

VERINT NEXTIVA VID-CENTER AND OP-CENTER MANAGEMENT SOFTWARE

TECHNICAL SPECIFICATIONS

SECURITY SYSTEM

DIVISION – 28 ELECTRONIC SAFETY AND SECURITY

LEVEL 1 __28 20 00 ELECTRONIC SURVEILLANCE

LEVEL 2 __28 23 00 VIDEO SURVEILLANCE

LEVEL 3 __28 23 19 DIGITAL VIDEO RECORDERS AND ANALOG RECORDING DEVICES

1.01 VIDEO MANAGEMENT SOFTWARE (VMS)

- A. The NVR shall be supplied with a client based software application that provides an easy-to-use graphical interface for the viewing, processing, playback and overall configuration of the system video processor.
- B. The VMS Software shall support an administrator and user level for remote access to the system. Only authorized access functions can be operated within these levels.
- C. The VMS Software shall support single sign-on methodology using Windows Active Directory that provides a method to restrict access to system resources by user logon.
- D. The NVR shall provide support for at least four simultaneous remote connections for live and/or playback of video without any local degradation to video recording rate and quality.
- E. The VMS Software shall support to locally buffer live and recorded video for faster video investigation in the already downloaded video.
- F. The NVR shall support identification of active users upon log on by the administrator.
- G. The on-screen display area shall include automatic tiling and sizing of up to 16 dockable camera windows.
- H. The VMS Software shall support Virtual DVR/NVR's that allow users to group 1 too many DVR/NVR's together and shall appear as if it is one complete DVR/NVR. This shall allow the user to connect to many DVR/NVR's without having to connect to each individually.
- I. The VMS Software shall support the ability to create groups of cameras from multiple DVR/NVR's (Virtual DVR) for display in up to 16 camera windows simultaneously.
- J. The VMS Software shall support the ability to create camera tours that allow the user to display multiple groups of cameras at a configurable display interval time.
- K. The displayable cameras shall be individually selectable or automatically displayed and scaled based upon available playback input channel video.
- L. The VMS Software shall support the ability to display thumbnail images for each camera of a NVR, providing a method for the user to easily drill down from 24hrs of video to 1 minute of video without the need to download whole video clips.
- M. The VMS Software shall provide the option for the display of 3 thumbnail images for each event stored in the NVR; these thumbnail images shall allow the user to easily investigate the event without the need to download the video clip. (See the events section for supported event types)
- N. The VMS Software shall have the capability to offload video from multiple cameras with a self executing standalone player. The executable files shall have the capability to be password protected. Double clicking the executable files shall start the playback of video.

- O. The VMS Software shall provide the ability to push firmware updates to the NVR.

- P. The VMS Software shall support all DVR/NVR programming functions including but not limited to:
 - a. Selection, addition and removal of remote accessible sites
 - b. Ability to select video input or inputs for live viewing
 - c. Ability to select video input or inputs for playback
 - d. Search for specific video images based upon time or date
 - e. Search for specific video images based upon transaction, number or event.
 - f. Program support for video recording modes
 - g. Programming of general, motion and event based recording
 - h. Scheduling of video image rates, resolution, and recording modes
 - i. User selectable resolution and quality settings
 - j. Network Throttling
 - k. Download buffering
 - l. Password Management
 - m. Time gap selection
 - n. Camera titles of 32 characters for each input
 - o. Alarm management, alarm system response and alarm scheduling

- Q. The VMS Software shall provide the means to view and download remote system properties showing the current set-up, programming and operational modes of the DVR/NVR including but not limited to:
 - a. Hardware version
 - b. Software version
 - c. Enabled system features
 - d. Number of cameras being used
 - e. Frame rate selection(s)
 - f. Motion recording mode
 - g. Compression resolution mode
 - h. Recording capacity modes and levels for short and long term settings
 - i. Drive information
 - j. Serial number(s)
 - k. Hard Drive SMART status
 - l. Disk free space
 - m. Data device connectivity

1.02 OPERATING HARDWARE AND SOFTWARE REQUIREMENTS

- A. The VMS Software shall be hosted on a commercial off-the-shelf computer that meets the following specifications or better:
 - a. Windows XP or Vista or Windows 7
 - b. Direct X version 9 or later (www.microsoft.com/directx)
 - c. Video adapter supporting at least 32 bit video (65,536 colors)
 - d. 10/100/1000 Ethernet Network interface port
 - e. 3GB of RAM
 - f. 256MB of Video Graphics memory
 - g. DVD or CD burner for offloading event video files (optional)
 - h. Free Hard Drive space for local video event storage (optional)
 - i. User log audit trail

2.01 ENTERPRISE MANAGEMENT SOFTWARE (EMS)

- A. The EMS Software shall provide a method for the user to download the following specific health and system properties on a scheduled basis; the user shall also have the ability to select which DVR/NVR's shall be included in each schedule. Each property shall have the ability to have its own schedule:
 - a. DVR/NVR Status Log, retrieves the basic status of items such as hard disk usage, hard disk temp, number of drives, camera status, firmware version, etc. This information shall be used to update dashboard.
 - b. DVR/NVR Audit Log, retrieves full audit information for each including but not limited to serial number, hdd serial number, average FPS, days of storage on drive, licensed features, etc. This information shall be used to ensure that the DVR/NVR's are configured and operation to expected customer standards.
 - c. Update of DVR/NVR firmware
 - d. Password Synchronization, update the DVR/NVR password to match database passwords.
 - e. DVR/NVR Time Synchronization, ensure that DVR/NVR time matches the EMS PC time
 - f. Event Download, download events and associated video to a central repository for later viewing.
 - g. Camera Image Capture, used to compare reference image with current camera image.
- B. The EMS Software shall provide a schedule task overview providing status of when the task was last run and whether the task ran successfully or not.
- C. The EMS Software shall provide an easy to understand dashboard view for the overall status of the DVR/NVR's being monitored. The EMS Software shall provide a visual traffic light type approach to display items that are either Critical(RED), need Attention(Yellow) or OK(Green) The dashboard shall display the following items as a minimum:
 - a. Hard Drive Status
 - b. Drive Temperature Status
 - c. Camera Status
 - d. Connection Status
 - e. UPS Health Status

The dashboard shall have an area to display alerts that have not been investigated.
- D. The EMS Software shall provide the user with a method to view the status of each DVR/NVR in the enterprise in a spreadsheet type view, the user shall have the ability to choose which status items shall be displayed and also determine the sort order. The EMS Software shall provide a way to filter the list of DVR/NVR's based on specific status types.
- E. The EMS Software shall provide the user with a method to view the collected audit information for each DVR/NVR in the enterprise in a spreadsheet type view, the user shall have the ability to choose which audit items shall be displayed and also determine the sort order.
- F. The EMS Software shall incorporate Crystal Reports for the purpose of generating Management Type Reports. The EMS Software shall have the following reports preconfigured and also support custom report creation:
 - a. Days of Storage
 - b. Last Status Error
 - c. Platform Version

- G. The EMS Software shall provide an Alert system which can be configured to email to either individual or groups of email addresses when one of the below status items change state:
 - a. Camera outage
 - b. DVR/NVR Connection problems
 - c. DVR/NVR not seen
 - d. Hard Disk temperature
 - e. Event occurred on the DVR/NVR
 - f. UPS Status

2.02 OPERATING HARDWARE AND SOFTWARE REQUIRMENTS

- A. The EMS Software shall be hosted on a commercial off-the-shelf computer that meets the following specifications or better:
 - a. Windows XP or Vista or Windows 7 or Windows 2008 Server
 - b. SQL Server 5 or SQLEXPRESS Version 5
 - c. Video adapter supporting at least 32 bit video (65,536 colors)
 - d. 10/100/1000 Ethernet Network interface port
 - e. 3GB of RAM
 - f. 256MB of Video Graphics memory
 - g. 500GB of Hard Drive space for Database