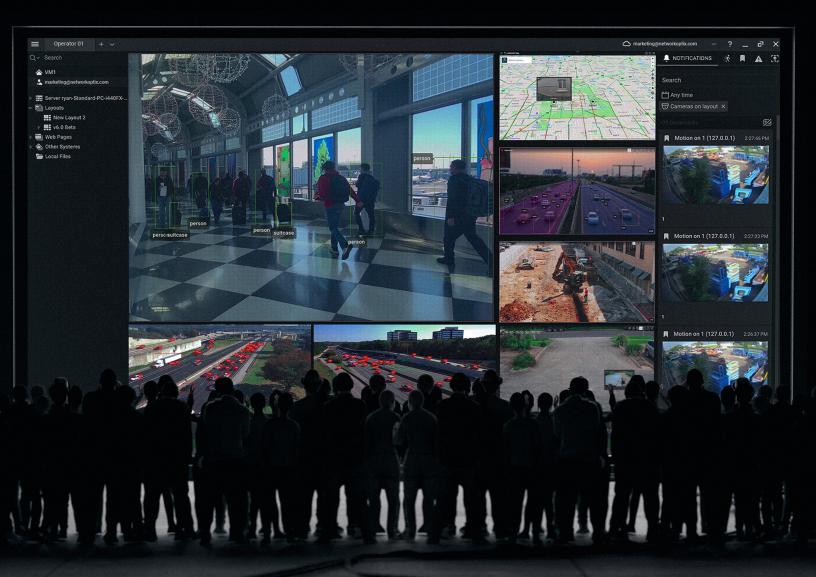# Nx Witness

Nx Witness VMS is a lightning-fast, easy-to-use, cross-platform IP video management system (VMS) / video surveillance software designed to discover, view, record, and manage IP video cameras so you can monitor, analyze, and react to critical events in real-time. Nx Witness is open and extensible with Cloud, Server, Desktop Client, and Mobile applications.

Cloud

A cloud-based service that enables simple, centralized remote access and insight into any **Nx Witness** system.

Server

A powerful, lightweight media server designed to discover, add, and manage system devices and resources.

Client

A rich media player with a flexible GRID interface designed for connecting to and managing an **Nx Witness** system.

Mobile

A mobile application for iOS and Android devices designed for remote viewing and control of **Nx Witness** systems.

Nx Maps

An intelligent Geographic Information System (GIS) mapping tool, Nx Maps enhances any Nx solution with advanced geolocation data visualization. It allows users to globally visualize their system within the Nx client, transforming users' ability to monitor and manage their IP devices - all through a simple, unified interface. With Nx Maps, users can add cameras to a GIS or image-based map, configure their field of view, apply color-coded markers, and launch cameras from the map.

Nx Connect

A comprehensive subscription management portal designed to streamline channel operations, enable new recurring revenue opportunities, and support sales growth for Nx resellers, system installers, and integrators. With Nx Connect, partners can enroll customers under their Channel Partner account, sell and manage services, and oversee billing and licenses—all within a secure, unified system.

Nx Witness Features

Fast Setup and Easy Maintenance:
- Rapid Installation: Set up your system in minutes.
- One-Click Updates: Apply organization-wide updates at the click of a button.
- Automatic Camera Discovery: Instantly discover and integrate cameras.
- Universal Compatibility: Supports all major brands of IP cameras.
- Server Hive Architecture: Ensures continuous operation with automatic camera failover in the event of server downtime.

User-Friendly Interface:
- Intuitive Usability: Simple and user-friendly controls to minimize the learning curve.
- Flexible Grid User Interface: Create unlimited customizable and shareable layouts.
- Cross-Platform Compatibility: Supports Windows, Linux, macOS, iOS, and Android.

Smart Search and Easy Export:
- Smart Search: Search Bookmarks, Objects, or Motion.
- Easy Export: Download and share detailed footage with a few clicks.

Hardware and Performance:
- Extensive Platform Support: Works with all major platform architectures - x86, ARM.
- Works with industry-leading AI chips from Intel, Nvidia, Qualcomm, Hailo and more.
- Validated Performance: Tested with industry leaders Dell and Seagate.
- Efficient Resource Utilization: Maximize your hardware capabilities with our server package.

Security:
- Industry Standard Encryption
- OAuth2 supported for any login
- TLS/SSL encryption: For communication between all components of the software stack.
- AES-256 encryption: For recorded video data to prevent unauthorized access.
- Audit trail: Maintain detailed logs of user activities and system events.
- Digital Watermarking: Add operator names to live, recorded, and exported video to prevent or discover leaked video.

Nx Toolkit

VIDEO SOURCE SDK

3rd Party Video Devices

The Video Source SDK provides the ability to integrate virtually any live or recorded video source (IP Cameras, NVRs, DVRs, etc) into System. It also allows integrating device I/O ports and motion detection information.

3rd Party I/O Devices

The Video Source SDK also provides the ability to integrate 3rd party I/O devices which can increase hard wire interoperability with 3rd party systems and connected devices.

STORAGE SDK [C++]

3rd Party Storage

The Storage SDK allows developers to read from or write to any storage location: local, remote, and cloud. Creating a storage plugin requires implementing standard functions such as: I/O stream, if file exist, delete file, list of files in the folder, etc.The Storage SDK also contains an example for using an FTP server as astorage location.

SERVER API [REST API]

Integrate ANYTHING using HTTP API Calls

A REST API that gives developers the ability to access almost every system feature available in the regular client: query/manage system resources (servers, cameras, users, permissions), pull live or recorded video out of System, generate events, create rules, control PTZ cameras, and more.

METADATA SDK

Create plugins that run on Nx Server

The Metadata SDK allows developers and tech partners to create installable Plugins for Nx Witness which run on the Nx Server application to create tight, seamless integrations. The Metadata SDK is focused on bringing object metadata from 3rd party Systems - like Face Recognition, Retail Analytics, License Plate Recognition, etc - to enhance both real-time system intelligence and post-event, post-capture video search and review.

For More Information:

NetworkOptix.com