USER MANUAL

AXIS Camera Station

About This Document

This manual is intended for administrators and users of AXIS Camera Station and is applicable for software release 3.50 and later. It covers configuration of AXIS Camera Station Server and AXIS Camera Station Client as well as instructions for using and managing AXIS Camera Station on your network. Later versions of this document will be posted on Axis web site, as required. See also the product's help pages.

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Legal considerations

Video and audio surveillance can be regulated by laws that vary from country to country. Check the laws in your local region before using this product for surveillance purposes.

Liability

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Support

Should you require any technical assistance, please contact your Axis reseller. If your questions cannot be answered immediately, your reseller will forward your queries through the appropriate channels to ensure a rapid response. If you are connected to the Internet, you can:

- download user documentation and software updates
- find answers to resolved problems in the FAQ database. Search by product, category, or phrase
- report problems to Axis support staff by logging in to your private support area
- chat with Axis support staff (selected countries only)
- visit Axis Support at www.axis.com/techsup/

AXIS Camera Station

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System Requirements

System Requirements

For best performance and stability these minimum requirements must be met.

AXIS Camera Station Client

- Windows® 7 Professional, Windows Vista® Business, Windows® XP Professional

- CPU: Intel® Pentium® 4, 2 GHz (Intel® Core™ i7 recommended for larger systems)

- RAM: 1 GB (4 GB recommended for larger systems)

- Hard drive: 1 GB free memory

- Screen: 1024 x 768

- Graphics card with DirectX® 9.0c; Onboard video memory of 256 MB

- Microsoft® .NET runtime environment (included in installation package)

Note
> Use the latest graphics card driver.

AXIS Camera Station Server

- Windows® 7 Professional, Windows Vista® Business, Windows® XP Professional, Windows® Server 2008 R2, Windows® Server 2008, Windows® Server 2003 (64–bit versions recommended for larger systems)

- CPU: Intel® Pentium® 4, 2 GHz (Intel® Xeon® recommended for larger systems)

- RAM: 1 GB (8 GB recommended for larger systems)

- Microsoft® .NET runtime environment (included in installation package)

Network

- 100 Megabit network (Gigabit network recommended for larger systems)

Hard disk configuration

- At 30 fps in VGA with compression 30 up to 15 cameras per hard disk

Note
> Make sure to always have the latest service packs and video drivers installed on your system.
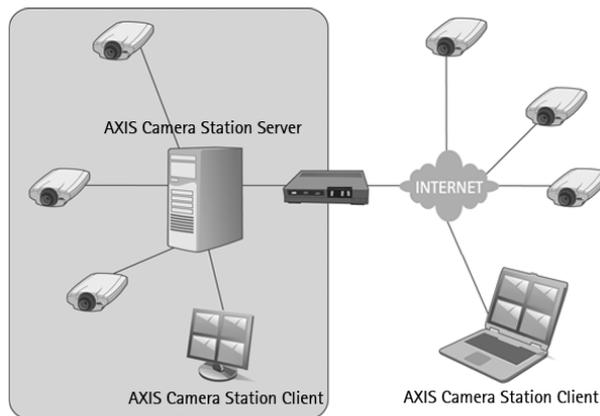
AXIS Camera Station

Overview

AXIS Camera Station is a complete monitoring and recording system for Axis network cameras and video encoders. AXIS Camera Station is comprised of

- AXIS Camera Station Server — handles all communication with the cameras and video encoders and recordings. Each server can communicate with up to 100 cameras/encoders.

- AXIS Camera Station Client — graphical interface enabling remote viewing and control from anywhere on the Internet or corporate network

Several Clients can be connected to the same Server, and each Client can be connected to several Servers. See *Multiple Servers, on page 6*.

AXIS Camera Station One has all the basic features of AXIS Camera Station for one camera/video channel.

Installation scenario. AXIS Camera Station Server, installed on a dedicated computer, handles the communication with cameras both inside and outside the local (corporate) network. The cameras are monitored and controlled from two AXIS Camera Station Clients — one on the local network and one connected via the Internet.

AXIS Camera Station Server

AXIS Camera Station Server handles all communication with the cameras that are included in the system. It also handles recordings, events and user management in the system. Once AXIS Camera Station Server has been installed on your computer, the Service Control allows you to start and stop the server as well as modify server settings if needed. If AXIS Camera Station Server and any cameras in the system are separated by a proxy server, you may need to open the Service Control to manually enter the appropriate proxy settings. See AXIS Camera Station Service Control Help for more information.

An icon in the system taskbar shows if the service has stopped 🔴 , or is running 🟢 . To modify server settings you can double-click the icon to open AXIS Camera Station Service Control, see *AXIS Camera Station Service Control, on page 58* and *AXIS Camera Station Service Administration, on page 61*.
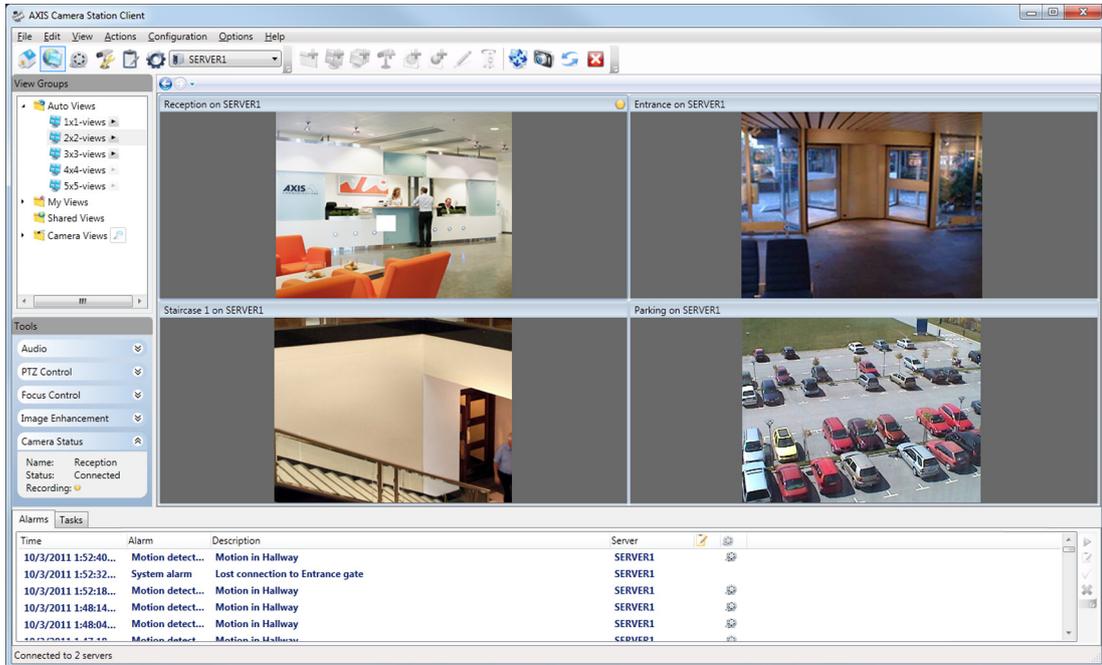
AXIS Camera Station Client

The user interface is developed with a focus on ease-of-use and intuitive handling with navigation tools providing quick access to cameras and recordings in the system. AXIS Camera Station is divided into six areas called workspaces: Start page, Live View, Recordings, Camera Management, Logs and Configuration.

AXIS Camera Station

Overview

The first time the application is started, AXIS Camera Station automatically finds and adds the cameras and video encoders that are on your network. If there are more cameras than you have a license for, the **Camera Search** dialog will pop up allowing you to select which devices to add, see *Add Cameras and Video Encoders, on page 24*.

Multiple Servers

AXIS Camera Station Client can be connected to multiple AXIS Camera Station Servers. Select **New Connection** from the **File** menu to connect to a new server. Servers can also be organized in server lists, see *Server Lists*, below.

Recent Connections in the **File** menu displays recently used servers. Select a server to connect to or disconnect from that server.

The **Selected server** drop-down list is available in the client toolbar and in several dialogs when connected to more than one server. When this list is shown, the client displays the cameras, recordings, events, logs, etc on the server selected in the list. Select another server to access devices and recordings on that server.
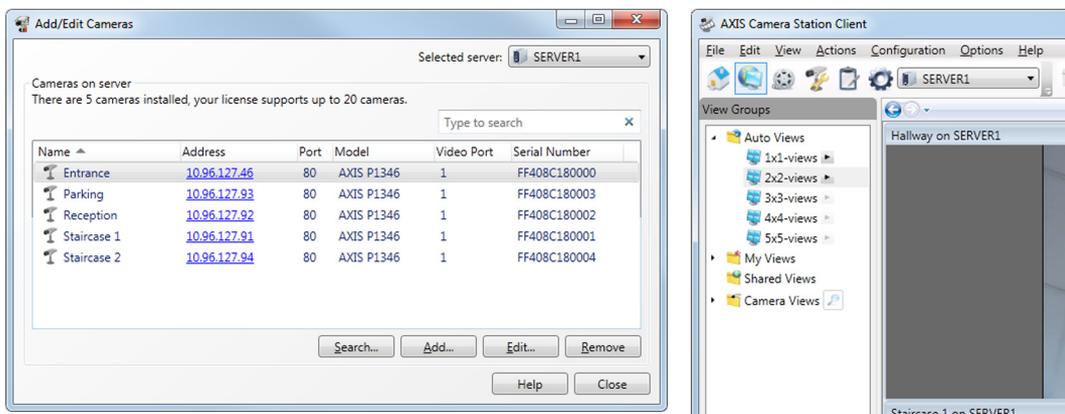
AXIS Camera Station

Overview

The Camera Management workspace and the Alarms and Tasks tabs at the bottom of the client's main window, see *Alarms and Tasks Tabs, on page 20*, display devices and alarms from all connected servers. In the Live View workspace, you can create split views with cameras from different servers.

Server Lists

Server lists are useful when working with a large number of servers, and when using the same servers for clients on different computers.

To create and edit server lists, go to **File > Switch to Servers > Server Lists**. A server can belong to more than one list.

Once created, you can connect to all servers in a list by selecting the list from the **Multiple servers** drop-down list in the Connect to AXIS Camera Station dialog displayed when starting the client. To switch between server lists, open the **File** menu, point to **Switch to Servers** and select the server list to connect to.

Server lists can be exported and imported into other AXIS Camera Station Clients. To export/import a server list, open the **File** menu, select **Import/Export** and then **Export Server Lists** or **Import Server Lists**.

AXIS Camera Station

Workspaces

Workspaces

AXIS Camera Station is divided into workspaces:

The **Start page** gives an overview of AXIS Camera Station, highlights new features and contains contact information for technical support. When disconnected from the server, this is the only workspace available.

The **Live View** workspace provides a single interface to organize, monitor and control Axis network cameras and video encoders.

The **Recordings** workspace handles recording search, playback, export and management.

The **Camera Management** workspace provides tools for efficient administration and maintenance of connected devices, such as firmware upgrade, assigning IP addresses, setting passwords and date and time settings.

The **Logs** workspace contains alarm, event and audit logs.

The **Configuration** workspace is a collection of all the important links for configuring AXIS Camera Station.

The workspaces are easily accessed by clicking on the navigation buttons in the toolbar or by selecting the workspace from the **View** menu.

Devices and Cameras

In AXIS Camera Station, the terms device and camera are used as follows:

Device   A network product that has its own IP address. A device can be:

- a network camera
- a video encoder (video server)
- an auxiliary device

Camera   A video source, that is,

- a network camera
- a video port (with a connected analog camera) on a video encoder

Each camera requires one AXIS Camera Station license.

Auxiliary device   A network device without video ports, for example an I/O audio module. Auxiliary devices can be added without an additional AXIS Camera Station license.

Example

A 4–port video encoder is one device with four cameras.

Note

Some video encoders have one IP address for each video port. In this case, each video port is treated as one device with one camera.

Live View

The Live View workspace provides a single interface to organize and monitor Axis network cameras and video encoders on your network. You can, for example, set up view groups, record, and control audio and pan/tilt/zoom (PTZ) functionality.

AXIS Camera Station
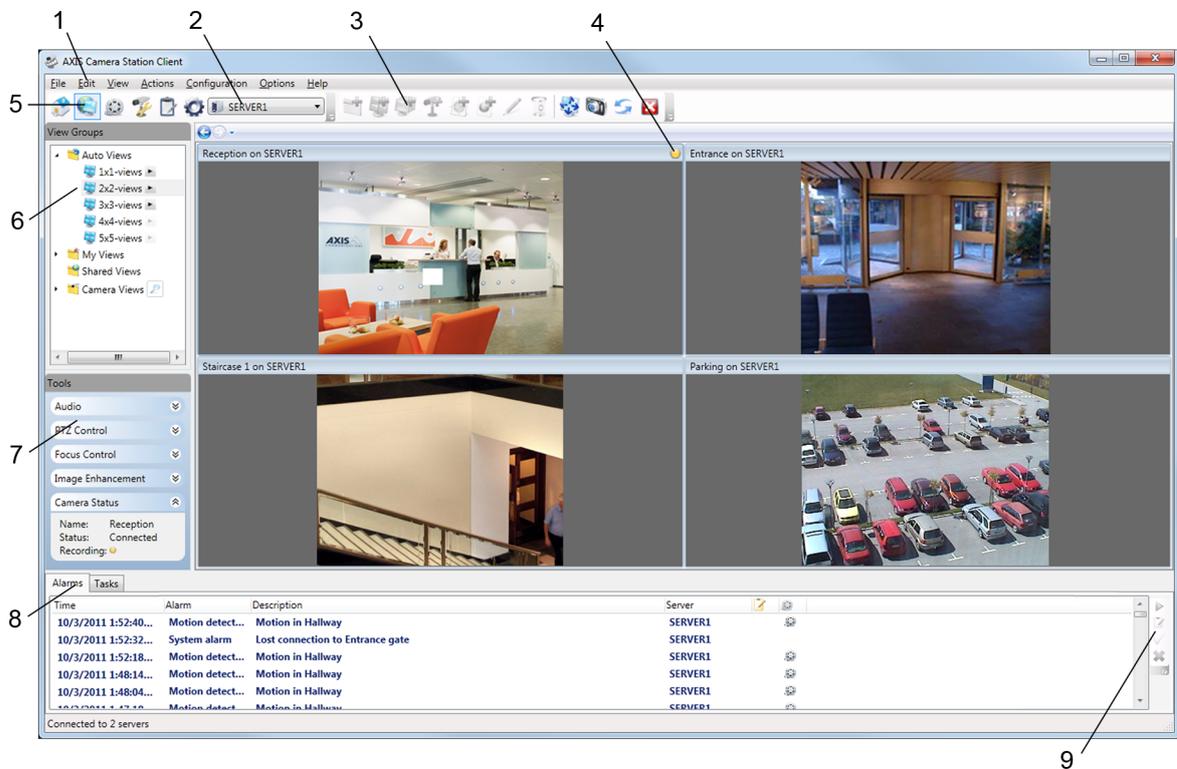
Workspaces

Live View workspace

1. Menu
2. Server selection list
3. Toolbar
4. Recording indicator
5. Workspace buttons
6. View groups
7. Audio, PTZ Control, Focus Control, Image Enhancement and Camera Status
8. Alarms and Tasks tabs
9. Alarms and Tasks toolbar

Views

There are five view types in AXIS Camera Station:

Split View	Displays up to 25 views in one window. One frame can be set as a hotspot that automatically loads the view from another frame when clicking in that frame.
Sequence	Switches automatically between selected views, with variable dwell times.
Camera View	Live video from one camera or video encoder. Camera views can be added to split views, sequences and maps.
Map	Imported image, for example a floor plan, on which camera views, split views, sequences, web pages and other maps can be placed. Providing a visual overview, maps make it easy to quickly locate and access individual cameras in the network video installation.
Web Page	External web application integrated into AXIS Camera Station. Web pages can be shown in a split view or a sequence together with live video.

For instructions on how to add split views, sequences and maps, see *Create Views, on page 31*.

AXIS Camera Station

Workspaces

Views can be used in event actions, see *Event Configuration Wizard, on page 43*.

View Groups

Views can be organized into view groups. A view group contains automatic or user-defined views. The following view groups are available in the pane in the left hand side of the Live View workspace:

- **Auto Views** — Automatically created split views for up to 25 cameras.

- **My Views** — User-created views. These views are available to the current user only.

- **Shared Views** — Views created by an administrator or operator that are accessible by all users.

- **Camera Views** — All cameras and video encoders that have been added to AXIS Camera Station.

You can add your own view groups as subgroups to My Views or Shared Views, see *Create a New View Group, on page 32*.

For instructions on how to add views to My Views and Shared Views, see *Create Views, on page 31*.

For instructions on how to add cameras and video encoders, see *Add Cameras and Video Encoders, on page 24*.

Audio

The **Audio** control under **Tools** in the Live View workspace includes Master Volume and Mute controls for cameras with audio capability. A volume control is shown for the selected camera if it has audio capability. To display the volume control in the image, place the mouse pointer over the desired camera view.

Note
- The audio control will be inactive but visible in Tools and will not appear in the image if the user does not have proper authority for audio, see *User Permissions, on page 51*.
- Audio is not available in M-JPEG streams.
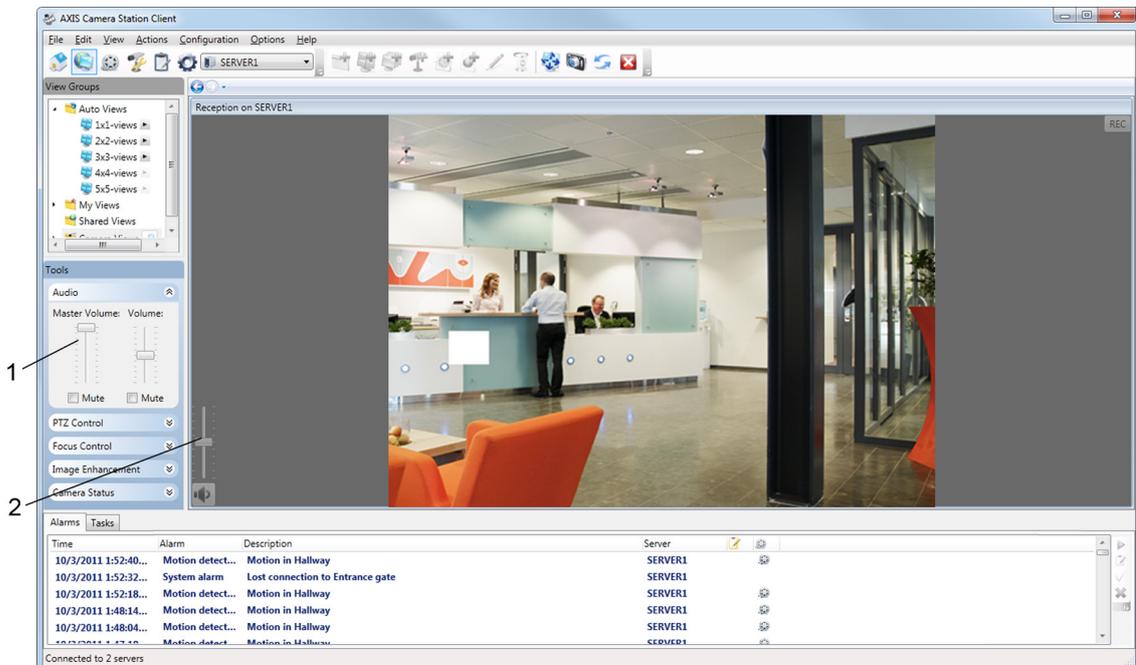
1   Master audio control
2   Volume control in image

Workspaces

PTZ Controls

AXIS Camera Station has two types of pan/tilt/zoom (PTZ) controls:

- **Mechanical** is for PTZ cameras (including cameras where digital PTZ has been enabled in the camera's Setup page)

- **Digital** can be used with any camera

In the Live View workspace, **PTZ Control** is available under **Tools**.

Mechanical PTZ Control

The pan, tilt and zoom functionality for PTZ cameras can be controlled:

- using the **Mechanical PTZ Control** under **Tools**

- using the mouse

When using the **Mechanical PTZ Control**, click on the arrow buttons to pan and tilt. Click on the center buttons "+" and "-" to zoom in and out.

To steer the camera view to a **preset position**, select the position from the **Presets** drop-down list. For more information on presets, see *Add a PTZ Preset Position, on page 36*.

When using the mouse, click in the camera view to pan and tilt. Use the mouse wheel to zoom in and out.

Note

For information on using a joystick, see *Input Devices, on page 53*.

Digital PTZ Control

Digital PTZ can be used with cameras that do not have mechanical PTZ support. Digital PTZ can be controlled:

- using the **Digital PTZ Control** under **Tools**

- using the mouse

When using the **Digital PTZ Control**, use the zoom in and out buttons (represented by magnifying glasses) to zoom in and out. After zooming in, use the red navigation box in the Digital PTZ Control to pan and tilt. Click and drag the box to the desired location. To zoom out, right-click or use the zoom out button.

When using the mouse, click in the camera view and use the wheel to zoom in. After zooming in, use the navigation box that appears in the lower right-hand corner of the live view to pan and tilt. Click and drag the box to the desired location. To zoom out, right-click or use the mouse wheel.

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Focus Control

The **Focus Control** is available under **Tools** in the Live View workspace.

Click **AF** to focus the camera automatically. If the result is not satisfactory, click the **Near** and **Far** buttons to adjust focus manually:

- Use the **Near** buttons to focus on objects close to the camera.

- Use the **Far** buttons to focus on objects far away from the camera.

The large **Near** and **Far** buttons move the focus position in multiple steps and are used for coarse adjustments. Use the small buttons to fine-tune focus.

Note

> Focus control is not available for all camera models.

Image Enhancement

Image enhancement improves video quality in challenging conditions such as fog, smoke, heavy rain or snow. In the Live View workspace, **Image Enhancement** is available under **Tools**. Select **Enable** and use the slider to adjust the amount of enhancement.

Camera Status

The Camera Status field shows information about the selected camera's connection and recording status.

Recording Indicators

A recording indicator in the upper right hand corner of the live view image signifies an ongoing recording:

- **Yellow** — Manual recording in progress

- **Red** — Motion detection or event recording in progress

- **Blue** — Continuous recording in progress
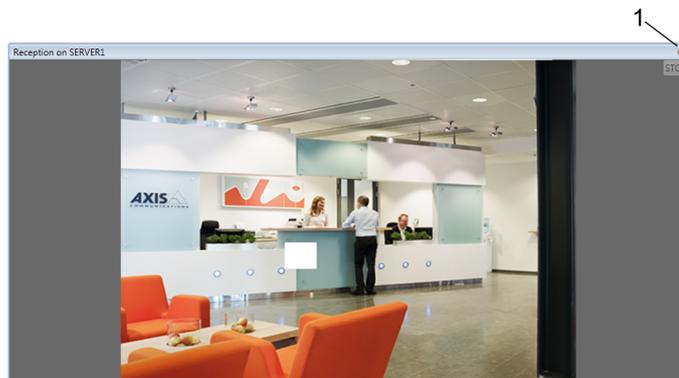
1   Recording indicator

Area Zoom

In the Live View workspace, you can use the mouse to magnify a selected area in the image. To zoom in, click in the image and drag to draw a rectangle surrounding the area to be magnified. To zoom out, rotate the mouse wheel.

Recordings

The Recordings workspace handles recording search, playback, export and recording management. The workspace is divided into tabs:

AXIS Camera Station

Workspaces

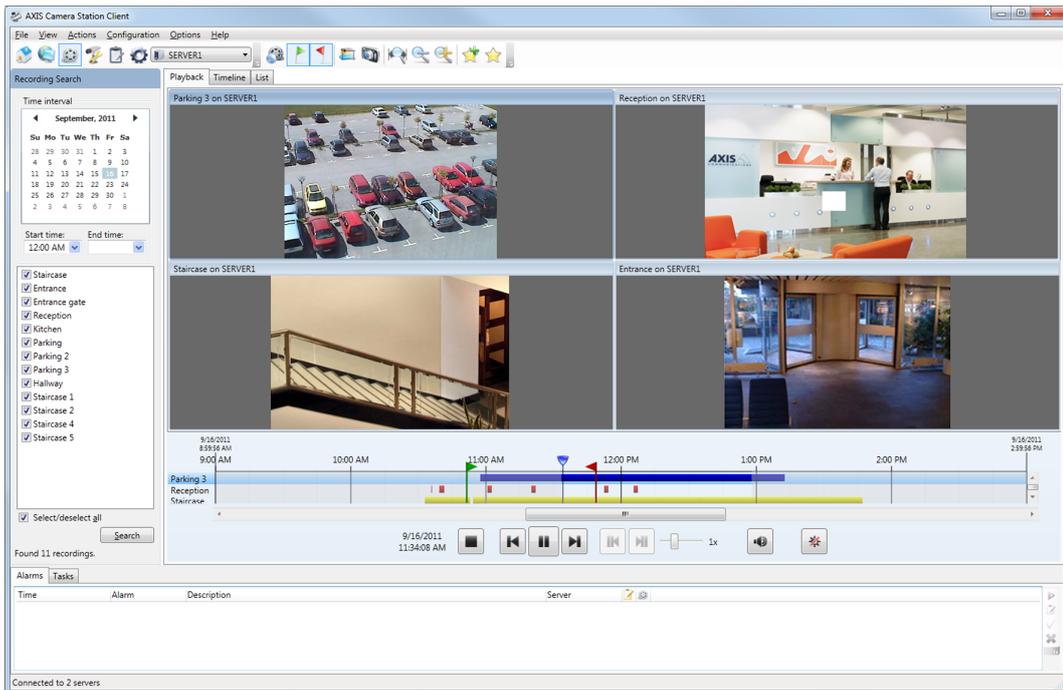- **Playback** — Recordings from up to 25 cameras can be played simultaneously. By default, playback starts automatically after a recording search.

- **Timeline** — View the search result on a timeline.

- **List** — View the search result as a list.

Recording Search

Use **Recording Search** to find recordings from a desired time interval.

To search and play recordings:

1. In **Recording Search**, specify the time interval for the search. Select a range of dates from the calendar and, optionally, select the start and end times from the drop-down lists.

2. Select the cameras to include in the search. Multiple cameras can be selected.

3. Click **Search**.

4. Playback starts automatically when recordings are found. Select the **Timeline** or **List** tab to view the search result on a timeline or as a list.

Playback

Playback starts automatically after a recording search. To play recordings from the Timeline or List tabs, select the recordings and click ▶ . Recordings from up to 25 cameras can be played simultaneously.

> **Note**
>
> To disable playback autostart, open the **Options** menu and select **Customize**. Select the **Recordings** tab and clear the box under **Autostart**.

The timeline below the playback window can be used to navigate through the recordings. Click in the timeline to position the playback marker. Use the scroll bar to pan the timeline. Use the mouse wheel to zoom in and out.

AXIS Camera Station

Workspaces
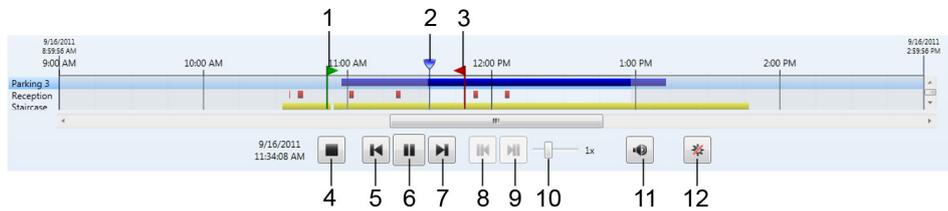
1. *Selection start marker*
2. *Playback marker*
3. *Selection end marker*
4. *Stop — Stops playback*
5. *Jump to previous — Jump to the start time of the ongoing or previous recording*
6. *Play/Pause — Starts, pauses and resumes playback*
7. *Jump to next — Jump to the start time of the next recording*
8. *Step Back — Step to the previous frame*
9. *Step Forward — Step to the next frame*
10. *Playback Speed — Move the slider to set the playback speed*
11. *Master Mute/Unmute — Mute and unmute audio for all recordings. Place the mouse pointer over the button to display the master volume control*
12. *Image Enhancement — Place the mouse pointer over the button to display the enhancement level control*

Digital zoom can be used in playback mode. Click in the image and use the mouse wheel to zoom in and out. Area zoom can also be used, see *page 12*. The navigation box in the lower right-hand corner can be used to navigate around the image.

Playback Toolbar

In Playback mode the following toolbar buttons become available:

	Export	Export selected recordings to ASF files. See *Export Recordings, on page 40*.
	Selection start marker	Set a start marker in the timeline. The marker defines the start of a time interval and will be inserted at the same position as the playback marker. Click the button again to remove the marker.
	Selection end marker	Set an end marker in the timeline. The marker defines the end of a time interval and will be inserted at the same position as the playback marker. Click the button again to remove the marker.
	Smart search	Search for motion in a specific area in recordings. This is especially useful when searching continuous recordings. See *Smart Search*.
	Take snapshot	Take a snapshot image from the selected camera. The snapshot is saved to the snapshot folder specified under **Options > Customize**.
	Area zoom	To zoom in on a period of time, click this button and use the mouse to select the desired time period in the timeline.
	Zoom in/Zoom out	Zoom in and out on the timeline.
	Add bookmark	Create a new bookmark. Bookmarks can be placed anywhere in a recording; playback will start from the bookmarked time.
	Show bookmarks	Open the list of bookmarks. Click on a bookmark to start playback. Right-click to edit or remove a bookmark.

Smart Search

To use the Smart search functionality:
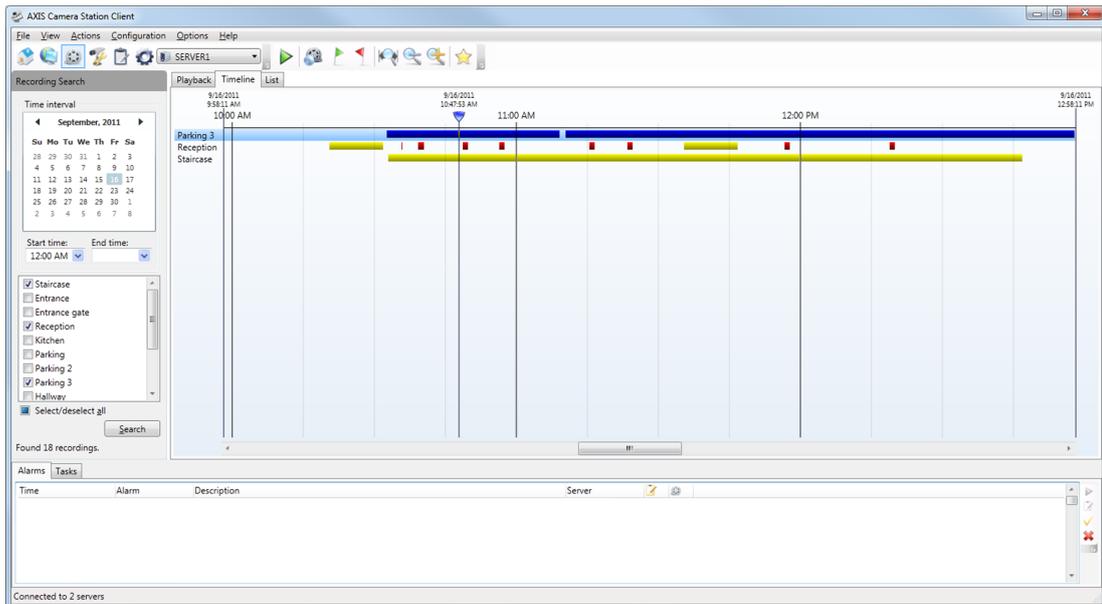
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Workspaces

1. Click the Smart search button [icon] in the toolbar, a Smart search next button will appear in the playback panel, a motion window will appear in the image and a sensitivity slider will appear in the lower right-hand corner

2. Drag and size the motion window to the desired area of the image.

3. Adjust slider to the proper sensitivity. A high value indicates high sensitivity to motion.

4. Click the Smart search next button to jump to the place in the recording where motion takes place.

Timeline

Select the **Timeline** tab to view the search result on a timeline.

Recordings are color coded:

- **Red** — Motion detection recording

- **Yellow** — Manual recording

- **Blue** — Continuous recording

- **Green** — Failover recording

In timeline view, the following toolbar buttons are available:

[icon]	**Play**	Play selected recordings.
[icon]	**Export**	Export selected recordings to an ASF file. See *Export Recordings, on page 40.*
[icon]	**Selection start marker**	Set a start marker in the timeline. The marker defines the start of a time interval and will be inserted at the same position as the playback marker. Click the button again to remove the marker.
[icon]	**Selection end marker**	Set an end marker in the timeline. The marker defines the end of a time interval and will be inserted at the same position as the playback marker. Click the button again to remove the marker.

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Workspaces

	Area zoom	To zoom in on a period of time, click this button and use the mouse to select the desired time period in the timeline.
	Zoom in/Zoom out	Zoom in or out on the timeline.
	Show bookmarks	Open the list of bookmarks

Right-click the recording in the timeline to open the **Recording Details** dialog. The dialog provides information about the recording and includes options such as start playback, export, bookmark and take a snapshot of the recording.

List

Select the **List** tab to view the search result as a list.

In List view, the following toolbar buttons become available:

	Play	Play selected recordings.
	Lock/Unlock	Lock or unlock selected recordings. Locking prevents the recording from being deleted. **Note**: Locked recordings will be deleted if the camera is removed from AXIS Camera Station.
	Export	Export selected recordings to an ASF file. See *Export Recordings, on page 40*.
	Show/Hide	Show or hide thumbnail images in the recording search list.
	Show bookmarks	Opens the list of bookmarks.

Camera Management

The Camera Management workspace provides tools for efficient management, administration and maintenance of devices connected to AXIS Camera Station. Devices can be organized using tags, see *Tags, on page 18*.
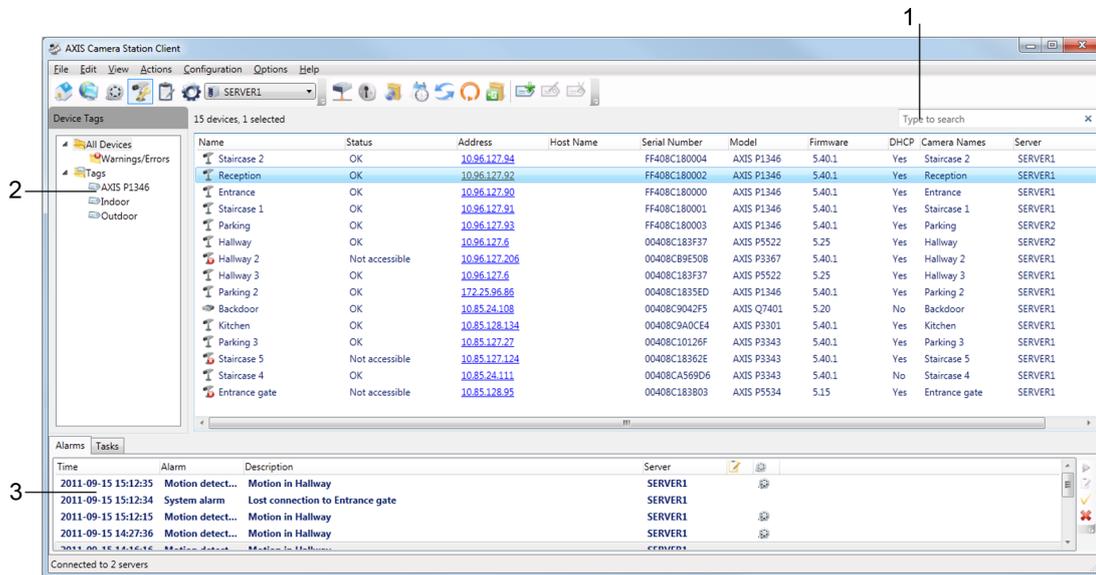
Note

A device is a network product with its own IP address, see *page 8* .

Use the search field to locate desired devices, or click on the headings to list devices in the desired order.

AXIS Camera Station

Workspaces

Camera Management workspace

1. *Search field*
2. *Device Tags*
3. *Alarms and Tasks tabs*

Tasks

Tasks can be performed on one or multiple devices. The following task are available from the **Actions** menu:

Assign IP address to selected devices, see *page 42*

User management tasks:

Set password for selected devices

Add user to selected devices

Remove user from selected devices

List users on selected devices

Upgrade firmware for selected devices, see *page 40*

Set date and time on selected devices

Refresh selected devices

Restart selected devices

Restore selected devices. This will reset most settings, including the password, to their factory default values. The following settings are not reset: boot protocol (DHCP or static), static IP address, default router, subnet mask, product interface language, system time, IEEE 802.1x settings.

The status of finished and ongoing tasks is shown in the Tasks tab at the bottom of the workspace. See *Alarms and Tasks Tabs, on page 20.*

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Workspaces

When connected to multiple AXIS Camera Station Servers, devices on all servers are displayed in the Camera Management workspace's main window. With the exception of assigning IP addresses, tasks can be performed on different servers at the same time.

Tags

For efficient management, devices can be organized using tags. A device can have more than one tag. You can for example create tags for managing different camera models and tags for cameras in different locations.

Created tags are listed in the **Device Tags** pane on the left-hand side of the Camera Management workspace. **All Devices** lists all connected devices. If there is a warning or error associated with a particular device, the device is also listed under **Warnings/Errors**.

To display all devices associated with a tag, select the tag under Tags. The devices will be listed in the main window along with their IP address, host name, connection status, serial number, model, firmware version being used, if the device was configured using DHCP, the names of the cameras associated with the device and the server the device is connected to.
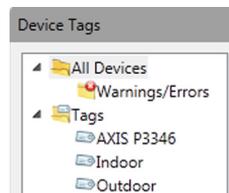
From the toolbar you can:

 Create a new tag

 Rename the selected tag

 Delete selected tags

Once tags have been created you can:

Add a tag to a device	Select the device, right-click and select **Tag**.
Remove a tag from a device	First select the tag under Tags in the Device Tags pane. Then select the device, right-click and select **Untag**.

Logs

The Logs workspace shows alarm, event and audit logs for easy navigation and an instant overview of the system. The workspace is divided in three tabs:

Alarms	Displays events and system alarms that have been triggered. Listed are the date and time of the alarm, the alarm title and an alarm description. For information on how to set up alarms, see *Event Configuration Wizard, on page 43*.
Events	Displays camera and server events such as recordings, triggers, alarms, errors and system messages. Listed are the date and time of the event, the event category and an event message.
Audit	Displays all user actions such as manual recordings, video streaming started or stopped and event configurations.

Select **Live logs** in the Logs pane to display continuously updated lists of alarms, events and audits. To search for logs from specific time period, select the **Search** option and specify a range of dates, a start time and an end time. Click **Search** to start the search.

AXIS Camera Station
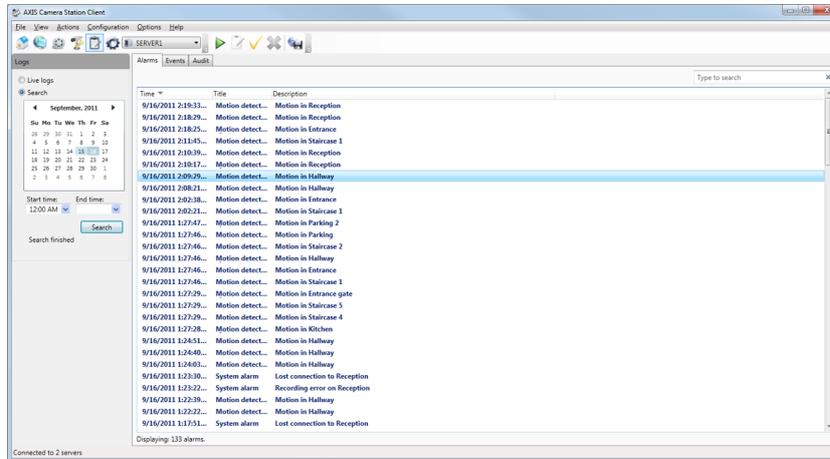
Workspaces

The following toolbar buttons are available in the Logs workspace:

▷	**Go to recordings**	(Alarms log only) Start a playback of the event that triggered the alarm.
📝	**Show alarm procedure for selected alarm**	(Alarms log only) Display instructions for the AXIS Camera Station user.
✓	**Acknowledge selected alarms**	(Alarms log only) Notify clients that alarms are being dealt with.
✗	**Remove selected alarm entries**	(Live Alarms log only) Delete the alarm entry from the list.
💾	**Export alarm log**	Save log as a text file.

Configuration

The Configuration workspace is a collection of all the important links to get AXIS Camera Station up and running.

|		
📷	**Add/Edit Cameras**	Add, edit and remove cameras and video encoders.
⚙	**Live View Settings**	Set format, resolution, compression, frame rate and audio (if applicable) for Live View.
⚙	**Recording Settings**	Set up recording settings for one or more cameras for manual, continuous and motion detection. Recordings can also be set up using the Event Configuration Wizard.
⭐	**Event Configuration Wizard**	Set up recordings and alarms by defining triggers and actions.
👤	**User Permissions**	Activate security and set up users with access rights to cameras.
▭	**Recording Storage**	Define where to store recordings and how much of the disk to use.
⚙	**Input/Output Settings**	Add, edit and remove input and output ports for cameras that have been added to AXIS Camera Station.
📅	**Schedules**	Set up schedules to be used in event configuration and recording settings.
🗝	**Licenses**	Add more licenses to AXIS Camera Station Server for more cameras or extended support date.

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Workspaces

	Customize	Customize the look of AXIS Camera Station at startup, the sound played when an alarm or event occurs, where to store snapshots and Playback behavior.
	PTZ Settings	Add new or modify existing pan/tilt/zoom (PTZ) preset positions.
	Bookmarks	Edit and remove bookmarks.

Alarms and Tasks Tabs

The Alarms and Tasks tabs at the bottom of the Live View, Recordings and Camera Management workspaces display recent alarms and tasks.
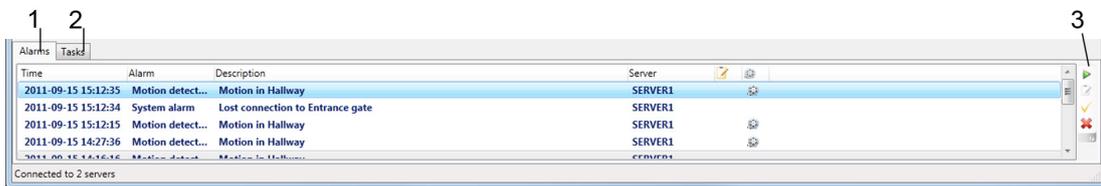
1   *Alarms tab*
2   *Tasks tab*
3   *Toolbar*

Alarms Tab

The Alarms tab lists the event and system alarms that have been triggered.

Time	The time the alarm was triggered or took place according to a schedule.
Alarm	What kind of alarm was triggered.
Description	A brief description of the alarm.
Server	(Displayed when connected to more than one AXIS Camera Station Server.) The AXIS Camera Station Server where the alarm occurred.
Alarm Procedure	Lists if there is a procedure configured to take place if an alarm is triggered.
Recording	Shows if the alarm contains a recording.

When an alarm occurs, right-click the alarm in the list and select:

	Go to Recordings	Open the Recordings workspace and play the recording generated by the alarm.
	Show Alarm Procedure	Display instructions for the AXIS Camera Station user.
	Acknowledge Alarms	Acknowledge the alarm to notify other clients that the alarm has been taken care of.
	Remove Alarm Entries	Remove the alarm from the list.

Task Tab

The Tasks tab lists tasks from the Camera Management workspace.

AXIS Camera Station

Workspaces

Task	The name of the task
Status	Shows if the task is: • Waiting (Waiting for another task to be completed on the server) • Running (Performing the task) • Cancel pending (Clean up after the task when the user pressed cancel) • Canceled (Cleaning is complete and the task is canceled) • Finished (Task completed) • Error (Task completed with errors, i.e. the task failed on one or more of the selected cameras)
Start Time	When the task was started
Owner	Who initiated the task
Progress	Shows how much of the task is left to be completed.
Server	(Displayed when connected to more than one AXIS Camera Station Server.) The AXIS Camera Station Server performing the task

The toolbar to the right displays the following buttons:

	Show	Displays additional information about the task.
	Cancel	Cancel selected tasks.
	Remove selected task entries	Remove one or more tasks from the task list.
	Auto remove successful	Automatically remove the task from the list when it is successfully completed.

AXIS Camera Station

Licenses

Licenses

AXIS Camera Station can be run in three license modes:

- **Licensed version**: Complete version allowing up to 100 video channels.

- **Demo**: A 30 day evaluation version with up to four video channels and full functionality.

- **AXIS Camera Station One**: A free version with one video channel.

Registering Licenses

Multiple licenses can be added to AXIS Camera Station to install up to 100 video channels. Contact your local Axis reseller to purchase more licenses. AXIS Camera Station offers two ways to add and register a license:

- **Automatic registration** — If AXIS Camera Station Server is installed on a computer with Internet connection, this is the easiest and fastest way to register and activate a new license.

- **Manual registration** — If AXIS Camera Station Server is installed on a computer without Internet connection, licenses can still be added in AXIS Camera Station. Make a note of the Server ID in the License Registration dialog as the Server ID is required to activate the license. The software can be used in grace mode for 5 days before the license is activated on Axis web site http://www.axis.com/techsup/acs

Refer to AXIS Camera Station Installation Guide for instructions how to register and activate licenses.

License Types

AXIS Camera Station allows different kinds of licenses to be added:

- **Base license**: Allow adding a set of video channels (4 or 10). The first license installed on the system must be a base license.

- **Upgrade license**: Allow adding more video channels (1, 5 or 20).

- **Support license**: Add one year to the support period of the product.

Support License

The initial base license includes one year free support and software upgrades for AXIS Camera Station. For access to support and upgrades after the first year has expired a yearly support license is required. A support license will grant you one year additional support and upgrades from the day when the new support license is registered.

AXIS Camera Station

Licenses

License Transition

AXIS Camera Station allows changing the license mode. Refer to the following table for more information about possible transitions:

From/to	Licensed version	Demo	AXIS Camera Station One
Licensed version	—	No	No
Demo	Yes	—	Yes
AXIS Camera Station One	Yes	Yes	—

Decoders

If running AXIS Camera Station in Licensed version, missing decoders can be installed through the menu **Options > Install Decoders** or in the Live View workspace from the view itself.

Due to licensing issues, decoders are not included in Demo mode or in AXIS Camera Station One. Decoders can be installed from the cameras if the licensing terms are accepted.

How to...

After installing the software, it must be configured for your cameras and video encoders. Among other things, this chapter describes how to configure and maintain AXIS Camera Station as well as how to set up recording, motion detection, and alarms. For installation instructions, refer to AXIS Camera Station Installation Guide.

Add Cameras and Video Encoders

Cameras and video encoders can be added to AXIS Camera Station in the following ways:

- By searching for devices on the network, see *Add Cameras and Video Encoders — Using Search*

- By specifying the device IP address or host name manually, see *Add Cameras and Video Encoders — Manually*
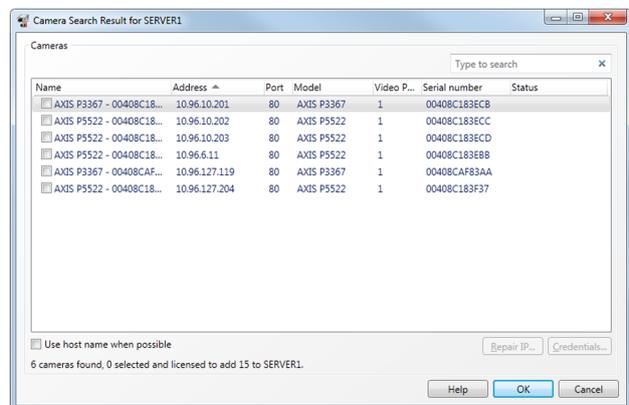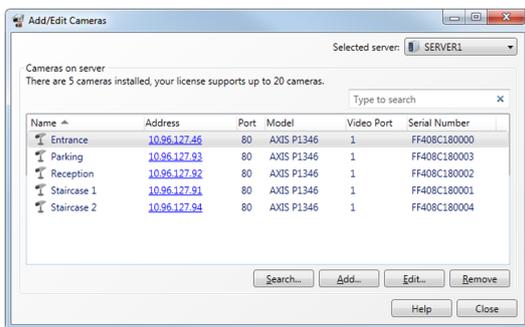
Note

> See *page 25* for information on how to add view areas.

Add Cameras and Video Encoders — Using Search

To add cameras using the search function, follow these steps:

1. Open the **Configuration** menu and select **Add/Edit Cameras**.

2. Click **Search**. The **Camera Search** result list opens with a list of the cameras found on your local subnet and all the cameras with routers that support multicast traffic.

3. Check the boxes of the desired camera/video encoder.

Note

> - If there is a problem adding a camera, look at the status field in the search result list to see if the camera has, for example, obsolete firmware or credentials mismatch.
> - Check the box **Use host name when possible** to use host names instead of IP addresses when adding cameras. If a camera is added using its host name, the host name will be used for all further communication with the camera. If a host name is not available, the IP address will be used.

Add Cameras and Video Encoders — Manually

To add cameras manually, follow these steps:

1. Open the **Configuration** menu and select **Add/Edit Cameras**.

2. Click **Add** to open the Add Camera dialog.

3. Under **Settings**, enter the required information.

    Enabled — The Enabled box should be checked. Recordings and Live View are not possible from this camera, if this box is not checked.

    Name — Enter a descriptive name for the camera.

    Address — Enter the camera's IP address or host name.

    Port — Enter the port number, if different than the default port 80.

    Video port — Multiport video encoders: Select the video port number.
   View areas: Select the number corresponding to the view area.

    External audio — If an external audio device should be used with this camera or video encoder, select the audio device from the drop-down list. All audio devices that have been added in the **Add/Edit Aux Devices** dialog are listed here. Select **None** to use the camera's built-in audio capabilities or if audio should not be used.

4. A valid administrator user name and password are required to access and configure Axis network cameras and video encoders.

    Master Credentials is the default user name and password used to access one or more cameras so that credentials do not have to be entered individually for each single camera. Master Credentials can be set under the menu item **Options > Set Master Credentials**. You also have the option of using specific credentials for a camera. In this case, check **Use specific credentials** and enter the specific user name and password.

5. Click **OK** to save.
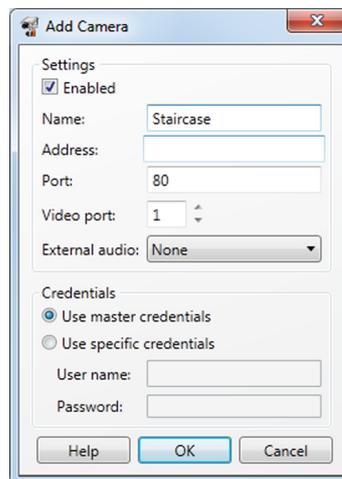
Add a View Area

To add a view area, follow these steps:

1. Enable and configure View Areas in the camera's Setup pages (for instructions, refer to the documentation provided with the camera).

2. Open the **Configuration** menu and select **Add/Edit Cameras**.

3. Click **Add**. Enter the camera's Name, Address and Port as described in *Add Cameras and Video Encoders — Manually*.

4. In the **Video port** field, select the number corresponding to the view area.

5. Click **OK** to save.

- View areas are supported by selected HDTV and megapixel cameras.
- When using multiple view areas from the same camera, each view area counts as one video channel in the total number of video channels supported by the installed AXIS Camera Station license.

Add Auxiliary Devices

Auxiliary devices are devices that provide additional, non-video-related functionality, for example more I/O ports or audio capabilities. Auxiliary devices cannot be used for video and do not require an additional AXIS Camera Station license.

Auxiliary devices can be added to AXIS Camera Station in the following ways:

- By searching for devices on the network, see *Add Auxiliary Devices — Using Search*
- By specifying the device IP address or host name manually, see *Add Auxiliary Devices — Manually*

See also *Use Audio from an Auxiliary Device, on page 38.*

Add Auxiliary Devices — Using Search

To add auxiliary devices using the search function follow these steps:

1. From the **Configuration** menu, select **Add/Edit Aux Devices**.
2. Click **Search**. The **Aux Device Search** window opens with a list of all auxiliary devices found on your network.
3. Check the boxes of the desired devices and click **OK**.

Note

Check the box **Use host name when possible** to use host names instead of IP addresses when adding auxiliary devices. If an auxiliary device is added using its host name, the host name will be used for all further communication with the device. If a host name is not available, the IP address will be used.

Add Auxiliary Devices — Manually

To add auxiliary devices manually follow these steps:

1. From the **Configuration** menu, select **Add/Edit Aux Devices**.
2. Click **Add** to open the Add Aux Device dialog.
3. Under **Settings**, enter the required information.

   Address — Enter the device's IP address or host name.

   Port — Enter the port number, if different than the default port 80.
4. A valid administrator user name and password are required to access and configure the device.

   Master Credentials is the default user name and password used to access one or more devices so that credentials do not have to be entered individually for each single device. Master Credentials can be set under the menu item **Options > Set Master Credentials**. You also have the option of using specific credentials for a device. In this case, check **Use specific credentials** and enter the specific user name and password.
5. Click **OK** to save.

Set Up Recording

Recordings can be continuous, manual or triggered by motion. Recordings can also be scheduled. Media profiles can be created for each type of recording for, among other settings, optimal frame rate and resolution. See *Configure a Media Profile, on page 37* for more information.

How to...

AXIS Camera Station also supports failover recordings. When enabled, a failover recording starts automatically if the connection between the camera and AXIS Camera Station is lost during an ongoing recording. See *Failover Recordings, on page 30.*

For information on how to set up recordings triggered by signals from I/O ports, system alarms, tampering attempts etc, see *Event Configuration Wizard, on page 43.*

Continuous and Scheduled Recordings

To set up a continuous or scheduled recording, follow these steps:

1. From the **Configuration** menu, select **Recording Settings**.

2. Select the camera and click **Continuous** to open **Edit Continuous Recording Settings**.

3. Check the **Enabled** box and choose a **Profile** from the drop-down list or click **Change** to create a new media profile.

4. Under **Schedule setting** select **Always** for a continuous recording, or select a schedule from the **Custom schedule** drop-down list. Click **Edit** to revise an existing schedule, or click **New** to create a new schedule. See *Set Up Schedules, on page 39* for more information.

5. Click **OK** to save settings and start recording.

Note

- Multiple cameras can be configured at the same time.
- A continuous recording uses more disk space than a triggered recording.
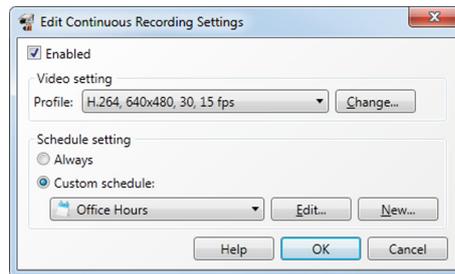
Manual Recordings

A manual recording can be started and stopped from the Live View workspace or the Actions menu:

- Open the Live View workspace and click the REC button that appears in the upper right corner when the mouse pointer is over the camera's live view frame. Click the button again to stop recording.

- From the **Actions** menu, open the **Record Manually** dialog. Select one or more cameras and click **Start** to start recording. Click **Stop** to stop recording.

During manual recording, a yellow indicator appears in the upper right hand corner of the live view image.

To configure manual recording settings, follow these steps:
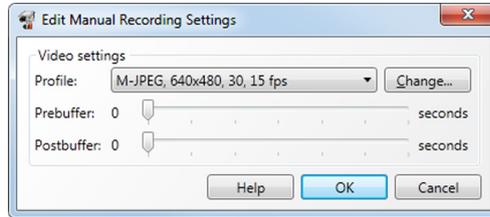
1. From the **Configuration** menu, select **Recording Settings**.

2. Select the camera and click **Manual** to open **Edit Manual Recording Settings**.

3. Choose a **Profile** from the drop-down list or click **Change** to create a new media profile.

4. Use the sliders to set the **Prebuffer** and **Postbuffer**, that is, the number of seconds to include before starting (prebuffer) and after stopping (postbuffer) the manual recording.

5. Click **OK** to save settings.

AXIS Camera Station

How to...

Multiple cameras can be configured at the same time.


Motion Triggered Recording

Motion can be detected by all Axis network cameras. Recording only when motion is detected will save disk space compared to other options such as recording continuously. Motion Detection Recording can be configured using the Event Configuration Wizard, see *page 43*, or the Recording Settings dialog as described here.

To set up a motion triggered recording, follow these steps:

1. From the **Configuration** menu, select **Recording Settings**.

2. Select the camera and click **Motion Detection** to open **Edit Motion Detection Recording Settings**.

3. Check the **Enabled** box.

4. Use the slider to set the **Trigger period**, that is, specify the minimum time between two alarms. This setting is used to reduce the number of alarms and recordings if there is a lot of motion in the area.

5. Click **Motion Settings** to configure motion detection windows. See *Motion Settings*, below.

6. Choose a **Profile** from the drop-down list or click **Change** to create a new media profile.

7. Use the sliders to set the **Prebuffer** and **Postbuffer**, that is, specify the number of seconds to record before motion was detected (prebuffer) and after motion stopped (postbuffer).

8. Under **Schedule setting** select **Always** to always record on motion detection, or select a schedule from the **Custom schedule** drop-down list.

9. Click **OK** to save settings.

When using view areas, motion detection can be configured for view area 1 only and is always set up using the full overview image.
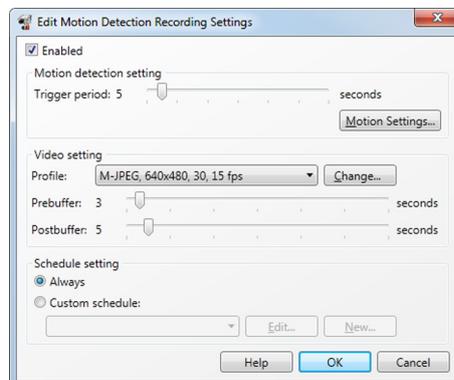
How to...

Motion Settings

Moving objects will be detected in the configured motion detection windows:

- **Include windows** define areas where motion should be detected

- **Exclude windows** define areas within an include window that should be ignored (areas outside include windows are always ignored)

For each motion detection window you can configure:

Object size – Object size is relative to the region size. At a high level, only very large objects are detected. At a low level even very small objects trigger an event.

History – History defines how long an object needs to be in a region before it is considered to be non-moving. At a high level an object that appears in the region will trigger the motion detection for a long period before it is considered a non-moving part of the image. At a low level an object that appears in the region will trigger motion detection for only a very short period.

Sensitivity – Sensitivity defines the difference in luminance between the background and the object. At a high level, an ordinary colored object on ordinary backgrounds will trigger motion. At a low level, only very bright objects on a dark background or very dark objects on a light background will trigger an event.

To set up motion detection windows, follow these steps:

1. Click **Motion Settings** to open the **Edit Motion Detection** dialog.

2. Click **Add** to create a new motion detection window. Select **Include** to create an include window or select **Exclude** to create an exclude window, as required.

3. Use the mouse to drag the window to the desired area. To resize, drag the sides of the window.

4. Set the **Object size**, **History** and **Sensitivity**. Begin with a predefined setting and if needed fine adjust the settings using the sliders while looking in the Activity window while there is a desired amount of motion in the motion detection window.

5. Click **OK** to save settings.

How to...
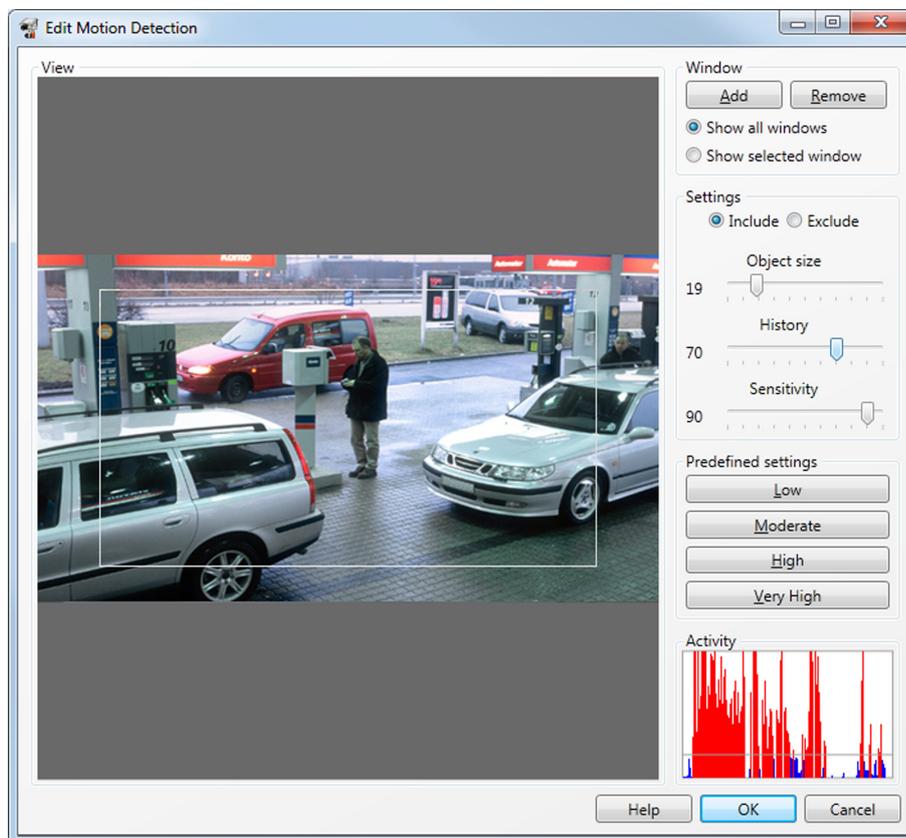
Failover Recordings

A failover recording starts automatically if the connection between the camera and AXIS Camera Station is lost during an ongoing recording. No new recordings can be started while the connection is lost.

Failover recordings will only affect H.264 recordings and can be enabled on cameras with support for storage (SD card) and firmware 5.20 or later.

To set up a failover recording, follow these steps:

1. From the **Configuration** menu, select **Recording Storage**.

2. Under **Cameras**, select the camera and click **Edit**.

3. Check **Enable failover recording**.

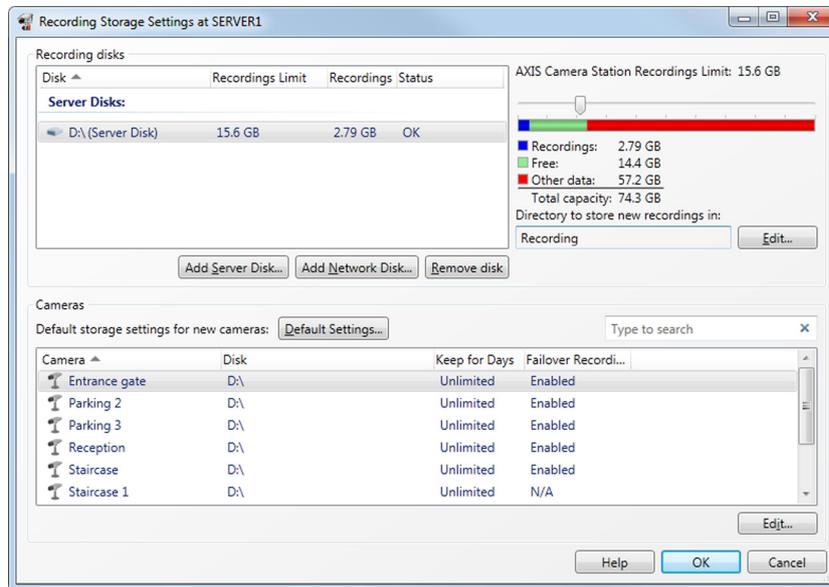4. Click **OK** to save settings.

Set Up Recording Storage

Recordings can be stored on a server disk on the local computer or on a network disk. To prevent the hard drive from becoming full a maximum disk usage should be set. Additional server and network disks can be added for security and more space.

Note

> Maximum drive space has precedence over the number of days to keep recordings. Recordings will be deleted if there is no room left in the allotted drive space.

How to...

Configure a Recording Disk

To add and configure a recording disk, follow these steps:

1. From the **Configuration** menu, select **Recording Storage**.

2. Click **Add server disk** or **Add network disk**.

3. Enter the path of the disk and click **OK** to save.

4. To set the maximum disk space allowed to be used by AXIS Camera Station, select the disk and use the **AXIS Camera Station Recordings Limit** slidebar.

5. To change the folder where recordings will be stored, select the disk and click **Edit** to specify new folder.

Configure Camera Recording Storage Settings

To specify storage settings for individual cameras, follow these steps:

1. From the **Configuration** menu, select **Recording Storage**.

2. Select a camera from **Cameras**.

3. Click **Edit** to open the **Edit Camera Recording Storage Settings** dialog.

4. Choose the disk to save recordings to from the list **Record to disk**.

5. Set the number of days to keep recordings. By default the recordings are set to 'Unlimited'.

6. Optionally, check the box to enable failover recordings.

7. Click **OK** to save settings.

To enter default storage settings for all newly added cameras, click **Default Settings** under Cameras.

Create Views

AXIS Camera Station supports different view types: split view, sequence, camera view, map and web page, see *Views, on page 9* . The views can be organized into view groups, see *View Groups, on page 10*.
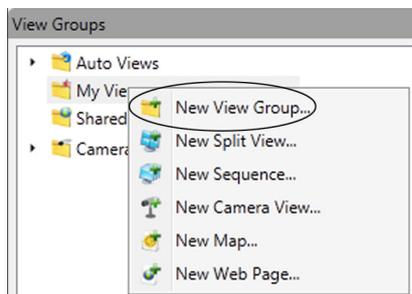
How to...

Create a New View Group

To create a View Group, follow these steps:

1. In the Live View workspace, right-click **My Views** or **Shared Views** in the View Groups pane.

2. Choose **New View Group**.

3. Enter a descriptive name for the group.

4. Click **OK** to save and close the dialog.

To add a Map, Sequence or Split View follow the instructions **Create a Map**, **Create a Sequence** or **Create a Split View**.

Create a Split View

To create a split view, follow these steps:

1. In the Live View workspace, right-click **My Views**, **Shared Views** or a created view group and choose **New Split View**

2. Enter a descriptive name and choose a layout from the drop-down list:

- **Standard** — optimized for standard resolution cameras (4:3 format)

- **Wide** — optimized for HDTV and megapixel cameras (16:9 format)

- **Corridor** — optimized for HDTV and megapixel cameras where the image has been rotated by 90 degrees (16:9 format, 90 degree rotation)

3. Drag cameras, views and maps to the desired camera views into place.

4. Click **OK** to save settings and close dialog.
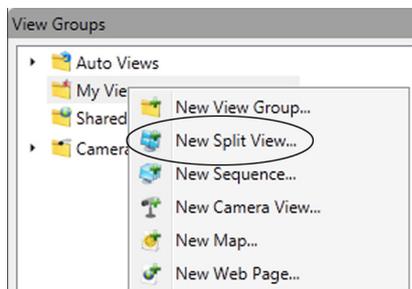

You can define a frame in the view as a **Hotspot** that will automatically load the view from another camera when it is clicked on. This is particularly useful for asymmetric views with one large view frame and several smaller views. The large view frame is typically defined as the hotspot. To define a hotspot, click in the desired section of the view and click **Set Hotspot**.

How to...

In the image below the large frame is the hotspot, and when another frame in the Split View is clicked, the Live View of that camera will load in the hotspot. In this example the camera view shown in the hotspot is the Entrance.
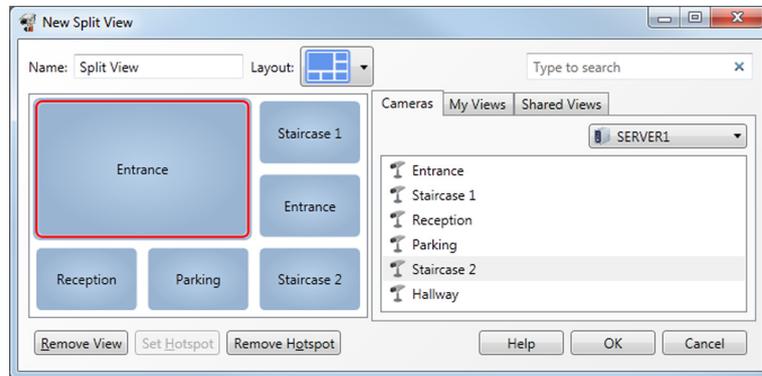
Create a Sequence

A sequence view automatically switches between views from different cameras. Each sequence can be set as a unique combination of camera views and variable dwell times.
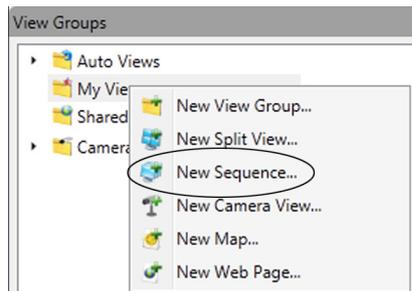
To create a sequence, follow these steps:

1. In the Live View workspace, right-click **My Views**, **Shared Views** or a created view group and choose **New Sequence**.

2. Enter a descriptive name.

3. Drag the cameras, views and maps you would like included into **Sequence Items**.

4. To include PTZ presets, select a PTZ camera and click **Set Properties**.

5. To set the number of seconds the sequence will dwell on a camera's Live View, click on the camera and click **Set Properties**.

6. Click **OK** to save settings and close dialog.

How to...

Create a Map

A map gives a visual overview of the cameras in your installation. A map is an image, for example a drawing or a photograph, on which you place cameras and views. Maps can also be placed on other maps in a hierarchical structure.
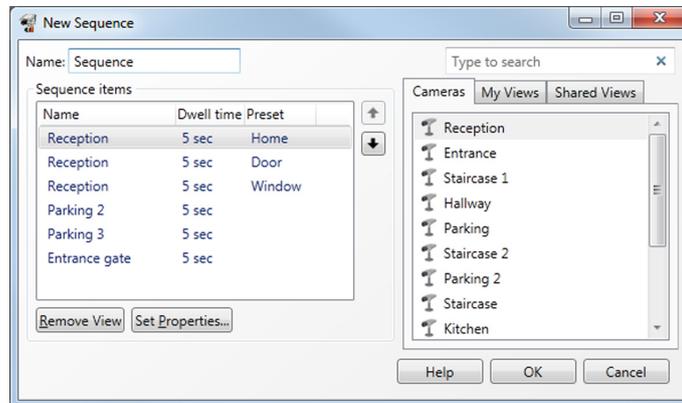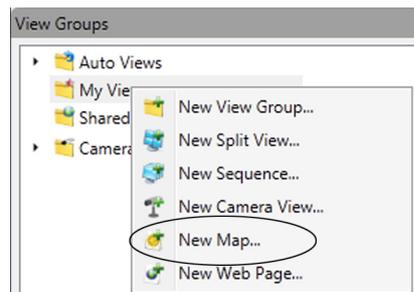

To create a map, follow these steps:

1. In the Live View workspace, right-click **My Views**, **Shared Views** or a created view group and choose **New Map**.

2. Enter a descriptive name.

3. Click **Import Map** and enter the file name or browse to locate the file.

4. Drag views to the map.

5. Click **OK** to save settings and close the dialog.

To remove a view from the map, select the view and click **Delete View**.

How to...

Create a Web Page View

External web applications can be integrated into AXIS Camera Station by creating a web page view. Web pages can, for example, be shown in a split or a sequence together with live video.
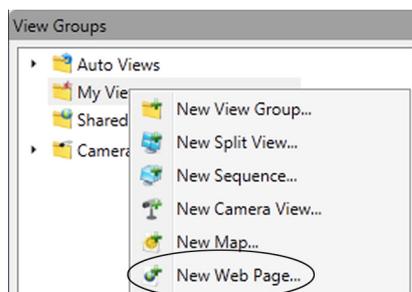
To create a web page view, follow these steps:
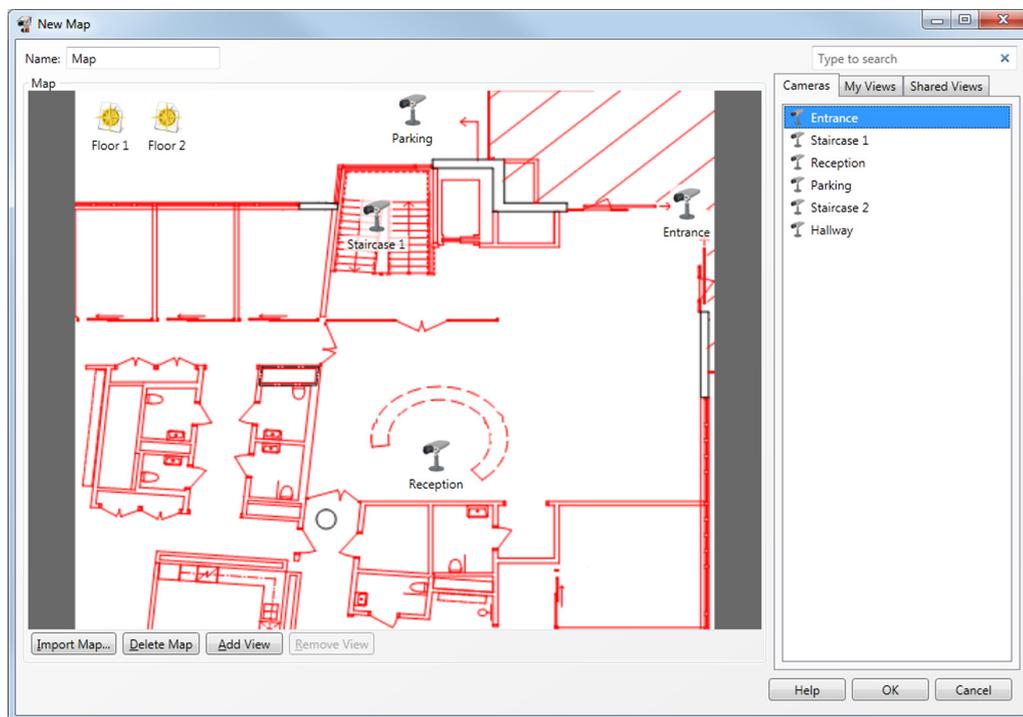
1. In the Live View workspace, right-click **My Views**, **Shared Views** or a created view group and choose **New Web Page**.

2. Enter a descriptive name.

3. Enter the complete Internet address of the web page to be displayed, for example, http://example.com/path.html

4. Click **OK** to save settings and close the dialog.

Note

Web pages cannot contain other views.

Add a PTZ Preset Position

For cameras with pan/tilt/zoom (PTZ) functionality, preset positions provide quick access to predefined views. Preset positions can be added to Sequence Views and can be used with the mechanical PTZ control.

To add a preset position, follow these steps:

1. From the **Configuration** menu, select **PTZ Settings**.

2. Select a PTZ camera and click **Configure**.

3. Steer the camera to the desired view using the mechanical PTZ control or clicking in the Preview window.

4. Click **Add** and type a descriptive name. Click **OK**.
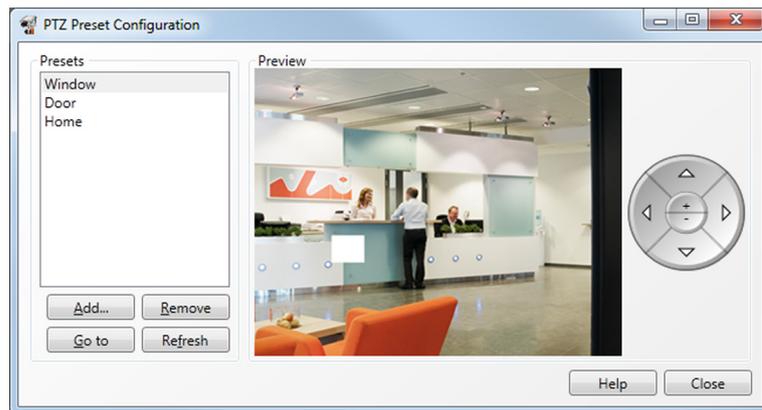
Note

- Presets configured in AXIS Camera Station are stored in the camera together with presets configured using the camera's Setup pages.
- The **Presets** list includes preset positions configured both in AXIS Camera Station and in the camera. Click **Refresh** to update the list.

Enable Audio in Live View

To enable audio in Live View, follow these steps:

1. From the **Configuration** menu, select **Live View Settings**.

2. Select a camera and click **Edit**.

3. From the **Profile** drop-down list, select a media profile where audio is enabled. If there is no such profile, click **Change** and create one. Select H.264 or MPEG-4; audio is not supported with M-JPEG.

4. To enable audio in split views and sequences, click **Large Splits** to display the override settings. Check the appropriate boxes and select a media profile where audio is enabled. If there is no such profile, click **Change** and create one. Select H.264 or MPEG-4; audio is not supported with M-JPEG.

5. Click **OK**.

Enable Audio in Recordings

To enable audio in recordings follow these steps:

1. From the **Configuration** menu, select **Recording Settings**.

2. Select a camera and click **Continuous**, **Motion Detection** or **Manual**.

3. From the **Profile** drop-down list, select a media profile where audio is enabled. If there is no such profile, click **Change** and create one. Select H.264 or MPEG-4; audio is not supported with M-JPEG.

4. Click **OK**.

Configure a Media Profile

Media profiles are video and audio settings used for live viewing and recording.

To configure a media profile, follow these steps:

1. Choose a **Format** for the media profile from the drop-down list. The options that appear in the list depend on the formats supported in the camera.

2. Select the **Resolution** to use. Depending on the camera, resolution can fall into different ranges. Resolution is a measure of how much detail a digital image can hold; the greater the resolution, the greater the level of detail.

3. Changing the **Compression** level affects the amount of bandwidth required. Lower compression improves image quality, but uses more bandwidth and storage space.

4. Specify the desired **Frame rate**. The actual frame rate depends on the model of camera, network conditions and your computer's configuration. Check **Max** if you like to always use the maximum frame rate possible.

5. The **Audio** checkbox is visible if the selected camera supports audio or if an external audio device is used with the camera. Audio is only available for MPEG-4 and H.264. Select this option to enable audio in live view or in recordings.

Note

You can define several media profiles for H.264 and M-JPEG video, but only one for MPEG-4.
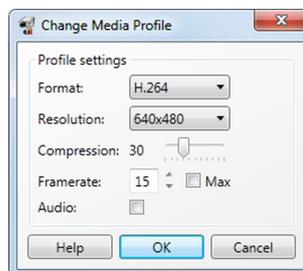
Override Media Profiles in Live View

The default media profile used in Live View can be overridden for split views and sequences. Using media profiles with lower resolution, frame rate or compression can improve performance, especially for large splits.

To change the override settings, follow these steps:

1. From the **Configuration** menu, select **Live View Settings**.

2. Select a camera and click **Edit**.

3. Click **Large Splits** to display the **Overrides** settings

4. Check or uncheck the appropriate boxes and select media profiles from the drop-down lists. Click **Change** to create a new profile.

Use Audio from an Auxiliary Device

Audio from an auxiliary device (for example AXIS P8221 Network I/O Audio Module) can be used together with live or recorded video from a network camera.

Follow these steps:

1. Add the auxiliary device to AXIS Camera Station, see *Add Auxiliary Devices, on page 26*.

2. Add the camera to AXIS Camera Station, see *Add Cameras and Video Encoders, on page 24*.

3. From the **Configuration** menu, select **Add/Edit Cameras**.

4. Select the camera and click **Edit**.

5. Select the auxiliary device from the **External audio** drop-down list.

6. Click **OK**.

7. Enable audio in the live view or recording settings, see *Enable Audio in Live View, on page 36* and *Enable Audio in Recordings, on page 36*.

Add Inputs and Outputs

External devices such as window sensors, glass break detectors or PIRs (Passive Infrared Detector) can be connected to camera inputs and used for triggering alarms, recordings or messages. An output's main function is to trigger external devices such as a door relay that controls door locks, or an alarm siren. For more information about input/output ports, refer to the camera's User Manual.

To add an I/O port to AXIS Camera Station, follow these steps:

1. From the **Configuration** menu, open **I/O Settings**.

2. Click **Add** to open a dialog with list of available I/O ports in existing devices.

3. Click to select the desired input or output port.

4. Click **OK**. The **Add I/O Port** dialog opens.

5. Enter a descriptive name for the port and for the active and inactive states. The names will appear under Logs, I/O Monitoring dialog and Event Configuration Wizard. Refer to the camera's User Manual about how the I/O ports were defined for setting descriptive names to the active/inactive states.

6. For output ports, check **On startup set to** to set the initial state of the output port. Choose the initial state of the Output port from the drop-down list.

7. Click **OK** to save settings.

Note

If more than one port is selected, the Add I/O Port dialog will not open. The ports will be added using default values.

Output ports can be set to an **initial state** upon startup and when AXIS Camera Station establishes contact with the camera.

How to...
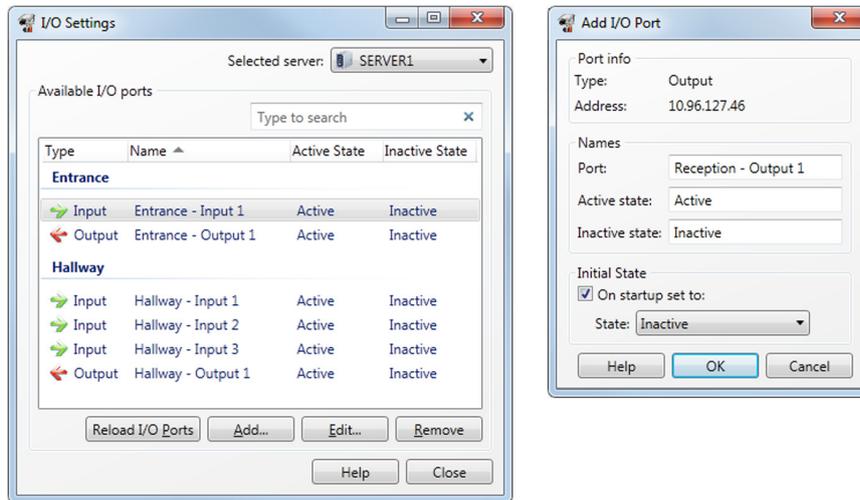
Set Up Schedules

Timetables can be set up to be used in Event Configuration Wizard and Recording Settings. Once a schedule has been entered, it can be reused as often as necessary. On special dates, for example public holidays, special schedules can be used.

To set up a schedule, follow these steps:

1. From the **Configuration** menu, select **Schedules**.

2. Click **Add** to open the **Schedule Editor**.

3. Enter a descriptive name for the schedule.

4. Click and drag on the timelines to define intervals. A blue bar means the schedule is on while white means the schedule is off.

5. To use a different schedule for special dates, click **Override**. Select the special dates and click **Edit** to set up the schedule.

6. Click **OK** to save.
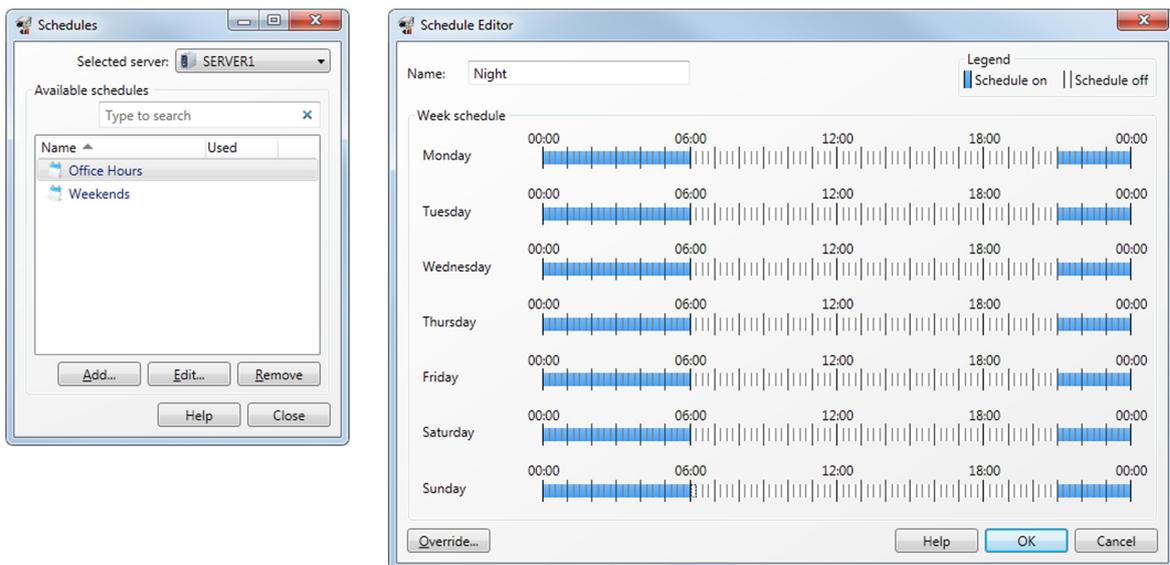
Send E-Mail Notification on System Alarm

A system alarm occurs when connection to a device is lost, when access to a recording disk is denied, when a recording disk is full, on recording errors, etc. An e-mail notification can be sent when a system alarm occurs.

To set up e-mail notification, follow these steps:

1. From the **Configuration** menu, open **System Alarm**

2. Check **Send e-mail on system alarm to the following recipients**.

3. Enter the e-mail addresses alarm messages should be sent to.

4. Under New recipient, choose if the address should be in the To, Cc or Bcc field of the e-mail and enter the e-mail address.

5. Click **Add** to enter the e-mail address into the **Recipients** box.

6. Click **OK** to save.

Note

To send emails, an SMTP server must first be added. To add an SMTP server, select **SMTP Servers** from the **Options** menu.

Export Recordings

Recordings can be exported to a local disk, a network location or burned to a CD or DVD. Multiple recordings can be exported at the same time.

Exported recordings are ASF files and can be played by, for example, AXIS File Player and Windows Media Player. AXIS File Player is free software and can be included with the exported recordings. AXIS File Player can be run without computer administrator rights; no installation is required.

To export a recording, follow these steps:

1. In the Recordings workspace, select the recordings to be exported. To export a part of a recording, set a time interval using the selection start and end markers.

2. Open the **Actions** menu and select **Export Selected Recordings**.

3. Browse to the local disk or network location, or select **Burn recordings** to burn to a CD or DVD.

4. Optionally, select **include setup file for decoders**. Decoders must be installed to view H.264 and MPEG-4 video.

5. Optionally, select **Create playlist** to create a playlist for Windows Media Player.

6. Optionally, select **Include AXIS File Player** to include AXIS File Player with the exported recordings.

7. Optionally, add a digital signature.

8. Click **OK**.

Note

- The selection start and end markers are available in the Playback and Timeline tabs.
- Recording export can also be scheduled. Open the **Configuration** menu and select **Scheduled Recording Export**.

Upgrade Firmware

Firmware is software that determines the functionality of electronic devices. Always use the latest firmware to ensure that your device has the latest functionality and improvements.

With an Internet connection, you can check for updates and download firmware directly via AXIS Camera Station Client. If the client is installed on a computer without access to the Internet, new firmware can instead be imported from a file (for example on a hard disk or memory stick).

AXIS Camera Station

How to...

Devices will be offline during firmware upgrade. When upgrading multiple devices you can choose to upgrade in

- **Sequence** — one device at a time

- **Parallel** — upgrade all devices. This option is faster but all selected devices will be offline at the same time.

To upgrade one or more devices, follow these steps:

1. Navigate to the Camera Management workspace.

2. Select the devices you want to upgrade.

3. Open the **Actions** menu and select **Upgrade Firmware**.

4. To check if new firmware versions are available for download, click **Check for Updates**. You will be asked to enter the user name and password for your **MyAxis account**. If you do not yet have an account, you can create one from this dialog.

5. For each device model, click the arrow under **Upgrade To** and select the firmware versions the devices should be upgraded to. The following options can be available in the drop-down list:

   - Firmware that has already been downloaded or imported is shown with its version number.

   - Firmware that is available for download is shown with the text **(Download)** after its version number. The firmware will be downloaded automatically when you click **OK** to start the upgrade operation.

   - Firmware that is available for import is shown with the text **(Import)** after its version number. The firmware will be imported automatically when you click **OK** to start the upgrade operation.

   - **Browse** — If the firmware file is not available for import, select this option and browse to locate the file.

6. Click **Options** and select to upgrade in parallel or sequence.

7. Click **OK** to start upgrading the devices.

> Note
>
> To check for updates, download or import firmware without upgrading devices, open the **File** menu, select **Import/Export** and then **Firmware**.
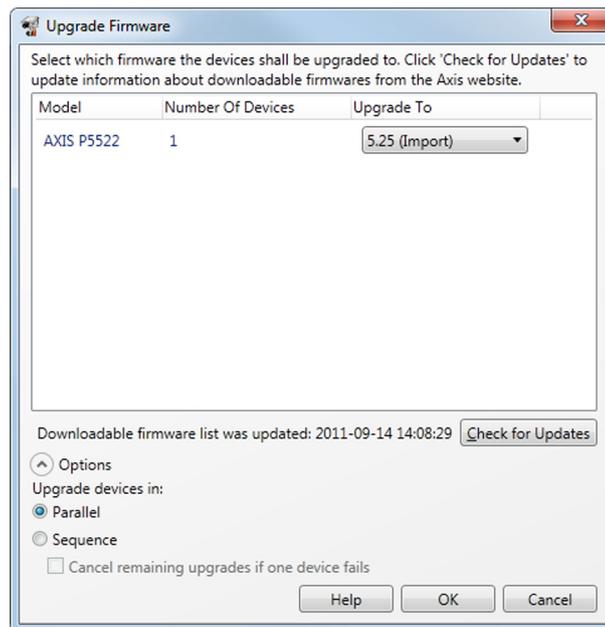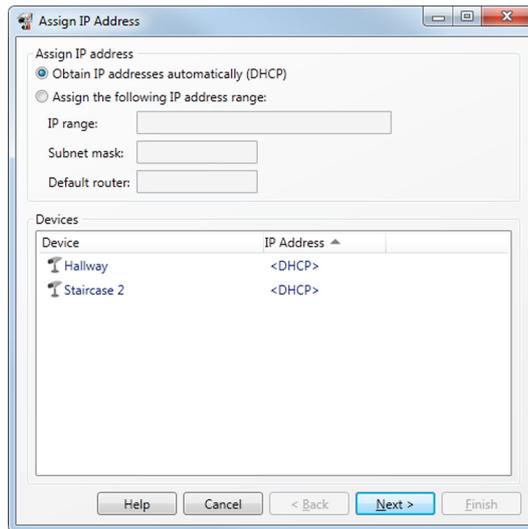
Assign IP Addresses

The Camera Management workspace allows you to configure IP addresses for multiple devices at the same time. You can

- Obtain IP addresses automatically from a DHCP server

- Search for available IP addresses in a specified range

To assign IP addresses to multiple devices, follow these steps:

1. Navigate to the Camera Management workspace.

2. Select the devices that you want to configure.

3. Open the **Actions** menu and select **Assign IP Address**.

4. Select one of the following options:

   - **Obtain IP addresses automatically (DHCP)**

   - **Assign the following IP address range**:
     Specify the IP address range, the subnet mask and the default router. Wildcards can be used, for example 10.93.*

5. Click **Next**.

6. The current IP address and the new IP address are displayed under **New IP addresses**. To modify the IP address for a device, select the device and click **Edit IP**.

7. Click **Finish** when satisfied with the new IP addresses.

Register a MyAxis Account

MyAxis is your personal area on Axis web site. From MyAxis you can download firmware and free software applications, submit questions to customer support, subscribe to electronic newsletters etc.

To register an account, go to http://www.axis.com/reg/register.php and enter the required information.

Event Configuration Wizard

Event Configuration Wizard

Event Configuration Wizard helps you set up rules for triggers and actions in AXIS Camera Station. By setting up a rule you can assign actions to triggers; for instance when motion is detected, a siren will sound and recording will begin on designated cameras.

Triggers are classified as:

Motion Detection	A motion detection event is triggered when an Axis camera detects motion within its defined area. Detection is performed by the camera which means no processing load to AXIS Camera Station.
Active Tampering Alarm	An active tampering alarm occurs when the camera is repositioned or when the lens is covered, sprayed or severely defocused.
AXIS Cross Line Detection	An AXIS Cross Line Detection event is triggered when a camera detects moving objects that cross a virtual line. See notes below.
System Event and Error	A system event and error triggers on recording errors, when connection to a camera is lost, access to the recording disk is denied or when the recording disk is full.

Advanced triggers:

Input/Output	Input/Output is when a camera's I/O port receives a signal from an external device, such as a doorbell, smoke detector or switch.
Device Event Trigger	The device event trigger is intended for advanced users and can be used if no other trigger is applicable. This trigger allows you to select any event available in a camera, for example events from applications uploaded to cameras with support for AXIS Camera Application Platform. For information about available events, refer to the camera's help files.

Actions are classified as:

Record	Start a recording from a specified camera.
Raise alarm	Send an alarm to all connected clients. An alarm procedure can be included.
Set Output	Set the state of an output port. This can be used to control an external device connected to the port.
Send e-mail	Send an e-mail notification to one or more recipients. Snapshots can be attached.
Live view	Open a specific view, camera or PTZ preset position.

Note

- I/O ports must be added to AXIS Camera Station before being used in the Event Configuration Wizard. See *Add Inputs and Outputs, on page 38*.
- Active Tampering Alarms are supported by products with tampering capabilities and firmware 5.11 and later.
- AXIS Cross Line Detection is an application that must be uploaded to the network camera or video encoder. The application can be uploaded to products with support for AXIS Camera Application Platform. For more information, refer to AXIS Cross Line Detection User's Guide.
- Device event triggers are supported by products with firmware 5.40 and later.

Create a Rule

The example described in this chapter demonstrates how to use the Event Configuration Wizard to create a rule that starts a recording, raises an alarm and sends an e-mail each time a door is opened. The door switch is connected to an input port of the camera monitoring the door.
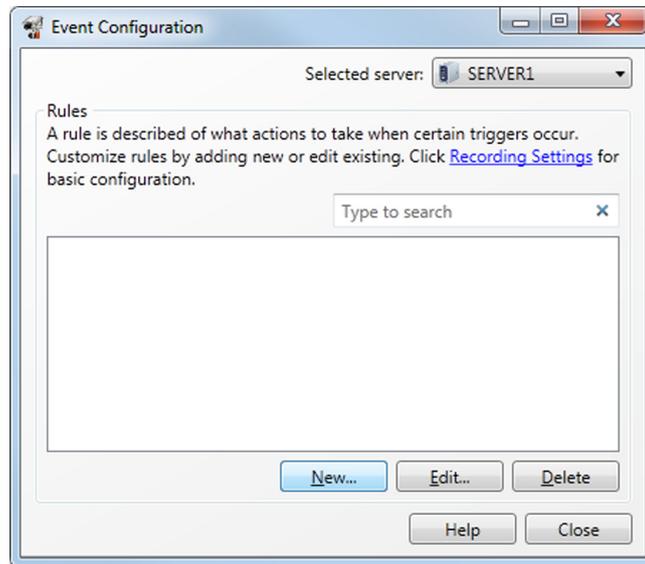
Start by creating a new rule:

1. Open the **Configuration** menu and select **Event Configuration**.

2. Click **New** to open the New Rule dialog.

Event Configuration Wizard

The rule is configured in four steps, described in the following sections:

- **Triggers** — add one or more triggers

- **Actions** — add one or more actions

- **Schedule** — select a schedule for the rule

- **Details** — check settings and enable the rule

Add Triggers

A rule can have one or more triggers. When using several triggers, only one of the triggers needs to become active to activate the rule.

In this example, an I/O trigger will be created.

Add an I/O Trigger

To create an I/O trigger, follow these steps:

1. In the New Rule dialog, click **Add** to open the Add Trigger dialog.

2. Click **Advanced** and select **Input/Output**. The Create I/O Trigger dialog opens.

3. Select the input port on the camera monitoring the door and select the trigger state that will activate the rule when the door is open (the state Active in this example). Available values depend on how the I/O port was defined under **Configuration > I/O Settings**. See *Add Inputs and Outputs, on page 38* for more information.

4. Since the trigger can go off many times and create unwanted events, an option is to set the **Trigger period** slider so that any triggers that come in under this period will be treated as one trigger.

5. Click **OK** to save the trigger settings.

6. When all triggers have been added, click **Next** to move to the Actions step.

Event Configuration Wizard
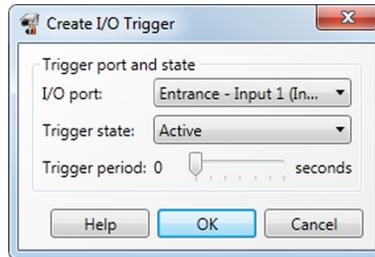
Add Actions

The rule can have one or more actions. In this example, three actions will be created: record, raise alarm and send e-mail.

Add a Recording Action

To create a recording action, follow these steps:

1. In the New Rule dialog, Actions step, click **Add** and select **Record**.

2. In Create Recording Action select the camera that should start recording. In this example, Entrance.

3. Select the **Video setting profile** from the drop-down list or click **Change** to enter a new profile. See *Configure a Media Profile, on page 37* for more information.

4. With the sliders select the number of seconds to include before the trigger (Prebuffer) and after the trigger stops (Postbuffer).

5. Click **OK**.
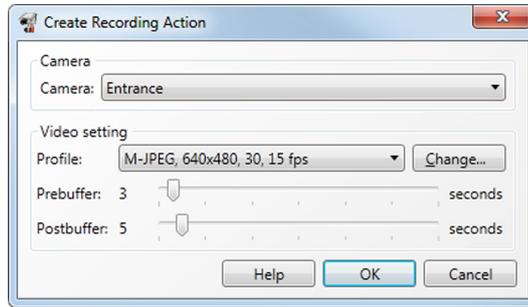
Event Configuration Wizard

Add a Raise Alarm Action

To create a raise alarm action, follow these steps:

1. In the New Rule dialog, Actions step, click **Add** and select **Raise alarm**.

2. Type a title for the alarm message and a description.

3. To include an alarm procedure, select **Alarm procedure**, click **Upload** and browse to locate the file.

4. Click **OK** to save.

Note

An alarm procedure is an uploaded file, for example a text or image file.
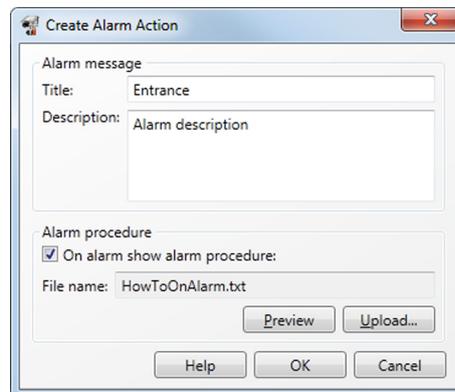
Add a Send E-Mail Action

Note

To send e-mails from AXIS Camera Station an SMTP server must first be added. Open the **Options** menu and select **SMTP servers**.

To create a send e-mail action, follow these steps:

1. In the New Rule dialog, Actions step, click **Add** and select **Send e-mail**.

2. Enter the e-mail addresses that alarm messages should be sent to. Under **New Recipient**, choose if the address should be in the To, Cc or Bcc field of the e-mail and enter the e-mail address.

3. Click **Add** to enter the e-mail address into the **Recipients** box.

4. Enter a subject for the e-mail in the **Subject** field.

5. Enter a message to the recipient.

Event Configuration Wizard

6. To attach camera snapshots, select **Attach snapshots** and click **Cameras** to select the cameras to include snapshots from.

7. To reduce the number of e-mails, select **Send one e-mail for each event** or **Don't send another e-mail for**.

8. Click **OK** to save.
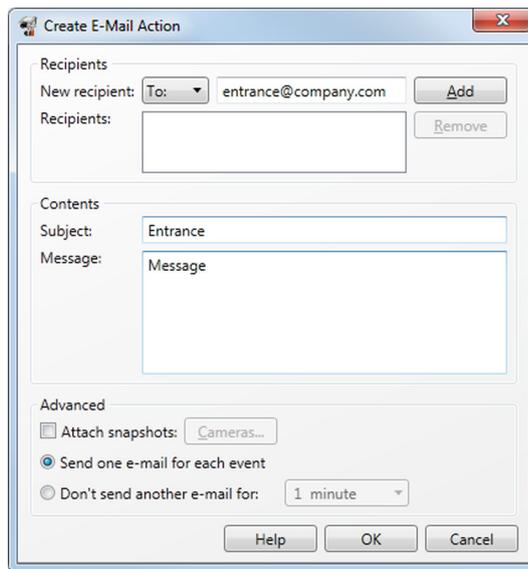
Set a Schedule

The rule can be configured to be active at all times or according to a schedule. For more information about schedules, see *Set Up Schedules, on page 39*.

To set a schedule, follow these steps:

1. When all actions have been added, click **Next** to move to the Schedule step.

2. Select **Always** to let the rule be active at all times or select a **Custom Schedule**

3. Click **Next** to go to the **Details** step.
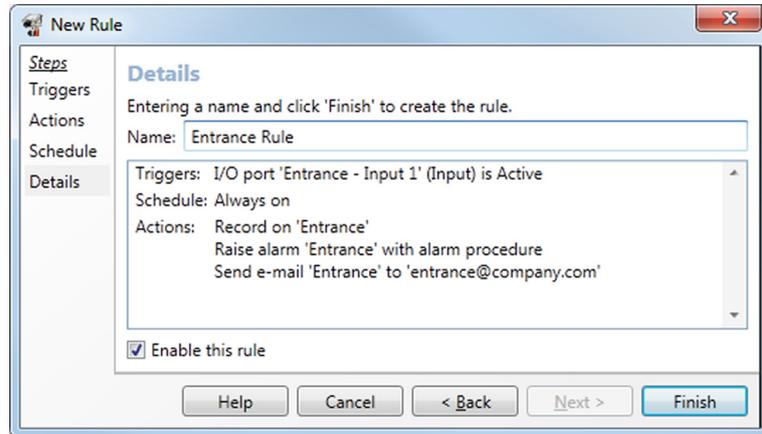
Rule Details

The final Details step shows the rule settings.

1. Enter a **Name** for the rule.

2. Check that all settings are correct.

3. Make sure that **Enable this rule** is selected and click **Finish** to save the rule.

AXIS Camera Station

Event Configuration Wizard

Network and Security Configuration

If AXIS Camera Station Client, AXIS Camera Station Server and the connected network devices are installed on different networks you might need to configure the proxy and/or firewall settings.

- If the client and the server are separated by a proxy server, the client proxy settings should be modified, see *Client Proxy Settings, on page 50.*

- If the client and the server are separated by a NAT, firewall or similar, the NAT or firewall should be modified, see *NAT and Firewall*, below.

- If network devices and the server are separated by a proxy server, the server proxy settings should be modified, see *Server Proxy Settings*, below.

If your local network uses a proxy for Internet connection, you might need to configure the proxy settings to:

- register licenses using the automatic registration option (server proxy settings)

- check for and download firmware updates (client proxy settings).

To prevent unauthorized access to the connected network devices, AXIS Camera Station has a high degree of security with multiple access levels using Windows Active Directory, see *User Permissions, on page 51.*

NAT and Firewall

If there is a NAT, firewall or similar that separates the server from the client you might need to configure the NAT and/or firewall to allow access to the network. Make sure the server port and streaming port (see *Server Port Configuration, on page 51*) are allowed to pass through the firewall and/or NAT. For instructions, contact your network administrator.

Note

> Some antivirus programs also block applications from accessing the network, similar to a firewall. To configure your antivirus program to allow the client and/or server network access, refer to the documentation provided with your program.

Server Proxy Settings

The server proxy settings need to be configured if:

- AXIS Camera Station Server and the network video devices are separated by a proxy server

- your network uses a proxy for Internet connection and you want to register licenses.
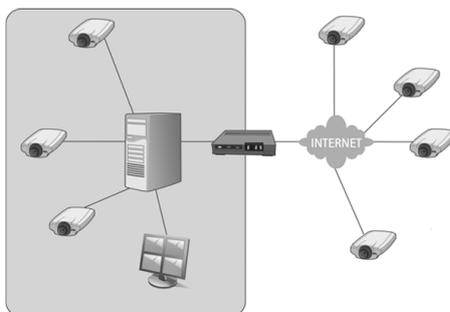
Devices outside of the local network. To access the devices on the other side of the proxy server from AXIS Camera Station, you must configure the server proxy settings.

Network and Security Configuration

To configure the server proxy settings, follow these steps:

1. Open **Service Control** from **Start > All Programs > AXIS Camera Station 3 > AXIS Camera Station Tools**.

2. Check the box **Modify server settings**.

3. Under **Proxy settings**, select **Use manual proxy settings**.

4. Enter the address and port number of the proxy server. This is usually the same address and port number as under **Internet Options** in **Windows Control Panel**.

5. If there are local devices that do not go through the proxy server, check **Bypass proxy for local addresses** and enter the devices' addresses in the box separated by semicolons.

Note

   If you don't know your proxy server settings contact your network administrator.

For more information on AXIS Camera Station Service Control, see *page 58*.

Client Proxy Settings

The client proxy settings need to be configured if:

• AXIS Camera Station Client and AXIS Camera Station Server are separated by a proxy server

• your network uses a proxy for Internet connection and you want to check for and download firmware updates.
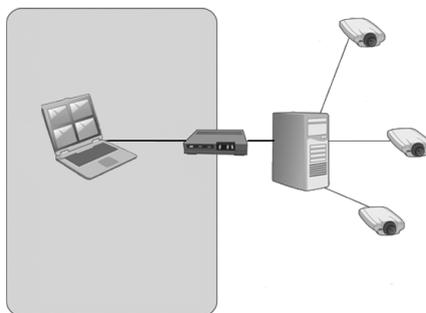
AXIS Camera Station Client behind a proxy. To connect to an AXIS Camera Station Server on the other side of the proxy, the client proxy settings must be configured.

To configure the client proxy settings, follow these steps:

1. Open the **File** menu and select **Client Proxy Settings**.

2. Select the appropriate option depending on your setup

   – **Direct connection** — This option should be checked if there is no proxy server between AXIS Camera Station Client and AXIS Camera Station Server.

   – **Use Internet Explorer settings** — AXIS Camera Station will use the same proxy settings as Internet Explorer

   – **Use manual proxy settings** — This option allows you to fill in the required information manually under Manual settings.

Network and Security Configuration

3. If **Manual settings** was selected, enter the proxy server's IP address/host name and port number. If there are local servers that do not go through the proxy server, check **Bypass proxy for local addresses** and enter the servers' addresses in the box separated by semicolons.

Server Port Configuration

The ports 55752 (control) and 55753 (media streaming) are used on the AXIS Camera Station Server computer for communication between the server and the AXIS Camera Station Client. If required, the ports can be changed from AXIS Camera Station Service Control, see *AXIS Camera Station Service Control, on page 58*.

User Permissions

Using Windows Active Directory, a high level of security can be implemented in AXIS Camera Station when granting user permissions. Before users can be granted access to AXIS Camera Station, they must be added to the local computer or have an Active Directory user account.

A user can be granted access as an individual or as part of a group. In cases where a user is granted access as an individual he will retain this right plus receive the rights he receives as part of a group. For example, a user is given access to camera X as an individual. The user is also a member of a group. The group is given access to cameras Y and Z. The user then has access to cameras X, Y and Z.

Administrators of the computer on which the AXIS Camera Station Server is installed are automatically given administrator privileges to AXIS Camera Station. It is not possible to change or remove the administrators group's privileges.

To configure user access rights, open the **Configuration** menu and select **User Permissions**.

Local Security

By default, local security is Disabled which means all users, who log onto AXIS Camera Station Server installed on the same computer as the AXIS Camera Station Client, will be given Administrator access. When local security is Enabled, access to AXIS Camera Station is restricted to trusted users and groups for both remote and local clients. For remote clients, local security is always enabled.

To change the local security settings, open the **Configuration** menu, select **User Permissions** and click **Security Settings**.

Add a User or a Group

To add a user or a group, follow these steps:

1. Open the **Configuration** menu and select **User Permissions**.

2. Click **Add** to open the **Add User/Group** dialog.

3. Select the AXIS Camera Station Server or **Domain**. The available users and groups are listed under **Available domain users/groups**. To narrow the list, select **Users** or **Groups**.

4. Select a user or group from the list and click **Add** to open the **User/Group Privileges** dialog.

5. Select an authority level for the user:

   - **Administrator** – Full access to all functionality of AXIS Camera Station and added cameras.

   - **Operator** – Full access to all functionality of AXIS Camera Station except Configuration pages, the camera management workspace and audit logs. Full access to selected cameras and I/O ports.

   - **Viewer** – Access to selected Live Views and I/O ports.

6. Optionally, select the cameras and I/O ports that the operator or viewer should have access to. Click **Advanced** to give access to individual features.

AXIS Camera Station

Network and Security Configuration
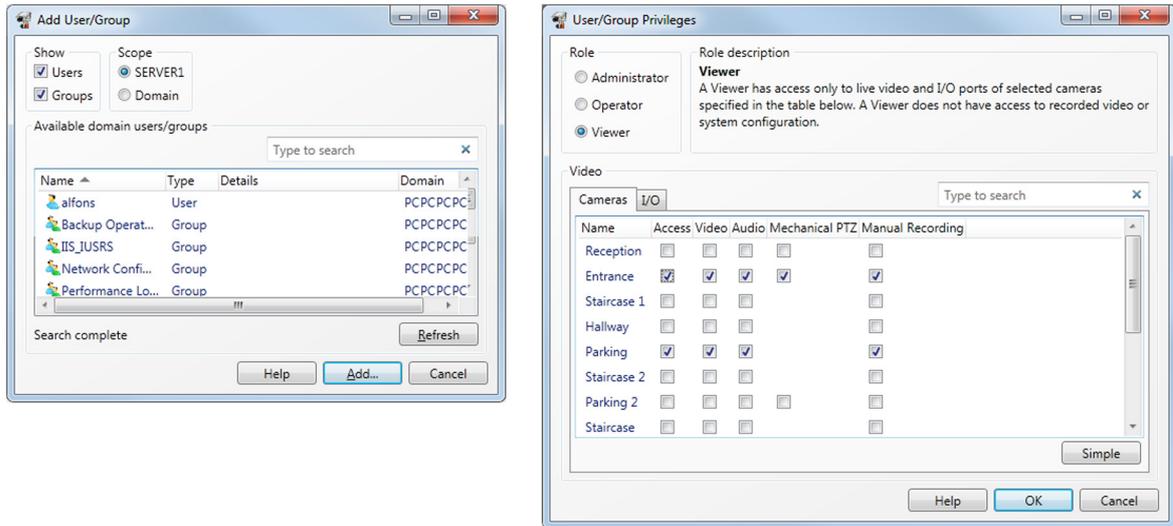
Note

- If the domain user search fails, make sure that AXIS Camera Station Service is logged on as a Windows user with access to the Active Directory. To change the user account for AXIS Camera Station Service, go to **Control Panel > Administrative Tools > Services**.

- For Input/Output ports to be visible here, they must first have been added to AXIS Camera Station. See *Add Inputs and Outputs, on page 38*.

Input Devices

The following input devices can be used with AXIS Camera Station:

- AXIS T8311 Video Surveillance Joystick

- AXIS T8312 Video Surveillance Keypad

- AXIS T8313 Video Surveillance Jog Dial

- AXIS 295 Video Surveillance Joystick

Hotkeys

Hotkeys give quick access to commonly used actions. A hotkey can be

- a keyboard combination

- a keypad combination

- a joystick button

- a jog dial button

To display a list of all currently assigned hotkeys for all input devices, open **Assigned hotkeys** from the **Help** menu.

Hotkeys defined as Global are available in all workspaces; other hotkeys are available in only one workspace.

To add, edit and remove hotkeys, open **Hotkeys** from the **Options** menu. Click **Restore defaults** to reset the hotkey configuration to default.

AXIS T8311 Video Surveillance Joystick

AXIS T8311 Video Surveillance Joystick is a USB device that can used

- to pan, tilt and zoom in the camera view (cameras with mechanical PTZ only)

- as a computer mouse

Connect the joystick before you start AXIS Camera Station. The joystick is detected and installed automatically.

Note

    If the joystick is connected after AXIS Camera Station has been started, click **Refresh** in the Live View workspace.

You can configure the joystick to toggle between the PTZ and mouse modes. Go top **Options > Hotkeys**, select **Joystick** and then **Add**. Select Global, **Turn on/off joystick PTZ controlling** and assign an unused joystick button.

The table below lists the default configuration for joystick hotkeys.

AXIS Camera Station

Input Devices
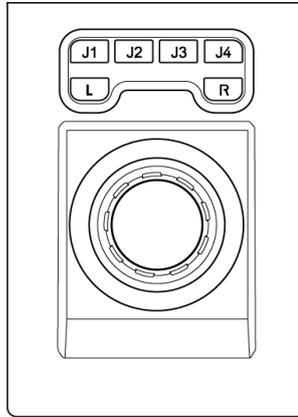
AXIS T8311

Button	Function (Global)	Function (Live View)	Function (Recordings)
J1		Go to preset 1	Play/Pause
J2		Go to preset 2	Stop
J3		Go to preset 3	Jump to previous recording start
J4		Go to preset 4	Jump to next recording start
L	Left mouse button		
R	Right mouse button		

AXIS T8312 Video Surveillance Keypad

AXIS T8312 Video Surveillance Keypad is a USB device used to quickly navigate between workspaces, cameras, views and PTZ presets.

Connect the keypad before you start AXIS Camera Station. The keypad is detected and installed automatically.

Note

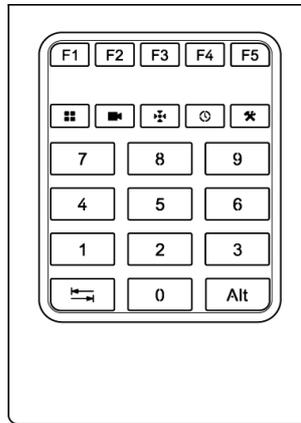> If the keypad is connected after AXIS Camera Station has been started, you must restart the application.

The table below lists the default configuration for keypad hotkeys.

AXIS Camera Station

Input Devices

AXIS T8312

Key	Function (Global)	Function (Live View)	Function (Recordings)
F1	Navigate to Start page		
F2	Navigate to Live View		
F3	Navigate to Recordings		
F4	Navigate to Logs		
F5	Navigate to Configuration		
▦ View	Go to the next user-created view (in My Views or Shared Views). Press 3+ ▦ to go to view number 3. Press ALT+ ▦ to go to the previous view.		
◀ Camera	Go to next camera view. Press 3+ ◀ to go to camera number 3. Press ALT+ ◀ to go to the previous camera view.		
⬚ Preset		Go to the next PTZ preset of the currently selected camera. Press 3+ ⬚ to go to PTZ preset 3.	
◷ Time			Enter a time (format hhmm) and press this key to start playback from the corresponding time. Example: 2000+ ◷ starts playback from 20:00 (8 pm).
✶ Tool	Select the next alarm in the alarm list. Press ALT+ ✶ to select the previous alarm in the list.		
⇆ Tab		Navigate forward in a split view. Press ALT+ ⇆ to navigate backward.	

AXIS Camera Station

Input Devices

The View, Camera, Preset, Time and Tool keys are backlit when the keys can be used. For example, the Time key is backlit when you are in the Recordings workspace.

AXIS T8313 Video Surveillance Jog Dial

AXIS T8313 Video Surveillance Jog Dial is a USB device used to jog and shuttle through recorded video.

Connect the jog dial before you start AXIS Camera Station. The jog dial is detected and installed automatically.

Note

> If the jog dial is connected after AXIS Camera Station has been started, you must restart the application.

The table below lists the default configuration for jog dial hotkeys.
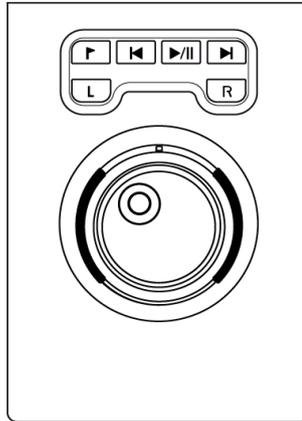
AXIS T8313

Button	Function (Global)	Function (Live View)	Function (Recordings)
Bookmark			Add a bookmark
Go to previous			Recordings search: Select the previous recording. Playback: Go to previous track of a recording.
Play/Pause			Recordings search: Play selected recording. Playback: Play and pause playback.
Go to next			Recordings search: Select the next recording. Playback: Go to next track of a recording.
L			Take a snapshot
R			Toggle search

AXIS 295 Video Surveillance Joystick

AXIS 295 Video Surveillance Joystick is a USB device that can used

- to pan, tilt and zoom in the camera view (cameras with mechanical PTZ only)

- as a computer mouse

Connect the joystick before you start AXIS Camera Station. The joystick is detected and installed automatically.
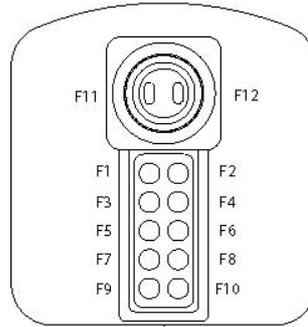
AXIS Camera Station

Input Devices

If the joystick is connected after AXIS Camera Station has been started, click **Refresh** in the Live View workspace.

You can configure the joystick to toggle between the PTZ and mouse modes. Go to **Options > Hotkeys**, select **Joystick** and then **Add**. Select Global, **Turn on/off joystick PTZ controlling** and assign an unused joystick button.

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| Button	Function (Global)	Function (Live View)	Function (Recordings)
F1		Go to preset 1	Play/Pause
F2		Go to preset 2	Stop
F3		Go to preset 3	Jump to previous recording start
F4		Go to preset 4	Jump to next recording start
F5	Left mouse button		
F6	Right mouse button		
F7		Show split/single view	Show split/single view
F8		Toggle full screen	Take a snapshot
F9	Navigate back		
F10		Start/Stop manual recording	
F11	Increase joystick speed. Keep the button pressed while moving the joystick.		
F12	Reduce joystick speed. Keep the button pressed while moving the joystick.		

AXIS Camera Station Service Control

AXIS Camera Station Service Control

AXIS Camera Station Service Control is the application that controls the AXIS Camera Station Service. The Service Control is started when the user logs on to Windows and is located in the system tray. In most installations, the Service Control's default settings are sufficient, but in some cases (see *page 49* for details) the proxy settings will need to be adjusted.

The system tray icon will display service changes, e.g. if the service is started or stopped . There are three ways to open the service control; double-click the icon in the system tray, right-click and select **Open AXIS Camera Station Service Control** from the pop-up menu or from Windows Start > All Programs > AXIS Camera Station 3 > AXIS Camera Station Tools > Service Control.
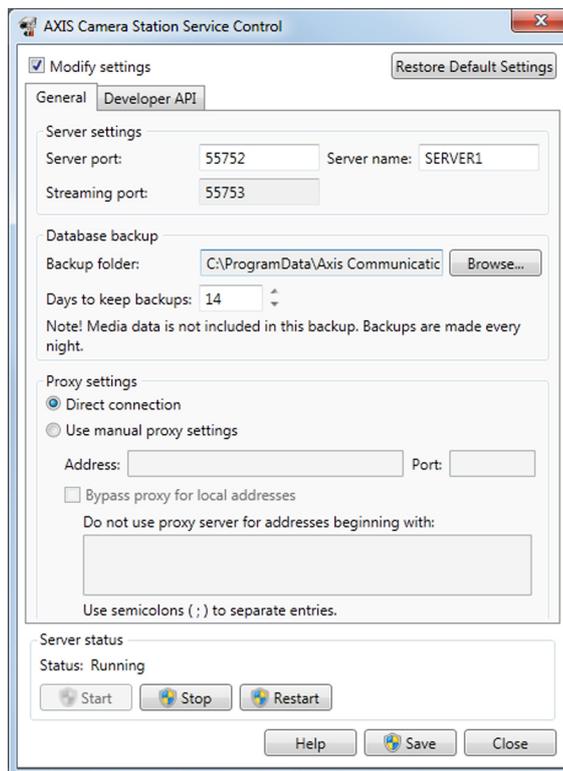
In addition to modifying the server settings, the AXIS Camera Station Server Control allows you to start, stop and restart the server. See also *AXIS Camera Station Service Administration, on page 61*.

Modify Server Settings

To change service settings, check the box Modify server settings.

Click **Restore Default Settings** to restore the default values for the server, streaming ports and proxy settings.

Server Settings

Under **Server settings** enter the ports the server will use to communicate with the clients. The streaming port is used for video streaming, for example sending live video or playback from the server to the client. If there is a NAT or proxy between the server and clients, the ports must be configured to let communication pass through.

> Note
>
> The server port number must lie in the range 1024-65534.

AXIS Camera Station Service Control

Once satisfied with the changes click **Save**. You will be prompted to restart the service for the changes to take effect.

Database Backup

The database stores information about configurations, recordings etc that is needed for AXIS Camera Station to work properly. The database is backed up every night. The backups are saved to a **Backup folder** which can be located on the local computer or the network. To change the backup folder, click **Browse** and navigate to the desired location. The oldest backups will be deleted after the number of days specified in **Days to keep backups**.

Note

- The backup will be saved to the default location if it cannot be written to the folder specified, for example if the server cannot access the folder. The default location is

  Windows 7/Vista/Server 2008/Server 2003:
  C:\ProgramData\Axis Communications\AXIS Camera Station Server\backup

  Windows XP:
  C:\Documents and Settings\All Users\Application Data\Axis Communications\AXIS Camera Station Server\backup

- The backup files are named `acs_system_<date_time>.fdb` and `license_system_<date_time>.fdb`

- **Recordings** are stored in the location specified in **Configuration > Recording storage** and not in the database, see *Set Up Recording Storage, on page 30*. Recordings should be backed up separately.

For information on how to restore the database, see *Lost data, on page 66*.

Proxy Settings

If there is a direct connection with the cameras in the system the default Direct connection radio button should be selected. If AXIS Camera Station Server is behind a proxy server, and devices are outside the proxy server, modify the proxy settings manually by selecting **Use manual proxy settings**. The proxy settings entered here are generally the same as those entered in the Internet Options in the Control Panel.

Check the box **Bypass proxy for local addresses** and enter local addresses or host names of local cameras where communication does not need to pass through the proxy server. For more information, see *Server Proxy Settings, on page 49*.

AXIS Camera Station Service Control
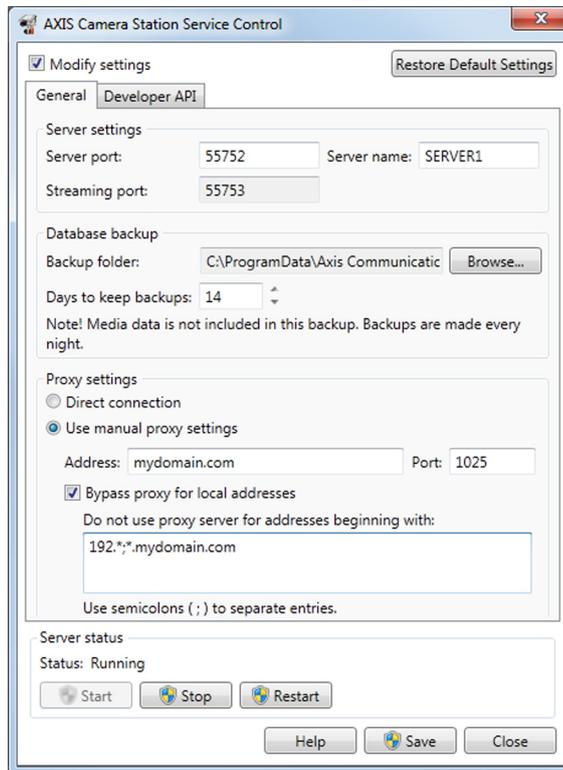
Server Status

Server status shows the current status of the AXIS Camera Station Server. The buttons **Start**, **Stop** and **Restart** change the server status.

Developer API

The settings under the **Developer API** tab are intended for AXIS Camera Station SDK users. Please refer to Windows Development on the Partner Pages at www.axis.com for more information.
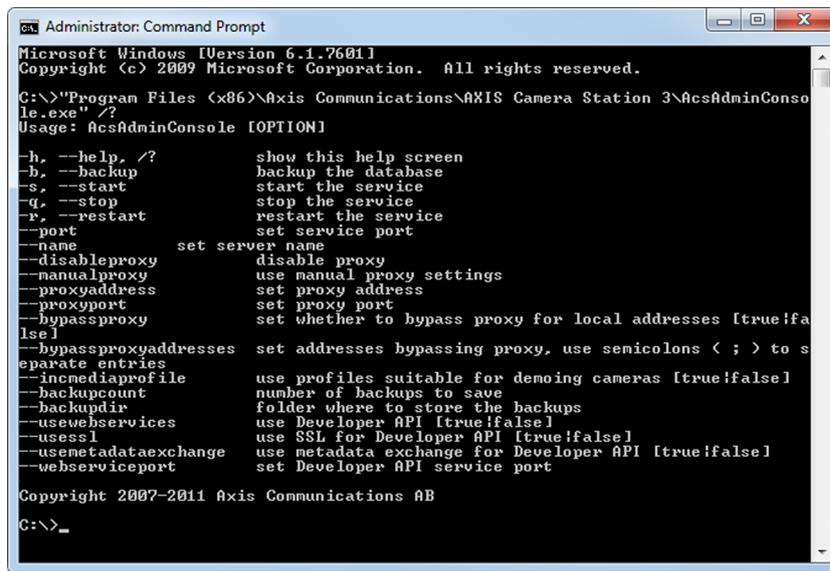
AXIS Camera Station Service Administration

AXIS Camera Station Service Administration

AXIS Camera Station Service Administration is a console application that has the same functions as AXIS Camera Station Service Control. It can be used from the command prompt or from a batch script to start and stop the service or backup the database, etc., which allows for automating and scheduling of administrative tasks.

The default location of the console application is
"C:/Program Files/Axis Communications/AXIS Camera Station 3/AcsAdminConsole.exe"

Note

AcsAdminConsole.exe must be run as administrator.

Supported Operations

Command	Description
AcsAdminConsole --help	List a summary of the supported operations
AcsAdminConsole --backup	Back up the database. Each backup generates two timestamped files named acs_system_<date_time>.fdb and license_<date_time>.fdb **Note:** AcsAdminConsole backs up configurations and metadata but not recordings. For information on how to restore the database, see *Lost data, on page 66*.
AcsAdminConsole --backupcount=<number> --backupdir=<path>	Specify the number of backups to keep (this number affects the automatically generated backups discussed on *page 59*, not the ones generated by the --backup command). Specify the folder where the backups will be stored.
AcsAdminConsole --start	Start service
AcsAdminConsole --stop	Stop service
AcsAdminConsole --restart	Restart service

AXIS Camera Station

AXIS Camera Station Service Administration

Command	Description
`AcsAdminConsole` `--port=<port number>`	Set server port (e.g. AcsAdminConsole --port=55762)

`AcsAdminConsole`
`--manualproxy`
`--proxyaddress=<proxy>`
`--proxyport=<port>`
`--bypassproxy=<true/false>`
`--bypassproxyaddresses=<address-`
`es>`
`--disableproxy`
	Use manual proxy settings.
	
	Set the proxy address and port (default 80).
	
	Bypass proxy for local addresses. Example: bypassproxyaddress=192.*, *mydomain.com

Troubleshooting

Troubleshooting

Area zoom

Area zoom does not work	Area zoom is not supported by AXIS 209MFD and AXIS 212 PTZ. Use the digital or mechanical PTZ controls instead.

Audio

There is no audio in Live View	Make sure the camera has audio capabilities.
	Check that audio is activated in Live view settings: 1. From the **Configuration** menu, select **Live View Settings** 2. Click on the desired camera and then **Edit** to open Live View Settings 3. Click **Change** to open Change Media Profile. 4. Check the **Audio** box **Note**: Audio is not possible in M-JPEG; choose MPEG-4 or H.264.
	Make sure the user has access rights to audio. Note: To follow these steps you must have administrator rights to AXIS Camera Station 1. From the **Configuration** menu, select **User Permissions** 2. Select User or Group and click **Edit** 3. Click **Advanced**. Make sure that Audio is checked in the desired camera
	Check that your computer has an audio card and that the card is not disabled.
There is no audio in split views larger then 6 split	Audio is not available in split views larger than 6 splits when using the default Live View settings. To change the default settings: 1. From the **Configuration** menu, open **Live View Settings**. 2. Select the desired camera and click **Edit** to open Live View Settings. 3. Click **Large Splits**. 4. Change the settings under **Overrides**. Enable audio by changing the media profiles or uncheck the appropriate boxes to disable the overrides. **Note**: Audio is not possible in M-JPEG; choose MPEG-4 or H.264.
There is no audio in sequence views	Sequence views use the media profile selected for 2–6 split views. To enable audio in sequence: 1. From the **Configuration** menu, open **Live View Settings**. 2. Select the desired camera and click **Edit** to open Live View Settings. 3. Click **Large Splits**. 4. Check the **2–6 split views** box and select a media profile where audio is enabled. 5. Repeat steps 2–4 for all cameras included in the sequence. **Note**: Audio is not possible in M-JPEG; choose MPEG-4 or H.264.
There is no audio in playback	Audio is available in playback only if audio was enabled in the media profile used for the recording.

Continuous, motion detection and manual recordings:
To enable audio:
1. From the **Configuration** menu, open **Recording Settings**
2. Select the desired camera and click **Continuous**, **Motion Detection** or **Manual**
3. Select a media profile where audio is enabled. If there is no such profile, click **Change** and check the **Audio** box.

Triggered recordings — Events
To enable audio in an existing rule:
1. From the **Configuration** menu, open **Event Configuration**
2. Select the desired rule and click **Edit**
3. Select a media profile where audio is enabled. If there is no such profile, click **Change** and check the **Audio box**
4. Click **Finish** to save.

For information on how to set up rules, see *Event Configuration Wizard, on page 43*.

Troubleshooting

	Note: Audio is not possible in M-JPEG; choose MPEG-4 or H.264.
Missing AAC decoder	To use the AAC audio format, a decoder must be installed. Click the link to install the decoder. If using Demo mode or AXIS Camera Station One, download the decoder from the camera's Live View page.

AXIS Cross Line Detection

AXIS Cross Line Detection does not work	AXIS Cross Line Detection can be used with network cameras and video encoders that support AXIS Camera Application Platform. To use AXIS Cross Line Detection as a trigger, you must first • upload the application to the camera • start the application in the camera For instructions, see AXIS Cross Line Detection User's Guide.

Domain user search fails

Cannot find domain users	Make sure that AXIS Camera Station Service is logged on as a Windows user with access to Active Directory. To change the user account for AXIS Camera Station Service, go to **Control Panel > Administrative Tools > Services**.

Graphics card

The graphics card driver is more than 12 months old	For AXIS Camera Station client to run properly, it is important that the graphics card in your computer has been updated with the latest driver.
Graphics card error	To find out what graphics card is installed in your computer, a diagnostic program called dxdiag can be used. In Windows 7/Vista/Server 2008/Server 2003: 1. Open the **Start** menu 2. Enter dxdiag in the Start Search field 3. If a prompt appears for the Diagnostic Tool, click **Yes** 4. Select the Display tab. The name of the Graphics card appears under Device In Windows XP: 1. Open the **Start** menu and select **Run** 2. Enter dxdiag in the Run dialog and click **OK** 3. If a prompt appears for the Diagnostic Tool, click **Yes** 4. Select the Display tab. The name of the Graphics card appears under Device To download the latest driver you need to visit the graphics card manufacturer's web site. Some of the more common ones are • nVidia - www.nvidia.com • ATI - www.ati.com • S3 - http://www.s3graphics.com To upgrade the graphics card drivers on your computer: 1. Download the driver from the manufacturers web site to your hard drive 2. Make sure that there are no other programs running on your computer. 3. Run the installer and follow the wizard to install necessary files 4. Reboot to activate the change
Graphics card warning	The graphics card does not the minimum system requirements, see *System Requirements*. The graphics card must support DirectX 9.0c, be Windows Vista compliant (even if running on Windows XP) and support Windows Presentation Foundation tier 2.

Troubleshooting

To check the graphics card's tier level, open the **Help** menu and select **Client Configuration Sheet**. Render Capability Tier is listed in the General Configuration Information section.

It is also possible to use the CPU for video rendering, instead of using the graphics card, see Empty "ActiveMovieWindow" popup below.

Live view

No image from camera	Proper decoders must be installed for MPEG-4 and H.264 video formats. In licensed mode, click on the link in the empty Live View window to launch the decoder installation. In AXIS Camera Station One or Demo mode, download the proper decoders from the camera's Live View page.
Repeated error message "Media Failed"	Try reducing the load to the CPU by modifying the Live View Settings for each camera under Configuration. Reduce the resolution, increase the compression setting and lower the frame rate.
	Check that your computer is not running low on memory.
	Check that the graphics card has been updated with the latest driver, see *Graphics card, on page 64*.
	Firewall and antivirus software sometimes block video signals. Check that your firewall and antivirus program do not block the following files: - AcsAdmin.exe - AcsAdminConsole.exe - ACSService.exe - Server.exe - AcsClient.exe - All content of C:\Program Files\Axis Communications\Components See also *NAT and Firewall, on page 49*.
Empty "ActiveMovie Window" popup	This indicates problems with the graphics card's video memory and hardware acceleration. Possible solutions: - Install the latest graphics card driver, see *Graphics card* - Upgrade to a graphics card with more video memory and higher performance - Use the CPU for video rendering, see below. To use the CPU for video rendering, follow these instructions: 1. Navigate to the AXIS Camera Station Client installation folder. The default location is: C:\Program Files\Axis Communications\AXIS Camera Station 3\Client <current version> 2. Open the file AcsClient.exe.config in a text editor. 3. Find this entry: `<setting name="ForceCompatibilityVideoMode" serializeAs="String"><value>False</value></setting>` 4. Change "False" to "True" 5. Save the file and restart AXIS Camera Station

Logon/connecting to server

User name or password is incorrect	Check that the user name and password are valid
	Check that the user has access rights to AXIS Camera Station Server
	Check that the clocks in AXIS Camera Station Client and Server are synchronized. For domain users, check that the domain server clock is synchronized with the server and client.

AXIS Camera Station

Troubleshooting

	A user who has not been added to the server, but is a member of the local administrators group on the server, must run the client as administrator on Windows 7/Vista. Right-click the AXIS Camera Station Client icon and select Run as administrator.
AXIS Camera Station Server was unable to verify message security. Please make sure server and client UTC times are reasonably synchronized	The clocks in AXIS Camera Station server and client are not synchronized. Adjust the clock in either the server or client so that they have the same date and time properties. For more information on setting up time in your computer consult the Window's help files.
Unable to connect to server. Please make sure that the server is running and accepting connections.	Check that a NAT/firewall is not blocking a connection to the server
Unable to locate the server computer. Please make sure that the server computer is connected to the network.	Check the address and port of the AXIS Camera Station server is correct.

Check that a NAT/firewall is not blocking a connection to the server

Check that the server is running. |
| Unable to connect to server! | Verify that the computer the server and client are installed on is up to date and has the latest service packs/patches from Microsoft

Verify that the network is correctly installed and configured on the server and client computer(s)

Verify that no NAT/firewalls are blocking connection between AXIS Camera Station client and server |

Lost data

Data lost due to hardware failure or other problems	The AXIS Camera Station database contains information about recordings and other metadata that is needed for the system to work properly. This database is backed up every evening.
	Recordings are not stored in the database and should be backed up separately from the locations designated in Recording Storage, see *page 30*.

If for some reason the database is lost due to hardware failure or other problems, the database can be restored either with the latest backup or you can use a prior backup.

To restore the database follow these instructions:
1. Open **AXIS Camera Station Service Control** and click **Stop**.
2. Navigate to the folder where the backup files are stored. The path to this folder is found under Database backup in AXIS Camera Station Service Control.
   The backup folder contains timestamped backup files named acs_system_<date_time>.fdb and license_system_<date_time>.fdb
3. Copy acs_system_<date_time>.fdb and license_system_<date_time>.fdb to **Windows 7/Vista/Server 2008/Server 2003:** C:\ProgramData\AXIS Communication\AXIS Camera Station Server\
   Windows XP: C:\Documents and Settings\All Users\Application Data\Axis Communication\AXIS Camera Station Server\
4. Delete the files ACS.FDB and LICENSE.FDB.
5. Rename acs_system_<date_time>.fdb to ACS.FDB and rename license_system_<date_time>.fdb to LICENSE.FDB.
6. Click **Start** in AXIS Camera Station Service Control. |

Troubleshooting

Menu item

I can't see the Configuration menu	You do not have administrator privileges. Menu items are hidden from users that are not granted access under User Permissions.

Playback problems

Not enough disk space to buffer	Increase the buffer size: 1. From the **Options** menu, open **Customize** and select the **Recordings** tab 2. Under **Playback buffering** select **Use at most** and use the slider to increase the buffer size

PTZ problems

Mechanical PTZ does not work PTZ presets cannot be configured	Check that the camera's PTZ control queue has not been enabled. If the control queue is enabled, mechanical PTZ controls and PTZ presets are not available. To check if the control queue is enabled, open the camera's built-in web pages in a browser. For more information, refer to the camera's User Manual available from www.axis.com

Recording storage

Network disk is not accessible	To use network disks linking to shared folders on other computers, the Local System account cannot be used to log on to AXIS Camera Station Service. To change the service login account, follow these instructions: 1. Go to **Control Panel > Administrative Tools > Services** 2. Right-click AXIS Camera Station and choose **Properties** 3. Click the **Log On** tab 4. Change from **Local System account** to **This account** 5. Choose a user with access to Windows Active Directory
Network disk is listed as "Unavailable"	The computer that AXIS Camera Station Server is installed on, should be part of the same domain as the shared folder that is entered as a network disk.

Move AXIS Camera Station installation

How do I move my AXIS Camera Station installation to another server?	To move your current installation to another server please follow these steps: 1. Install AXIS Camera Station (same version) on the new server 2. Open AXIS Camera Station at the new location and do a new license registration. 3. Stop AXIS Camera Station Service, see *page 58*. 4. Move the file named ACS.FDB to the new location: In **Windows 7/Vista/Server 2008/Server 2003/64−bit versions** the file is located at C:\ProgramData\AXIS Communication\AXIS Camera Station Server. In **Windows XP** the file is located at C:\Documents and Settings\All Users\Application Data\Axis Communications\AXIS Camera Station Server 5. Move your recordings from the recording paths e.g C:\Recordings\ to the new location. **Note**: The recording paths must be exactly the same on the new server.

Contact Customer Support

Technical support is available for licensed versions of AXIS Camera Station with a valid support license. Open the **Options** menu and select **Licenses** to check if you have a valid support license. If the support license has expired, a new license can be obtained from your Axis reseller.

If you contact Axis Customer Support, please help us resolve your problem expediently by zipping and attaching the following files to your online support case:

Troubleshooting

Server Report	To generate a Server Report, follow these steps: 1. Open AXIS Camera Station Client. 2. From the **Help** menu, select **Server Report**. 3. Click **OK** to save the Server Report as a zip file.

Windows Event Logs: Application and System

To generate event logs, follow these steps:

Windows 7, Windows Vista, Windows Server 2008, Windows Server 2003
1. Click the **Start** button, right-click **Computer** and select **Manage** to open Computer Management.
2. Select **Event Viewer > Windows Logs** and then **Application**.
3. From the **Action** menu, select **Save All Events As** and save as an event log (evt) file.
4. Repeat steps 2 and 3 but select **System** instead of **Application**.
5. Zip both files and attach them to your support case.

Windows XP
1. Click the **Start** button, right-click **My Computer** and select **Manage** to open Computer Management.
2. Select **System Tools > Event Viewer** and then **Application**.
3. From the **Action** menu, select **Save Log File As** and save as an event log (evt) file.
4. Repeat steps 2 and 3 but select **System** instead of **Application**.
5. Zip both files and attach them to your support case.

Screenshots

To copy what is currently displayed on the screen to a file, follow these steps:
1. Press ALT - PRT SCR.
2. Open the Paint program included with Microsoft Windows.
3. In Paint, open the **Edit** menu and select **Paste**.
4. **Save** the file.
5. Attach the screenshot to your support case.

If a Server Report cannot be generated, for example if AXIS Camera Station Server does not start, run DirectX Diagnostic Tool as described below and provide debug logs with your support case.

DirectX Diagnostic Tool

To generate information about DirectX components and drivers, follow these steps:

Windows 7, Windows Vista, Windows Server 2008, Windows Server 2003
1. Click the **Start** button and type `dxdiag` in the search box.
2. Open the program dxdiag.exe
3. Click **Save all information** and save as a text (txt) file.
4. Attach the text file to your support case.

Windows 7
1. Click the **Start** button and select **Run**.
2. Type `dxdiag` in the **Open** box and click **OK**.
3. Click **Save all information** and save as a text (txt) file.
4. Attach the text file to your support case.

Debug logs

To create debug logs, zip the following folder:

Windows 7, Windows Vista, Windows Server 2008, Windows Server 2003
C:\ProgramData\Axis Communications\AXIS Camera Station\3.xx

Windows XP
C:\Documents and Settings\All Users\Application Data\Axis Communications\AXIS Camera Station\3.xx

Note: ProgramData and Application Data are hidden folders. Activate "Show hidden files and folders" to display them.