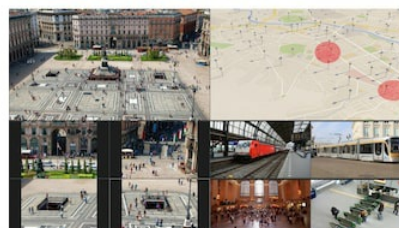


SOW-S Series

Network Video Management
Software – Standard Edition



Overview

Simple, easy-to-use, network video management software for monitoring systems with up to 288 cameras

This simple, easy-to-use video management software supports monitoring systems with up to 288 cameras, which is ideal for common applications such as retails and banks.

The SOW-S Series is the first 4K-ready VMS application from Sony with 4K recording and playback capability. It's ideal for use with Sony 4K cameras, supporting unique image output functions like Intelligent Cropping. Recording 4K image data with four times the resolution of Full HD, the SOW-S Series supports more effective, efficient video monitoring by providing excellent situational awareness plus the ability to recognise fine details in a scene and quick, accurate searches.

Multiple users can simultaneously and securely access live or recorded video via their smartphone or tablet from any location. In addition remote PC clients can securely access system functions via a web browser, with no need to install application software.

Multi-vendor support allows easy expansion through the addition of a growing choice of third party cameras and other

devices to create a powerful, versatile monitoring system. Regular software updates give monitoring professionals the reassurance of top-flight performance and the addition of new features to expand system capabilities even further.

Monitoring workflow is enhanced with support for a wide range of smart analytical and automation functions. This software-based solution gives system designers and integrators the freedom to select server hardware from the marketplace with CPU and operational specifications to meet their customers' precise needs.

Note

The SOW-S and SOW-E Series network video management software and HAW-S and HAW-E Series network video recorders are not compatible with each other and cannot be used in the same system.

Features

Compatible with Sony 4K cameras

Sony 4K cameras provide powerful new ways to get the whole picture, allowing detailed analysis of specific areas in a scene, together with a wide-area situational overview. They offer a range of video output functions, including Intelligent Cropping and Multi Tracking, plus Evidence Shot, high resolution still image capture that's ideal for evidence. The SOW-S Series supports the video output functions unique to Sony 4K cameras, including a single real-time 4K/30 fps video stream and Intelligent Cropping that provides a Full HD overview video plus up to four VGA close-up video streams at the same time.

Multi-client access via smartphone or PC

Multiple users can simultaneously and securely access live or recorded video via their smartphone or tablet from any location. In addition remote PC clients can securely access system

functions via a web browser*, with no need to install application software. Live images captured with a smartphone or tablet by on-site staff can be transferred to the system, shared among users in the operations room and recorded to the central server. This supports timely monitoring of events, even in extreme environments where installing cameras is difficult.

* Web browser supports limited functions, while client application software installed on a PC supports full system functions.

See the complete picture

Multiple monitors can be easily controlled by a single operator. The monitors are allocated to different tasks - such as viewing cameras images, a site map or alarm list - giving a single operator a complete overview and status of the entire system.

All-round awareness

Interactive, multi-layered maps offer a situational overview plus control of cameras and other integrated systems. Icons are displayed in a map image showing the location of each camera: operators can instantly view live video by clicking on an icon. When an alarm event occurs, the associated camera icon is displayed prominently, helping the operator understand the situation and take appropriate action.

Specifications

System components (software modules)

Recording Server	Yes
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Number of connected cameras per system	288
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Maximum number of	
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cameras per recording server 32

Recording Server manager	Yes
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Management Application (local management)	Yes
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Event Server (for handling of events and alarms)	Yes
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NVMS Mobile Client	Yes
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Network Video Management System Smart Client	Yes
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Network Video Management System Web Client	Yes
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Network Video Management System Smart Client - Player (local playback/export)	Yes
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Device support

Support for ONVIF™ compliant devices	Yes
Generic device support via universal driver	Yes
Number of IP device brands supported via dedicated device integration	152
Number of supported IP camera models	5.136
Number of supported video encoder models	363
Number of dedicated IP input/output models	14
Number of supported DVRs	75
Number of supported IP audio devices	10
Number of supported perimeter detectors	18
Secure HTTPS camera	

connectivity (on supported devices) Yes

Video processing

H.264, MJPEG, MPEG-4, MPEG-4 ASP and MxPEG support Yes

Dual stream (live and recording) per camera Yes

Client video stream down sampling (resolution and FPS) option Yes

Send camera pre-alarm images (pre-recording buffer) to recording server Yes

Video recording speed up on motion, event or time schedule Yes

Built-in Video Motion Detection (VMD) Yes

Auto adjustable VMD sensitivity Yes

Motion metadata
generated during VMD analysis Yes

VMD exclusion zones Yes

Video motion
detections per server All connected cameras

Audio

One-way audio
support Yes

Two-way audio
support Yes

One-way audio
recording Yes

Maximum number of
supported audio
channels 32

Pan-tilt-zoom (PTZ)

Preset positions per
camera 25

Go-to preset on event Yes

Preset patrolling	Yes
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Combine patrolling and go-to preset on event	Yes
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Number of PTZ priority levels for prioritized PTZ control	1
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I/O and events

Hardware configurable events (such as I/O input, motion, tampering, temperature, communication failure)	Yes
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Motion detection events (VMD in Recording Server)	Yes
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System error events (for example disk full)	Yes
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Manual / User defined events	Yes
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Event-based notification	Yes
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Event-based output control	Yes
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Event-based device start/stop	Yes
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Alarm Manager

View triggered alarms	Yes
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Number of alarm priority levels	32000
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Customizable alarm priority levels	Yes
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Customizable alarm categories	Yes
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Alarm handling reporting	Yes
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Alarm logging	Yes
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Redundancy option for high availability	Yes
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Video retention time	Unlimited
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Recording capacity per device/day	>1 TB
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Archiving of recordings	Yes
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Archiving to network drives	Yes
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Dynamic archiving (disk spanning)	Yes
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Online access to archives	Yes
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Archiving schedules	Hourly
Automatic storage distribution	Yes
Storage definition and retention time per device	Yes
Storage overview (used vs. available space) of available storage drives	Yes

Support for Add-on products

Supports Screen Recorder	will be supported
Supports ONVIF Bridge	Yes

Management

Automatic initial configuration wizard	Yes
Configuration wizards for aided system setup	Yes

Automatic camera discovery	Yes
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Device scanning with device model detection	Yes
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On-the-fly configuration changes	Yes
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Run servers as Windows Services	Yes
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Scheduled start/stop of devices	Yes
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System configuration restore points	Yes
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Export and import of configuration data	Yes
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Offline license activation	Yes
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Viewing clients

Maximum number of clients	20
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Customizable access port with NAT support	Yes
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Single step installer (installs Smart Client together with server)	Yes
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System alarms and notification

Email notification	Yes
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SMS notification	Yes
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User authentication and rights management

Basic User (XProtect application accounts)	Yes
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Windows User (local Windows accounts)	Yes
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Dual authorization (Smart Client users)	Yes
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Logging

System logging	Yes
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Event logging	Yes
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Audit logging	Yes
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Languages (Management Interface)

English	Yes
French	Yes
German	Yes
Japanese	Yes
Spanish	Yes

General view handling (Client)

Number of view layouts	2 (Mobile/Web Client), 41 (Smart Client)
Maximum view Items per view	100 (Smart/Web/Mobile Client)
Optimized view layouts for 4:3 and 16:9 display ratios	Yes (Smart Client)
Corridor optimized view layouts	Yes (Smart Client)
Optimized view layouts for landscape and portrait displays	Yes (Smart/Mobile Client)
Cameras from	Yes (Smart/Web/Mobile Client)

multiple servers

Support for Shared Views and Private Views

Yes (Smart/Web/Mobile Client)

Images in views

Yes (Smart Client)

Active HTML pages in views

Yes (Smart Client)

Hotspot in views

Yes (Smart Client)

Carousel in views (controllable)

Yes (Smart Client)

Full screen mode

Yes (Smart/Web/Mobile Client)

Display views as floating window

Yes (Smart Client)

Display views on multiple monitors

Yes (Smart Client)

Advanced multi window support with synchronized or independent operation

Yes (Smart Client)

Switch to view by number

Yes (Smart Client)

Initial default view

Yes (Smart/Web/Mobile Client)

Camera search	Yes (Smart/Web/Mobile Client)
Automatic restore views and windows at login	Yes (Smart/Web/Mobile Client)
Live view (Client)	
Update on motion only	Yes (Smart Client)
One-way audio support	Yes (Smart Client)
Two-way audio support	Yes (Smart Client)
Start recording in view	Yes (Smart Client)
Independent playback in live mode	Yes (Smart Client)
Replace cameras in view without changing view setup	Yes (Smart Client)
Share video image	Yes (Smart/Mobile Client)
Switch to camera by number	Yes (Smart Client)

PTZ support (Client)

Define presets in the client application	Yes (Smart Client)
View who have PTZ control and time to automatic release	Yes (Smart/Web/Mobile Client)
Go to preset position	Yes (Smart/Web/Mobile Client)
Pause patrolling at manual operation	Yes (Smart/Web/Mobile Client)
Grandeye 360° Quad View	Yes (Smart Client)
Immervision Enables® panomorph lens support	Yes (Smart Client)
Joystick support	Yes (Smart Client)
Assign commands to keyboard shortcuts and joystick buttons	Yes (Smart Client)
Auxiliary commands (wash and wipe)	Yes (Smart Client)

I/O and events control (Client)

Camera overlay buttons	Yes (Smart Client)
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Manually activate events and trigger outputs	Yes (Smart/Web/Mobile Client)
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Playback (Client)

Maximum view items per view	1 (Mobile/Web Client), 100 (Smart Client)
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Playback mode	Multi Camera(Smart/Web Client), Single Camera(Mobile Client)
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Recording search	Yes (Smart/Web/Mobile Client)
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Recent history of recording sequences per camera	Yes (Mobile Client)
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Time/date search	Yes (Smart/Web/Mobile Client)
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Independent playback in playback mode	Yes (Smart Client)
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Event/alert list in recording	Yes (Smart Client)
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Graphical timeline	Yes (Smart Client)
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Adjust playback speed	Yes (Smart/Web/Mobile Client)
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Single frame step (forward/backward)	Yes (Smart/Web/Mobile Client)
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One-way audio support	Yes (Smart Client)
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Digital zoom	Yes (Smart/Web/Mobile Client)
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Share video image	Yes (Smart/Web/Mobile Client)
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Print report with comments	Yes (Smart Client)
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Privacy masking	Yes (Smart/Web/Mobile Client)
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Smart Search (Client)

Smart Search based on VMD analysis	Yes (Smart Client)
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Sequence Explorer (Client)

Listing of sequences	Yes (Smart Client)
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Listing of time intervals	Yes (Smart Client)
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Dedicated Sequence Explorer tab that can be displayed as	Yes (Smart Client)
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floating window

Alarm Manager (Client)

Alarm list and alarm preview view items in normal camera views	Yes (Smart Client)
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Sort and filtering functions	Yes (Smart Client)
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Instant preview of primary and related cameras	Yes (Smart Client)
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Map function (Client)

Standard graphical file formats supported for maps	Yes (Smart Client)
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Number of linked map layers supported	64 (Smart Client)
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Video preview	Yes (Smart Client)
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Integrated control of speakers, microphones and I/O devices	Yes (Smart Client)
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Drag-and-drop and point-and-click definition of map elements	Yes (Smart Client)
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Integrated PTZ control	Yes (Smart Client)
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Real-time system integrity overview and system performance	Yes (Smart Client)
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Export (Client)

Export in still image format (JPEG)	Yes (Smart/Web/Mobile Client)
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Export in media player format (AVI)	Yes (Smart/Web/Mobile Client)
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Export with audio in media player format (AVI)	Yes (Smart Client)
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Export with audio in media player format (MKV)	Yes (Smart Client)
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Export in Network Video Management System format	Yes (Smart Client)
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Server side export	Yes (Smart/Web Client)
Encrypted export with password	Yes (Smart Client)
Digital signing of exported video	Yes (Smart Client)
Re-export prevention	Yes (Smart Client)
Auto-export of Smart Client – Player	Yes (Smart Client)
Preserve system defined privacy masks	Yes (Smart/Web/Mobile Client)
Additional export specific privacy masks	Yes (Smart Client)
Direct export to optical media	Yes (Smart Client)
Flexible camera selection for export	Yes (Smart Client)
Bulk export to multiple media formats	Yes (Smart Client)
General and camera specific export comments	Yes (Smart Client)

Pre/post comment slides (media player format only)	Yes (Smart Client)
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Verification of digital video signatures in Smart Client – Player	Yes (Smart Client)
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Video Push (Client)

Video Push	Yes (Mobile Client)
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Installation (Client)

Run without installation	Yes (Web Client)
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Optional browser plug-ins for enhance viewing performance	Yes (Web Client)
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Single step installer (installs client together with server)	Yes (Smart Client)
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Initial and update installations from Management Server	Yes (Smart Client)
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System access (Client)

Auto-login	Yes (Smart/Mobile Client)
Secure (HTTPS) client-server connection	Yes (Mobile/Web Client)
Dynamic bandwidth adaptation	Yes (Mobile/Web Client)
Bandwidth threshold	Yes (Mobile/Web Client)

Authorization (Client)

Restrict user access by devices (cameras, microphones, I/O devices, etc.)	Yes (Smart/Web/Mobile Client)
Restrict access to live view	Yes (Smart/Web/Mobile Client)
Restrict access to PTZ	Yes (Smart/Web/Mobile Client)
Restrict access to playback	Yes (Smart/Web/Mobile Client)
Restrict access to export	Yes (Smart/Web/Mobile Client)
Restrict access to setup	Yes (Smart Client)

Personalization (Client)

Application options	Yes (Smart/Mobile Client)
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Centralized management of application options	Yes (Smart/Web Client)
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Application theme support	Yes (Smart Client)
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Task oriented tabs	Yes (Smart Client)
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Toggle between Advanced mode and Simplified mode. Default mode: A – Advanced, S - Simplified	Yes (Smart Client)
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System (Client)

Hardware accelerated video decoding (Intel Quick Sync video)	Yes (Smart Client)
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Languages (Installation, UI and help function) (Client)

Arabic	Yes (Smart/Web/Mobile Client)
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English	Yes (Smart/Web/Mobile Client)
French	Yes (Smart/Web/Mobile Client)
German	Yes (Smart/Web/Mobile Client)
Japanese	Yes (Smart/Web/Mobile Client)
Spanish	Yes (Smart/Web/Mobile Client)
Turkish	Yes (Smart/Web/Mobile Client)

Computer running Standard Edition Products (System Requirements)

CPU	Intel® Pentium® 4, 2.4 GHz
RAM	Minimum 4 GB
Network	Ethernet 100 Mbit
Graphics adapter	AGP or PCI-Express, minimum 1024 x 768, 16-bit colors
Hard disk space	Minimum 10 GB free hard disk space available, excluding space needed for recordings
	Microsoft® Windows® 10 Pro (64 bit)* Microsoft Windows 10 Enterprise (64 bit)*

Operating system	<p>Microsoft Windows 8.1 Pro (64-bit)</p> <p>Microsoft Windows 8 Enterprise (64-bit)</p> <p>Microsoft Windows 8 Pro (64-bit)</p> <p>Microsoft Windows 7 Ultimate (64-bit)</p> <p>Microsoft Windows 7 Enterprise (64-bit)</p> <p>Microsoft Windows 7 Professional (64-bit)</p> <p>Microsoft Windows Server 2012 (64-bit): Standard and Datacenter</p> <p>Microsoft Windows Server 2012 R2 (64 bit): Standard and Datacenter</p> <p>Microsoft Windows 2008 R2 (64-bit): Standard, Web, High Performance Computing (HPC), Enterprise and Datacenter</p>
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Software	<p>Microsoft .NET 4.5.1 Framework</p> <p>DirectX 9.0 or newer</p> <p>Windows Installer 4.5</p>
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Computer running Mobile Server (System Requirements)

CPU	Intel® Pentium® 4, 2.4 GHz
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RAM	Minimum 4 GB
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Network	Ethernet 100 Mbit
Graphics Adapter	Onboard GFX, AGP, or PCI-Express, minimum 1024 x 768, 16-bit color
Hard Disk Space	Minimum 10 GB free hard disk space available (When using server-side export additional storage space is needed)
Operating system	<p>Microsoft® Windows® 10 Pro (64 bit)*</p> <p>Microsoft Windows 10 Enterprise (64 bit)*</p> <p>Microsoft Windows 8 Pro (64 bit)</p> <p>Microsoft Windows 8.1 Enterprise (64 bit)</p> <p>Microsoft Windows 8.1 Pro (64 bit)</p> <p>Microsoft Windows 7 Ultimate (64 bit)</p> <p>Microsoft Windows 7 Enterprise (64 bit)</p> <p>Microsoft Windows 7 Professional (64 bit)</p> <p>Microsoft Windows Server 2012 (64 bit): Standard and Datacenter</p> <p>Microsoft Windows Server 2012 R2 (64 bit): Standard and Datacenter</p> <p>Microsoft Windows Server 2008 R2</p>

(64 bit): Standard, Web, High Performance Computing (HPC), Enterprise, and Datacenter

Software	Microsoft® .NET 4.5.1 Framework
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Computer running Smart Client, Smart Client - Player and Smart Wall - Using Software Decoding (System Requirements)

CPU	Intel® Core™2 Duo
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RAM	Minimum 1 GB
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Network	Ethernet 100 Mbit
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Graphics Adapter	Onboard GFX, AGP or PCI-Express, minimum 1280 x 1024, 16-bit colors, DirectX 9.0 or newer
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Hard Disk Space	1 GB free
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Operating system	Microsoft® Windows® 7 Professional SP1 (32-bit or 64-bit) * Microsoft® Windows® 7 Enterprise SP1 (32-bit or 64-bit) * Microsoft® Windows® 7 Ultimate SP1 (32-bit or 64-bit) * Microsoft® Windows® 8 Pro (32-bit or 64-bit) Microsoft® Windows® 8 Enterprise
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	<p>(32-bit or 64-bit)</p> <p>Microsoft® Windows® 8.1 Pro (32-bit or 64-bit)</p> <p>Microsoft® Windows® 8.1 Enterprise (32-bit or 64-bit)</p> <p>Microsoft® Windows® 10 Pro (32-bit or 64-bit)</p> <p>Microsoft® Windows® 10 Enterprise (32-bit or 64-bit)</p>
Operating system (contd)	<p>Microsoft® Windows® Server 2008 R2 (32-bit or 64-bit): Standard, Web, High Performance Computing (HPC), Enterprise, and Datacenter</p> <p>Microsoft® Windows® Server 2012 (32-bit or 64-bit): Standard and Datacenter</p> <p>Microsoft® Windows® Server 2012 R2 (32-bit or 64-bit): Standard and Datacenter</p> <p>Microsoft® Windows® 7 and Server 2008 R2 are only supported on physical PC's not on virtual machines</p>
Software	<p>Microsoft® .Net 4.5.1 Framework</p> <p>Requires Operating System and Graphic Adaptor support for DirectX 9.0 or newer</p>

Computer running Smart Client, Smart Client - Player and Smart Wall - Using Hardware (System Requirements)

CPU	Intel CPU supporting Intel QuickSync, Intel GPU enabled in BIOS
RAM	Minimum 1 GB
Network	Ethernet 100 Mbit
Graphics Adapter	AGP or PCI-Express, minimum 1280 x 1024, 32-bit colors, DirectX 11.0 or newer
Hard Disk Space	1 GB free
Operating system	<p>Microsoft® Windows® 8.1 Pro (32-bit or 64-bit)</p> <p>Microsoft® Windows® 8.1 Enterprise (32-bit or 64-bit)</p> <p>Microsoft® Windows® 10 Pro (32-bit or 64-bit)</p> <p>Microsoft® Windows® 10 Enterprise (32-bit or 64-bit)</p> <p>Microsoft® Windows® Server 2012 (32-bit or 64-bit): Standard and Datacenter</p>

Microsoft® Windows® Server 2012 R2 (32-bit or 64-bit): Standard and Datacenter

Software

Microsoft® .Net 4.5.1 Framework
Requires Operating System and Graphic Adaptor support for DirectX 11.0 or newer

Computer running Web Client (System Requirements)

CPU

Intel Core2 Duo, 2.0 GHz
Intel Core i3-5010U 2.1 Ghz*

RAM

1 GB
4 GB*

Network

Ethernet 100Mbit / WiFi 2Mbit

Graphics Adapter

AGP or PCI-Express, minimum 1280 x 1024, 16 bit colors

Hard Disk Space

500 MB free

Operating System

Any capable of running the below browsers

Microsoft Internet Explorer® 9 or later**

Safari® 5 or later**

Browser	Google Chrome™ 16 or later Google Chrome™ 48 or later (recommended)* Mozilla® Firefox® 11 or later Mozilla® Firefox® 43 or later (recommended)*
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Device running Mobile Client (System Requirements)

RAM	2GB*
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Operating System	Android 5.0 or higher iOS 9.2 or higher
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Network	2G/3G (4G or WiFi)*
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Notes

*	Required for using Direct Streaming
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**	Not supported when using Direct Streaming
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Gallery

