Axxon Next 4.0 — Release Notes

08.04.2016 AxxonSoft releases version 4.0 of Axxon Next video management software with a number of new features fully capable of handling the needs for enterprise-class integrated protection of large, geographically complex sites.

Highlights of Axxon Next 4.0

Failover

Axxon Next 4.0 provides even greater reliability and fault tolerance thanks to failover capabilities. When configuring a system, the administrator can select a backup server that will come online in case of a failure in any running server.

Cross-System Client

Axxon Next 4.0 lets an operator or administrator of the security system simultaneously connect to multiple Axxon domains joining servers of various Axxon Next-based security systems.

Support for on-camera storage

Axxon Next 4.0 provides connection to disk storage controlled by cameras and video recorders in order to view the archive, export and copy (replicate) recordings to Axxon Next archive.

Events from external systems

Axxon Next 4.0 provides control over retail operations – the system synchronizes the cash register information with video sequences captured by a camera pointed at the cash register. Moreover, an operator of Axxon Next 4.0 can receive events from any Intellect object in real time and associate the data with recorded video. Axxon Next version 4.0 includes full support for events from access control, fire alarm and perimeter security systems.

License plate search in archive

Axxon Next 4.0 incorporates an algorithm for license plate recognition. These license plate numbers are saved to a database and associated with the relevant recorded video from several cameras. This feature is included in MomentQuest, i.e. it can be used in all cameras in security systems of any scale.

Face search in archive

Axxon Next features a face capture and search algorithm, that automatically detects a face in the field of view or in a provided video footage, and then searches for that same face in other video provided by networked cameras. Either face found in the archive or photo from external file can be used as an initial photo for face search. This feature is included in MomentQuest, i.e. it can be used in all cameras in security systems of any scale.

Tag&Track Pro

Tag&Track Pro allows operator to simultaneously get the «big picture» of everything happening at a protected site using a panoramic camera while obtaining detailed imagery of the objects moving around it using a PTZ camera that automatically follows each object.

Offline analytics

Axxon Next 4.0 lets you import any video footage and investigate it with Forensic Search. This feature is relevant for existing security systems with no archive analysis tools.

Macros

Macros are a convenient tool that allow specifying a series of actions for reacting to events or even combinations of events. With macros, users can create scenarios for auto response to specific events.

Metadata from IP devices

In Axxon Next 4.0 server can receive metadata from on-board analytics on IP devices. The CPU burden on the video server is significantly reduced, which allows the server to handle more video streams and so reduce the total number of servers in the system. Metadata is required for MomentQuest, TimeCompressor, Tag&Track, AutoZoom and other features.

MotionWavelet

Motion Wavelet is an efficient video codec based on wavelet conversion, providing more flexible selection of the quality of video to stream to remote clients. It offers additional options for Green Stream, the company's exclusive technology for dynamically selecting the smallest video stream with sufficient resolution without overloading networks or client CPUs.

More goodness

Server
- Video can be streamed from a server to clients over the UDP protocol; multicasting has been added.
- Backup & restore of configuration added.
- 64-bit support added.
- H.265 support added.
- H.264 support added to web server.
- Intel Quick Sync Video.
- Frames are dropped while recording because of lack of disk resources.
- Object trajectory databases are overwritten because of lack of disk resources.
- Range of port numbers can be selected.
- HotKeys support.

- Custom security keyboard support added.
- ONVIF Profile G support added and ONVIF driver implemented.
- TrayTool added – server can be restarted, client as well as activation and data collection utilities can be started from the system tray.

Video

- Situation analysis detection tools have been modified – video analysis has been improved.
- Live video buffering added.
- Configuring a large number of cameras of the same model added.
- Tag&Track Lite implemented: a camera in front of which an object may appear is auto detected and highlighted.
- Video can now be rotated by 90, 180 or 270 degrees.
- Merging video from multiple cameras.
- OnScreen PTZ mode added - PTZ cameras are controlled in a viewing tile.
- Video import from external systems for further analysis using Axxon Next tools has been added.

Archive

- Video stream can be selected for recording to the archive.
- Video archiving to network storage added.
- Video replication between archives implemented – continuous data replication from one archive to another within the security system.
- Time is now displayed for each object in the TimeCompressor mode.
- Object type (person, group of people or vehicle) parameter has been added to Forensic Search.
- Frame-by-frame backwards playback of archive has been implemented.

Export

- Instant export: an image or video clip can be exported in just one click during viewing of live video as well as when viewing archive video.
- The list of export formats has been extended: video export in AVI and EXE and frame export in PDF with template preset.
- Privacy masking has been added – part of an export data frame can be hidden.
- Video stream pruning is now enabled.
- Maximum video file size is now limited. If the size of exported data exceeds the set one, then several files are created.
- Exact date and export interval can now be set.

- Export from archives of multiple cameras is now enabled.
- Automatic snapshot printing while performing export has been enabled.

Layouts
- Video wall management mechanism has been updated: one of created layouts can be displayed on any monitor of any workstation connected to the server.
- Users can now share their layouts with each other.
- New information boards have been added: The Message Board enables operator to run macros manually when getting filtered events. The Web panel displays the specified web page on the layout.
- When connection is lost a camera is automatically replaced with a standby one on the layout.

Interface
- Discovery Tool panel has been improved.
- Archive configuration panel has been improved.
- Archive search panel has been improved.
- Layout configuration panel has been improved.
- Alarm management panel has been improved.
- Viewing tile has been improved.
- Objects panel has been added –it is possible to perform a quick search of and display any camera in the system.
- Activation utility interface has been improved.
- Alarms and triggering of detection tools are now displayed on the timeline in web client.

Rights and users
- Support for LDAP authentication.
- User rights have been modified: map access, device configuration and archive access rights have been added.
- PTZ control priority can now be selected by the user.
- Group rights for accessing devices can now be configured.
- Web server user rights are now supported.
- Automatic quit of the Client in case of user inactivity has been implemented; inactivity threshold is set manually.
- Operator audit trail has been added – the system log now contains all user actions.

Fixes

More than 150 bugs have been fixed in Axxon Next 4.0.

IP device support

The release includes Drivers Pack **3.37** for IP devices support. Detailed information about the Drivers Pack, where to find the latest set of drivers, and the list of supported hardware is available on the following page:

http://www.axxonsoft.com/integrated_security_solutions/supported_ip.php

Downloads and licensing

The Axxon Next installer includes both the client and server components. The client can be installed on a computer together with the server, or installed on a separate dedicated client workstation. There is no limit on the total number of servers and clients in a system.

5 Axxon Next license types are available: demo mode with limited operating hours, free version and 3 types of paid licenses (Start, Professional and Universe). Data on all the types of Axxon Next licenses is given on the page.
Free version supports 1 server, 4 video streams, unlimited archive as well as unlimited number of clients.

Learn more about Axxon Next on the product page at

 http://www.axxonsoft.com/products/axxon_next/

Updating from previous versions is not available. This feature will be implemented in version 4.1.

Product documentation

System Requirements

Axxon Next Installation Guide

Axxon Next Activation Guide

Complete Axxon Next 4.0 Documentation