



Solus Appliance V6.3

Server Solutions for 8, 16, 24 and 32 Configurations DVTEL's Entry Level, Single Server Solution with RAID 5 Storage

DVTEL's Solus Video Management System (VMS) is an open standard, network based, turnkey software and hardware system that uses the latest technology advancements to deliver a user-friendly solution.

One package replaces the antiquated CCTV matrix switch, multiplexer, and DVR to give you a cutting-edge IP-based physical security solution.

The Solus Appliance VMS comes in 8, 16, 24 and 32 configurations, works with the most popular brands of IP cameras and encoders, and is ONVIF Profile S Conformant. With Solus VMS, you have a plug and play system without being locked into proprietary hardware.

Solus gives you the tools you need to view, capture, record, analyze, and store high quality video and audio. Anytime, anywhere.

Digital to its core, Solus can be digital or analog at the edge. You can view live and recorded images on a PC monitor or, using a decoder, on an analog CCTV monitor. You can control camera selection and PTZ camera operation from a PC keyboard and mouse, or from a traditional CCTV keyboard. The system accepts IP networked cameras or, any traditional analog cameras by using an encoder. Whether the data is analog or digital, the Solus VMS engine is 100% digital.

With four packages available, a solution that best fits the needs of the small to mid-sized user is easy.

Live video monitoring:

- Cameras can be monitored using computer monitors displaying the ControlCenter client application and analog monitors connected to the network via hardware decoders
- State-of-the-art on screen display applet is used for maximizing video real estate
- Multiple patterns of tile layouts include 4:3 and 16:9 aspect ratios for ControlCenter use
- Camera switching using a client PC mouse, PC keyboard or CCTV keyboard
- Camera sequences
- Supports remote viewing over the internet using the Gateway and Transcoder services

- Robust with RAID 5 storage
- Bundled rack mount server solution includes
 user connections, 2 keyboard connections and 8/16/24/32 channel connection licenses
- Supports multiple video compressions including
 H.264, MPEG4 and MJPEG
- Greater flexibility in viewing, recording and exporting audio and video
- Integrates with existing legacy CCTV equipment and hundreds of 3rd party
 IP cameras and encoders
- Provides multi-level user access rights
- Interactive system administration dashboard
- Thin web client provides quick and easy access to live and recorded video



VIDEO INNOVATION TO SECURE YOUR BUSINESS



Live audio monitoring:

- Audio inputs, such as microphones, can be monitored using computer speakers on the ControlCenter client workstation. They can also be monitored using audio outputs such as speakers, connected on the network via audio hardware decoders
- Audio inputs can be linked to video cameras for combined audio-video monitoring or be monitored independently

Recording:

- Record video from any supported camera or edge device in any resolution and profile
- Record independent or video linked audio inputs
- Support for multiple recording triggers: manual, schedule, alarm-based, motion-based and event-based. These recording reasons are saved as part of the clips' metadata
- Dynamically change record settings based on motion, alarm or other events
- Support for pre and post-alarm and pre and post-event recording
- Control the recording retention time how long clips remain archived before being overwritten - per camera and per type of recording trigger
- Lock clips that should be kept indefinitely
- Recording profiles and schedules can be set individually per stream (audio or video)

Playback from archive:

- Support for multiple concurrent video and audio playback sessions
- Archives can be queried based on scenes; date and time; recording reasons/triggers; bookmarks and incidents; motion smart search and other motion search methods
- Increase or decrease playback speed and use reverse playback to examine clips from end to start. Support for frame by frame playback

- The ControlCenter timeline provides a visual indication of the current frame's time and postion, the playback speed and metadata such as recording triggers and bookmarks
- The ControlCenter timeline provides video and audio clip navigation capabilities such as jumpto-time, change of speed and direction, change of timeline resolution and more

Export:

- Video and audio can be exported to a DVTEL proprietary file format, providing an encryption protected SHA-1 digital signature for evidence management purposes
- Video can be exported to an AVI file using industrystandard codecs, with or without audio
- Audio can be exported in a standard WAV format
- ControlCenter supports exporting clips for burning to a DVD with a copy of the standalone DVTEL proprietary player
- Mass export functionality optimized for high-speed export of massive amounts of data
- Background export functionality provides a cost effective solution for long term retention of video and audio footage, allowing to configure automatic schedules for copying footage from the archiver's primary storage to a secondary storage place

Video matrix:

- Support PTZ user hierarchy to determine which users have priority over other users when controlling PTZ cameras
- Camera switching from any keyboard or workstation to any viewing tile or analog monitor the system sequences
- Salvos available with layouts in ContolCenter or groups of analog monitors
- Guard tours (layout tours)
- Complete PTZ control, including control of presets, patterns, auxiliaries, PTZ lock
- CCTV keyboard support

Events and actions:

- Event logging within the audit trail database
- Support for automatic execution of actions in response to events





Event logging and reporting:

- Solus automatically supports auditing of many types of events into an audit trail database
- Support for user selectable event-type logging
- Recorded events include date, time and other relevant fields of information
- Reporting tool provides means for creating multiple types of reports, based on time criteria set by the user and allows the user to view, print and export the reports
- Alarm history can be queried and displayed in ControlCenter

User management:

 Solus VMS supports user management capabilities, security authentication and privileges

Motion detection:

- Motion detection is supported in the following modes:
 - Full screen or zones on the archiver, for all DVTEL IP cameras and encoders, exluding the value line cameras
 - Edge based motion detection with zones for most of the 3rd party edge devices as well as DVTEL cameras
- Motion smart search, allowing the user to define a region of interest to query the system for all the motion incidents that have occurred in that region during a certain time period

Remote connectivity:

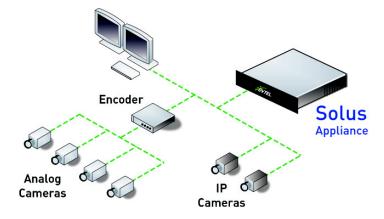
- Users can connect to multiple Solus systems from a single client application
- Thanks to the Gateway and Transcoder server, video can be viewed even over limited bandwidth connections, even when connecting over the internet

Unified ioimage analytics:

- Inherent support for ioimage analytics
- Receive analytics events and alarms in ControlCenter
- View ioimage analytic detections marked with OSD on the video
- Arm, disarm and clear events from ioimage analytics device

Advanced alarm management:

- Support for creation and configuration of an unlimited number of alarm types
- Alarms can be triggered automatically by the system in response to any event, according to the administrator's definition
- Alarms can be triggered manually by users
- Alarms can be sent to multiple recipients, either simultaneously or based on pre-defined, alarm-typespecific recipient priorities
- ControlCenter displays an alarm list with detailed alarm states and history as well as various other alarm indications, including sound
- Situational awareness: using MapBuilder the user can generate maps with alarm icons that display the alarm status
- Alarm can be displayed with color coding to help operators quickly determine the level of urgency
- Alarms may display video and audio content to the user, including live and archived footage and maps.
 Alarms can also be associated with a pre-defined procedure URL page
- ControlCenter can display footage of multiple alarms concurrently in different tiles, in block or Salvo modes
- Collaboration for operator groups: each operator can accept forward, snooze or clear an alarm
- Alarms can trigger recording of pre-alarm and postalarm periods, if defined
- Alarm recording is marked with automatic bookmarks
- Recorded alarm clips can be searched by recording reason or bookmark text



Typical Solus Appliance VMS Configuration





System components*: Services

- Directory the system's central administration and configuration database
- EventDistributor (EDB) intelligent rule based switching of events and actions
- Archiver records video, audio and metadata and manages edge devices
- SafeRun watchdog service
- Gateway and Transcoder for remote connectivity, usually over the internet or limited bandwidth connections
- Web server allows user to monitor video from web clients

Client Applications*

- ControlCenter the operator command and control interface and a player for live, archived and exported multimedia and case management
- AdminCenter the system configuration interface
- Thin Web Client view live and recorded video and control PTZ from an Internet Explorer and Firefox browsers
- Quick ControlCenter "canned" version of ControlCenter that doesn't require an installation

VMS solution includes:

- Feature Rich Software enterprise level features and functionality in an SMB package providing ease of installation, training, maintenance and usability
- Hardware workstation and storage included (see specifications)
- Keyboard Connections 2 keyboard connections included

- Camera Connections 8, 16, 24, 32 channel systems
- User Connections 54 user connections included, not to exceed 10
- Documentation Solus VMS manuals and guides
- Reporting Tool included in base license

Solus Appliance specifications*:

- Platform Rack Mount DVTEL USS SMB Elite, powered by Dell
- Operating System Windows® Server 2008, 64 bit
- CPU Quad-core Intel® Xeon® processor
- Memory 8 GB
- Database SQL Express 2008, included with the Solus VMS software
- Hard Drives RAID 5 with enterprise grade hard drives 3/4/6/8TB for SOLUS-RMHW-8/16/24/32 respectively
- Storage Capacity: 2/3/4/6 TB for Solus-RMHW-8/16/24/32 (150GB reserved for system)
- Onboard sound card
- Two network ports



* ControlCenter clients should be installed on a separate machine

Ordering Information

	Solus VMS 8	Solus VMS 16	Solus VMS 24	Solus VMS 32
Number of Channels	8	16	24	32
Option to Add 8 SW Channels (not to exceed 32)	+8	+8	+8	N/A
Storage Capacity (Net)	2TB	3ТВ	4TB	6TB
Part No. for Solus VMS V6.3	SOLUS-RMHW-8	SOLUS-RMHW-16	SOLUS-RMHW-24	SOLUS-RMHW-32
Part No. for Option to Add 8 SW Channels	SOLUS-8-CAM	SOLUS-8-CAM	SOLUS-8-CAM	N/A
Part No. for User Pack Adds 5 Licenses (not to exceed a total of 10 per system)	SOLUS-USR-UPG-5	SOLUS-USR-UPG-5	SOLUS-USR-UPG-5	SOLUS-USR-UPG-5
Part No. to Upgrade Solus to Latitude NVMS V6.2 Classic (1 required per 8 channels)	1 x SOLUS-8STC-UPG	2 x SOLUS-8STC-UPG	3 x SOLUS-8STC-UPG	4 x SOLUS-8STC-UPG

