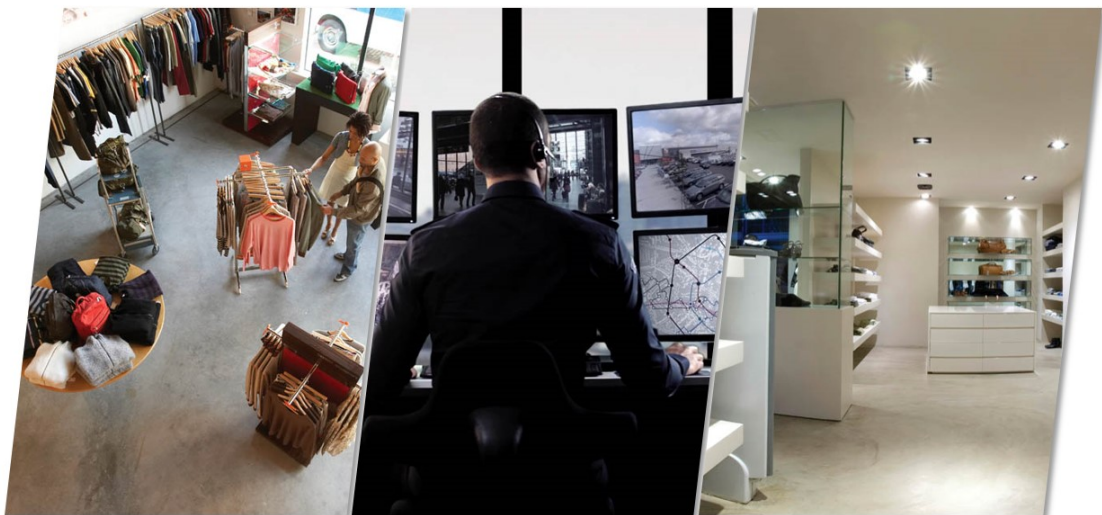


AXIS Guardian

Cloud-based managed services

AXIS Guardian is a unique cloud service that together with Axis wide range of network products, gives alarm companies the possibility to expand their offering with new services and increase their recurring revenue streams. The service platform is managed by Axis in the cloud and enables alarm companies to provide trouble-free and reliable monitoring of small and medium business. The alarm companies can use AXIS Guardians centralized device management and health monitoring to easily maintain and manage the system remotely. It is designed to be tightly integrated into the central station monitoring software, to streamline the alarm handling flow. The dedicated Alarm Operator web application increases alarm operation efficiency with e.g. remote video verification. The web and mobile applications also allows the end customer to access the camera system for their own business operations during regular business hours. Axis provides system infrastructure, hybrid storage combining cloud and edge storage, 24/7 support and the day-to-day maintenance.

- > **Easy to install and low installation costs**
- > **Easy to package and sell new service offerings to end customers**
- > **Axis is a total solution provider delivering HW, SW, and Service**
- > **Peace of mind**



Managed Services Platform

Application	
Service Level Agreement	Specified separately
Platform Support	24/7/365 support by Axis
End-customer Support	Delivered by Service Provider
System scalability	
Customer accounts	Unlimited
Users per account	Configurable number with individual permissions
Sites per account	User interfaces designed for up to 100 sites per account
Cameras per Site	User interfaces designed for up to 16 cameras per site
Alarm center integration	
MAS MASterMind Receiver	MAS MASterMind version 6.36. Alarm signaling via MASXML over TCP. Multiple alarm receiver support with automatic fallback, retry and recovery
Generic Receiver	Alarm signaling via HTTP/HTTPS POST. Multiple alarm receiver support with automatic fallback, retry and recovery
Alarm panel	I/O triggers for wired connection and HTTP triggers for networked connection
Alarm Signals	Refer to Triggers & Event section
System integration	
Application Programming Interface	Open HTTPS-based API for software integration, e.g. customer portals, point of sales.
Alarm center integration	
Device analytics	For information about supported analytics, please refer to separate list provided by your Axis sales representative.
Alarm triggers*	Alarms triggered by analytics, external I/O and on-site HTTP triggers via LAN
Event triggers*	Events triggered by alarm triggers, Build-in PIR Sensor, Audio Detection, AXIS Active Tampering and schedule
Actions*	Record video clip (e.g. video verification alarm clip), send HTTP notification (e.g. trigger action in device on same LAN), pulse I/O (e.g. open gate), turn on light (e.g. light scene for improved image quality), play audio clip (e.g. deter intruder), send alarm (e.g. send alarm signal to alarm receiving center), send end-user notifications
Recording	Continuous recording 24/7, scheduled recordings (week based schedules), alarm clip before and after trigger event (typical 30 seconds alarm clip), ongoing recording during activity for stateful triggers (recordings restarts after 15 minutes of activity)
End-user Notifications	SMS/E-mail on alarm recording, device connect/disconnect, edge storage disruption. SMS gateway and E-mail server required
Logs	Alarms, event and audit logs
* Product dependent capabilities	
Compatible products	
Device connectivity	AXIS One-Click Connection. Outbound TCP Ports 443 and 8080-8089 must be accessible from the LAN. Optional proxy supported. Minimum 0.5 Mbps upload bandwidth dedicated per camera.
Cameras	Refer to separate list

Speakers	For information about supported Axis devices, please refer to separate list provided by your Axis sales representative.
Network Door Stations	For information about supported Axis devices, please refer to separate list provided by your Axis sales representative.
Storage	
Cloud storage	Available packages: 7/14/30/60/90/120 days of retention
Edge storage	Retention based on available storage, scene type, activity and recording configuration.
Edge storage media	For information about supported Axis devices, please refer to separate list provided by your Axis sales representative.
Legal	Retention can be limited per camera to conform to local legal requirements.
Video	
Video compression	H.264 (MPEG-4 Part 10/AVC) with AXIS Zipstream
Resolutions*	Up to Full HD
Frame rates*	Live view: Remote: Up to 15 fps Direct: Up to 15 fps Recording: Cloud: Up to 15 fps Edge: Up to 15 fps
*Average bitrate (measured over 24 hours) must not exceed 450 kbps, peaks allowed	
Audio	
Audio streaming	Two way (product dependent)
Audio compression	AAC (product dependent)
Legal	Live and recorded audio can be disabled to conform to local legal requirements.
Cyber Security	
Camera dispatch	Authentication using Owner Authentication Key (OAK)
Camera connection	AXIS One-Click Connection w. Encryption and Authentication
Web client communication	HTTPS
Mobile client communication	HTTPS
API communication	HTTPS
Streaming video via cloud	RTSP over HTTPS*
SSL certificates	Wildcard certificates required (Provide to Axis by service provider)
Users	Multiple user access levels with password protection
Administrators	Multiple admin access levels with password protection
Analytics	Analytics is utilized to gather anonymized data from devices, web applications and mobile apps to improve the product.
*Communication to/from AVHS Service Platform. Optional direct connection between clients and devices on LAN utilize HTTP and RTSP over TCP	

Admin Portal

General	
Target Users	Service Provider administrators
Languages	English. Other languages upon request (NRE plus maintenance fee)
Branding	AXIS branded
User interface	Web based

System scalability	
Account management	Add, remove, update and suspend customer accounts. Assign subscriptions based on available packages: storage, retention, resolution, frame rate. Assign and manage permissions.
Administrators	Multiple admin access levels with password protection
Customers	Multiple customer access levels with password protection
Customer support	Remote access to customer account for support and maintenance. Option for end customer to consent
System	
Web browser requirements	Google Chrome™ (latest)
Operating System requirements	Microsoft Windows® 10. Microsoft Windows® 8.1 (Not supported beyond Microsoft End of Mainstream Support)

Alarm Operator Web App

General		Live view & playback	
Target Users	Alarm operators	Video viewing	Simultaneous live and alarm clip view of up to 16 cameras. Live or alarm clip focus mode. Split view and full screen, Multiview streaming, Axis' Corridor Format, Digital zoom. Object overlay.
User Interface	Single Page Web Application	Search for recordings	Search for recordings based on camera, date and time. Timeline visualization
Languages	English. Other languages upon request (NRE plus maintenance fee)	PTZ	Control of PTZ cameras using mouse, joystick or presets
Branding	AXIS branded.	I/O control	Pulse or toggle output port
System		Audio	Two way. Remote speaking using compatible speakers
Network connectivity	Outbound TCP Port 443 must be accessible from the LAN. Outbound TCP Port 843 also required for remote speaking functionality.	Resolution	Manual or automatic selection for best bandwidth/quality tradeoff
Web browser requirements	Google Chrome™ (latest)	Integration	
Operating System requirements	Microsoft Windows® 10, Microsoft Windows® 8.1 (Not supported beyond Microsoft End of Mainstream Support)	Alarm center	One click launch without login from alarm center software. Operator live view automatically triggers recording to cloud for validation purposes

End User Web App

Application		Live view	
Target Users	Service Provider end customers	Camera live view	Live view of up to 4 cameras. 1, 2, 3 and 4-split views, single view in full screen, Multiview streaming, Axis' Corridor Format, Digital zoom
User Interface	Single Page Web Application	PTZ	Control of PTZ cameras using mouse, joystick or presets
Languages	English. Other languages upon request (NRE plus maintenance fee)	Resolution	Manual or automatic selection for best bandwidth/quality tradeoff
Branding	Custom branding upon request (NRE plus maintenance fee)	I/O control	Pulse or toggle output port
System		Audio	Two way
Network connectivity	Outbound TCP Port 443 must be accessible from the LAN. Outbound TCP Port 843 also required for remote speaking functionality.	Playback	
Web browser requirements	Google Chrome™ (latest), Firefox® (latest), Safari® (latest), Microsoft Edge (latest), Internet Explorer® 11 (Not supported beyond Microsoft End of Mainstream Support)	Search for recordings	Search for recordings based on camera, date and time. Timeline visualization
Operating System requirements	Microsoft Windows® 10, Microsoft Windows® 8.1 (Not supported beyond Microsoft End of Mainstream Support), Apple OS X® (latest)	Playback	View recordings from of up to 4 cameras. 1, 2, 3 and 4-split views and full screen
		Export	Multiple video clips from selected cameras per export, maximum duration 15 minutes. Video in MP4 format packaged in ZIP container including M3U playlist.
		Configuration	
		Basic	Camera name and description, Action Rules and alarm recipients. Controlled by user permissions.
		Advanced	Add new device, device configuration, remote device access, manage: edge storage, I/O, stream profiles, users (guests) and end-customer notifications. Targeted towards administrators. Controlled by user permissions.

End User Mobile App

General		Live view & playback	
Target Users	Service Provider end customers	Camera selection	Site list and camera overview
User Interface	Native mobile application	Video viewing	Full screen live view of selected camera. Axis' Corridor Format, Digital zoom
Availability	Available free of charge on Apple App Store (Hosted Video) and Google Play (AXIS Viewer for Hosted Video)	Search for recordings	Search for recordings based on camera, date and time. Timeline visualization
Languages	English, French, Italian, German, Spanish, Dutch and Portuguese	Export	Multiple video clips from on camera per export, maximum duration 5 minutes. Video in MP4 format. Exported to mobile device photo gallery
Branding	AXIS branding available free of charge. Custom branding upon request (NRE plus maintenance fee)	Audio	One-way audio streaming.
System		Resolution	Manual selection for best bandwidth/quality trade off
Network connectivity	Outbound TCP Port 443 must be accessible from the mobile device.	Arm/disarm	Manually arm or disarm alarm zones
Mobile access	Axis mobile viewing apps for Android devices, iPhone and iPad		
Mobile device minimum requirements	iOS 8 or later Android 4.2 or later Subject to change as new iOS and Android versions becomes available		