AXIS Camera Station Pro

User manual

Introduction

This document is based on the following versions:

- *AXIS Camera Station Pro 6.17*
- *AXIS Camera Station mobile app for Android*
- *AXIS Camera Station mobile app for iOS*

AXIS Camera Station Pro video management software puts efficient surveillance at your fingertips with an intuitive interface that's easy to operate – even for the occasional user. In this guide you will find a summary of the main features and functions.

The AXIS Camera Station Pro video management software is at the core of this Axis end-to-end solution. The complete solution is comprised of:

- **AXIS Camera Station Pro server software:** handles all communication with cameras, video encoders and auxiliary devices in the system. The number devices that each server can communicate with is typically limited by the total bandwidth available.
- **AXIS Camera Station Pro client software:** provides access to recordings, live video, logs and configuration. The client can be installed on any computer enabling remote viewing and control from anywhere on the Internet or corporate network.
- **AXIS Camera Station Secure Entry:** built in within AXIS Camera Station Pro software and provides access control functionality when the AXIS A1601 and the AXIS A12 series door controllers are added.
- **AXIS Camera Station Network Recorders:** With an Axis network video recorder you get an easy-to-install and reliable solution perfectly adapted to Axis wide range of network products. The recorders are preloaded with all necessary software including video management software licenses.
- **Mobile viewing app for AXIS Camera Station:** provides access to recordings and live video on multiple systems. The app can be installed on Android and iOS devices and enable remote viewing from other locations.
- **Axis Secure Remote Access:** Axis Secure Remote Access simplifies the installation of remote access to surveillance systems.
- **AXIS Camera Station Integrator suite:** A set of tools to help integrators design, deploy and maintain AXIS Camera Station Pro solutions, these tools include AXIS Site Designer, AXIS Installation Verifier and AXIS System Health Monitoring.
- **Cloud Services:** AXIS Camera Station Pro gives you the option to connect to cloud services that provide the ability to view video and manage devices using an internet browser.
- **AXIS Audio Manager Pro:** It's possible to integrate AXIS Audio Manager Pro into AXIS Camera Station Pro to provide public address functionality.
  - AXIS Audio Manager Pro now support features like live messages from SIP calls as the microphone console, remote system health monitoring of the speakers, etc. For more specific information, see the *AXIS Audio Manager Pro A&E specifications*.
- **AXIS Body Worn Manager:** AXIS Body Worn system can be plugged right into an AXIS Camera Station Pro or evidence management system (EMS), for an end-to-end solution from Axis.

Live view functionality

General client operation

Functionality	Description
Tabs for easy selection	Makes it possible to create a customized workspace with instant access to views and cameras. Easily move between the resources depending upon the task.
Drag and drop selection (including multiple selection)	Fast and intuitive operation. Easily create customized views on the fly.
Multi-monitor support	Enables even better overview and operation. The operator can have different monitors for different functionality, such as viewing recordings and live view simultaneously.
Multi-windows	It is possible to open multiple instances of AXIS Camera Station Pro. This is ideal for the ultra wide monitors and allows you to have live- and replay-functionality open in different windows.
Online and offline help	Updated help information when you need it. The help is sensitive to the page you are viewing to enable quick understanding of the function. A QR code is also provided to help users reach the information when solutions are offline.
What's new	What's new information provides an overview of what new features we've added to an update. A QR code is also provided to help users reach the information when solutions are offline.
User defined action buttons	Allows you to define various actions and make them available in your workspace such as playing an audio message from an Axis audio device.
On screen controls for extra camera features	Makes it possible to access certain Axis camera features such as starting wipers, initiating AXIS Speed Dry etc.
Joystick integration (AXIS T8310 Video Surveillance Control Board)	For easy and precise control Pan Tilt Zoom cameras.
Web pages for simple integration and display	Allows you to integrate with an external system, all that is needed is a web presentation. This can be used for the presentation of Switch interfaces, People counting statistics, and even weather reports and more.
Programmable hot keys	Makes it possible for the advanced operator to trigger a function such as instantly display a specific view, take a snapshot etc.
Logs	Makes it possible to track who did what and system events in a certain timeframe. Logs can be saved from a minimum 7 days and up to 1000 days.
Filter and search logs	It is possible to search the content within the logs and filter for specific log type (alarms, audits and/or events).
Operator selectable video stream profiles (low, medium, high)	Useful for low bandwidth connections and to optimize operator experience.
Stream information (frame rate/ bitrate etc.) for diagnostics	Instant information about live-view performance such as bandwidth, frame rate and resolution.

Axis Secure Remote Access	Simplifies access to remote surveillance systems. Once enabled it removes the need of manual port-forwarding and router configurations. The technology uses multiple levels of authentication to establish secure, encrypted communication between a client and the surveillance system.
Data-saving mode	To save bandwidth, data-saving mode to client streaming settings. By default it will change the quality to "low" on all streams with Secure Remote Access, after the user has been inactive for over 5 minutes. This feature can be enabled and disabled for all streams.

Software customization

Functionality	Description
Adaption of user interface	Three color themes to meet a range of operator environments and preferences (light, classic and dark).
Action buttons	Easily create action buttons in live view for the control of device functionality as well as external systems. Examples are to control illumination, trigger an audio message, arm/disarm alarm panels or open a barrier.
Create interactive maps	Import a map of your site to get an interactive overview for easy navigation. Place devices on map, add cameras with thumbnail views, speakers with the ability to trigger audio clips, doors icon which reflect status and action buttons which can trigger event setup in action rules. View areas and directional arrows can be used to indicate the direction of the camera view. Flashing view areas for cameras can be configured to flash when the camera is recording via an event. Audio zones configured within AXIS Audio Manager Pro can be added to the map. Multi-layer maps can also be created providing a simple overview of larger installations.
Software integration with other systems	Application Program Interface - API for software integration is available to approved partners on request.
Audit and event logs can be written to a file	This enables integration with third-party Syslog solutions for centralized monitoring and compliance requirements.
Integration with Axis devices	VAPIX® can be used within action rules.

Viewing and video

Functionality	Description
Video encoding	Support for AV1, H.264, H.265 and Motion JPEG video encoding.
Synchronized live video from different servers	Get the full overview by viewing live video from different servers and or sites simultaneously.
UltraHD 4K	Support for high resolution cameras for clear identification of incidents (requires appropriate client and display).
360 dewarping in live and playback	Allows operators to get a complete scene overview without blind spots.

Axis Corridor format (9:16)	This makes it possible to optimize the monitoring of tall wide scenes such as aisles and corridors.
Multi-sensor stitching	Presents multiple camera sensors camera streams as one single joined view.
PTZ control including pre-set positions and autofocus	Allows you to follow and track moving objects and focus on details of interest. Preset positions can also be used when an alarm is activated to automatically observe the area of interest.
PTZ Autotracking	Via the Autotracking ACAP the AXIS PTZ will automatically track selected objects identified by the camera or when an object enters a predefined zone.
User defined digital presets	Allows you to add digital preset positions of areas of interest. These can also be used within views.
Split views	Create views using predefined split view templates or via the dynamic view which supports up to 12 x 12 (144). Different camera views can be different sizes within the same split view and can also include the hotspot. Performance will depend upon the chosen hardware.
Split views formats	Different camera views can be different sizes within the same split view and can also include the hotspot.
User defined multi-view displays	Flexible customization of your views, combine maps, web pages, cameras and more.
User defined video sequences	Create virtual guard tours to automatically overview your site.
Flexible Maps with camera preview and interactive icons	Quick overview of entire site with instant navigation and access to camera views. Interactive icons enable the control of doors, speakers and the siren and light. Multi-layer maps can also be created providing a simple overview of larger installations.
Hot spot view	One frame can be set as a hotspot that automatically loads the view from another frame or map when clicking in that frame. Hotspots can be useful for asymmetric split views with one large and several small frames. The largest frame is typically defined as the hotspot. Hotspots can also be used as an action in the action rules and used to dynamically show alarm images. Hotspots can also be used when replaying video simplifying the camera selection.
Dynamic hot spot	Video streams that have specific activity, such as motion detection in a camera, are displayed in the dynamic hot spot view. The view will dynamically adjust the number of cells to support the number of cameras being displayed. When the activity in the camera has stopped it will be removed from the dynamic view after a configurable number of seconds. You can also pause the individual video stream.

Overlays	Enables overlays, such as the camera's current time and date. It is also possible to toggle overlays in live and recorded video when using the AV1 video format.
Receive live and recording alerts	Allows the user to right click on a tab and associate it with alerts. By doing so alarm actions will not interfere with the user's current view.
Manual recording	Enables an operator to manually trigger a recording by clicking an icon in the live view.
Instant playback	Easily jump from live view back in time a few seconds (user configurable) to immediately investigate something seen in the live view.
Snapshot still images from live	Allows you to easily save and share still images from cameras and maps with others.

Audio

Functionality	Description
AXIS Audio Manager Pro Integration	Allows control of an AXIS Audio Manager Pro system within the AXIS Camera Station Pro graphical user interface. AXIS Audio Manager Pro version 5.0 or later is required, since it provides public address functionality.
Live audio from microphone connected to a camera or other device with audio inputs	Allows you to listen-in on live view scenes and get both video and audio recordings.
Live talk to a speaker	Allows you to speak live to deter intruders or inform and communicate with staff and customers.
Action buttons to trigger stored messages	Possibility to play pre-recorded messages to deter intruders, or inform staff and customers.
Alarms can be used to trigger stored messages	Use alarms from actions and or ACAP's (AXIS Camera Application Platform) to automatically trigger pre-recorded messages such as "intruder detected".
Speaker icons on maps can trigger stored messages	Trigger any of the messages stored on a camera by using the speaker place on a map.
Push-to-talk audio	Push-to-talk can be enabled for all Axis cameras supporting half duplex audio.
Listen to this source only	When monitoring multiple channels of video and audio all other source are muted at a click of a button.
AXIS Audio Manager Pro integration	This allows control of an AXIS Audio Manager Pro system within the AXIS Camera Station Pro graphical user interface. AXIS Audio Manager Pro version 5.0 or later is required. This provides public address functionality.
Devices connected within AXIS Audio Manager Pro	Devices connected within AXIS Audio Manager Pro can be used as microphone sources within AXIS Camera Station Pro.

Recording playback

Functionality	Description
Multiview synchronized playback	Get full overview of an incident by investigating multiple cameras simultaneously.
Synchronized playback from different servers	Get full overview of an incident by investigating playback views from different servers and or sites simultaneously.
Hotspot selection	Cameras can be displayed by using hot spot selection.
Video Scrubbing	Quick investigation of recorded video by dragging the timeline forward and backward.
Fast play (up to x64)	Allows you to quickly analyze video and find the section that is of interest.
Frame advance	Possibility to investigate details frame by frame.
Smart search with results shown as thumb nails	Define a boundary box in scene of interest and define time frame (e.g. what happened at the entrance between 7-9 pm). All incidents taking place will be instantly presented as thumbnails.
Snapshot still images from playback	Allows you to easily share images with others.
Bookmarks with notes	Facilitates investigation by marking video for easy retrieval at a later date and building cases for export.
Lock recording from being overwritten	Secures video from being overwritten in its original form on the server if required.
Color coded timeline with filter	Clear color coding of different types of recordings and events and filter makes it easy to locate incident of interest.
Thumb nail preview of recordings within the timeline	Hover on the timeline and a preview image will be presented. This enables the operator to quickly review video recordings.
Calendar selection	Easily search within specific time and dates to quickly find video of interest.
Playback and export from SD cards	Playback and export recordings directly from SD cards that are added to the cameras are possible. Choose continuous recording or start recordings through action rules.
Failover recording from SD card	If contact with a server is lost, video will be saved on a cameras SD card. When contact with the server is re-established video will automatically be uploaded to server.
Smart Search 2.0	Advanced filters used to search recorded video footage. Search for vehicles or people, filter further by color, trip wire, area and ability to filter out fast and small objects. Results in a similar timeframe can be grouped, which provides the ability to display the results in a clearer overview. Smart Search 2.0 can also be used on Radar metadata, including a filter for object speed, or within action rule triggers.

Similarity search within Smart Search 2.0	The Similarity search function performs a search based upon visual similarities of a person. This can also be used to search for the person on different cameras and on different days. Note this is pixel based and not using any biometric data.
Background processing for Smart Search 2.0	Enables faster performance by continually processing video in the background without effecting system performance. Can be enabled on camera by camera basis.
Free text search within Smart Search 2.0	Free text search is a powerful video forensic tool that allows you to user search using their own words. This enhances flexibility and accelerates investigations when searching for moving objects in large amounts of recorded video.
Local Free text processing	Free text search performs all processing locally on your server and does not use the internet connection to send any video, images, or prompt text to axis.com or use any internet services.
Free text search moderation within Smart Search 2.0	Search text is moderated to prevent abuse and promote ethical use. Unsuitable search words are blocked. Feedback can be sent to Axis to add or remove restricted words.
Responsible AI use	Free text search uses an internet connection to verify the feature is suitable to use from a legal point of view. If legal requirements change in the future the functionality can be disabled.

Recordings and events

Functionality	Description
Recording methods	It is possible to set a recording method for each camera as well as alarm triggered. The different methods: • Manual - recording occurs when turned on manually • Continuous – recording is happening all the time • Motion - recording occurs when there is movement in the image • Object detection - recording occurs when a specific set object is identified in the image (different types of vehicles, humans)
Pre and post buffer for motion detection recordings	The Pre alarm buffer allows you to record video of what occurred prior to a detected event and the Post alarm is the time to record after a detected event. This can ensure you obtain all the relevant information.
Ability to configure free shape "include" area and multiple exclude areas for Motion detection Makes it possible to increase VMD performance and reduce false alarms.	Makes it possible to increase VMD performance and reduce false alarms.
Motion detection has short lived object, small object and swaying object filters	Makes it possible to reduce false alarm triggers by excluding certain objects.
Event categories	Administrators can create categories with different associated retention times and colors. An operator can then apply them to recordings depending on their importance. This access can be granted to operators and this feature via user permissions. Event categories can be added to the Record action in Action rules.
Scheduling	Schedules can be used to manage access control, action rules and recording configuration scenarios. They can be configured to one-minute intervals for both day- and week-based scheduling. Override schedules can be created for special dates such as public holidays.

Active alarm handling

Functionality	Description
Alarm alerts / notifications	Alarms are sent to users connected to the server.
Alarm view	Automatically switch to the video view associated with the alarm.
Support for alarm acknowledgements	Alarms are high-lighted until acknowledged by operator.
Support for alarm procedures	Possibility to write instructions to explain what actions to take presented with a specific alarm.

Video export

Functionality	Description
Right click events to select video for export	Selection is made simple. Right click an event and choose export.
Markers to select video for export	Specify the start and end of an export by the use of markers. The video shown will reflect the marker, removing the need to specify the exact time the event occurred - drag the marker and view the video.
Edit video length within the export tab	Ability to adjust the start and end time of a video within the export tab. This flexibility enables clips to be tailored without the need to return to the recordings tab.
Multiple cameras and recorded sequences can be added to export	Different cameras and recordings from different times can all be combined in the export to create a complete overview of the incident.
Notes can be added to video sequences	Makes it possible to describe details of the incident that may not be obvious to the recipient.
Digital signature	Increase the evidential value of exported material. The digital signature can be used to verify that video export had not been tampered with since the time of export.
Integrated signed video	Axis video streams contain information that can be used by the file player to verify the authenticity of the exported video.
Create playlist and include Axis File Player	Makes it easy for third-party recipients to view exported material including synchronized playback (up to four cameras) and presentation of notes and bookmarks.
Password protection zip export	Safeguard that your exported case can be transferred to the recipient in a secure way.
Incident report	Management of case information including video stills and text descriptions. The incident report will be created on a network location which can then have restricted access thus limiting the access to the exported video.
Video Redaction	Mask video before exporting to protect third-party privacy. Pixelated boxes are easily applied to the video to obscure individuals and object identity without the need for additional software or services.
Automatic export to archive video	Scheduled export of recorded video for long term backup storage.
Exported video formats	Multiple video formats can be exported as ASF, MP4 and MKV.
Axis File player	Included as default when exporting video for third-party's without the need for installing additional software for playback.

User management and user permissions

Functionality	Description
User profiles	Individually define a user's rights to access certain devices and their functionality.
Support for Microsoft Active directory	Microsoft Active Directory can be used to facilitate the administration of users, groups and device access rights.
Support for user groups	Possibility to define access rights on group level, three default user profiles: • **Administrator:** Full access to the system including system configurations and live and recorded video of all cameras. • **Operator:** Access to selected functionality and live and recorded video from selected cameras. • **Viewer:** Access to selected functionality and live video from selected cameras.
Limit access to functionality	You can restrict access to the following functions: Cameras, Views, Categorize events, IO, System, snapshots, replay video, export video, alarms, decoders, Access Control, System health monitoring and Audio Manager Pro functionality.
Mechanical PTZ priority	When two users with different priorities try to control the PTZ camera at the same time, the user with the highest priority will block the other user.

Multi-site management

Functionality	Description
Clients can connect to multiple servers simultaneously	Connect to several servers to have a complete overview of a larger premises or even multi-site installations.
Server lists	You can group servers and locations in a server list. If you have multiple sites or servers this function makes it easy to access and connect to them.
Aggregated views	Camera live and recorded views may be combined from multiple sites/servers. An example would be to view all entrance doors of a retail chains stores.
Axis Secure Remote Access	Simplifies access to remote surveillance systems. Once enabled it removes the need of manual port-forwarding and router configurations. The technology uses multiple levels of authentication to establish secure, encrypted communication between a client and the surveillance system.
Administration	An administrator can connect to multiple sites/ servers and configure devices and settings.

Scalability

Functionality	Description
Scale up to larger systems by adding servers	Grow the number of cameras and performance by adding more servers. It is easy to configure the clients to view both recorded and live video from multiple servers.

Storage

Functionality	Description
Multiple storage locations can be allocated	It is easy to add additional direct attached and local network storage and allocate to cameras. Cameras can be allocated to different storage locations if desired.
Zip stream	Zip stream profiles can be applied to reduce storage requirements whilst maintaining forensic details.
Individual retention times can be applied to each camera	To manage video storage time and comply with regulations, individual desired retention times can be set for each camera.
Average bitrate	Average bitrate is a sophisticated method of controlling bitrate. Video compression will be adapted to ensure retention time requirements are always met.
Edge storage on SD card	Choose continuous recording or start recordings through action rules.
Copy SD cards to server	Ability to copy the SD card recordings to the server continuously or via a schedule.
Failover recording by adding a SD card to the camera (auto transfer on connection resume)	Makes it possible to create redundancy and record to SD card within the camera if connection to recording server is lost. The recording will be uploaded to the server once the connection is regained.
Axis Validated Storage solutions	Axis supplies a range of network video recorders. These include the AXIS S22 Series appliances with built in POE switches and the AXIS S11 Series recorders which meet higher demands as they can include RAID and redundant PSU's. The AXIS S30 Series recorders can also be used in conjunction with an installation of AXIS Camera Station Pro server. AXIS S30 Recorders is automatically configured to use HTTPS when communicating with HTTPS set cameras.
Storage and RAID status for AXIS S30 and S40 series recording devices	Storage and RAID status for AXIS S30 and S40 series recording devices is visible within storage management.

Action rules and integration

Action rules

Functionality	Description
Action rule engine	Enables triggers and actions to be defined to build more complex and tailored solutions. For example, an activation of a trip wire from AXIS Fence Guard ACAP could then action the recording of video from certain cameras, move a PTZ to a specific preset, trigger an audio message on a speaker and trigger an output to turn on some lights and alert an operator.
Various triggers	Triggers define when a rule should be activated. The following triggers are available: Motion detection, Live view, System event and error, Always active (used in combination with schedule), Input and output, Device event (includes alarms generated from ACAPS), Action button, Access control event, External HTTPS and Smart search 2.
Trigger logic	Both AND and OR logic can be applied to triggers for flexible configuration.
Various actions	One rule can have multiple actions. When the rule is activated, all actions are performed. The following actions are available: Record, Raise Alarm, Set Output, Send Email, Live View, Send HTTP Notification, Virtual I/O, Send mobile app notification, Turn rules on or off, Add bookmark, Access Control, Send to video decoder and Audio Manager Pro.
Copy action rule	The copy function can help increase efficiency where multiple similar action rules are required.
Configuration support of multiple action rules	Select multiple action rules and add new triggers/ actions to all selected rules. This enables faster creation of action rules that contain the same schedules, triggers and/or actions.
Scheduling	Schedules can be used to define when action rules are operational. They can be configured to one-minute intervals for both day- and week-based scheduling. Override schedules can be created for special dates such as public holidays.

Integration with other Axis IP products

Functionality	Description
AXIS Camera Station Pro is the perfect match for your Axis devices	AXIS Camera Station Pro supports AXIS video products with firmware versions 4.30 or higher except AXIS 206M and AXIS 206W. AXIS Network Door Controllers will require the latest AXIS OS.
360 dewarping in live, playback and export (AXIS XXXX-P Models)	Allows operators to get a complete scene overview without blind spots even in exported video via the AXIS File Player.

Axis multi-sensor stitching (AXIS P38XX-pve)	Presents multiple camera sensors camera streams as one single joined view.
Axis multidirectional cameras with PTZ. (AXIS Q6000 series & AXIS M5000-G)	In these models the fixed cameras provide a complete overview of the scene and the PTZ enables the capture of even more detail. Simple operation is provided as the operator can click within the view of a fixed camera and the PTZ will move to that associated position.
AXIS Q19 Series	Axis thermal monitoring for reliable detection in all environmental conditions.
AXIS Q1961-TE	The Axis temperature monitoring camera allows alarms to be created when an object reaches a maximum temperature. Measure the temperature of objects within AXIS Camera Station Pro.
AXIS Door Stations and Video Intercoms (AXIS A8004 / A8501 / A8207 / I8016-LVE)	Answer/ decline / ignore call, audio and visual communication and open contact for opening door. Features include: - Preview window showing live video of the caller. - Multiple calls will stack. - If AXIS Camera Station Pro is minimized, calls will still be shown. - Record video and audio of person entering including pre and post time. - Answer calls and open doors from the Axis mobile app. - "Speak" functionality can be enabled to enable communication to door station with a call being initiated.
Combined Siren and Light (AXIS D4100-E)	Control triggering of the combined Siren ad light device. Adding audio and visual indications of events generated within AXIS Camera Station Pro.
Inputs and Outputs (AXIS A91/A92/A98 series and AXIS D3110)	Tightly integrated with AXIS Camera Station Pro action rule engine to enable the creation of tailored solutions. - Inputs such as panic buttons and other sources such as PIR's, alarms and door contacts can easily be connected to a system. - Outputs can be used to control of other equipment such as barriers, shutters and lights.
Audio (AXIS C3003 / C1004 / C8033)	Enhance your surveillance system with audio: - Speakers can be associated with a camera to enable viewing and live talking to the site. - Pre-recorded messages such as "wrong direction", "intruder detected" etc. can be manually triggered

	from action buttons and automatically triggered from alarms and analytics.
Axis Decoder (AXIS T8705, AXIS D1110)	Enables video and split views to be displayed on monitors across the network to keep an eye on customer areas, manufacturing processes etc. without the need for a client. It is also possible to select multiple cameras or views and send them to a decoder connected to the server. Supported views can also be sent to the AXIS D1110 decoder on alarm using action rules.
Radar display and alarm triggers (AXIS D2050-VE, D2110-VE)	Live view of radar to visualize the movements of an intruder. Integration via the action rule engine enables more advanced solutions to be configured. Can also be used to log the speed of vehicles when used in conjunction with the AXIS Speed Monitor ACAP.
AXIS A1001 with AXIS Entry Manager	Simple access control functionality can be added: - Trigger actions in AXIS Camera Station Pro such as recording a person entering a building. - Integration with action rule engine to create advanced alerting such as alarming on door forced, door held open and tamper alarms. - Action buttons to unlock and lock doors. - The web page of AXIS Entry Manager used for the management of doors and card holders can also be displayed and operate within AXIS Camera Station Pro.
AXIS A12, AXIS A16, AXIS A17, and AXIS A18 series with AXIS Camera Station Secure Entry	Unified access control features using AXIS Camera Station Secure Entry. See section 19 for details.
AXIS S22XX Network Switch	Configure and manage the AXIS S22XX network switch within the configuration of AXIS Camera Station Pro. This includes port and POE management.
AXIS Body worn solutions	Mobile video footage from guards and employees in vulnerable situations can be incorporated into the surveillance solution. Once uploaded the footage is behaves exactly as one of the permanently connected cameras. It is also possible to specify where the storage location is for new body worn users. Lastly, it is possible to make a CAD (Computer Aided Dispatch) integration in the Body Worn component.
AXIS Body Worn Assistant mobile app	Notes and categories added in the AXIS Body Worn Assistant mobile app are displayed in the AXIS Body Worn metadata list in AXIS Camera Station Pro recording view.

AXIS Object Analytics	Select which objects to detect—humans, vehicles, or types of vehicles including cars, trucks, buses, and bikes, and then define behavioral conditions such as time in area and cross line for that object to trigger an event.
AXIS License Plate Verifier ACAP	License plates, vehicle color & vehicle type captured by cameras using the AXIS License Plate Verifier ACAP can be viewed and searched for within the AXIS Camera Station Pro Data search tab. Vehicle access control solutions can also be created using the AXIS License Plate Verifier ACAP. Plates lists can be imported and exported as CSV-files.
AXIS Autotracking 2.0 ACAP	The Axis PTZ running the Autotracking ACAP will automatically track selected objects identified by the camera or when an object enters a predefined zone.
AXIS Speed Monitor	Used in conjunction with an Axis radar, the speed of a vehicle can be overlayed on a camera image. Alarms can also be generated if a vehicles speed is over the maximum limit. The speed data is also available in data search and can be used to assess vehicle behavior on a site – ideal for health and safety.
Other ACAPs installed on the camera	Axis edge based analytics can be added to cameras to increase operator efficiency and to meet specific requirements for example: - Axis provides ACAPS such as AXIS Guard Suite, AXIS Perimeter Defender, AXIS Live Privacy Shield and AXIS Object Analytics. - ACAPs are also available from partners to enable a wide range of enhanced functionality such as audio analytics and more. Running analytics on the camera removes the required for a central server and simplifies scalability.

Integration of third-party products

Functionality	**Description**
Third Party Camera Support. AXIS Camera Station is ONVIF Profile S conformant.	AXIS Camera Station Pro supports *ONVIF Profile S conformant* third-party devices. **Note:** One Universal license per video stream is required.
Ability to add RTSP and HTTP video streams	Possibility to add video streams directly to AXIS Camera Station Pro for live view and recordings. **Note:** One Universal license per video stream is required.
API	AXIS Camera Station Pro API offers functionalities such as System information and configuration, Camera capabilities, Snapshot, Live view, Recordings from specified cameras, interval and range, Playback,

	PTZ, Action Buttons, Get Event Logs, Audio transmission, Support for third party devices. AXIS Camera Station Pro API documentation is available to approved partners on request.
External data	Using the API, data from third party systems such as Licence Plates, Electronic Point of Sale (cash registers) and similar systems can be saved and presented into AXIS Camera Station Pro. This data can also be associated with video recordings and interrogated using the data search. Applicable for the following Axis products - AXIS Camera Station Secure Entry, AXIS License Plate Verifier and AXIS Speed Monitor.
Data search	The possibility to filter data entries by date and time and free text from external data sources.
Audit and event logs can be written to a file	This enables integration with third-party Syslog solutions for centralized monitoring and compliance requirements.

Data search

Functionality	Description
Filter on date and time and free text linked with video	The possibility to filter data generated from AXIS Secure Entry (access control events), AXIS Licence Plate Verifier (registration plates, vehicle color, make, model and type, zone and speed) and other data sources (integrated with the API). These results are associated with video recordings.
Filter data source	Display and filter only data sources of interest for example only Access Control data.
Filter for specific attributes associated with the data source	When you have filtered for Access Control attributes such as doors, card holders and events will be presented as a filter type.
Filter further using AND / OR Event markers	Filter results using ADD and OR as well as parenthesis to reduce the returned results.
Display “Live data”	Ability to display data live such as license plates and access control data. This can also be combined with the filter to show live events of interest such as access denied or refund. When connected to multiple servers you can filter a specific server to focus your investigation.
Display images	Images associated with the data such as access control photos can also be displayed within both the live and replay of Data Search.
Event markers	Event markers are displayed on the recording timeline to aid investigations.
Export data	Export the data contained within the search to a text file.

AXIS Data Insights Dashboard

Functionality	Description
Present counting data in graphical form	Counting data can be presented in graphical form. The data provided from the Data Insight Dashboard can be useful in understanding the movement of vehicles and people and within your site.
Supported dashboards	Display counting data from AXIS Object Analytics crossline counting scenario. Displays occupancy data from AXIS Object Analytics occupancy in area scenario. Display data from AXIS Audio Analytics events. Display data from AXIS Image Health Analytics events. Display data from AXIS Guard Suite events and applications. Display data from AXIS Air Quality Monitor. Display data from Traffic monitoring. Display data from Zone Analytics. Display data from Occupancy estimation.
Filter your data	Multiple filters can then be easily applied to your data to for you to gain specific insights.
Export your data	The data can also be exported and used within applications.

Mobile app for iOS and Android

Note

Functionality can vary slightly between operating systems.

Functionality	Description
View live and recorded video	Connect to a selected server and view video from anywhere.
Picture in picture	A live view image can be displayed whilst reviewing recordings. This is useful when reviewing alarm notifications as both the trigger of the alarm notification and the live status can be viewed simultaneously.
Video Scrubbing	Quick investigation of recorded video by dragging the timeline forward and backward.
Fast play (up to x8) and slow play (0.25)	Allows you to quickly analyze video and find the section that is of interest.
Frame advance	Possibility to investigate details both forward and backwards frame by frame.
Color coded timeline with filter	Clear color coding of different types of recordings and events and filter makes it easy to locate incident of interest.
Calendar selection	Easily search within specific time and dates to quickly find video of interest.
Video encoding	Support for AV1, H.264, H.265 and Motion JPEG video encoding.
Multi view of live from single server	View multiple cameras to overview a site.
Server list	Easy overview of all servers/sites in the system.
Export video	Instantly share video with third-party.
Snapshot stills	Instantly share still images with third-parties.
PTZ control including pre-sets	Control PTZ to follow moving objects.
360 Panoramic Dewarp	Dewarp 360 panoramic video in both live and playback.
Audio (listen)	Allows you to listen-in on live view scenes.
Audio (talk)	Allows you to talk to a speaker associated with a camera.
Axis Door Station Integration	Two-way audio communication and live video image of caller. A door connected to the door station can also be opened from the app.
Mobile alarm notifications	Receive alarm notifications on your mobile device. The alarm notification has to be configured with action rules of AXIS Camera Station Pro server and requires connection via Axis Secure Remote Access.
Notification list	A list of notifications is provided in the mobile app enabling fast connection to alarm events.
Action button	Action buttons are presented in the app to control external equipment such as illumination, trigger audio messages and open or close shutters or barriers.

Axis Secure Remote Access	Simplifies access to remote surveillance systems. Once enabled it removes the need of manual port-forwarding and router configurations. The technology uses multiple levels of authentication to establish secure, encrypted communication between a client and the surveillance system.
Manually control doors	Administrator can grant access, lock, unlock and lock down doors via the mobile app.

AXIS Camera Station Pro web client

The AXIS Camera Station Pro web client can be used to view connect to your AXIS Camera Station Pro system on your local area network (No internet connection is required – on prem solution). It is a simplified version of the Windows Client requiring no software to be installed on the view PC or MAC. It is also used when connecting via the optional cloud service.

Functionality	Description
View live and recorded video	Connect to a selected server and view video on your local network.
Split views	Split views that have been created on your AXIS Camera Station server will be available in the web client. Only video is currently supported.
Select stream profiles	The ability to select stream profiles to suit your network bandwidth.
Share video and Export	Share links to specific recording point in time and export sections of video.
Control of PTZ cameras	Control PTZ cameras including the selection of PTZ Presets.
360 Panoramic Dewarp	Dewarp 360 panoramic video in both live and replay.
Audio	Two-way audio. Transmit live audio to speakers and listen to audio from your microphones.
PC and MAC compatibility	The web client can be used with a wide range of internet browsers Chrome, Edge and Safari.

Cloud services through Axis Cloud Connect

In addition to the capabilities available in AXIS Camera Station, AXIS Camera Station Pro also offers the following optional cloud services.

Functionality	Description
Video operation	Connect to a selected server and view live and recorded video from anywhere using a web browser.
Smart search 2.0	Advanced filters used to search recorded video footage. Search for vehicles or people, filter further by color, trip wire, area and ability to filter out fast and small objects.
Similarity search within Smart Search 2.0	The Similarity search function performs a search based on visual similarities of a person. This can also be used to search for the person on different cameras and on different days. This feature is pixel based and not using any biometric data.
Free text search within Smart Search 2.0	Free text search is a powerful video forensic tool that allows a to user search using their own words. This enhances flexibility and accelerates investigations when searching for moving objects in large amounts of recorded video.
Server monitoring	Provides an overview of the system including the recording hardware. Storage information is provided including details associated with retention.
Device Management	View the status of your devices and update firmware.
Management of server software	Remotely update your server software.
Licence Management	Manage the licenses within your system.
User Management	Invite cloud users via their My Axis email address. Users can be assigned roles to enable them to view video or manage your systems.
Cloud Storage	Securely save your recordings in the cloud. Choose which region your recordings are stored in. Store your recordings at 15 fps, 720 p and for 30 days.

Integrator functionality

Management of software

Functionality	Description
Software updates	AXIS Camera Station Pro can automatically check for new updates. When a new update becomes available it will be downloaded and automatically installed. The updates can also be scheduled.
Restart the server service	An administrator can restart the server service from a connected client. This removes the need to physically at the server when a restart is required.

Device configuration

Functionality	Description
Design and specify a solution based upon AXIS Camera Station Pro using AXIS Site Designer	The tool includes camera, accessory and recorder selectors as well as a built-in storage calculation. The tool also provides a bill of material, installation notes, quotation with prices and an auto configuration file.
Auto configuration from AXIS Site Designer	Save installation time and eliminate mistakes by exporting configurations made in AXIS Site Designer to AXIS Camera Station Pro (configuration generated in AXIS Site Designer can be sent via email or downloaded to an USB).
Installation notes from AXIS Site Designer	Save installation time and eliminate mistakes by transferring installation notes made in AXIS Site Designer (pdf sent by mail or downloaded to an USB).
Automatic discovery of devices	Automatic discovery of devices connected to the network (even without the configuration of IP addresses).
Automatic generation of a root certificate	The root certificate can be used to sign other certificates when using HTTPS or IEEE.
HTTPS by default	When adding a device, HTTPS communication will be selected as default. Where devices do not support HTTPS, HTTP will be used.
HTTPS – Validate device address	To enhance HTTPS communication the device address can be compared to the address AXIS Camera Station Pro is using to communicate with the device. If the address is different, it will be considered untrusted.
Automatic View creation	Once cameras are added views are automatically created for quick navigation. These can then be adjusted to the customer requirements.
Simultaneous configuration of multiple camera settings from multiple servers	Facilitates configuration when installing several cameras with the same configurations such as recording profile.
Image configuration	Adjust camera image including brightness, color, WDR and rotation and mirroring.

PTZ pre-sets can be added and saved	Makes it possible to quickly move and zoom to a specific area of interest such as garage entrance to easily capture a license plate.
Cameras and other Axis devices such as audio, IO, and door station, can be added to the system	Easy to expand the system with extra functionality with differing devices to meet customer requirements.
External data sources	External data sources (for instance door activities) can be associated with a camera view. This then associates recordings with the data when using the Data search tab.
Remote access to device web page	Access all the connected devices features via the devices web interface. This gives access to advanced functionality and enables efficient configuration when accessing remotely.

Management of devices

Functionality	Description
Assign IP Address (Fixed/DHCP)	Makes it possible assign IP Addresses automatically from a DHCP server or assigned from an IP address range.
Add users and Set passwords	Support for Microsoft Windows Active Directory makes it possibly to easy add users in the system.
Password Randomization	Automatically generate a secure password on a device. This password is generated at the maximum length supported by the selected device(s).
Firmware upgrades	System can automatically check for new device firmware upgrades; Firmware can be upgraded in parallel or in a sequence.
Administrator informed of new firmware when starting client	Makes it possible for Administrator to decide if firmware should be updated or not.
Install camera application (ACAP)	A camera application is software that can be uploaded to and installed on Axis network video products to add functionality to the device, for example detection, recognition, tracking or counting capabilities. The ACAP installed directly from AXIS Camera Station Pro or downloaded from Axis webpage or vendor's web page.
Save configuration file	Multiple devices can be configured at the same time by copying device settings from one device, or by applying a configuration file.
Set time and date	The date and time settings for your Axis devices can be synchronized with the server which will act as an NTP (Network Time Protocol) source. The server time and device time offset is displayed making it easy to identify if there are any issues with the time synchronisation throughout the solution.
Restart device and restore factory default	Restart devices (ONVIF devices included) or restore devices to 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 and system time.
Multiple device Management	Possibility to perform batch upgrades and configurations of connected devices.
Manage devices from multiple servers	Possibility to perform batch upgrades and configurations of connected devices from different servers.
HTTPS	Securely connect to devices using HTTPS. AXIS Camera Station Pro can also configure a Certificate Authority.
Replace a camera	A camera can be replaced in the system without losing the recordings of camera being replaced this includes cameras with multiple sensors. Comparable settings will be maintained including recording settings, views and icons on maps.

Reporting and verification

Functionality	Description
Axis Installation verifier (Tests the system integrity and produces reports for service and handover)	This unique function stress tests the system high lighting any issues. The tool automatically produces useful documentation for integrators which can be used for hand over and service documentation.
Client and server configuration sheets (Documents all client and Server settings)	Possibility to automatically create hand over documentation containing all system configurations.
System report	This report contains all system logs and system configuration settings. This can be used by technical support to simplify the trouble shooting of issues.
Axis services	Link to view the current status of Axis cloud-based services. Subscription to alerts is possible and in the event of an issue an email will be sent.
System Health Monitoring	Provides an overview of the system including the recording hardware. Storage information is provided including details associated with retention. Notifications are generated if a device or if the system goes offline and emails can be sent. Multiple systems on the network can be monitored to ensure the system is performing as expected.
System Health Monitoring Cloud Service (Preview)	Enables remote viewing of the System Health Monitoring information via a web browser.

Unified access control

AXIS Camera Station Secure Entry is part of the AXIS Camera Station Pro software and provides a unified solution combining both surveillance and access control functionality. No extra software modules are required, simply add Axis door controllers to the system (each door controller requires a core license) and all of the functionality is available.

The solution supports up to 1000 doors per server and 10,000 card holders (with up to 5 credentials) so is suitable for a wide range of applications. You can create multi-server solutions with up to 64 servers.

For an overview, look at this *brochure*.

Access control configuration

Functionality	Description
Encryption between controller and reader	OSDP Secure Channel support encrypts the data between AXIS A4020-E and AXIS A4120-E readers and the AXIS A16 series / AXIS A12 series door controllers.
Door and zone configuration	This feature provides the possibility to configure a door installation in AXIS Camera Station Pro linking it to the correct hardware peripherals and combining doors into zones. The door type "Floor" is used for configuring elevators up to 16 floors.
Scheduling	Schedules can be used to define when access control access rights and valid and also to automatically unlock and lock doors. Schedules can be configured to one-minute intervals for both day- and week-based scheduling. Override schedules can be created for special dates such as public holidays.
Anti-pass back	Anti pass back preventing a card holder entering the same zone before exiting the current one. When detected an alarm can be raised as entry can be denied. Card holders can be configured to be exempt from this feature.
Double swipe	The double swipe function allows a user to override the current status of a door. It can be used to unlock a door outside of a regular schedule.
Last card swipe	Sorting/Search door in last card swipe.
Two-person rule	Two people are required to swipe the cards to gain access.
IP Reader	It is possible to add the AXIS A8207-VE (Video intercom and access control reader) to the system as an IP Reader.
Pin chart of configured AXIS A16 series / A12 series	After the doors have been configured, a color-coded pin chart can be viewed and printed which can be used to assist installers when installing the hardware on site.
Identification profiles for doors in the system	Identification profiles defines the manner of identification required at a door and can be combined with scheduling. For instance, requiring card and pin at night and only card in the daytime.

Customizable PIN length	Set the number of digits (1-24) in the system for PIN (Personal Identification Number) that accompanies a card for cardholder validation.
PIN features	Duplicate PIN check, "Valid To" options for PINs.
Card formatting	Add a possibility to define card formats in the system providing an easy translation from data received from any card reader and data to be validated in an access control setup. These can be deployed system wide or on individual readers.
Card creation	Cards can be designed and stored in multiple templates. The card template can show up to five fields and background images/logos. One or more cardholders can be linked to a chosen template and printed out on printers that are supported by Windows operating system.
Copying of preconfigured door configurations	You can copy a door controller's configuration and apply it to another. This saves time and eliminates configuration mistakes.
Manual backup of configuration	Back up your Secure Entry (Access control) System configuration and database.
Manual backup of card holder photos	Back up your card holder photographs used with the system.
Multi server configuration	The ability to create a main server and sub server configuration. Which then supports the ability to share cardholder and groups to all of the configured servers.

Access control management

Functionality	Description
Cardholder management	In the Access management tab, you can create cardholders, give them multiple credentials (up to 5) such as cards and PIN codes, and associate a photo. Custom fields in the cardholder profile are provided for additional information.
Support for Microsoft Active directory	Microsoft Active Directory can be used to populate card holder details.
Global cardholder management	Ability to create a global cardholder or group which will be shared to all access control servers that are part of a multi server configuration.
License plate credentials	License plates can be used as a credential. The AXIS License Plate Verifier ACAP has to be used to capture the license plates.
QR Code® credentials and email distribution for effective visitor management QR Code is a registered trademark of Denso Wave Incorporated in Japan and other countries.	QR Codes (Static and dynamic) can be created used in conjunction with the AXIS Barcode Reader ACAP installed on a door intercom as a credential. You can also define the access using time eg valid between 9.00 - 11.00.

	The QR code credential can also be emailed for efficient and cost effective visitor management.
Dynamic QR Code credential	A dynamic QR code can be generated for more secure temporary access. Dynamic QR code access requires the AXIS Mobile Credential app.
Mobile credential via Bluetooth	Using the AXIS Mobile Credential App and the AXIS A4612 Network Bluetooth Reader mobile telephones can be used as a credential.
Duress PIN	A duress pin can be associated with a card holder. When this PIN is entered the door will open and an additional alarm alert will be generated and presented to the system operators.
Create card holder photo	As well as importing a photo to associate, you can take a photo using a PC webcam.
Cardholder groups	Cardholders can be combined into cardholder groups such as staff, management or cleaners for easy and scalable management.
Access rules	An access rule defines when someone has access to where. Combining a schedule with a cardholder, or group of cardholders with doors and/or zones. They can also be enabled and disabled via AXIS Camera Station Action rules.
Unlocking schedules including First person in	Applying an unlocking schedule on a door unlocks the door while the schedule is active. Adding the First person in flag enables the unlocking schedule only if someone has first entered the door.
Manual door and zone control	Manual door actions like Access, Unlock, Lock and Lockdown can be sent to individual or multiple doors and zones.
Manual door override	If the system is unavailable, the doors can be manually overridden.
Lockdown of door and zones	Cardholders will not be able to enter zones or doors when the lock down is active. Cardholders can be configured to be exempt from lockdown and will be able to enter when the system is in lockdown.
Import and Export of cardholder information	Cardholder information from an existing access control database can be imported via CSV file. This simplifies the migration from one system to another. The system can also be restored from the last point in time an export was created.
Configuration reports	Add a possibility to export configuration reports in CSV format.
Mustering and roll call reports	Create mustering and roll call reports containing zone, card holder groups, mustering points and selected time frame.
Access control management	An administrator can grant access, lock, unlock and lock down doors via the mobile app.

Door dashboard

The door dashboard provides live information and control of the associated door. The door dashboard can be used within split views just like cameras within AXIS Camera Station Pro.

Functionality	Description
Real time visual verification of door activity	The activity at the door is displayed together with the relevant cardholder photo for easy real time verification. The last event is shown constantly.
Live door status	The current status of the door monitor and lock is displayed. Door forced open and Door open-too-long alarms will be displayed in real time when viewing the door dashboard.
Bookmarked transactions	An operator can bookmark an individual entry for easy investigation.
Manual door and zone control	Manual door actions like Access, Unlock, Lock and Lockdown can be sent to the associated door.

Hardware overview (compatible network door controllers)

AXIS Camera Station Secure Entry is only compatible with the AXIS A12, A16, A17 and A18 series of network door controllers.

You can find more details about the hardware on the *Network door controllers product page at axis.com*.

Functionality	Description
Secure Entry Firmware track	The unified solution only supports the AXIS A12, AXIS A16, AXIS A17, and AXIS A18 Network Door Controller Series on the AXIS Camera Station Secure Entry Firmware track.
Autonomous configuration	The controllers are configured autonomously to function regardless of AXIS Camera Station Pro server being online.
Number of doors	A maximum of 1000 doors can be used per server (dependent upon the AXIS Camera Station server hardware). Multi server solutions can be created with up to 64 servers. A maximum of 128 doors can be used and is dependent on AXIS Camera Station Pro server hardware. Each AXIS A16 series door controller can control up to two doors depending on the requirement. Each AXIS A12 series door controller can control up to one door depending on the requirement.
Readers	RS485 (OSDP)/Wiegand/Bluetooth via the AXIS A4612 Network Bluetooth Reader
Wireless Locks	Up to 16 Aperio wireless locks can be connected to an Axis door controller via the Aperio AH30 hub.

Additional information

- *AXIS Camera Station Pro landing page*: Overview information and link to free 30-day trial
- *AXIS Camera Station S22 Appliance Series*: All-in-one recorders with integrated switch
- *AXIS Camera Station S11 Recorder Series* and *AXIS Camera Station S12 Recorder Series*: Robust recording solutions
- *AXIS S3008 Recorder Series*: Easy expansion of your recording solution
- *AXIS Camera Station Workstations*
- *AXIS Camera Station Secure Entry*: Unified access control and video surveillance
- *AXIS Mobile Credential*
- *AXIS Camera Station Mobile Application*
- *AXIS Camera Station Pro tutorial videos*: Library of videos to show features and functions
- *AXIS Camera Station Pro release reviews*
- *AXIS Camera Station Cybersecurity quick reference guide*

T10203602

2026-10 (M14.2)

© 2023 – 2026 Axis Communications AB