# MAXPRO® VMS



Video Management System

MAXPRO VMS

Honeywell 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 third-party systems.

MAXPRO VMS supports emerging technologies in the industry, like 4K resolution, H.265 smart video compression codec, multi-imager cameras and fisheye cameras. Customers can fully utilize the advantages of superb video quality with four times the details over 1080p HD, 30%~50% less storage expense (when compared to H.264 compression), and seamless 180° and 360° surrounding surveillance. Advanced camera features, like "Click & Drag" 3D PTZ control, license plate recognition, intelligence events and bounding boxes on objects detected by specific video analytics, 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.

MAXPRO VMS, combined with Honeywell's Intelligent Command's powerful webbased platform and intuitive graphical interface, allows greater unified command and control with expanded situational awareness features. MAPS feature works with GIS/CAD for map navigation across sites, buildings and floors with camera and access device placement for live view, playback and alarm indication. The bulk camera firmware and password updates feature along with System Health Dashboards across all devices enable customers to manage their facilities efficiently and with ease.

MAXPRO VMS is also highly scalable so users can easily expand their video surveillance network from small to medium single instances to enterprise level supporting thousands of devices.



MAXPRO Intelligent Command

## 

#### **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 products contain no content or material from any companies or their subsidiaries prohibited under US National Defense Authorization Act (NDAA) Section 889 and can be used as part of video systems which comply with NDAA Section 889.

## Honeywell

#### **FEATURES**

#### Scalable security system for flexible deployment

- A single MAXPRO server can support numerous recording sub systems (NVR/ DVRs)
- Distributed architecture in the form of multiple MAXPRO servers in a parentchild topology facilitates "Enterprise" style deployment, where child VMS server users & roles, workstations, sites, and partitions can be easily added to parent VMS server through advanced discovery

#### Open integrated platform for endto-end solution

- Auto-discovery of cameras connected to supported recorders
- 60 / 35 / 30 series cameras, edge storage, multi-imager and explosionproof camera support
- Support for multicast stream reduces camera and network loading with live view on multiple clients

## Redundant server and recorder failover for 24/7 operational continuity

- Redundant server option increases system reliability.
- 1+1/N+M MAXPRO NVR failover and failback automatically or manually. View and playback on one client panel

#### Smart search, playback and clip export for efficient forensic investigation

- Ability to investigate events and alarms by simultaneously viewing alarm video at various stages. For every alarm, users can view the video captured during prealarm, 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 in the timeline to easily return to the scene with multiple cameras' views
- 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
- Smooth reverse and synchronous playback across MAXPRO NVRs for efficient cross-site investigation
- Incident management mode allows creating a package of clips multiple cameras at different times that can be played back sequentially

## Intelligent analytics for proactive threat detection and operation efficiency boost

- Intelligent events from cameras can be viewed at the alarm panel and trigger event recording on MAXPRO NVRs for further investigation
- Annotation with bounding boxes on objects detected by Xtralis IntrusionTrace<sup>™</sup>, LoiterTrace and ADPRO<sup>®</sup> NVR in both live view and playback for visual notification and verification
- Honeywell Video Analytics (HVA) integration with automatic camera stream selection for optimal performance
- Integration with augmented vision face recognition analytics from Idemia
- Integration with video analytics from lpsotek
- License plate recognition event management with rich details and easy report generation for efficient vehicle management with Honeywell VehicleTrace<sup>™</sup> enabled cameras

#### Powerful desktop clients for enhanced monitoring and fast response

- Viewing, creating, saving and naming salvos with up to 8x8 cameras each under My Salvos or Shared Salvos.
  Support for aspect ratio - 16:9, 4:3 and stretched for video salvos
- 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
- Quick and responsive alarm actions can be initiated from the preview pane options
- Innovative "One-Click" or "Mouse Drag" 3D PTZ control experience that does away with legacy PTZ controls of continuous clicking
- 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
- Enriched video viewing experience through intuitive video rendering engine optimizes CPU utilization by altering the video frame rate for low bandwidth throttling
- NVIDIA and Intel GPU based rendering support for H.264 and H.265 decoding up to 60 frames per second (1080p camera) with smooth display on 4K monitors reduces the number of workstations needed for monitoring large sites with 30+ cameras
- Ability to play recorded video together with audio stream and ability for operators to talk to camera audio output through bi-directional audio support
- 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

- Monitor control allows controlling all monitors from a single client (monitor wall control)
- Remote monitor mode allows sharing and controlling a remote monitor while still viewing locally

#### Unified mobile apps

- Single, unified Honeywell Secure mobile App allows access to cameras and doors via VMS, NVR, and Intelligent Command while on the move
- Compatible with iOS<sup>®</sup> and Android<sup>™</sup> devices

## Intuitive graphical user interface for efficient site management

- Feature-rich and user-friendly client interface to view video from numerous different recorders from a single point
- Operators can log on using their local language and the built-in messaging system allows operators to share video scenes via instant messages
- Role-based operator privileges
- An extremely powerful macro programming language is available to fully customize actions based on events
- Support for active directory user authentication

## Effective privacy protection options for data privacy compliance

- Body pixilation and blurring in live view to protect customer and employee privacy from abuse of surveillance data
- Four-eye dual user authentication for playback of original video record, for example, with simultaneous logon from two groups of managers and worker' council representatives
- Selective unmasking for clip export of selected cameras and date/time with only the face of a person of interest unmasked while other people's faces are anonymized

#### 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.

### MAXPRO® VMS Intelligent Command

MAXPRO Intelligent Command is a powerful web-based platform and intuitive graphical user interface which transforms the video management experience to optimize security surveillance, enhance situational awareness and make properties more secure.

#### **FEATURES**

## Scalable security system for flexible deployment

- Web-based application for stand-alone and integrated systems of video & access control
- Expand the number of thin client users for local or remote access anywhere
- Removal of the need for firewall or IT exceptions as well as software installation and support for workstations

## Graphical user interface for efficient site management

- Connected security across geolocations
- Unified and intuitive user interface reduces training costs for security personnel
- Customizable viewing grid via drag-drop camera setup plus priority sequencing of vulnerable areas, cameras or access points
- H.264 and H.265 video codecs supported
- Support for bulk camera firmware upgrade and password modification through Intelligent Command, for simplified device maintenance
- Incident workflow with attachments, Incident reports and standard operating procedures for efficient situational response
- Certificate-based encryption secures server-client communications

## Map navigation to view security status of property and buildings

- GIS online map support including OpenStreet Maps or other web-based maps
- Easy cross-site navigation with instant in/out zoomable maps from global to local viewpoints
- Import multi-layered building floor plans for precision in identifying and locating events
- Leverage existing CAD drawings/floor plans and significantly reduce map engineering costs
- Devices quickly placed on GIS or floor plan maps via drag-drop or via configuring map structure
- HTML 5 live video and instant playback for quick situation response

#### Incident workflow and standard operating procedures for rapid decision making and situation response

- Compliance with standard policies through customizable workflows
- Quick search and filter functionality for alarms or specific situational notifications
- Unified alarm management in alarm details pane including acknowledgement, history, and rollup
- Attach and secure various forms of evidence to incidents
- Automatic documentation of any incident workflow trail including location, time, evidence, assignment, operator comments, and standard operating procedures
- Generate incident report package and export in pdf to authorities

#### Embedded tools to drive compliance metrics and centralized device management

- System Health Dashboard provides 24-hour simultaneous recording status across fleet of NVRs all in one dashboard for early detection of device failures
- Healthy Building Dashboard single view of metrics on occupancy and crowd estimation, no mask detection and social distancing violations
- Accelerate multiple video device firmware updates simultaneously
- Simplify device maintenance and password updates across multiple devices at once

#### INTELLIGENT COMMAND IS COMPATIBLE WITH

- MAXPRO VMS
- MAXPRO NVRs\*

\*in conjunction with the VMS

#### CYBER SECURITY FEATURES

- Enhanced password security: nonrecoverable passwords, enforcing complex passwords, password expiry, no default passwords
- Addressed unauthenticated/ unauthorized channels
- Secured firewall configuration
- Secured web client enabled HTTPS and TLS 1.2; protection from CSRF and XSS attacks
- Restricted folder and registry access to operators
- Secured assemblies digital signing
- Secure communications with equIP cameras using Honeywell proprietary protocol and 30 Series cameras with TLS1.2 encrypted video streams
- Support for digest authentication in multicast stream between camera and MAXPRO VMS client

### MAXPRO® VMS Video Management System



#### TABLE 1. RECOMMENDED HARDWARE SPECIFICATIONS

TABLE 1. RECOMMENDED HARDWARE SPECIFICATIONS				
MAXPRO VMS Minimum Server Specs	Standard Spec up to 5 Clients	Performance Spec 10 clients	Premium Spec 25 Clients and greater	
PROCESSOR	Single Intel® Quad Core™ Xeon® E3 1225V3 3.2 GHz S1150	Single Intel® Quad Core™ Xeon® E-2134 3.5 GHz	Dual Intel® 8 Core™ Xeon® Silver 4110 2.1 GHz	
OPERATING SYSTEM	Microsoft Windows® Server 2019 64-bit, Server 2016 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			

#### TABLE 2. RECOMMENDED WORKSTATION SPECIFICATIONS

MAXPRO VMS Minimum Workstation Specs	2 Monitor Workstation	4 Monitor Workstation	
PROCESSOR	Intel® Core™ i7-8700, 3.2 GHz		
OPERATING SYSTEM	Microsoft Windows® 10 Enterprise 64-bit		
COMPUTER TYPE	Workstation		
SYSTEM MEMORY (RAM)	16 GB		
DVD DRIVE	DVD +/- RW		
DISK	500 GB 7200RPM SATA3		
VIDEO ADAPTER	Integrated Intel UHD graphics 630	Integrated Intel UHD graphics 630 and NVIDIA Quadro P620	
NETWORK CONNECTION	1 Gbit/sec or greater		
VIRTUAL ENVIRONMENT	Virtual environment not supported on client machines		

#### TABLE 2. ORDERING INFORMATION – MAXPRO VMS

#### MAXPRO VMS - Part Numbers and Licensing

MAXPRO VMS	- Base Software and Licenses	
HNMSWVMS	VMS Base software includes: MAXPRO VMS, SQL® 2019 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)	
SSAHNMVMS	Annual software support agreement - MAXPRO VMS Base software	
SSAHNMRED	Annual software support agreement - redundant MAXPRO VMS software	
workstation	License – One license per connected	
HNMSWCL	MAXPRO View - single client license	
MAXPRO VMS Base Channel License		
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	
	vith Active Alert® Video Analytics - analytics channel	
HNMHVAB	HVA - base package	
HNMHVAS	HVA - standard package	
HNMHVAP	HVA - premium package	
HNMHVASI	HVA - smart impressions	
HNMHVAPC	HVA - people counter	
MAXPRO VMS	Server Failover Solution	
NFHALAN	Neverfail® Server Failover Management	

#### TABLE 3. ORDERING INFORMATION – MAXPRO VMS LITE

#### MAXPRO VMS LITE - Part Numbers and Licensing

MAXPRO VMS LITE	- Base Software and Licenses
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HNMSWVMSLT	MAXPRO VMS Lite software includes: MAXPRO VMS, SQL® 2019 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)			
SSAHNMVMSL	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 Redundancy after the MAXPRO VMS Lite Upgrade				
	MAXPRO Redundant System			
HNMSWRED	MAXPRO Redundant System			
HNMSWRED MAXPRO VMS Lite	Ş			
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MAXPRO VMS Lite	Upgrade Upgrade MAXPRO VMS Lite to MAXPRO VMS			
MAXPRO VMS Lite	Upgrade Upgrade MAXPRO VMS Lite to MAXPRO VMS			
MAXPRO VMS Lite HNMUG INTELLIGENT CON	Upgrade Upgrade MAXPRO VMS Lite to MAXPRO VMS IMAND			
MAXPRO VMS Lite HNMUG INTELLIGENT CON HNMINDWRKFL	Upgrade Upgrade MAXPRO VMS Lite to MAXPRO VMS IMAND Intelligent Command Incident & Workflow Intelligent Command Safety & Compliance			
MAXPRO VMS Lite HNMUG INTELLIGENT CON HNMINDWRKFL HNMDASHBOARDS	Upgrade Upgrade MAXPRO VMS Lite to MAXPRO VMS IMAND Intelligent Command Incident & Workflow Intelligent Command Safety & Compliance Dashboard Intelligent Command GIS/Online Web Map			
MAXPRO VMS Lite HNMUG INTELLIGENT CON HNMINDWRKFL HNMDASHBOARDS HNMONLNEMAPS	Upgrade Upgrade MAXPRO VMS Lite to MAXPRO VMS Intelligent Command Incident & Workflow Intelligent Command Safety & Compliance Dashboard Intelligent Command GIS/Online Web Map Integration Camera device management for third- party cameras			

#### MAXPRO® VMS Video Management System

TABLE 4. MAXPRO VMS Version Recorder Compatibility					
Recorder Models	7.5 (Current Release)	7.0	6.X		
MAXPRO NVR	$\checkmark$	$\checkmark$	$\checkmark$		
MAXPRO VMS (VMS IN VMS)	$\checkmark$	$\checkmark$	$\checkmark$		
HEN*2 Embedded NVR	$\checkmark$	$\checkmark$	$\checkmark$		
HEN*3 4K/8MP Embedded NVR	$\checkmark$	$\checkmark$	$\checkmark$		
HEN*4 4K/12MP Embedded NVR	$\checkmark$	$\checkmark$	$\checkmark$		
ADPRO IFT, IFT-E, FASTTRACE 2E, IFT GATEWAY	$\checkmark$	√	$\checkmark$		

✓ Supported × Not Supported

#### DOWNLOAD MOBILE APP



View live and recorded video, manage alarms and overall site security.

#### For more information

www.security.honeywell.com/uk www.security.honeywell.com/me buildings.honeywell.com/security

#### **Honeywell Commercial Security**

Emaar Business Park, Sheikh Zayed Road Building No. 2, 2nd floor, 201 Post Office Box 232362 Dubai, United Arab Emirates Tel: +971 4 450 5800

#### **Honeywell Commercial Security**

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