

# Software for Network Video Recording System Vectis HX Software

# V2.1.3



Vectis HX NVS SW 8 Vectis HX NVS SW 16 Vectis HX NVS SW 32 Vectis HX NVS SW 64 [Vectis HX NVS SW 128] [Vectis HX NVS SW 256]

Vectis HX software is a fully integrated, scalable network video surveillance package that is designed to be used with network cameras, video transmitters and digital video recorders. With Full HD capability, ONVIF support and H.264 streaming, Vectis HX is designed to control, monitor, record and play back network video streams seamlessly.

- Remote monitoring of live images in multiple Client systems via the network
- Up to 64 simultaneous IP camera connections (128 or 256 camera installation needs to be clarified with TCC before installing on-site)
- Remote software upgrades and system setup
- ONVIF2 IP-Standard Protocol implementation for the support of network cameras from Siemens and partially 3<sup>rd</sup> party manufacturers (e.g. Axis)
- Support of Siemens IP camera event management via ONVIF2 protocol
- Available compression modes: H.264, MPEG4 and MJPEG
- Compatible with Windows 7 (working as 32-bit application in 32-bit or 64-bit Operating System)
- Purpose built video database file system for storing captured video data
- Map monitoring of live images
- Bi-directional audio communication and recording
- Intelligent, centralised system operation and management for efficient event handling
- Comprehensive, intuitive graphical user interface and logical menu setup ensure training requirements are minimal
- Enhanced security
- Remote viewing software allows immediate secure access to the system over a network



# **Functionalities**

# ■ Administration Service

Manages information of other systems, devices, users and schedules for operating Vectis HX software.

#### ■ Recording Service

Pre-configured or instant recording of video transmitted from the network video device (i.e. IP camera).

# **■** Monitoring Service

Provides notification of both live, and recorded events that have been detected at the registered device in the Client system.

#### ■ Video Analytics Service

Enables video analytics functionality including loitering, as well as removed object detection.

# ■ Streaming Service

Simultaneously streams images from connected devices to multiple client systems.

# ■ Vectis HX Client Software

Live video monitoring, camera control, searching recorded video, data export, event handling, built-in map operation.

#### **■** Technical data

| Recording speed                  | lin. 100 ips overall, max. rate of ips is dependent on the PC model (for System Requirements see elow) individually configurable for each camera   |  |  |  |
|----------------------------------|--|--|--|--|
| Video inputs                     | 8 – 256 IP camera inputs via a network, (dongle for 8 / 16 / 32 / 64 / 128 / 256 channel version available), support for ONVIF protocol (version 1.0 & 2.0) [Remark: 128 and 256 channel version needs clarification with TCC first before ordering] |  |  |  |
| Supported IP cameras             | Actually only the new range of Siemens IP cameras is fully supported.  These models are: CxMx1025, CxIS1425, CxMx2025, CCID1445-DN18/28/36   |  |  |  |
| Video outputs / multi monitoring | Primary Monitor of PC (HDMI, DVI or VGA depending on PC in use)<br>Secondary Monitor depending on the type of graphic card inside the PC model (support of up to 4 monitors is possible)   |  |  |  |
| Audio inputs / outputs           | Over IP / Line Out of PC   |  |  |  |
| Alarm inputs                     | Optional module for 8 or 16 terminal, programmable as NC or NO → not supported yet, function is planned for a later version  |  |  |  |
| Video standard                   | PAL  |  |  |  |
| S erver cascadable               | Yes, to 1 ADMIN server, 63 sub-servers can be registered. The maximum cascadable cameras $4 \times 6 = 256$ cameras depending to the used dongles.<br>Up from V2.1: a maximum number of $4 \times 256 = 1024$ IP cameras can be registered           |  |  |  |
| Access to server installation    | Simultaneous access from up to 64 Clients to one server  |  |  |  |
| Resolution                       | IP-cameras: max. 5 megapixels depending on the camera, highest performance of the PC is require  |  |  |  |
| Compression                      | H.264, MPEG-4, MJPEG   |  |  |  |
| Network protocols                | RTP, RTSP, UDP, TCP  |  |  |  |
| Backup recording media           | Depending on the PC model, at least Network / USB / DVD burner   |  |  |  |
| Playback                         | Individual images, forward/backward, pause (frozen image), playback with up to 16 channels simultaneously from 1 DVR/NVR, playback with streams from more than 1 DVR/NVR simultaneously and timely synchronized is not supported                     |  |  |  |
| Image search                     | By means of date, time, camera number, recording event, logbook, motion/museum, text-in  |  |  |  |
| Language, selectable             | English, German, French, Italian, Spanish, Swedish and Czech, Standard-Chinese, Dutch, Polish, Portuguese, Russian (Danish, Finnish, Turkish in preparation)   |  |  |  |
| Security & Authentification      | Enhanced security using the SSL function and by setting up multiple user groups with different leve of user rights for each  |  |  |  |
| Quality of Service (QoS)         | Not supported yet  |  |  |  |
| Certificates / Approvals         | No dedicated approvals   |  |  |  |
| Encrypted export of recordings   | Yes, chained fingerprint   |  |  |  |
| PTZ control                      | Yes, in the software by Graphical User Interface (GUI). Up from V2.1: support of the Vectis HX IP Keyboard is available.   |  |  |  |

| Sabotage control for each camera                   | This is handled not by software, but by camera.  |  |  |
|--|--|--|--|
| Motion detection for each camera                   | This is handled not by software, but by camera based on ONVIF2 protocol. This function is supported up from V2.1.  |  |  |
| Intelligent Video Sensors / Software specification | The number of devices that can be supported for each option are as follows:  Camera Registration for a standalone software package (up to 256 cameras): monitoring service, streaming service, video analytics service and recording service is supported depending on its license and server system  Device Registration: Maximum of 1,024 devices  Recording (not supported for DVRs): Maximum of 8 to 256 channels depending on the type and number of connected WIBU-Key licenses  Streaming: The number of channels that can be streamed equals the number of channels that can be recorded  Video Analytics: Up to 8 channels per video analytics service are available. These include:  Trip Zone  Left Object Detection  Removed Object Detection  Loitering Detection |  |  |
| Limitations  | Max. number of users = unlimited   |  |  |
|  | ■ Max. number of user groups = unlimited   |  |  |
|  | Max. number of clients to one server = 64  |  |  |
|  | Max. number of device registration = 1024  |  |  |
|  | ■ Max. number of supported cameras = dependant to the used Dongle → 8, 16, 32, 64. 128 * or 256 *  |  |  |
|  | ■ Max. manageable storage capacity per server = 50 TB  |  |  |
|  | Support of NAS = planned for a later version   |  |  |
|  | Support of eSATA external Storage device = no  |  |  |
|  | <ul> <li>Support of iSCSI external Storage device = depends on the used Server PC and Storage device<br/>model, Storage device must be Windows OS compliant</li> </ul>   |  |  |
| Minimum Hardware requirements for<br>Server system | Operating system: Microsoft® Windows® XP x86 (32 bit) (Home Standard, Business, Ultimate, Enterprise), Microsoft® Windows® 7 x86 (32/64 bit) (Home Premium, Professional, Ultimate), Microsoft® Windows® 8 x86(32/64 bit) (Pro. Enterprise), Microsoft® Windows® Server 2003/2008  |  |  |
|  | ■ CPU: Intel i7 with > 2.6 GHz / Intel Xeon 3.0 GHz or faster  |  |  |
|  | RAM: 4GB or more   |  |  |
|  | ■ VGA: ATI Radeon <sup>TM</sup> HD2400 or NVIDIA GeForce FX5500, (ATI recommended) (1024x768 till 1920x1080, colour depth 24bpp or higher)   |  |  |
|  | ■ Hard disk drive: 50 GB or more free space, recommended = 500 GB  Internal Restrictions: 5 GB or more of free space are required for each service (for example, 10 GB or more of free space is required when installing administration and monitoring services)   |  |  |
|  | LAN: Gigabit Ethernet or faster  |  |  |
| Minimum Hardware requirements for Client system    | Operating system: Microsoft® Windows® XP x86 (32 bit) (Home Basic, Business, Ultimate, Enterprise), Microsoft® Windows® 7 x86 (32 / 64 bit) (Home Premium, Professional, Ultimate), Microsoft® Windows® 8 x86(32/64 bit) (Pro. Enterprise)   |  |  |
|  | ■ CPU: Intel Core II Quad 8200 2.33 GHz or Intel i5 / i7 with > 2.6 GHz  |  |  |
|  | RAM: 4GB or more   |  |  |
|  | ■ VGA: ATI Radeon <sup>HD</sup> 3650 or NVIDIA GeForce 8400GS, (ATI recommended) (1024x768 till 1920x1080, colour depth 24bpp or higher)   |  |  |
|  | ■ Hard disk drive: 25 GB or more free space, recommended = 250 GB  |  |  |
|  | ■ LAN: Gigabit Ethernet or faster  |  |  |

# Details for ordering

| Туре                         | Part no          | Designation                                      | Weight **     |
|------------------------------|------------------|--|---------------|
| Vectis HX NVS SW 8 cameras   | S54569-P851-A1   | Vectis HX software for usage with 8 IP cameras   | Approx. 0.2kg |
| Vectis HX NVS SW 16 cameras  | S54569-P851-A2   | Vectis HX software for usage with 16 IP cameras  | Approx. 0.2kg |
| Vectis HX NVS SW 32 cameras  | S54569-P851-A3   | Vectis HX software for usage with 32 IP cameras  | Approx. 0.2kg |
| Vectis HX NVS SW 64 cameras  | S54569-P851-A4   | Vectis HX software for usage with 64 IP cameras  | Approx. 0.2kg |
| Vectis HX NVS SW 128 cameras | S54569-P851-A5 * | Vectis HX software for usage with 128 IP cameras | Approx. 0.2kg |
| Vectis HX NVS SW 256 cameras | S54569-P851-A6 * | Vectis HX software for usage with 256 IP cameras | Approx. 0.2kg |

<sup>\*</sup> Order only on demand. Clarification with Technical Competence Center is mandatory (email: <a href="mailto:sp.support.de@siemens.com">sp.support.de@siemens.com</a>)

# ■ Notes for software installation

- o If an installed demo version should be updated to a full working installation whilst using a dongle, it is mandatory first to deinstall the demo version completely
- o This can be executed using the Windows function "System Software Add/remove programs".
- Afterwards the Vectis HX NVS software has to be installed from the CD, which is part of the delivery together with the new dongle.
- o Finally all site parameters have to be parameterized accordingly.

Further products and accessories can be found in the Internet: www.siemens.com/securityproducts

<sup>\*\*</sup> Device incl. packing material, accessories that are included in the delivery, and documentation

The information in this document contains general descriptions of technical options available, which do not always have to be present in individual cases. The required features should therefore be specified in each individual case at the time of closing the contract. © Siemens AB • Document no. A6V10356612• Edition: 01.2014 Siemens AB Infrastructure & Cities Security Products International Headquarters Englundavägen 7 SE-171 24 Solna Tel. +46 8 629 0300

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