Netavis Observer 5.0

Full Feature List

Contents

1 Live monitoring

- 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
- Digital zooming in camera views
- Switching of I/O contacts

2 Event management

- All events and alarms are stored in a powerful event database for documentation and subsequent retrieval
- Alarm notification via e-mail, SNAP XML / SNAP URL integration, TCP message, and I/O contacts
- Event Management System (EMS) programmable
- Free definition of event actions: Examples: start recording, switch cameras on the main monitor, send e-mail, switch I/O contacts, send messages to external systems, etc.
- Rule administration for graphical configuration of event triggers and corresponding actions
- 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 XML and SNAP URL)
- Support for server-based and in-camera motion detection
- Manual export of event statistics, events including their parameters, and heat maps
- Automatic export and upload of event statistics, events including their parameters, and heat maps to Netavis sMart Data Warehouse and 3rd party systems

3 Archive

- Recording of video and audio data in Motion JPEG, MPEG (MPEG-4, H.264, and H.265) and MxPEG formats
- Permanent recording
- 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 (Netavis Software-RAID)
- Zooming into recorded camera views
- Simultaneous replay of multiple cameras (up to 4 in the archive, up to 16 in exports)

- Motion detection in the recording archive (MJPEG only)
- Optional display of video analytics information in the replay
- Portable external archive via eSATA incl. hot swap function (NEA)
- 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
- Archive Access within the Online Monitor's view port
- Archive Efficiency Feature for event-/iCAT-based and permanent recordings

4   iCAT video analytics

- Server-based object detection and tracking works with all integrated camera models
- People and object counting with Smart Tripwire
- Perimeter security with Smart Tripwire
- Heat maps of 4 types of analytics data: object count, object speed, stopped object count, object stopping time
- Manual and scheduled automatic reset of heat map data
- Normalization of heat maps across multiple servers
- 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
- iCAT Face Detection module also estimates age group, gender, and attention time
- iCAT Traffic analytics for highways, expressways, motorways, and tunnels
- iCAT Number Plate Recognition with support for plates from more than 60 countries
- iCAT Red Light Violation to detect traffic violations

5   External data sensors

- Integration of external data sensors (e.g. 3D sensors)
- Real-time processing of data for people counting, zone monitoring, queue management applications
- Configuration of thresholds to create alarm events
- Integration with event management system
- Interfaces for exporting data

6   Privacy and security

- Optional secure communication for camera, server and client connections via HTTPS (TLS)
- Recordings can be encrypted with AES encryption
- Privacy Mask
- Dynamic Privacy Mask
- 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.)
- Option to only read the country/region of a number plate
- Comment fields to document the application and responsible person for each camera

7   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.
- SNAP URL integration interface based on HTTP
- SNAP XML integration interface
- SNAP XML SDK is available for Java and .NET
- Integration of Observer video streams in standard web pages (Video4Web)
- Graphical I/O device administration for I/O contacts of cameras and other I/O devices
- Direct interface to Netavis sMart Data Warehouse

8   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 and application level)
- Master licensing for a server cluster

9   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)

10 Multi language

- Available in more than 20 languages
- Define the language at startup or change it in real time without restart

11 Client technology

- 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 Windows and Linux
- Mobile Client for many mobile platforms with multi-camera live views and recording archive access
- Client on Server (direct connection of monitor to server, no additional client needed)
- Dynamic view control

12 System requirements and compatibility

Please refer to the "Server, Client and Storage Compatibility and Requirements" document available on our homepage for detailed information.

13 Supported video sources

- ONVIF Profile S cameras
- Observer natively supports many IP cameras and video sources of the leading camera vendors. Please visit our homepage for the complete list.
- Generic RTSP Driver for many cameras which are not natively integrated in Netavis Observer
- Support for Full HD (1080), 4K, and all aspect ratios (incl. HDTV 16:9, 16:10, and proprietary m:n)
- Support for analog devices via video servers/encoders

14 Supported streaming formats

- Motion JPEG (JPEG stream, no audio)
- MPEG-4 (incl. audio)
- H.264 (incl. audio)
- H.265 (incl. audio)
- MxPEG (incl. audio)

15 Further modules

- Layout Navigation

- Video Wall
- iCAT Number Plate Recognition (CarReader)
- iCAT Sabotage Detection