

NETAVIS Observer 4.4

Live viewing

- Unlimited number of digital and analog cameras in arbitrary views from full screen to matrices with 10 by 10 images
- Named predefined and freely definable views with many different layouts
- Fully bidirectional audio communication with MPEG cameras (see also streaming formats)
- Dynamic view control based on events
- Smart guard™ round tours: Automatic round tours in the online monitor
- Cropping view ports for showing parts of camera images
- Zooming into camera views
- Switching of I/O contacts

Recording

- Recording of video and audio data in Motion JPEG, MPEG (MPEG-4 and H.264) and MxPEG formats
- Event- and time-based recording of single cameras and camera groups (e.g. triggered by alarms, motion detection, and external events)
- Holiday calendar function for special holiday recording scheduling settings
- Intelligent dynamic storage management with prioritization for important cameras
- Unique Timezoom™ function for fast archive search
- Segmented recording for high data security even in the case of hardware failure (RAID1)
- Zooming into recorded camera views
- Simultaneous replay of multiple cameras (in exports up to 16)
- Motion detection in the recording archive (MJPEG only)
- Optional display of video analytics information in the replay
- NEA portable external archive via eSATA incl. hot swap function
- Export of recordings in various formats (JPEG, AVI, SAFE)
- Export in password-protected manipulation-safe format including parallel multi camera exports of up to 16 cameras
- Zooming of camera views is possible in the export
- Documentation of recording archive access

Integrated video analytics

- Server-based object detection and tracking works with all camera models
- People and object counting with Smart Tripwire™
- Object tracking statistics (Visual statistics™ as heat map overlay)
- Export of statistics data
- Integration with event management system
- Performance optimization with multi-streaming from cameras ("dual streaming video analytics")
- Optional detection of camera covered, camera turned, camera defocused, loss of analog video signal on video server
- Human face detection module estimates age group and gender

Event and alarm management

- All events and alarms are stored in a powerful event database for documentation and subsequent retrieval
- Alarm notification via e-mail, SMS, SNAP XML integration and I/O contacts
- Programmable Event Management System (EMS)
- Free definition of event actions: Examples: start recording, switch cameras on the main monitor, send SMS or e-mail, switch I/O contacts, send messages to external systems, etc.
- Automatic starting of recording on events
- Replay of event-related recordings
- Video export of event-related recordings
- Video annotations with external data
- Interface for external events (SNAP and URL command API)
- Support for server-based and in-camera motion detection

Client technology

- Works in a standard web browser on standard PCs or mobile devices (no complicated installation or configuration necessary)
- Multi-monitor operation
- Support for monitor walls of security centers
- The user interface can be tailored for various user groups like administrators, security operators and business managers
- Automatic, fully transparent upgrades without user intervention
- Desktop clients available for MS-Windows and Linux (web-based)
- Client for iPad for mobile live streaming with full layout control and recording archive access
- Simple browser client for live streaming available for many mobile platforms
- Client on Server (direct connection of monitor to server, no additional client needed)
- Powerful server-based motion detection for all cameras
- Control of other functions with EMS-based motion detection events (e.g. dynamic live views, recording, PTZ control, etc.)

Privacy and Security

- Optional secure communication for camera, server and client connections via HTTPS (SSL)
- Recordings can be encrypted with state-of-the-art 128 bit AES encryption
- Privacy masking
- Documentation of recording archive access
- 4-eye principle for login with secondary password
- Audio distortion for recordings
- Single-point user management even for a distributed server network (support for Active Directory/LDAP)
- Detailed user and camera access rights (e.g. archive access, PTZ control, privacy features, etc.)

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Multi-server and multi-site management

The distributed server architecture allows the design and management of an unlimited number of sites, servers, cameras and users worldwide. Such distributed systems are very flexible because they can easily be extended by adding extra servers or clients. This scalable architecture allows you to build, operate and manage server clusters according to your business needs with minimal effort and costs. Servers do not rely on a central instance, so that a breakdown of one server does not affect the overall system.

- Flexible server networks with separate camera and user servers
- Geographically distributed server cluster possible
- Single-point server management by any client in the network for
 - User authentication management (support for Active Directory/LDAP)
 - Camera management including camera groups
 - Storage management, in case of a SAN/NAS Solution
- Bandwidth management for limiting video traffic on the LAN
- Transcoded video streams for high resolution video streams over low-bandwidth connections (ABS™)
- Automatic distributed server upgrades
- Failover cluster compliance
- Multi-segment network configurations per server
- Server monitoring with SNMP (OS level)
- Master licensing for a server network

Integration interfaces

- Many integrations with external applications and systems are available (e.g. security management, SCADA, access control, alarm systems, POS systems, etc.).
Please refer to our homepage for an actual list of available integrations.
- URL command API integration interface based on HTTP
- SNAP integration interface based on XML
- Integration of Observer video streams in standard web pages (Snapplet)
- SNAP SDK is available for Java and .NET
- Support for I/O contacts of cameras and other web I/O devices

System requirements and compatibility

Please visit our home page for an actual list of compatible devices and systems.

- Server: Standard Intel-based Redhat Linux ES server hardware
- Professional server Operating System (CentOS) included in every Observer bundled version.
- Storage: Standard hard disks, SCSI, NAS, SAN
- Clients:
 - Desktop: All Windows platforms and systems that are Java-enabled (e.g. Linux, Unix)
 - Mobile: special client for iPad and browser client for all other mobile platforms

Supported video sources

- Observer supports many IP cameras and video sources of the leading vendors (>25 vendors). Please visit our homepage for an actual list.
- Support for Full HD (1080) and all aspect ratios (incl. HDTV 16:9, 16:10, and proprietary m:n)
- Support for analog devices via video servers or video capture cards

Supported video streaming formats

- Motion JPEG (JPEG stream, no audio)
- MPEG-4 (incl. audio)
- H.264 (incl. audio)
- MxPEG (incl. audio)

PTZ support

- Full PTZ control in the online monitor with the mouse or USB joystick
- Preset positions and automatic PTZ routes
- Event-based PTZ control (e.g. with motion detection events)
- Priority-based PTZ handling (a high-priority user can overrule the PTZ activities of a lower-priority user)

Multi language

- Available in more than 20 languages (more are added, please check our home page for an actual list)
- Define the language at startup or change it in real time without restart

Further modules

- Layout Navigation Tool (LNT)
- Video Wall
- Number Plate Recognition (CarReader)