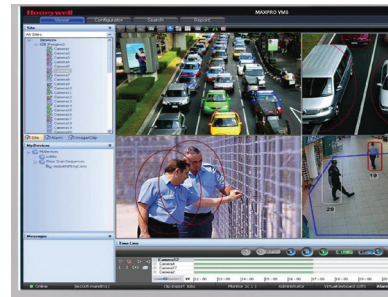# MAXPRO® VMS

Video Management System

Honeywell's MAXPRO VMS (video management system) controls multiple sources of video subsystems to collect, manage and present video in a clear and concise manner. MAXPRO VMS intelligently determines the capabilities of each subsystem across various sites, allowing video management of analog or digital video devices through a unified configuration and viewer. The subsystems can be analog matrix switches or digital/network video recorders allowing both analog or digital input to be viewed on an analog or digital monitor. Users can benefit from using traditional analog systems and IP-network systems at the same time to ensure maximum use of their initial investments. These subsystems range from Honeywell matrix switchers, DVR/NVRs and 3rd party systems.
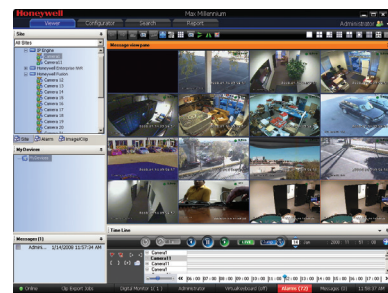
MAXPRO VMS supports emerging technologies in the industry, like 4K resolution, H.265 video compression codec, multi-imager cameras and fisheye cameras. Customers can fully utilize the advantages of superb video quality with 4 times the details over 1080p HD, 30%~40% less storage expense (when compared to H.264 compression), and seamless 180° and 360° surrounding surveillance. Furthermore, MAXPRO supports the native integration with Honeywell equIP® series IP cameras. The advanced camera features, like "Click & drag" 3D PTZ control and intelligence events, help surveillance operators to efficiently protect people, property and services.

Maxpro has database redundant and 1+1/N+M NVR failover features for unforeseen/maintenance scenarios in enterprise and critical infrastructure applications. Once there is a failure on NVR equipment, system database or network, the redundant and failover feature can continue to support the system functions with minimal interruption. Incidents will be reported in a system log for future auditing and reporting.

Control of MAXPRO VMS can be through a traditional joystick controller, mouse or even through third party interface. The extremely powerful rules engine (Macro's) allows customization of the system to respond and control in the best possible manner for the application. MAXPRO VMS is highly scalable so users can easily expand their video surveillance network from small to medium single instances to enterprise level supporting thousands of devices. Additionally, MAXPRO VMS includes integration with Honeywell's Pro-Watch® security management system, Active Alert® and People Counter video analytics, as well as other Honeywell products and solutions. The feature-rich user interface truly offers a unified management platform across many disparate systems to further embody Honeywell's concept of "Learn One, Know Them All."

MAXPRO VMS Client Viewer 2x2

MAXPRO VMS Client Viewer 4x4

MARKET OPPORTUNITIES

MAXPRO VMS is ideal for facilities requiring at-risk critical infrastructure protection such as airports, seaports, large multi-site commercial buildings, casinos, and other high-profile facilities. It is the perfect client-server video management solution for locations requiring the use of both digital and analog technologies.

MAXPRO® VMS

Video Management System

FEATURES

- Feature-rich and user-friendly Client interface to view video from numerous different recorders from a single point

- Role-based operator privileges

- Web client option for simple, no license, no software install applications

- Redundant server option increases system reliability

- Operators can log on using their local language and the built-in messaging system allows operators to share video scenes via instant messages

- Auto-discovery of cameras connected to supported recorders

- An extremely powerful macro programming language is available to fully customize actions based on events

- A single MAXPRO Server can support numerous recording sub systems (NVR/DVRs)

- Remote monitor feature allows controlling all monitors from a single client (Monitor Wall control)

- 1+1/N+M MAXPRO NVR failover and failback automatically or manually. View and playback on one client panel

- Surrounding cameras mode with presets, makes following subjects of interest simple and efficient by allowing the nearest camera of interest to be immediately in view

- Honeywell H.265, multi-imager, thermal and explosion-proof camera support

- Quick and responsive alarm actions can be initiated from the preview pane options

- Incident management mode allows creating a single clip with multiple cameras at different times that can be played back sequentially or simultaneously through a salvo layout

- Remote monitor mode allows sharing and controlling a remote monitor while still viewing locally

- Ability to investigate events and alarms by simultaneously viewing alarm video at various stages. For every alarm, users can view the video captured during pre-alarm, on-alarm, post-alarm, and also view live video from the camera which triggered the alarm through a single 2x2 salvo.

- Commentable bookmarks allow users to tag scenes of interest to easily return to the scene

- Control any analog or digital monitor from a single workstation or joystick keyboard. Allows the system to be used as a true analog and digital matrix.

- Innovative "One-Click" or "Mouse Drag" 3D PTZ control experience that does away with legacy PTZ controls of continuous clicking

- Intelligence events from cameras can be viewed at the alarm panel and trigger event recording on MAXPRO NVRs for further investigation

- 360° de-warping "spreads" the distorted fisheye image into natural panoramic and/or multiple tile views. Operators can view and focus on zones of interest on live and recorded video.

- Honeywell Video analytics integration

- Enriched video viewing experience through intuitive video rendering engine optimizes CPU utilization by altering the video frame rate and GPU rendering support for H.264 and H.265 decoding reduces the number of workstations needed for monitoring large sites with 30+ cameras.

- Search and find video through event view or timeline. Preview search allows viewing a snapshot at various times to quickly narrow the scene of interest.

- Synchronous playback across MAXPRO NVRs for efficient cross-site investigation

- Distributed architecture in the form of multiple MAXPRO servers in a Parent Child topology facilitates "Enterprise" style deployment

RECOMMENDED HARDWARE SPECIFICATIONS

MVMS R450 MINIMUM WORKSTATION SPECS	2 MONITOR WORKSTATION	4 MONITOR WORKSTATION
PROCESSOR	Intel Core i7-6700, 3.4GHz	
OPERATING SYSTEM	Microsoft Windows® 7 Professional and Windows® 10 Enterprise 32-/64-bit	
COMPUTER TYPE	Workstation	
SYSTEM MEMORY (RAM)	8 GB	
DVD DRIVE	DVD +/- RW	
DISK	500 GB 7200RPM SATA3	
VIDEO ADPATER	Integrated Intel HD graphics 530 or NVIDIA Quadro NVS 300 512 MB	Integrated Intel HD graphics 530 and NVIDIA Quadro NVS 315 1 GB PCIE x 16 LP
NETWORK CONNECTION	1 Gbit/sec or greater	
VIRTUAL ENVIRONMENT	Virtual environment not supported on Client machines	

For detailed recorder versions, hardware and software compatibility please check the following link
http://www.security.honeywell.com/hota/compatibility/index.html

MAXPRO® VMS

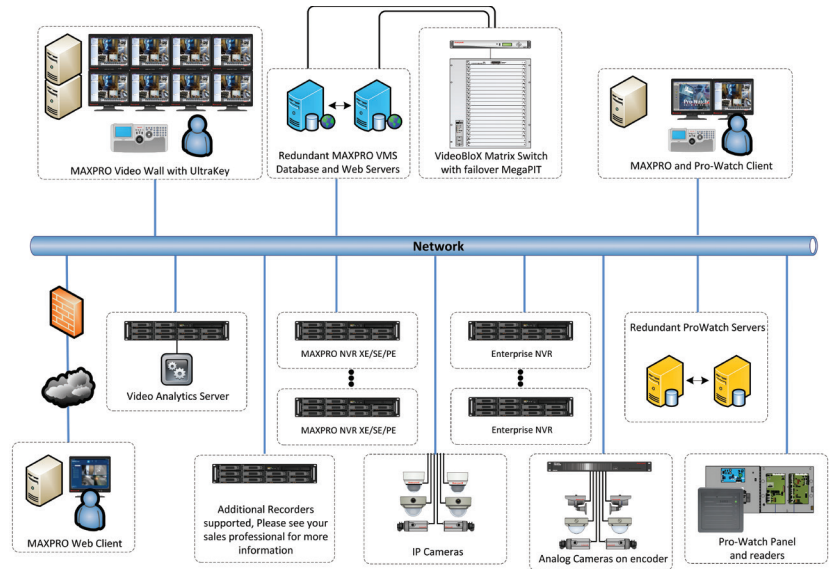Video Management System

ARCHITECTURE

MAXPRO VMS is based on client-server architecture for maximum flexibility, customization and integration. It offers one–click migration support from analog matrix systems. The MAXPRO VMS client enables the monitoring of sites and the configuration of video devices such as cameras, monitors, keyboards, etc. The MAXPRO VMS server consists of the MAXPRO VMS framework controller and database, and other core components.

This diagram illustrates the MAXPRO VMS architecture and associated components.

Cyber Security Features

- Enhanced password security – non-recoverable passwords, enforcing complex passwords, password expiry, and no default passwords
- Addressed Unauthenticated/Unauthorized channels
- Secured firewall configuration
- Secured Web client – enabled HTTPS and SSL, and protection from CSRF and XSS attacks
- Restricted folder and Registry access to operators
- Secured Assemblies – Digital signing

MAXPRO VMS Typical System Design – R450

MAXPRO Video Wall with UltraKey | Redundant MAXPRO VMS Database and Web Servers | VideoBloX Matrix Switch with failover MegaPIT | MAXPRO and Pro-Watch Client

Network

Video Analytics Server | MAXPRO NVR XE/SE/PE | Enterprise NVR | Redundant ProWatch Servers | MAXPRO NVR XE/SE/PE | Enterprise NVR

MAXPRO Web Client | Additional Recorders supported, Please see your sales professional for more information | IP Cameras | Analog Cameras on encoder | Pro-Watch Panel and readers

RECOMMENDED HARDWARE SPECIFICATIONS

MVMS R450 MINIMUM SERVER SPECS	STANDARD SPEC UP TO 5 CLIENTS	PERFORMANCE SPEC 10 CLIENTS	PERFORMANCE SPEC 25 CLIENTS AND GREATER
PROCESSOR	Single Intel® Quad Core Xeon E3 1225V3 3.2GHz S1150	Single Intel® 6 Core Xeon E5 2630V2 2.6GHz	Dual Intel® 6 Core Xeon's E5 2630V2 2.6GHz
OPERATING SYSTEM	Microsoft Windows® 2012 Server STD 64-bit, or 2008 Server R2 STD SP1 64-bit		
COMPUTER TYPE	Server – dual power supply suggested		
SYSTEM MEMORY (RAM)	8 GB	16 GB	32 GB
DVD DRIVE	DVD +/- RW		
DISK	Two separate hard drives or two sets of RAID arrays		
	Disk/RAID set 1 utilizes 10K RPM SATA 150 GB or 10K-15K RPM SCSI 146 GB for Windows operating system, MAXPRO VMS Server Software, and Microsoft SQL Server software		
	Disk/RAID set 2 utilizes 10K RPM SATA 150 GB or 10K-15K RPM SCSI 146 GB for MAXPRO VMS database files and Microsoft SQL Server database files		
	Note: If fault tolerance is required, RAID set 1 is RAID 1, 10 or 0+1 and RAID set 2 is RAID 10 or 0+1		
VIDEO ADAPTER	Display Adapter with Video resolution 1024x768 pixels; 32-bit color or higher		
SERIAL PORTS	Only required if serial device are to be connected - Suggested 8 Port MOXA PCI-e serial RS232		
NETWORK CONNECTION	1 Gbit/sec or greater		
VIRTUAL ENVIRONMENT	VM Ware ESXi version 5.5, vSphere and Hyper-V		

MAXPRO® VMS

Video Management System

ORDERING

MAXPRO VMS - PART NUMBERS AND LICENSING	
MAXPRO VMS - BASE SOFTWARE AND LICENSES	
HNMSWVMS	VMS Base Software includes: MAXPRO VMS, SQL 2014 Express, includes Licenses for One (1) MAXPRO VIEW Client, with 64-channel interface to MAXPRO NVR Series, IP Engine, Enterprise NVR, MAXPRO-Net and VideoBloX Matrix Switch. (Add "-B" to P/N for redundant server licenses)
SSAHNMBASE	Annual software support agreement - MAXPRO VMS Base software
MAXPRO CLIENT LICENSE – ONE LICENSE PER CONNECTED WORKSTATION (CLIENT APPLICATION CAN RUN MULTIPLE INSTANCES) (ADD "-B" TO P/N FOR REDUNDANT SERVER LICENSES)	
HNMSWCL	MAXPRO View - Single Client License
SSAHNMW1	Annual software support agreement - Single (1) Client
SSAHNMW5	Annual software support agreement - Five (5) Client
SSAHNMW10	Annual software support agreement - Ten (10) Client
MAXPRO VMS BASE CHANNEL LICENSE (ADD "-B" TO P/N FOR REDUNDANT SERVER LICENSES)	
HNM64	Additional 64 Base Channels
HNM128	Additional 128 Base Channels
HNM192	Additional 192 Base Channels
HNM256	Additional 256 Base Channels
HNM384	Additional 384 Base Channels
HNM448	Additional 448 Base Channels
HNM512	Additional 512 Base Channels
MAXPRO VMS WITH ACTIVE ALERT® VIDEO ANALYTICS - ONE LICENSE PER ANALYTICS CHANNEL	
HNMHVAB	HVA - Base Package
HNMHVAS	HVA - Standard Package
HNMHVAP	HVA - Premium Package
HNMHVASI	HVA - Smart Impressions
HNMHVAPC	HVA - People Counter

MAXPRO VMS LITE - PART NUMBERS AND LICENSING	
MAXPRO VMS LITE - BASE SOFTWARE AND LICENSES	
HNMSWVMSLT	MAXPRO VMS Lite Software includes: MAXPRO VMS, SQL 2012 Express, includes Licenses for One (1) MAXPRO VIEW Client, with 64-channel interface to MAXPRO NVR Series, IP Engine, Enterprise NVR, MAXPRO-Net and VideoBloX Matrix Switch. Expandable up to a maximum of three Clients and 128 Channels. No third party adapter support. (Add "-B" to P/N for redundant server licenses)
SSAHNMLT	Annual software support agreement - MAXPRO VMS Lite software
MAXPRO VMS LITE BASE CHANNEL LICENSE - ONE LICENSE PER VIDEO INPUT	
HNM64	Additional 64 Base Channels
MAXPRO VMS LITE UPGRADE	
HNMUG	Upgrade MAXPRO VMS Lite to MAXPRO VMS

MAXPRO VMS VERSION RECORDER COMPATIBILITY				
RECORDER MODELS	R450 B455 CURRENT RELEASE	R410 B424 PRIOR RELEASE	R310 B326 PRIOR RELEASE	R300 SP2 B215 PRIOR RELEASE
MAXPRO NVR	✓	✓	✓	✓
MAXPRO VMS (VMS IN VMS)	✓	✓	✓	✓
ENTERPRISE	✓	✓	✓	✓
IP ENGINE	✕	✕	✓	✓
RAPIDEYE™	✓	✓	✓	✓
FUSION	✓	✓	✓	✓
HEN*2 EMBEDDED NVR	✓	✕	✕	✕
HRDP H.264	✓	✓	✓	✓
HRDP MPEG4	✓	✓	✓	✓

✓ Supported　　✕ Not Supported

For more information

www.honeywell.com/security

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