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PRODUCT

AIVU-NVR

The software solution for professional digital videorecording

AiVu-NVR is the solution for acquiring and recording images from video sources such as IP video cameras and video servers.

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AIVU-NVR

HIGHER PERFORMANCE AND QUALITY

Designed for high-performance security solutions, AiVu-NVR is the software solution for the management of video streams in complex security systems, ideal for integration in large, multi-site architectures as well as for the complete management of medium to small systems with no need to install a video management system.

A user interface entirely developed using HTML5 and with no plug-ins required allows users to make their video security system fully operational in no time: thanks to simple installation and configuration procedures, users can access images from their browsers without any additional plugins or external programs.

The constant upgrade of the software guarantees the absolute protection of images and data from any external attack, in compliance with the latest cybersecurity standards: this is why AiVu-NVR is the video solution providing the highest level of cybersecurity on the market.

- Management of IP cameras and proprietary protocols of the leading manufacturers

- Support of ONVIF-S compliant cameras

- Transcoding of live streams and recordings with user-configurable parameters

- Codec support: MJPEG, H.263, MPEG-4, H.264, WebM

- Encryption of live streams and recordings to ensure maximum security and privacy

- Efficient re-coding for narrow-band connections

- Integration in IT infrastructures through API/SDK decoding libraries

- Interactive configuration via user interface or upload of .xls files

- Browser-integrated H264/WebM streaming with no need of plugins

- Integration with video analytics modules and support of on-board camera algorithms

CYBERSECURITY FIRST

MAXIMUM PROTECTION OF VIDEO STREAMS

The architecture of AiVu solutions includes a complete separation of the network segment to which video cameras are connected from the network providing access to the Internet.

Video cameras are connected to the AiVu-NVR device using dedicated network cards. Furthermore, the use of internal firewalls prevents any unauthorized or possibly harmful access from external devices.

The high security standards of AiVu-NVR allow access to video streams only through secure protocol such as HTTPS, SSH, SSL and VPN.

Video streams are encrypted, in compliance with applicable law with regard to data protection. Thanks to the AiVu-NVR software, any entry level camera can become fully-compliant with the laws on privacy.

Furthermore, AiVu-NVR and the video management application are connected through a dedicated, encrypted VPN providing a secure connection on any kind of network (e.g. a public WiFi).

But that's not it: the AiVu platform can be employed with the highest security even with video camera models deemed not secure due to the possible presence of backdoors.

Robustness

A hardware watchdog monitors the operation of the system, automatically restoring full operation in case of failures of the hardware devices. Furthermore, the software can generate alarms regarding anomalous or unexpected events.

Reliability

Aitek guarantees proper operation of its software, even in complex systems and critical infrastructures, eliminating any risk related to system crashes, failures and operating interrupts.

Cybersecurity

AiVu-NVR is designed to eliminate external attacks: all our solutions guarantee the software's incorruptibility and prevent outside access to video or the installation of malware. Furthermore, AiVu-NVR protects the system from malfunctions caused by unsafe cameras.

Support

Aitek guarantees technical support for all its products The complete backward compatibility of our solutions allows to upgrade any installation, thus always providing the highest reliability, security and performance.
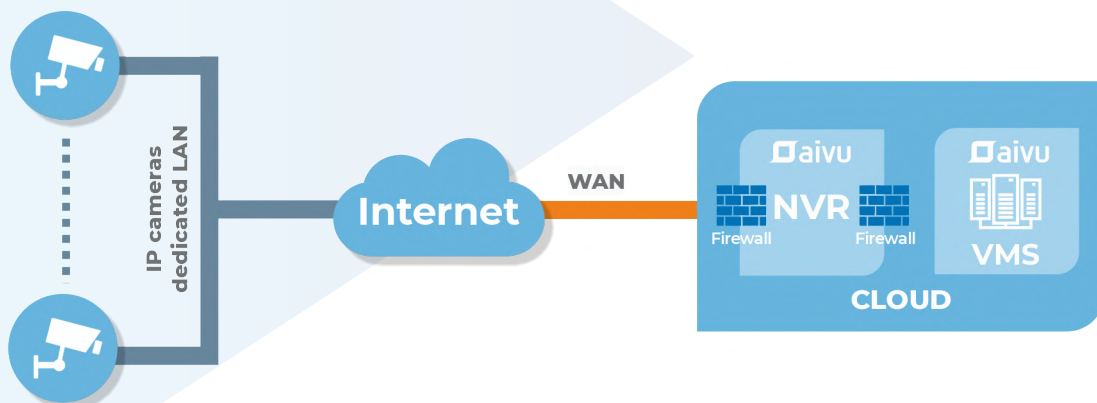
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AIVU-NVR FEATURES

One of the strengths of AiVu solutions is the complete protection of video streams. The video cameras can be "guarded" within a dedicated network that does not allow any external connections, and which can only be reached using the AiVu-NVR software.

ON-SITE ARCHITECTURE
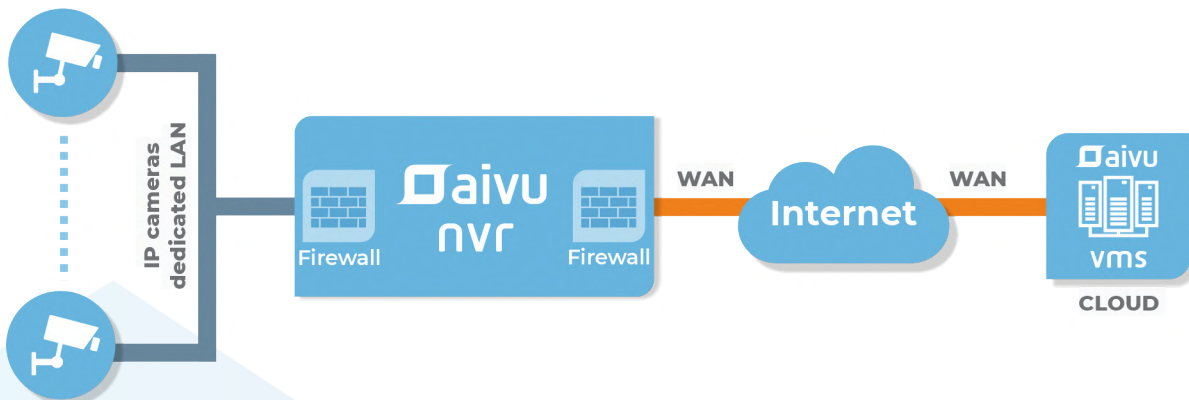
ON-CLOUD ARCHITECTURE

AiVu-NVR is conformant with ONVIF Profile S

ONVIF® | S

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AIVU-NVR FEATURES

User interface

A web interface accessible through any common browser allows access to all features for the remote management of a video security system.
Users can display live streams, send pan-tilt-zoom commands to cameras, browse and download recordings, manage decoders, take charge of alarms and more.

Real-time access to videos

The high performance of AiVu-NVR guarantees easy access to live and recorded streams, in HD quality or using on-the-fly transcoding, even over low-band connections, allowing to save time in recreating events and identifying offenders.
The user-friendly configuration interface reduces installation time and requires minimal staff training, while limiting maintenance costs.

Simple configuration of complex system

The user interface of AiVu-NVR allows to upload configuration parameters (as an .xls file) to further simplify and speed up the configuration of a video recorder: a few clicks is all it takes to simultaneously connect a large number of video cameras and completely configure an AiVu-NVR, without the need to repeat the same configuration procedure.

Faster and better video search

Searching and selecting video streams based on timestamps or camera names is a feature that makes using the system even easier, considerably reducing response times and making AiVu-NVR's interface a practical, easy-to-use, essential resource for security.

An "open" platform for great compatibility

AiVu-NVR has natively implemented protocols of the leading manufacturers of cameras and video servers, ensuring full compatibility and maintaining the high quality of acquired images and maximum performance.

Image access from mobile devices

Thanks to the latest HTML5 technologies and standard video codecs, AiVu-NVR supports the latest generation of operating systems. Access to the images is also possible from mobile devices, enabling users (e.g., security guards) to view images anywhere and anytime, with no need to constantly man control stations and with considerably shorter response times in case of critical situations.
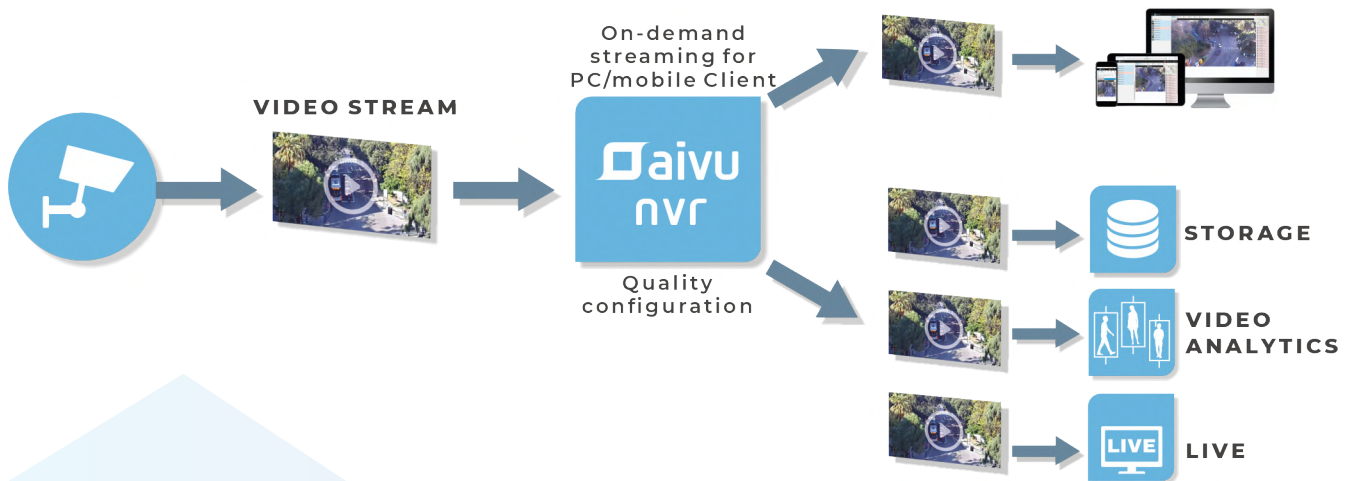
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AIVU-NVR FEATURES

▶ Video restreaming

The AiVu-NVR software provides the distribution of HD video streams, optimizing the required bandwidth from the video cameras to the AiVu client for image display. The restreaming technology allows to send on-demand video streams to clients with parameters that can be tuned based on the user's needs.


▶ Diagnostics

AiVu-NVR is equipped with diagnostic tools capable of detecting in real time failures of the connected video sources: video signal loss, network connection issues, devices that do not recording, I/O card management. All reports are collected and displayed in real time on the AiVu-NVR interface.

▶ Georeferencing of video stream

The AiVu-NVR video-recording software can be integrated with GPS systems. Each video stream can be identified by timestamp and geographic coordinates, allowing to reconstruct the route of vehicles on a map.

▶ *OPTIONAL*
Video analytics

AiVu-NVR can integrate the video analytics AiVu-Smart Modules platform for the processing of live and recorded streams. This video analytics algorithms detect in real time a wide range of events capable of affecting the security of monitored areas and related to people, objects or vehicles, but also acquire data useful for generating statistics and business intelligence analysis.
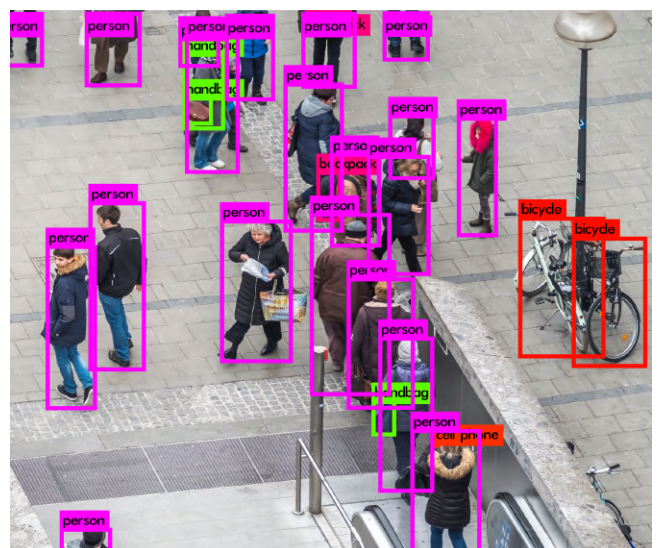
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AIVU-NVR TECHNICAL FEATURES

EMBEDDED SOLUTION

▶ Available as an appliance embedded on selected and certified physical hardware

▶ Aitek's own embedded Linux OS with encrypted file system featuring two backup operating systems

VIDEO INPUT

▶ Managing of video from IP cameras or encoders in MJPEG, H.263, MPEG-4, H.264 or WebM formats

▶ ONVIF-S standard certification

VIDEO OUTPUT

▶ Video streaming available in proprietary and ONVIF-S protocol

▶ SW video encoding application compliant with the MJPEG, H.263, MPEG-4, H.264, WebM standards

▶ Frame rate self-adjusting to optimize network bandwidth

VIDEO RECORDING

▶ Continuous recording

▶ Configurable max. retention time of recordings for each single video camera with automatic deletion

▶ Automatic overwriting of recordings

ALARM MANAGEMENT

▶ Alarm filtering based on the date / time and type of the event

▶ Marking of alarms with event timestamp, camera name, GPS coordinates, etc.

▶ Alarms can be display in real time on the AiVu-NVR interface or sent to third-party supervisory system

OPEN INTERFACE

▶ Export of reports via Modbus protocol over TCP, SNMP, JSON-REST, SDK

▶ Web interface based on HTTPS protocol and HTML5 plug-in free technologies

▶ SDK with support for Java e C in Linux e Windows environments

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