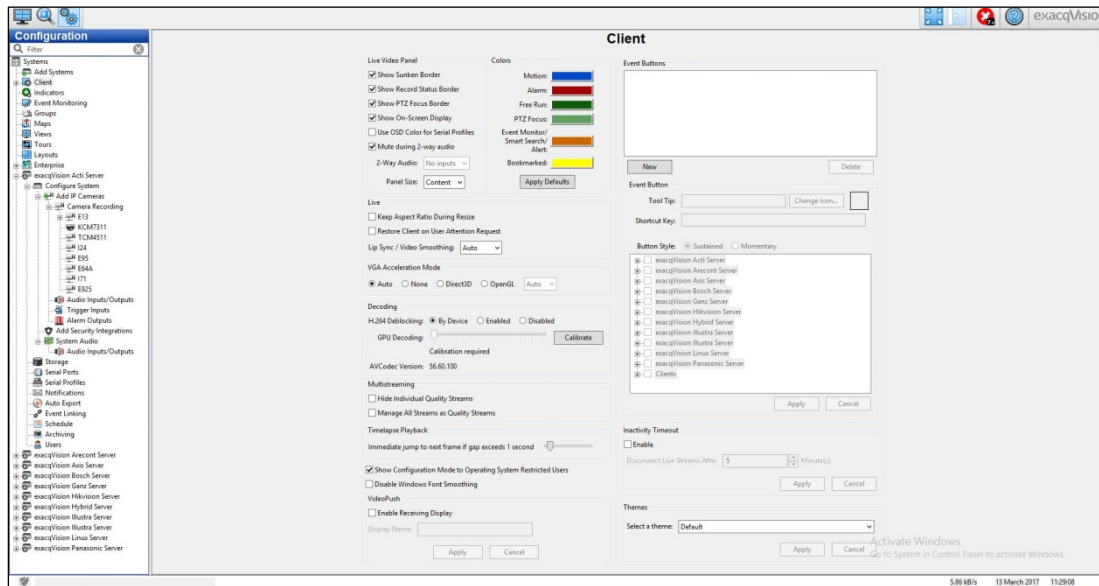| Interface element	Description
Live Video Panel pane	Modifies the window display and audio settings on the **Live** window. For more information, see **Table 67. Live Video Panel pane in the Cient window.**
Colors pane	Changes the default border colors on video panels for the following events: Motion, Alarm, Free, Run, PTZ Focus, and Event Monitor. To change an events color, click the color next to the events name, and then select a new color and click **Ok**. The **Colors** pane is not available in exacqVision Start.
Live pane	To maintain the video panel aspect ratio when you increase or decrease the size of the exacqVision client, select **Keep Aspect Ratio During Resize**.
	To display a minimized client when an event occurs that requires user action, select **Restore Client on User Attention Request**.
	To ensure that audio and video play back synchronize, select **Enabled** from the **Lip Sync/Video Smoothing** list. This option buffers up to 5 seconds of video and audio and can compensate for an intermittent video stream. However, it also increases memory usage and video latency.
VGA Acceleration 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. The **VGA Acceleration** pane is not available in exacqVision Start.
Decoding pane	Improves the visual quality of video in the exacqVision client. For more information, see **Table 68. Decoding pane in the Client window.**
Multistreaming pane	To hide secondary streams of cameras in the navigation tree in the **Live** window, and to let the client determine the most appropriate stream to display, select **Hide Individual Quality Streams**.
	To let the client handle all secondary streams as if they were quality streams, even if the secondary stream's aspect ratio is different from the main stream, select **Manage All Streams as Quality Streams**.
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 1 second** slider. The **Timelapse Playback** pane is not available in exacqVision Start.
Show Configuration Mode to Operating System Restricted Users heck box	Hides the **Config (Setup) Page** icon for users with Window settings restrictions. This feature is not available in exacqVision Start.
Disable Windows Font Smoothing check box	By default, the system applies a font smoothing technique to sharpen text font. To disable this technique, select the **Disable Windows Font Smoothing** check box.
VideoPush pane	For the exacqVision client to receive items from another exacqVision client with an Enterprise license, select **Enable Receiving Display**.
	If you enter a name for the exacqVision client in the **Display Name** field, it displays on the title bar of the exacqVision client that it connects to remotely.
	For more information on the VideoPush feature, see **VideoPush window**.
Event Buttons pane	Creates shortcuts for any configured soft trigger. To create a shortcut for a soft trigger, see **Creating a shortcut for a soft trigger.** The **Event Buttons** pane is not available in exacqVision Start.
Inactivity Timeout pane	Automatically disconnects live video streams after a set time of inactivity. To set an inactivity time, select **Enable**, and then from the **Disconnect Live Stream After** list select a number of minutes and click **Apply**.
Themes pane	To change the exacqVision client color scheme, use the **Select a theme list**.
24-Hour Clock	This feature is only available on Mac computers.

Table 66. Client window

Interface element	Description
Show Sunken Boarder check box	Decreases the space between video panels.
Mute during 2-way audio check box	Mutes all sound when you use the 2-Way Audio feature.
2-Way Audio list	Displays a list of microphones that connect to the client computer. To send audio from the client to the server, select a microphone from the **2-Way Audio** list.
Panel Size list	Displays a list of video panel size options for live video.
	To display the video panels using the dimensions of the currently displaying video panel, select **Content**. If the majority of the video panels on display capture 16x9, all video panels will 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 widescreen layout icons are not available.

Table 67. Live Video Panel pane in the Cient window

Interface element	Description
H.264 Deblocking area	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**.
	The **H.264 Deblocking** pane is available only to Administrators and Power Users, and on some cameras.
GPU Decoding slider	Accelerates the decoding of video streams. To set the GPU decoding, move the **GPU Decoding** slider and then click **Calibrate**.

Table 68. Decoding pane in the Client window

Creating a shortcut for a soft trigger

To create a shortcut for a soft trigger, complete the following steps:

1. In the **Event Buttons** pane, click **New**.

2. Enter a description of the soft trigger in the **Tool Tip** field.

3. Click **Change Icon**, and upload a default or custom icon.

4. Optional. Enter a keyboard shortcut key.

5. 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.

6. From the list, select a soft trigger.

7. Click **Apply**.

Joystick window

In the **Joystick** window, you can configure standard USB joysticks with the exacqVision system. For more information, see **Table 69. Joystick window** and **Table 70. Joystick Configuration area in the Joystick window**.

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

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 70. Joystick Configuration area in the Joystick window**.
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 69. 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 Axis** check box.
	When you adjust the playback speed, the X Axis box in the **X Axis** area turns green to indicate the direction of the zoom.

Table 70. Joystick Configuration area in the Joystick window

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 71. Indicators window and Table 72. Indicator Configuration pane.

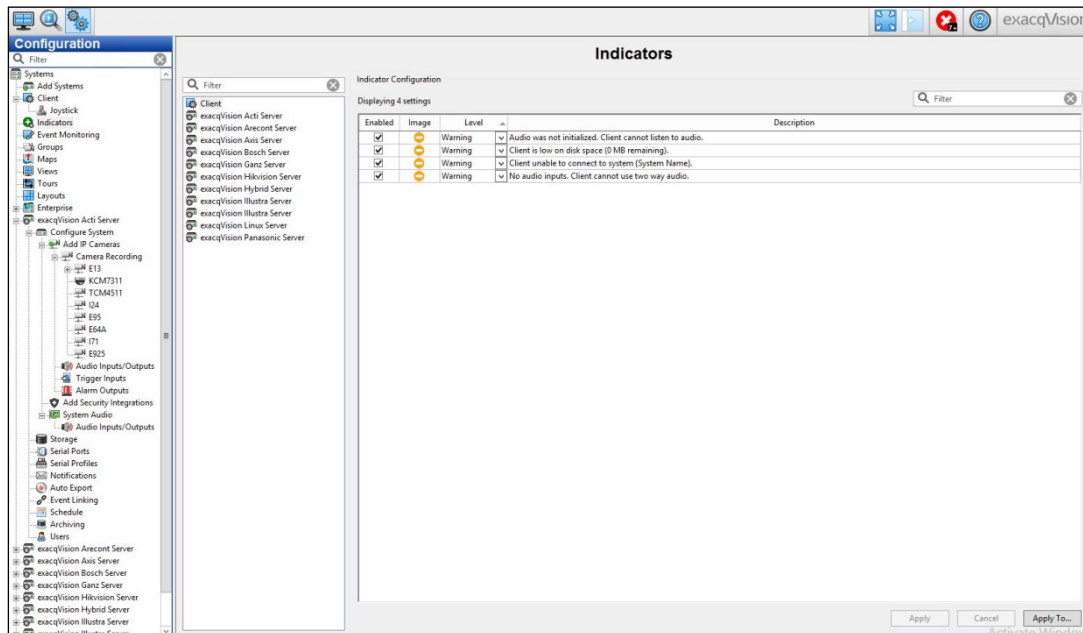Figure 49. Indicators window

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 72. Indicator Configuration pane**.
Indicators icon 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 71. Indicators window

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**.

Table 72. Indicator Configuration pane

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 73**.

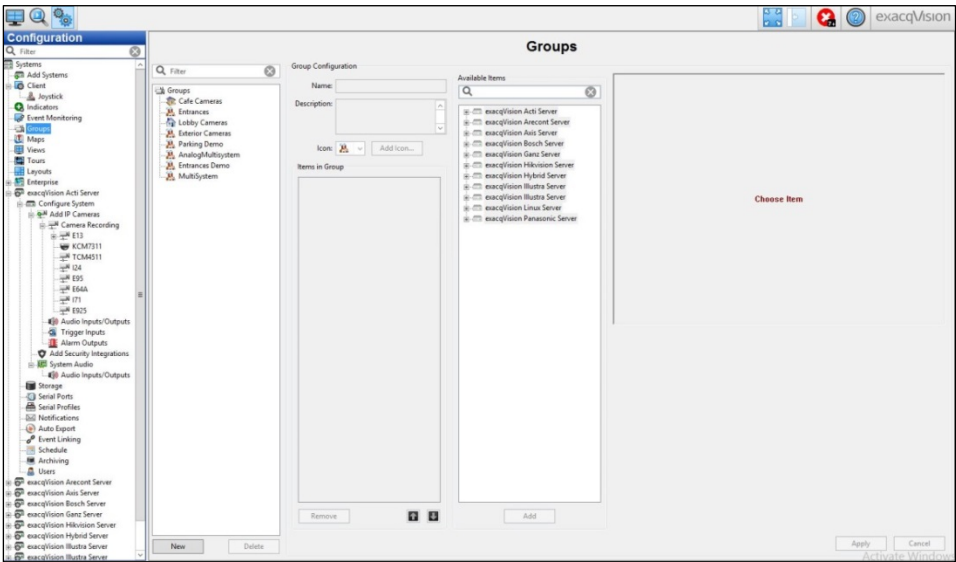> **Note:** The **Groups** window is not available in exacqVision Start.

Figure 50. Groups window

Interface element	Description
Groups 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**.

Table 73. Lists in the Group window

Creating a new group

To create a new group, complete the following steps:

1. In the **Groups** window, click **New**.

2. In the **Group Configuration** pane, enter a name and description for the group.

3. 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**.

4. 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.

5. 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 74. Maps window**.

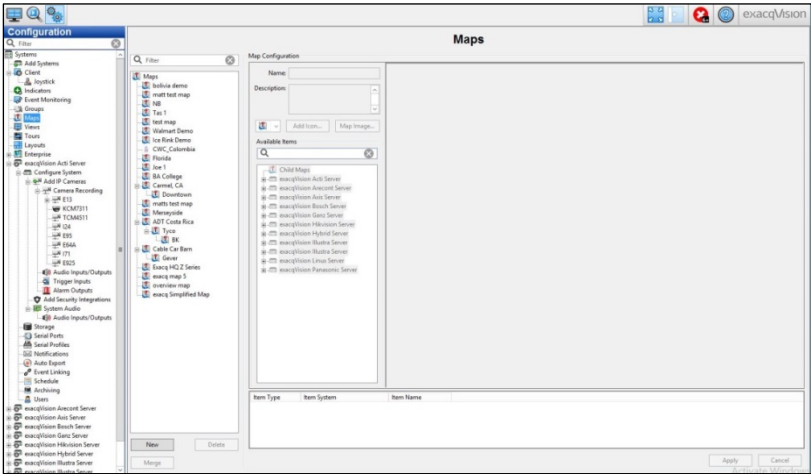> Note: The **Maps** window is not available in exacqVision Start.

Figure 51. 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.

Table 74. Maps window

Creating a custom map

To create a custom map, complete the following steps:

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

2. In the **Map Configuration** pane, enter a name and description for the map.

3. 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.

4. From the **Icon** list, select an icon to represent the map.

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

5. Associate items to the map, by selected them from the **Available Items** list and dragging them onto the map.

6. 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. There are 3 categories of views: To create a view, see **Creating a view.** For information on the view categories, see **Table 75. View categories**. For information on the functionality of the **Views** window, see **Table 76. Views window**.
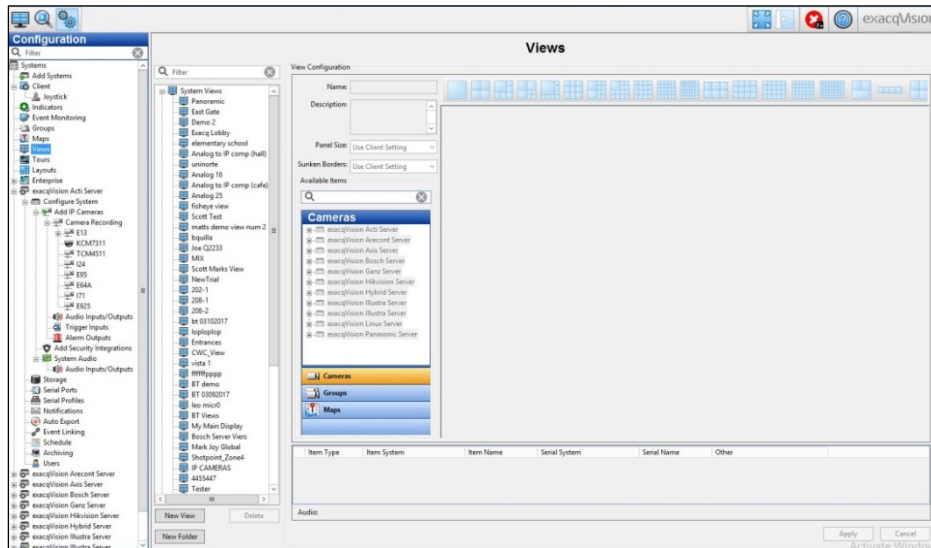

Figure 52. Views window

Interface element	Description
System views	Available to all users that connect to the server.
User group views	Available to users with permission level access. User group views are not available in exacqVision Start.
User views	Available only to the user that created the view. The User views option is not available in exacqVision Start.

Table 75. View categories

Interface element	Description
View category list	Displays the view categories and a list of the views and view folders that you create.
New Folder button	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.

Table 76. Views window

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**.

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 77. Tours window**.
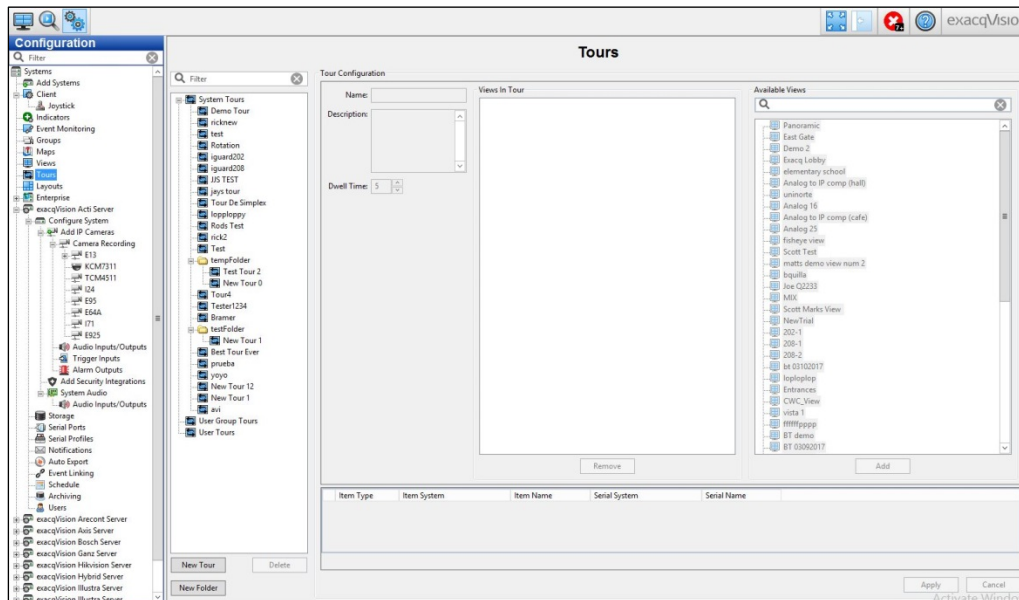

Figure 53. Tours window

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 **View 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.

Table 77. Tours window

Creating a new tour

To create a new tour, complete the following steps:

1. In the **Tours** window, click **New Tour**.

2. Enter a name and description for the tour in the **Tour Configuration** pane.

3. Select a view from the **Available Views** list, and click **Add**. Repeat this step to add more views to the tour.

4. Select the view in the **Views In Tour** list, and then select a **Dwell Time**.

5. 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 78. Layout window.
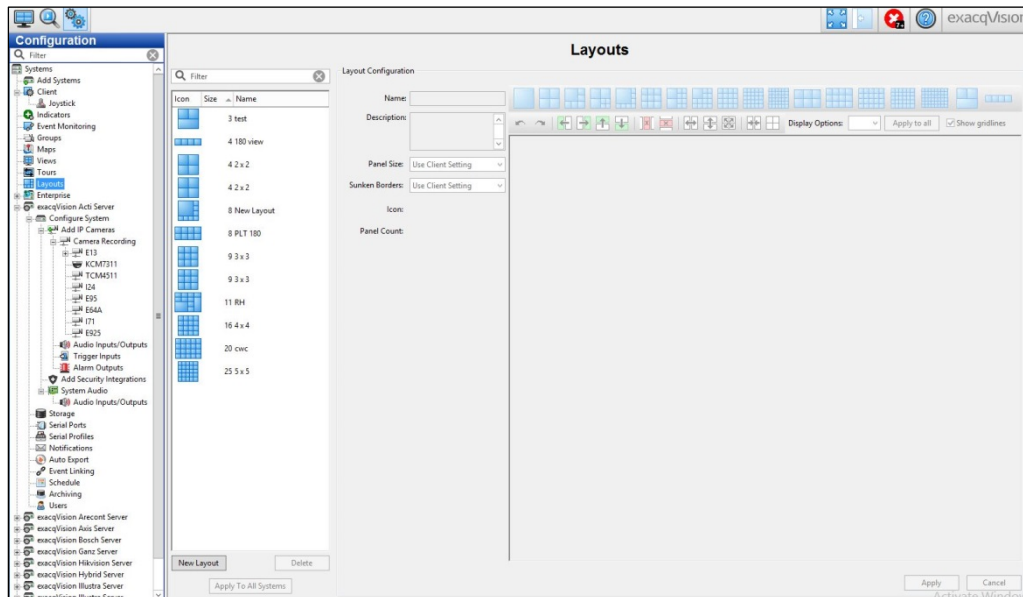

Figure 54. Layout window

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 settings** 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.

Table 78. Layout window

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**.

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 79. System Information window**.
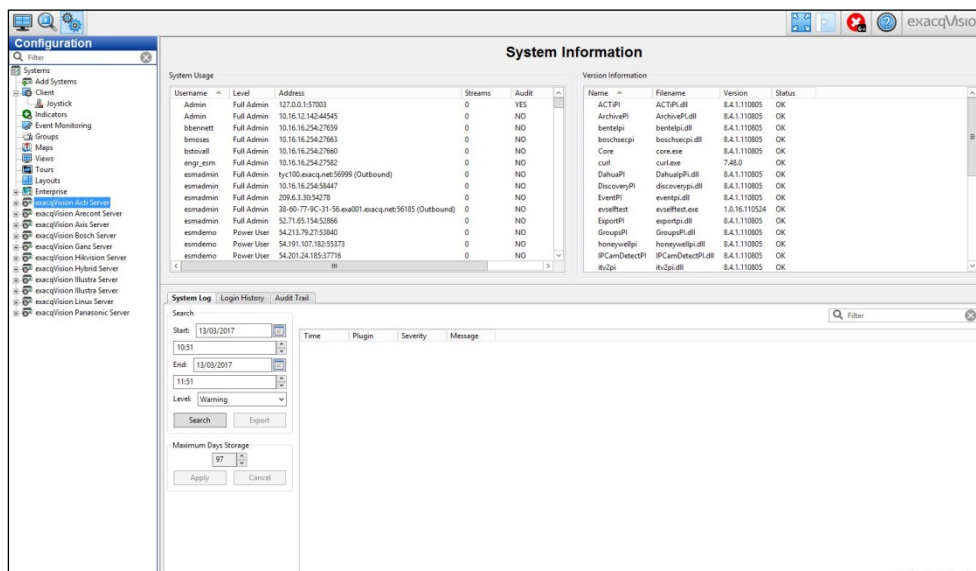

Figure 55. System Information window

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 software version of each system file.
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.

Table 79. System Information window

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**.

Chapter 4. Live window

Live window overview

In the **Live** window, you can view and manage your cameras, groups, and maps, bookmark live video, send and receive information and audio to and from other client systems, and replay video using exacqReplay. To open the **Live** window, 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**.

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 **Table 80. 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**.

Table 80. Video panel functions

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.

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

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 a map

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 53. Recording setting modes**. 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 81. Map viewing functions.

> **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.

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**.

Table 81. Map viewing functions

Accessing a View

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, hover 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

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 Cases** 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 **VideoPush** window to send views, layouts, 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. To open the **VideoPush** window, in the **Live** window click the **VideoPush** icon from the toolbar. For information on the functionality of the **VieoPush** window, see **Table 82. VideoPush window**.

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**.
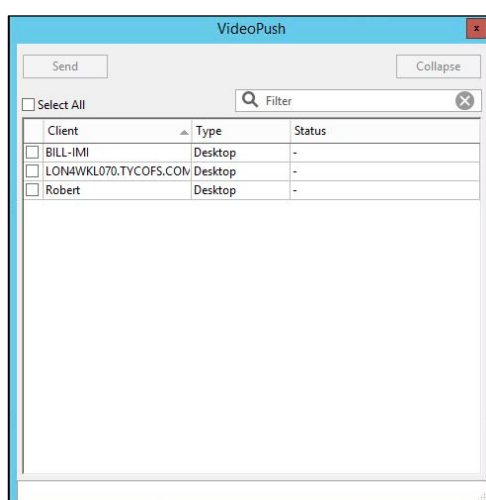

Figure 56. VideoPush window

Interface element	Description
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 **VideoPush** window so that you can see the video panels in the **Live** window.
	To reduce the size of the **VideoPush** 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**.

Table 82. VideoPush window

Sending information using the VideoPush window

To send information using the **VideoPush** window, complete the following steps:

1. In the toolbar, click the **VideoPush** icon.

2. Select the target client or clients from the **Client** list.

3. Click **Send**.

   Note: 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 in the Live window

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 83. PTZ Control panel** window.

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 **Table 27. Presets tab on the Mechanical PTZ tab**.

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.
Focus area	Adjust the focus of the camera. The **Focus** area is only available on some cameras.

Table 83. PTZ Control panel window

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

You can use the area zoom feature to zoom in on a specific area of live video.

> **Note:** 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 pane**l 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

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 84. exacqReplay video controls**.

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 84. exacqReplay video controls**.
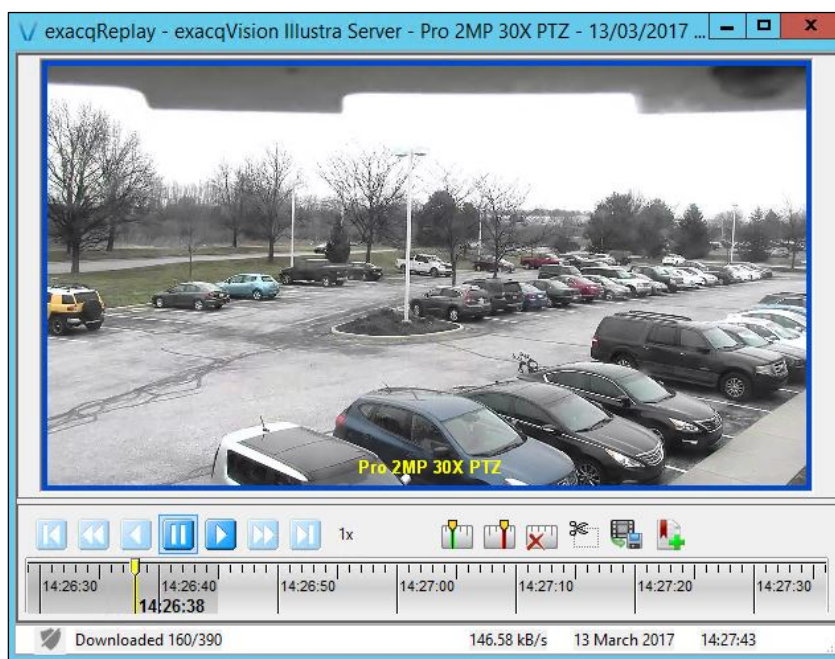

Figure 57. exacqReplay window

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

Table 84. exacqReplay video controls

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 85. Event Monitoring list functions**. To create an event profile, see **Creating an event monitoring profile**.

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

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**.

Table 85. Event Monitoring list functions

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 86: Soft Trigger window**.
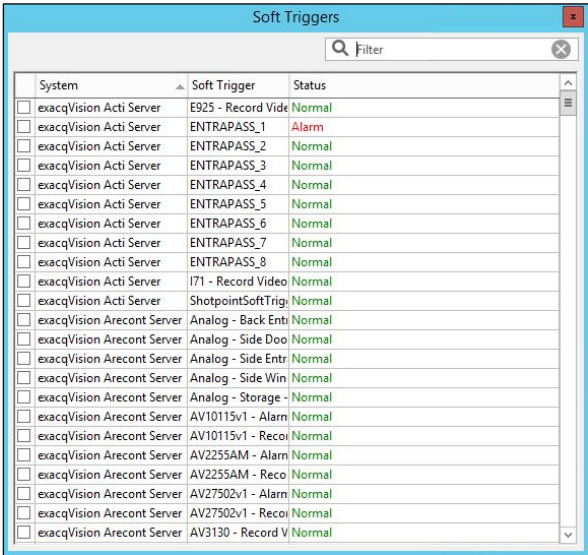
Figure 58. Soft Triggers window

Interface element	Description
Soft Trigger column	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 column	**NORMAL** indicates that the soft trigger is not active. **ALARM** indicates that the soft trigger is active.

Table 86: Soft Trigger window

Chapter 5. 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: a timeline search, thumbnail search, list search, smart search, and a 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 represent, select the **Show Legend** check box below the **Search Range** area.

Timeline search

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

Performing a timeline search

To perform a timeline search, complete the following steps:

1. In the **Search** window, click the **Timeline Search** icon.

2. From the navigation tree, select the items you want to search.

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

    Note: The default time duration between the start and end time is two hours. If you change the start time, the end time adjusts to keep the set duration.

4. Click **Search**.

Thumbnail search

A thumbnail search scans video from a single camera and captures thumbnail images from a specific interval of time. You can use a thumbnail search to search cameras, and cameras in groups and maps. After you complete a thumbnail search, orange lines display in the timeline to indicate the capture time of each thumbnail. For information on thumbnail functions, see **Table 87. Thumbnail search functions**.

    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** 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**.

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 centre 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.

Table 87. Thumbnail search functions

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 88. List Search window**.

> Note: The list search option is only available in exacqVision software version 7.2 or higher.

Performing a list search

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**.

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.

Table 88. List Search window

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 **Table 89. 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 Items 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.
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.

Table 89. Video playback control panel

Video playback and Point of Sale (POS)

When you play back video associated with 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

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:

- 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.

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. Perform a search.

2. 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.

3. Left-click the video panel and drag the curser until you have drawn a box over the area you want to search.

4. 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.

5. 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.

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 **Table 90. New Bookmark tab**.

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

Interface element	Description
Go to bookmark after you 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.

Table 90. New Bookmark tab

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. In 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

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

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**.

> **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.

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 a 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 .exw file in a player, which can be run by a user who does not have access to the exacqVision client. You can also select a .psx, a packaged .ps, a .avi, a .avi, a .mov, and a mp4 file format.
   >
   > - If the system disconnects during an export process, the export process automatically resumes after the system reconnects.

Export players

You can download players using the following links:

- **Windows Media Player**
  http://www.microsoft.com/windows/windowsmedia/default.mspx

- **Quicktime Player**
  http://www.apple.com/quicktime/download

- **VLC Player**
  http://www.videolan.org/vlc

- **MPlayer**
  http://www.mplayerhq.hu/design7/dload.html

You can download codecs using the following links:

- **3ivx MPEG4 decoder**
  http://store.3ivx.com/3ivxStore/?features=dec&platform=win&license=plus&Go=Go

- **DivX decoder**
  http://www.divx.com/en/downloads

- **Quicktime codec resources**
  http://www.apple.com/quicktime/resources/components.html?os=Windows&ctype=696d6463&csubtype=48323634

- **Perian Codec for Quicktime**
  http://www.perian.org

In **Table 91**, you can find information about the file compatibility of operating systems.

Video format	Windows Players			Linux Players		Mac Players
	WMP*	Quicktime Player	VLC	MPlayer	VLC	Quicktime Player
AVI MJPEG	●	● with DivX decoder	●	●	●	● with DivX decoder
AVI MPEG4	● with DivX	● with DivX decoder	●	●	●	● with DivX decoder
AVI MPEG4 with ASP	● with DivX	● with DivX decoder	●	●	●	● with DivX decoder
AVI H.264	● with DivX	● with DivX decoder	●	●	●	● with DivX decoder
Quicktime MJPEG		●	●	●	●	●
Quicktime MPEG4		●	●	●	●	●
Quicktime MPEG4 with ASP		● with 3ivx MPEG4 decoder	●	●	●	● with 3ivx MPEG4 decoder
Quicktime H.264		●	●	●	●	●
mp4 MJPEG			●		●	
mp4 MPEG4		●	●	●	●	●
mp4 MPEG4 with ASP		● with 3ivx MPEG4 decoder	●	●	●	● with 3ivx MPEG4 decoder
mp4 H.264		●	●	●	●	●

Table 91. Quicktime and AVI file export players

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 92. Burn Disc window**.

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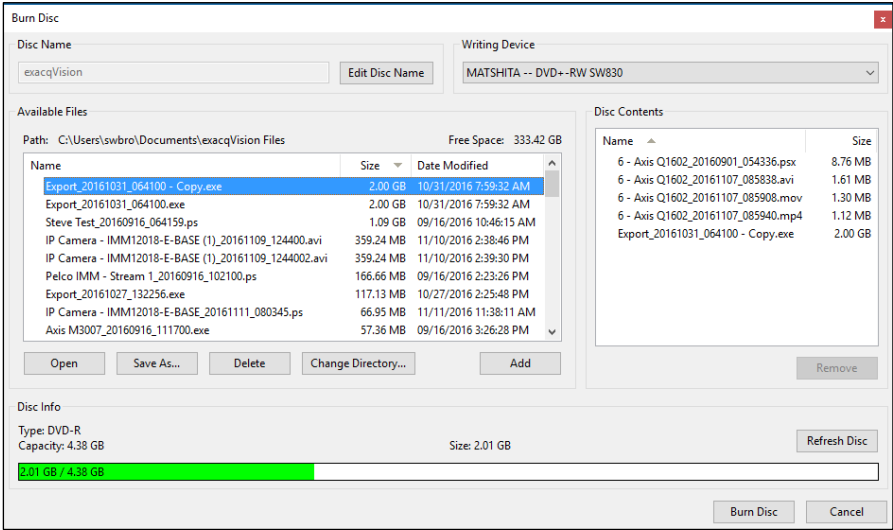

Figure 59. Burn Disc window

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**.

Table 92. Burn Disc window

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 93. File Manager window**.
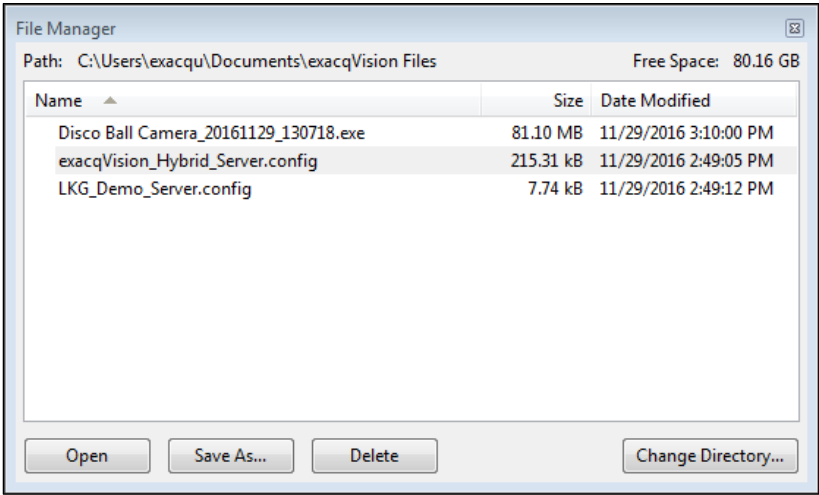

Figure 60. File Manager window

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**.

Table 93. File Manager window

Chapter 6. Enterprise Management

Enterprise management overview

The enterprise management section contains features that are available only in exacqVision Enterprise.

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 **Active Directory/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 94. Active Directory/LDAP tab in the Enterprise System window** and **Enterprise System window**.
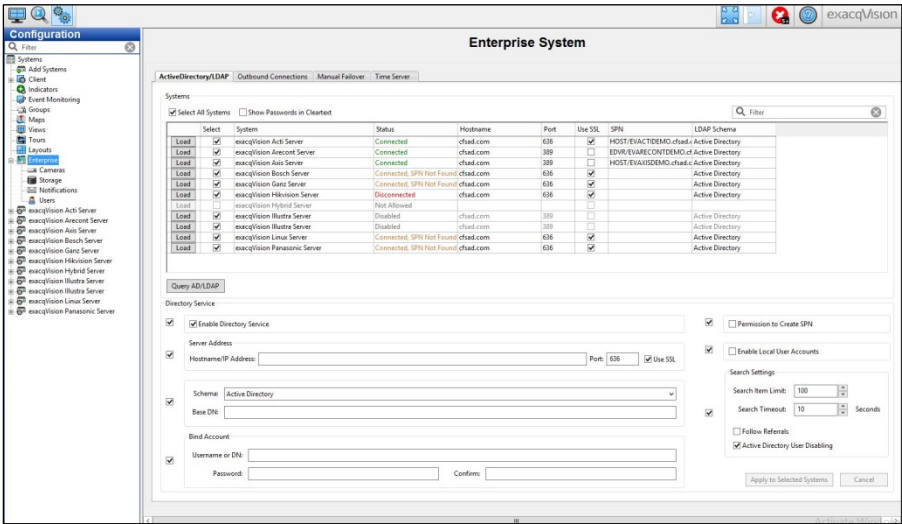
Figure 61. Active Directory/LDAP tab in the Enterprise System window

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**.

Table 94. Active Directory/LDAP tab in the Enterprise System window

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 95. Outbound Connections tab in the Enterprise System window.**
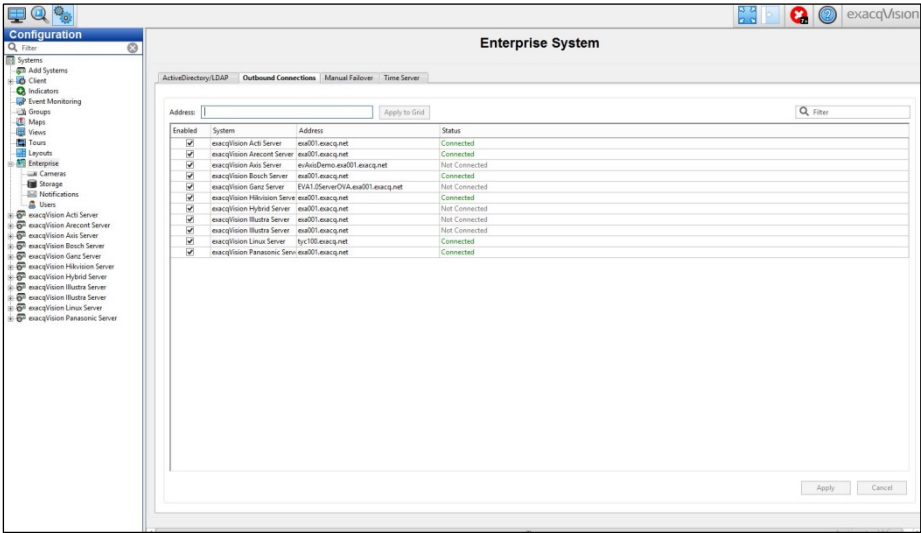

Figure 62. Outbound Connections tab in the Enterprise System window

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**.

Table 95. Outbound Connections tab in the Enterprise System window.

Manual Failover tab

ESM (Enterprise System Manager) is a failover function for exacqVision servers. You can configure ESM to automatically control this failover process across all the exacqVision servers it monitors. However, if ESM 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 96. Manual Failover tab in the Enterprise System window**.

> Note: The **Manual Failover** tab displays only when ESM is monitoring that server for failover.
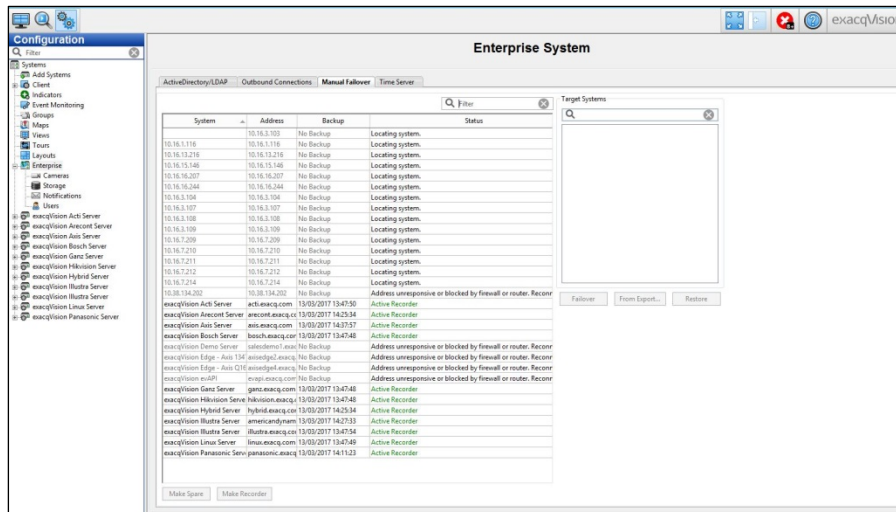
Figure 63. Manual Failover tab in the Enterprise System window

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.

Table 96. Manual Failover tab in the Enterprise System window

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 97. Time Server tab in the Enterprise System.**
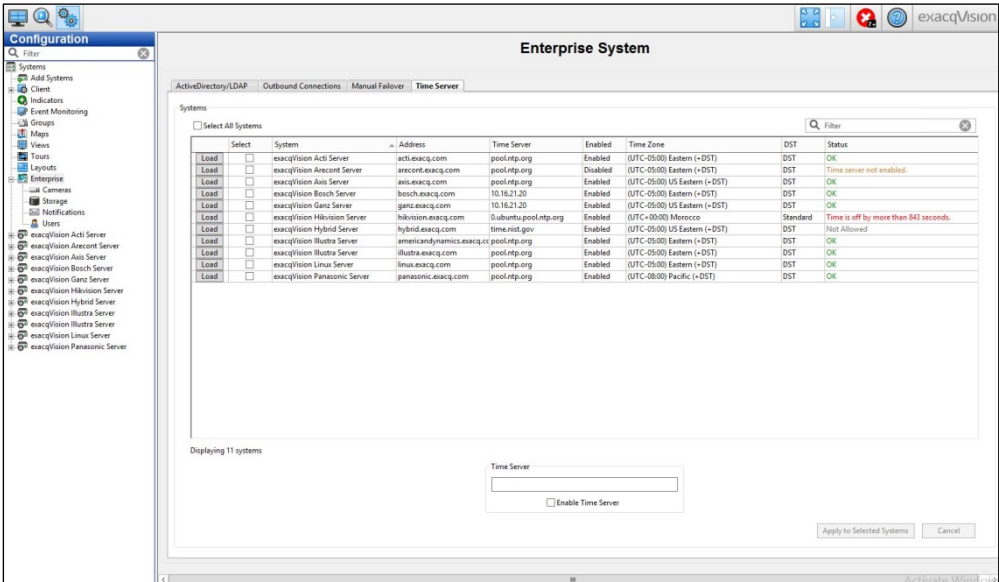

Figure 64. Time Server tab in the Enterprise System window

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**.

Table 97. Time Server tab in the Enterprise System window

Enterprise Cameras window

In the **Enterprise Cameras** window, you can view information about all the cameras in the servers that connect to ESM. For information, see **Table 98. Functions of the Enterprise Cameras window**.
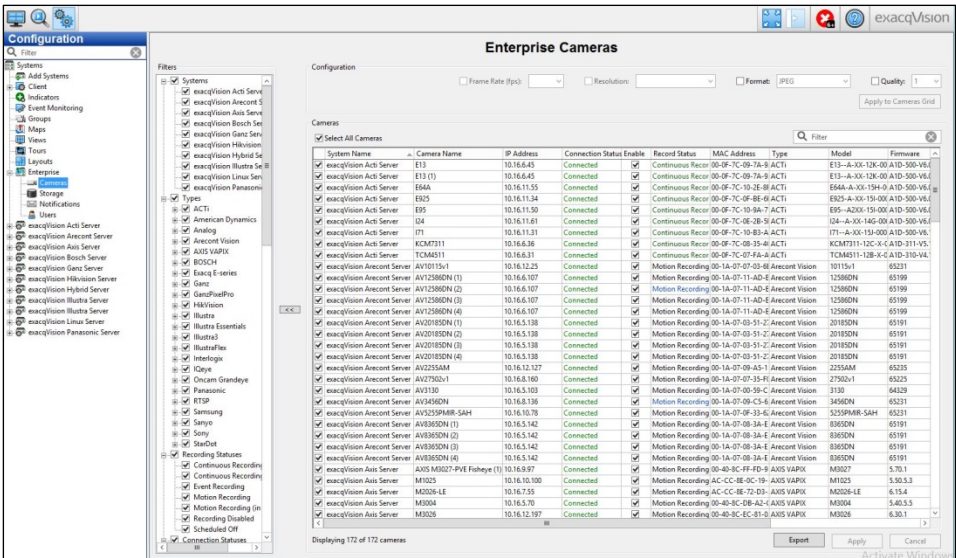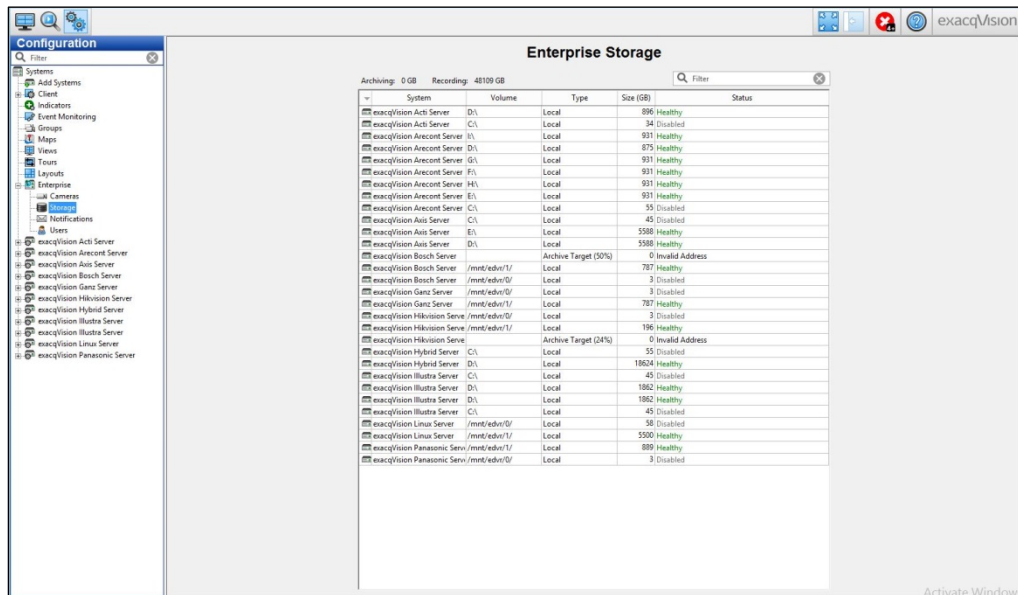

Figure 65. Enterprise Cameras window

Function	Description
Settings	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**.

Table 98. Functions of the Enterprise Cameras 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.

Figure 66. 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**.
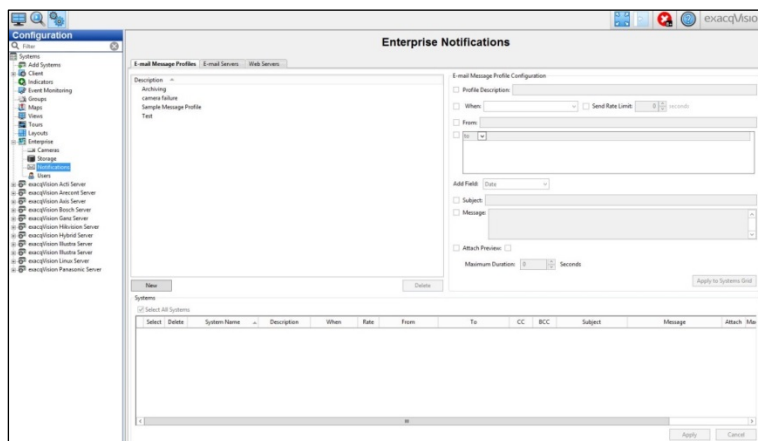

Figure 67. Enterprise Notification window

Associating a notification profile with a server

To associate a notification profile with a server, complete the following steps:

1. In the **E-mail Message Profile** tab, click **New**.

2. In the **E-mail Message Profile Configuration** pane, enter a brief description of the email's content.

3. 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**.

4. 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.

5. Enter a subject for the email, and then type the email message in the **Message** field.

6. Click **Apply to Systems Grid**.

Associating an email server with a server

To associate an email server with a server, complete the following steps:

1. In the **E-mail Servers** tab, click **New**.

2. In the **E-mail Message Profile Configuration** pane, enter a brief description of the email's content.

3. 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.

4. 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.

5. Enter a subject for the email, and then type the email message in the **Message** field.

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 group, see **Creating a user or group with LDAP integration** and **Creating a user or group without LDAP integration**. For information on the functionality of the **Enterprise Users** window, see **Table 99. Enterprise Users window**.
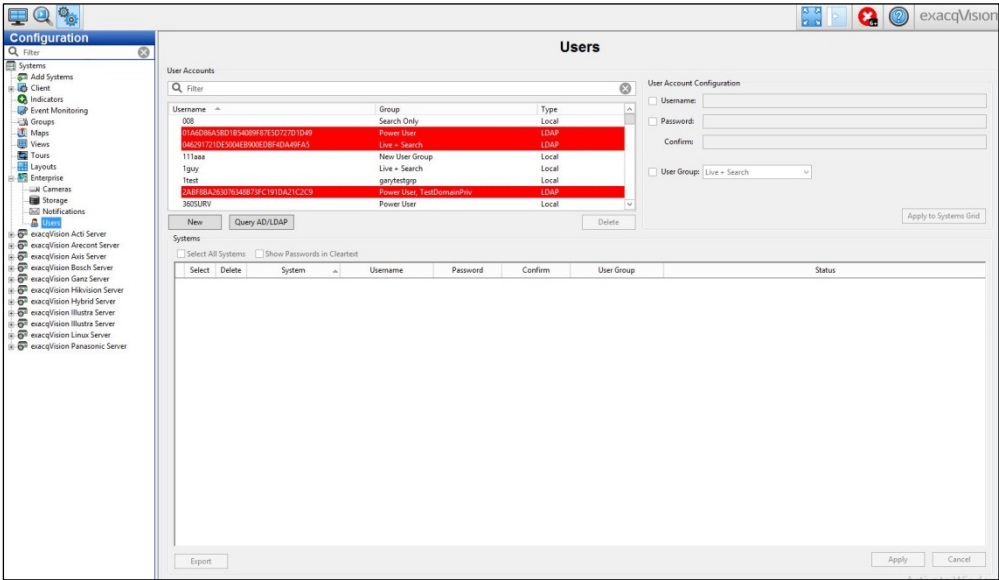

Figure 68. Enterprise Users window

Interface element	Description
New button	To display a list of the servers that you can add a user to, click **New**.
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.
Show Passwords in Cleartext check box	To display the password in the **exacqVision Systems** pane, select the **Show Passwords in Cleartext** check box.
Export button	To save the enterprise user configuration file that contains a list of users, click **Export**. You can then import this file in the **Systems** list.

Table 99. Enterprise Users window

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 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** 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 **exacqVision 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**.

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 group without LDAP integration, complete the following steps:

1. In the **Enterprise Users** window, enter a username in the **User Account Configuration** pane.

2. Enter a password in the **Password** field, and then confirm the password in the **Confirm** field.

3. From the **User Group** list, select a user group.

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

5. Click **Apply**.

Chapter 7. 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:

Exacq Technologies, Inc.
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: http://www.exacq.com

Chapter 8. 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 $C\,E$ 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.

Chapter 9. Warranty

LIMITED WARRANTY AND LIMITATION OF LIABILITY

LIMITED WARRANTY. Exacq hardware products are warranted against defects in materials and workmanship for three (3) years from the date Exacq ships the products to the Customer. All software products are licensed to the Customer under the terms of the appropriate Exacq Technologies license. For a period of ninety (90) days from the Delivery Date, Exacq software products (when properly installed on Exacq hardware products) (a) will perform substantially in accordance with the accompanying written materials, and (b) the medium on which the software product is recorded will be free from defects in materials and workmanship under normal use and service. Any replacement of a licensed software product will be warranted for the remainder of the original warranty period or thirty (30) days, whichever is longer. Customer must obtain a Return Material Authorization number from Exacq before returning any products under warranty to Exacq. Customer shall pay expenses for shipment of repaired or replacement products to and from Exacq. After examining and testing a returned product, if Exacq concludes that a returned product is not defective, Customer will be notified, the product returned at Customer's expense, and a charge made for examination and testing. This Limited Warranty is void if products or parts are damaged by (a) improper handling, normal wear and tear, accidents, theft, vandalism, fire, water or other peril; (b) conditions outside the specifications for operation of the products, including but not limited to, electrical power, temperature humidity, dust or lightning; (c) Customer supplied third party software not intended for use with the applicable Exacq software; (d) utilization of an improper hardware or software key; (e) or improper use, negligence, repair, alteration or maintenance of the product not performed by Exacq Technologies, Inc. or its authorized service centers or authorized technicians.

CUSTOMER REMEDIES. Exacq's sole obligation (and Customer's sole remedy) with respect to the foregoing Limited Warranty shall be to, at its option, return the fees paid or repair/replace any defective products, provided that Exacq receives written notice of such defects during the applicable warranty period. Customer may not bring an action to enforce its remedies under the foregoing Limited Warranty more than one (1) year after the accrual of such cause of action.

RETURN/CANCELLATION POLICY. Customer may return unwanted products within thirty (30) days of the Delivery Date. Customer shall pay a twenty percent (20%) restocking charge on any unwanted products returned to Exacq. No returns will be accepted after the thirty (30) day period has expired. Where special equipment or services are involved, Customer shall be responsible for all related work in progress; however, Exacq shall take responsible steps to mitigate damages immediately upon receipt of a written cancellation notice from Customer. A Return Material Authorization number must be obtained from Exacq for return of any products. Exacq may terminate any order if any representations made by Customer to EXACQ are false or misleading.

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