Optiview VMX
Integrated Video Management System for Surveillance and Access Control

Features

- Supports 512 Cameras
- Supports 256 Video Intercom Devices
- Integrates All Management Functions into One Client
- Allows Device Initialization and Management
- Live Video Playback from Edge Device
- Supports Access Control and Video Intercom Integration
- Configure Video Wall Layout and Scheme
- Offers Fisheye Camera Dewarping on Live View
- Offers Facial Recognition and Search on Live View

Overview

The Optiview VMX is a powerful, all-in-one video surveillance management software for system scalability and reliability. The Optiview VMX supports up to 512 cameras and 256 Video Intercom devices, with the ability to integrate multiple access or video intercom devices. Base Optiview VMX supports 64 cameras before additional licensing required.

The Optiview VMX provides user rights management, device management, alarm management, video wall output, and two-way audio. In addition to these VMS features, Optiview VMX offers advanced features, including support for real-time face recognition and robust event management controls.

Flexible & Scalable

Optiview VMX supports 512 video channels, with support for eight (8) connected face recognition cameras. Optiview VMX also supports 256 Video Intercom Devices (SIP-enabled), and offers features to manage and control access control devices.

Compatibility

Optiview VMX is compatible with all Optiview IP-enabled devices: network cameras, NVRs, DVRs, video intercom devices, and access control devices. The server is also compatible with the ONVIF protocol, so it can connect to ONVIF-enabled third-party devices.

Fisheye Camera Support

The software features full support for Optiview Fisheye cameras. The software supports options for the Fisheye camera installation and offers dewarp modes. Dewarping solves the problem of distortion in the circular panoramic view in both live or playback modes.

Video Wall

Offers settings to configure all aspects of a video wall application. The application supports video wall layout, live preview, scheme configuration, and tour setup. In addition, the application supports video wall splicing and roaming.

Real Time Face Recognition

The Optiview VMX performs real-time facial recognition on up to eight (8) channels simultaneously. The software captures and analyzes facial features to determine gender, age, expression, glasses, mustache, and mask, and then can record the faces and store the associated structured data. The server also filters incoming video to display faces that match target features.

Access Control & Video Intercom

Optiview VMX offers full support and integration for access control and video intercom products to support a complete security and surveillance system. The server monitors door status and events, manages access rights, and support advanced rules management. In addition to access controls, the server supports two-way communication between intercom and control center.

Management Operations

The software manages the devices and the user accounts for an entire organization. Operators can assign different camera ranges, active use periods, and business roles for each user. The server also supports different schemes for various events, including IVS, to record and view all event history information.

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System Features

GENERAL FUNCTIONS

ORGANIZATION & GROUP MANAGEMENT

DEVICE MANAGEMENT
- Initialize Optiview devices
- Add devices via auto search and IP Address
- Supports IP, P2P, ONVIF
- Manage Optiview devices

USER MANAGEMENT
- Add, edit and delete users
- Assign appropriate permissions to specific users
- Restrict user access by MAC and expiration dates

STORAGE
- Central storage: local disk storage and extended storage via iSCSI
- Add, edit, delete, enable and disable the record plan
- Supports edge storage and central storage for record plan

BLIND ACCESS CONTROL CHANNELS

PLAYBACK
- Playback recording from edge devices
- Apply video filters: normal, motion, alarm, video loss, video tampering
- Sync play
- Reverse playback
- Playback frame-by-frame
- Slow and fast forward playback (1/64x to 64x speeds)
- Lock or mark important recording segments for central storage
- Supports Smart Search and POS data search

EMAP
- Use raster map, main map, and sub-maps
- Supports 8-level sub-map
- Add, edit, and delete hot spots (camera, alarm input) on the map
- View live video and playback on the map
- Zoom in and zoom out the map
- Supports visible range and initial angle
- Icon flashes on map when alarm occurs

VIDEO WALL
- Add and manage the video wall
- Supports On/Off screen ID
- Combine multiple screens into one screen
- Bind the decode channel with the corresponding screen
- Decode the real-time video to the video wall
- Decode the playback video to the video wall
- Manually or automatically decode to wall
- Control the video wall split
- Change the stream type of video channel
- Add box, on/off screen, and back display
- Tour the video channel
- Schedule plan: Set the running task on timeline
- Tour plan: Loop different tasks, set loop times

LIVE VIEW
- Displays device tree, device IP Address or device name
- Control PTZ cameras
- Set manual recording
- Take Snapshots
- Apply Fisheye dewarping
- Audio talk
- Set alarm window
- Set Region of Interest: divide one window into 4 or 6 parts, one shows whole image and others show details
- Supports Four (4) Live View tabs
- Save current split as a view
- Add channels as favorites
- Video tour according to device, organization, favorite or view.
- View map via live view window

GENERAL FUNCTIONS (cont)

EVENT MANAGEMENT
- Detect device exception, video events, alarm input, access control Events, etc.
- Set alarm scheme: all day, weekday, weekend, or custom template
- Set alarm priority: Low, Medium, High
- Link recordings, snapshots, live video, alarm output, PTZ actions, or e-mail
- Add, edit, delete, enable, and disable alarm schemes
- Display event info including alarm time, alarm name, alarm status, etc.
- View live video or pictures from a related camera
- Acknowledge events
- Arm control for events
- Forward alarm to relevant users
- Send e-mail when processing events
- Process events
- Search events

DOWNLOAD CENTER
- Download recordings from an edge device
- Download recordings by timeline, files, or tags
- Supports multi-task download
- Supports .dav, .MP4, .flv, .asf, and .avi video formats

INTELLIGENT BUILDING FUNCTIONS

PERSONNEL MANAGEMENT
- Add, edit, and delete people and departments
- Issue card credentials or fingerprint via USB reader or device
- Authorize by door or door group
- Issue private passwords and face authentications
- Manage guest, VIP, and normal personnel management

ACCESS CONTROL
- Monitor door status and events
- Group door access levels
- Manage access rights
- Lock/Unlock doors with one key
- Link fire detection devices
- Set advanced door rules: anti-passback, first card unlock, inter-door lock, multiple card unlock, remote verification

VIDEO INTERCOM
- Supports Video Intercom devices based on SIP protocol or with command center
- Release text information and addres books information to devices

ATTENDANCE
- Set access control devices as attendance stations
- Attendance time period management
- Attendance shift management and arrangement
- Attendance report management

VISITOR MANAGEMENT
- Visit Registration, Appointment Registration
- Searching Visit Record and Export

VEHICLE ENTRANCE / EXIT MANAGEMENT
- Edit parking-lot, includes total and available spaces, parking name etc.
- Manage owners, vehicles and cards
- Bind LED screen with ITC or spot detector device
- Open the barriers with cards remotely
- Force existing vehicles to leave
- Search and export the historical pass records
- Supports daily, weekly, monthly, and annual statistics of vehicle entrance

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System Features

ANALYTICS+

FACE RECOGNITION
- Perform face recognition
- Search for faces in live video using similar face or feature search
- Prepare structured reports of gender and age
- Manage face library

SYSTEM MAINTENANCE

LOGS
- View operator log and door log in control client
- Search and export logs

BACKUP AND RESTORE
- Backup system data automatically (daily, weekly, monthly)
- Backup system data manually
- Restore system data from server or local file

OTHER FUNCTIONS
- FTP for alarm pictures
- Calibrate device time and server time

Minimum System Hardware Requirements

HARDWARE REQUIRMENTS // SERVER

Operating System		Windows Server 2008 Standard Windows Server 2012 R2 Standard Windows Server 2016 Standard VMware ESXI 6.0 (Windows Server 2008 Standard) VMware ESXI 6.0 (Windows Server 2012 R2 Standard) VMware ESXI 6.0 (Windows Server 2019 Standard) Windows 10 (64-bit)
CPU	Recommended	Intel® Xeon® CPU E3-1220 v5 @3.00GHz
	Minimum	Intel® CoreTM i5
Memory		16 GB
Storage	Recommended	at least 500GB
	Minimum	at least 200GB
Network Connection	Recommended	Four (4) 1000 Mbps Ethernet Ports
	Minimum	Two (2) 1000 Mbps Ethernet Ports

HARDWARE REQUIRMENTS // CLIENT STATION

Operating System		Windows Server 2008 Standard Windows Server 2012 R2 Standard Windows Server 2016 Standard VMware ESXI 6.0 (Windows Server 2008 Standard) VMware ESXI 6.0 (Windows Server 2012 R2 Standard) VMware ESXI 6.0 (Windows Server 2019 Standard) Windows 8.1 (64-bit) Windows 10 (64-bit)
CPU	Recommended	Intel® CoreTM i5-6500 @ 3.20GHz
	Minimum	Intel® CoreTM i3-2120 @ 3.30GHz
Memory	Recommended	16 GB
	Minimum	8 GB
Graphics Card	Recommended	Intel® HD Graphics 530
	Minimum	Intel® HD Sandbridge Desktop Graphics
Storage	Recommended	at least 500GB
	Minimum	at least 200GB
Network Connection		One (1) 1000 Mbps Ethernet Port

MANAGEMENT FUNCTIONS

		FREE VERSION	PAID VERSION
Organization & User	Organization	10 Hierarchies, 999 organizations per hierarchy	
	User Groups	Three (3) Levels	
	Users	1 online user	100 online users
Devices (single point performance)	Video[1]	64 Channels	512 Channels
	Access Control[1]	64 Devices	200 IP Devices, 1024 Doors
	Video Intercom[1]	128 Devices	1024 Devices (no more than 32 Video Intercom devices)
	Face Recognition Cameras	2 Channels	32 Channels
	Alarm Hosts	2	100
	License Plate Capture	2 Channels	32 Channels
Media Transmission Server	Video Input/server	350Mbps	
	Video Output/server	350Mbps	
Record	Video Storage Bandwidth per Server	150Mbps	
	Maximum Capacity per Storage Server	200TB	
	Download Task	Up to five (5) per client	
Event	Number of Events w/o Pictures	80 per second	
	Number of Events w/ Pictures	Five (5) per second	
Emap	Raster Map Hierarchies	Eight (8)	
	Photos per Raster Map	Up to 64	
	Raster Map Size	Up to 14.7MB	
	Channels	Up to 200	
Personnel Management	Persons	10,000	
	Cards	10,000	
	Fingerprints	10,000	

[1] Maximum number of video, access control, or video intercom devices listed assumes that no other type of device is connected to the VMX.