AxxonSoft Validates Stream Handling Scalability of Axxon One VMS on Intel CPUs

Intel® Architecture

"The new collaboration between Axxon One VMS and the Intel® Data Center GPU Flex 140 allows the system to support over 300 video analytics feeds for smoke/fire/object detection with a 1920x1080 resolution, particularly enhancing capabilities for companies and organizations to manage and protect larger areas. This enhancement empowers customers to effectively ensure more comprehensive coverage. By offering sophisticated solutions, we aim to meet contemporary security needs and provide security professionals with advanced tools to maintain their edge."

— **Alan Ataev**
AxxonSoft CEO

About AxxonSoft

AxxonSoft is a developer of intelligent video surveillance solutions that make the world a safer place. The company's Axxon One Video Management Software (VMS) uses artificial intelligence, neural networks, and deep learning technologies and integrates with physical security systems and most CCTV cameras to provide complete video analytics and comprehensive security solutions for government, institutional, and commercial applications.

Axxon One Uses AI for Accurate Video Analytics

AxxonSoft's Axxon One intelligent video management software (VMS) is an edge-deployed VMS featuring video viewing and playback software suitable for a wide range of industries. The VMS is combined with AI-based video analytics functionality that is vertical-industry-specific. This industry leading video analytics capability makes the whole system strategic for public safety, smart city, and transport use cases.

With its intelligent video analytics, Axxon One provides the data needed for advanced security applications including recognizing number plates, detecting early fire conditions and other potentially dangerous conditions, and tracking specific objects. Axxon One is an open platform with a published API enabling integration with related systems to trigger events, alarms or create reports.

Making Video Security More Effective

Using the Axxon One VMS makes every video surveillance application more effective. Axxon One is especially impactful in smart city applications as a tool to ensure operational integrity, citizen safety, and the security of key sites. Other applications include retail, airports, banks / ATMs, education, sports and entertainment, casinos, transport and logistics, mining, utilities, oil & gas, manufacturing, and data centers.

Deploy with Confidence

AxxonSoft is working with Intel to deliver a high performance and scalable hardware platform using Intel® architecture CPUs and discrete graphics processor units (GPUs).

Axxon One was pre-validated on a hardware platform utilizing the latest Intel® Xeon® Scalable processors, a data center class CPU family delivering scale, performance and efficiency across a broad range of workloads.

The validated systems also featured Intel® Data Center GPU Flex 140 devices, the industry's most open GPU that is optimized for visual cloud workloads at the network edge including media streaming and AI visual inference. Compute power from Intel® architecture processors enables AxxonSoft to support large scale deployments with enhanced performance that often outperforms competitive discrete GPUs.

A subset of the system's use cases was validated by AxxonSoft, including motion detection, neural tracker, personal protective equipment detection, pose detection, neural counter, fire detection, and object tracker with neural filter. The validation exercise also established the number of video channels delivered in all the use cases, helping customers to size an Axxon One deployment accurately.

This validation gives customers confidence that they are buying the right system configuration to support the number of cameras and other devices that are part of the deployment.

Intel® Distribution of OpenVINO™ Toolkit

Intel® Distribution of OpenVINO™ toolkit is designed to accelerate the development of machine learning solutions. A tool suite for high-performance deep learning, the OpenVINO toolkit is aimed at delivering faster, more accurate results deployed into production across Intel architecture from edge to cloud.

The toolkit enables a write-once, deploy-anywhere approach to deep learning deployments on Intel platforms that optimizes performance and simplifies deployment.

Learn More

For details about Axxon One or other AxxonSoft VMS products, contact your Intel or AxxonSoft representative.

Read the AxxonSoft Performance and Validation Report for Integration on Intel® Xeon® Scalable-based rack server with Intel® Data Center GPU Flex 140.

To create an Axxonsoft solution with Intel 3rd Gen Xeon systems like those validated in the ISV Validation Lab report, please contact Intel OEM and system builder partners, including Velasea.

Learn more about: Intel® Partner Alliance

Why Validating Matters

By validating the Axxon One platform in the Intel lab, Axxon Soft has positioned its solution for:

Simplified AI deployment	**Cost-effective performance**	**Accelerated time to value**
An all-in-one preconfigured solution means no need to purchase and experiment with individual components.	The specified system has been tested and proven to deliver the right level of performance to reach desired deployment goals.	Ready-right-now DeepInsights enables fast, easy AI adoption to begin improving community safety upon implementation.

Count on a pre-validated solution to streamline deployment and simplify scaling. That's because optimizing hardware and software configurations in advance reduces risk and complexity, helping to ensure that an AI solution will deliver the right level of performance for the task at hand—from day one.

The AI Solution Validation Lab at Intel

Intel AI platforms offer open and modular solutions for competitive TCO and time to value that AxxonSoft needs to win in this competitive market. Intel backs up this technology with an AI solution validation lab that is a unique and comprehensive preconfigured, remote testing environment. Through the lab, participants have access to the latest hardware and chipsets, including 3rd Gen Intel® Xeon® Scalable processors and 4th Gen Intel® Xeon® Scalable processors. Intel engineers provide technical consultation and recommendations along with ongoing support throughout the validation process. On completion, the participant receives detailed performance reports and recommendations from Intel on the optimized platform that will best meet their customers' deployment goals for the AI solution.

Intel's AI Validation Lab featuring Intel® Xeon® Scalable dual CPU rack server

Features:	Products:
▪ Preconfigured remote validation lab	▪ Chassis: Intel® Xeon® Scalable-based rack server
▪ Configured multi-stream analytics	▪ CPU: 2x Intel® Xeon® Gold 6338N
▪ Access to the latest Intel® architecture platforms, accelerators, and enabling chipsets	▪ GPU: Intel® Data Center GPU Flex 140
▪ Complete system configuration for optimal recommendations	▪ Memory: Installed Physical Memory (RAM) 256GB
▪ Access to Intel consultation and enabling resources	▪ Intel® Distribution of OpenVINO™ toolkit