HIKVISION

iVMS-4200

Overview

iVMS-4200 is versatile video management software for the DVRs, NVRs, IP cameras, encoders, access control devices, security control panels, video intercom devices, decoders, VCA devices, etc. It provides multiple functionalities, including real-time live view, video recording, remote search and playback, file backup, alarm receiving, etc., for the connected devices to meet the needs of small and medium-sized projects.

With the flexible distributed structure and easy-to-use operations, iVMS-4200 client software is widely applied to the surveillance project of financial, public security, military, telecommunications, transport, electricity, education, water conservancy industries, etc.

Main Features

Live View
- View settings and instant playback
- Main/auxiliary screen live view
- Up to 64-window division for standard screen, and 48-window division for the wide screen
- Custom window division configurable
- Live view in fisheye mode for fisheye camera
- Master-slave tracking
- Resuming the latest live view status after client restart

Recording
- Recording both main stream and sub-stream for playback
- Remote manual recording
- Recording schedule for continuous recording, event recording and command recording
- Storing alarm pictures on Storage Server
- Providing SAN and CVR configuration for CVR device
- Video file overwritten and expired video file deleting

Alarm Management
- Camera linkage and multiple linkage actions
- Device arming and alarm output control
- Alarm configuration for camera event, alarm input, zone event and device exception
- Searching and exporting the linked pictures of alarm logs
- Audible waring and pop up image when alarm triggered
- Custom alarm sound as desired.

Playback
- Local and remote playback
- Instant playback, normal playback, alarm input playback, event playback, ATM playback, VCA playback, and fisheye playback.
- Up to 16-ch synchronous playback
- Locate the playback time accurately
- Skipping the unconcerned video during VCA playback
- Searching the video files which contain POS information
- Providing Player in the installation directory to view the downloaded video file
- Merging the video files when downloading by date
- Downloading video files for multiple cameras at the same time

Access Control and Video Intercom
- Managing video intercom and access control in one module
- Linking cards, fingerprints, and face picture to person and setting permissions when adding a person
- New design and interaction for time and attendance: Providing department schedule, multiple shift schedules, and various statistics
- Real-time alarm management for added access control devices
- Subscribing alarm that the client can display in real-time alarm management when it is triggered
- Alarm linkage with added cameras, including pop-up live view and captured picture
- Adding access control point as hot spot on E-map and viewing the video of the linked camera
- Adding Elevator Controller for management and control
- Configuration wizard for access control and time and attendance

Security Control Panel
- Real-time alarm management for added security control panels
- Subscribing alarm that the client can display in real-time alarm management when it is triggered
- Acknowledging the received alarm, viewing the alarm on E-map, etc.
- Alarm linkage with added cameras, including pop-up live view, captured picture
- Adding zone as hot spot on E-map and viewing the video of the linked camera
- Adding Pyronix control panel for management and control
- Configuration wizard

Statistics
- Data statistics of heat map, people counting, counting, road traffic, face retrieval, license plate retrieval, behavior analysis, and face capture
- Showing large picture of face retrieval, license plate retrieval, and behavior analysis and the pictures can be exported for local storage

Network
- Encoding devices, decoding devices, Hik-Connect devices, access control devices, security control panels, video intercom devices, storage servers, stream media servers connectable
- Checking device's online users
- NTP protocol for time synchronization
- Searching the active online devices
- Adding devices which have been added to the Hik-Connect account
- Adding online device which support Hik-Connect to the Hik-Connect account
- For added Hik-Connect device, supporting live view, normal playback, PTZ control, two-way audio, receiving alarm, stream auto-switch, etc.
- Adding devices by HiDDNS and IP Server; batch importing devices
- Generating QR code for encoding devices to add to the mobile client
- Two-way audio and broadcast function

General

- Applied in local area network and wide area network
- H.264, H.264+, H.265, and H.265+ video encoding formats
- E-map function
- Remote configuration for added devices
- User permission management
- Creating a password to activate the device. For device which supports Hik-Connect, enabling Hik-Connect service when activating it.
- Resetting device password
- Hardware decoding for live view and playback
- Linkage between video surveillance and non-video surveillance (access control, video intercom, and security control panel)

PTZ Control

- Remote PTZ control, preset, patrol, and pattern settings
- 3D positioning, auxiliary focus, and wiper function
- Displaying analog speed dome's local menu via PTZ control panel
- PTZ control of one-touch patrol and one-touch park
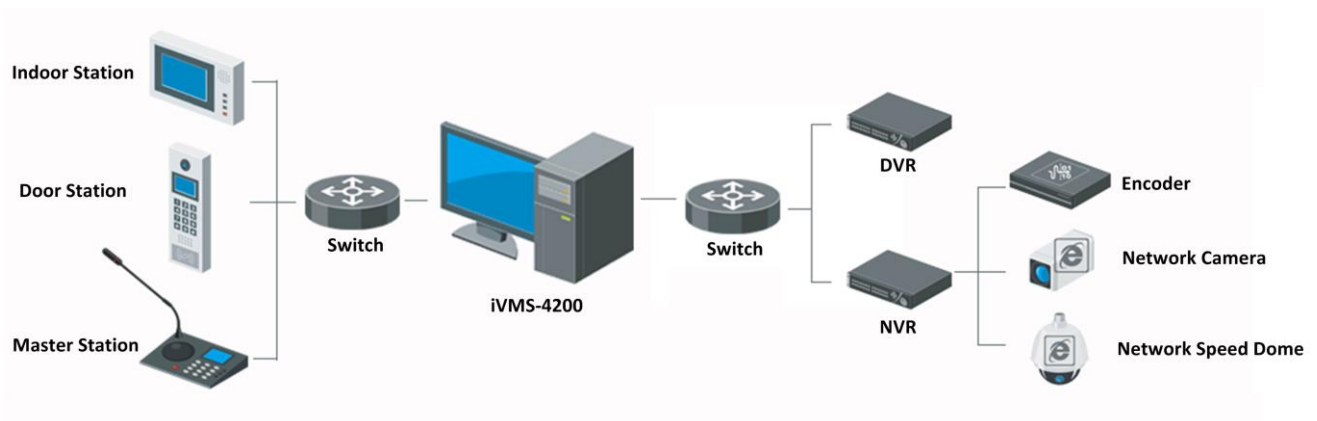
Backup

- Downloading video files to PC
- Log search and backup
- Importing and exporting the configuration file
- Auto backing up database according to the configured schedule
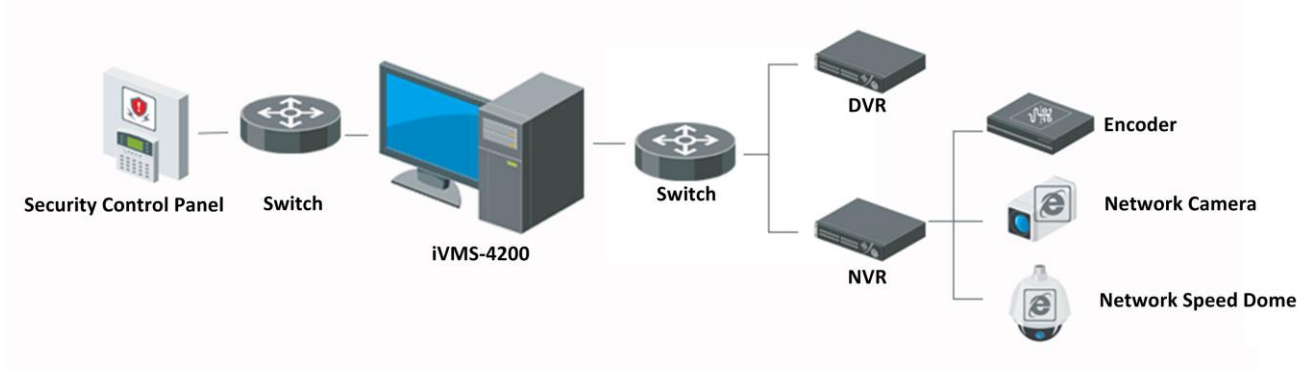
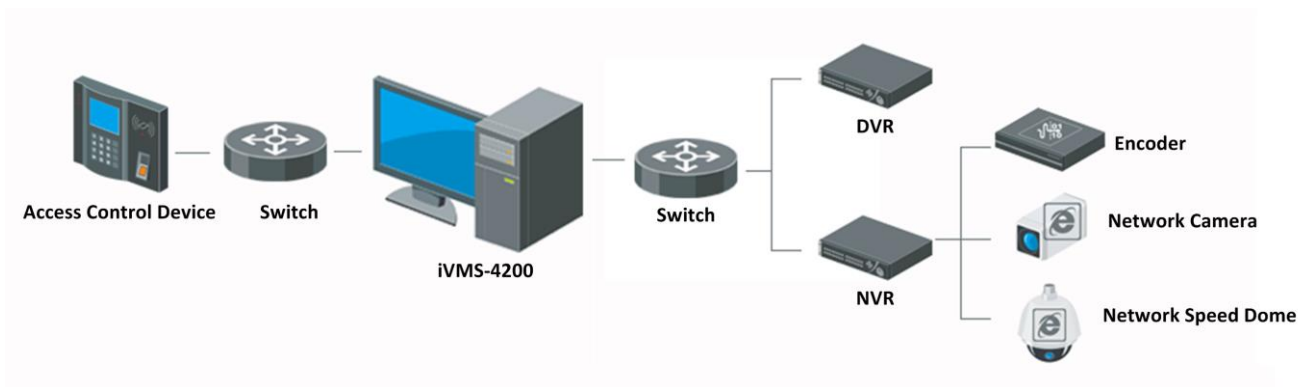## Typical Application

Application for Video Surveillance
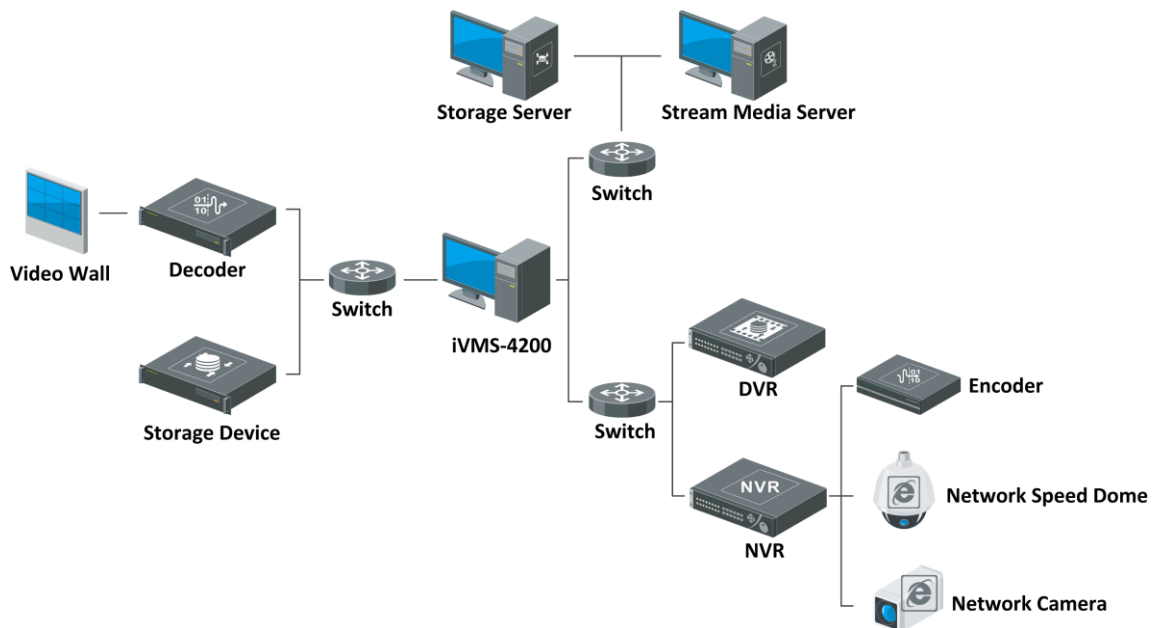
Application for Video Intercom

Application for Security Control Panel

Application for Access Control

System Requirements

Client Requirements

Recommended	**Processor**	Intel® Xeon® E3-1226 V3 @ 3.30GHz
	Memory	8 GB of RAM
	Operating System	Microsoft® Windows 7 (64-bit)
	Video Card	Intel® HD Graphics P4600
High Performance	**Processor**	Intel® Core™ i7-6700K @ 4GHz
	Memory	16 GB of RAM
	Operating System	Microsoft® Windows 7 (64-bit)
	Video Card	NVIDIA GeForce GTX1070

Maximum Number of Cameras Viewed per Client under Different System Requirements (Software Decoding)

Encoding Format	Resolution	Bit Rate (Mbps)	Frame Rate (fps)	Maximum Number of Cameras Viewed Simultaneously	
				Recommended	**High Performance**
H.264	**1080p**	6	30	7	15
	8 MP	16	30	2	4
H.264+	**720p**	1	30	19	32
	1080p	3	30	8	15
	3 MP	4	30	5	12

H.265	**720p**	1	30	12	28
	1080p	3	30	5	11
	3 MP	4	30	3	8
H.265+	**720p**	0.5	30	14	30
	1080p	1	30	6	11
	3 MP	2	30	4	9

Maximum Number of Cameras Viewed per Client under Different System Requirements (Hardware Decoding)

Encoding Format	Resolution	Bit Rate (Mbps)	Frame Rate (fps)	Maximum Number of Cameras Viewed Simultaneously	
				Recommended	High Performance
H.264	**1080p**	6	30	25	25
	8 MP	16	30	6	6
H.264+	**720p**	1	30	45	45
	1080p	3	30	24	23
	3 MP	4	30	19	17
H.265	**720p**	1	30	N/A	45
	1080p	3	30	N/A	23
	3 MP	4	30	N/A	15
H.265+	**720p**	0.5	30	N/A	45
	1080p	1	30	N/A	22
	3 MP	2	30	N/A	15

Notes:

- For the field of N/A, the video card under the recommended system requirement does not support H.265 or H.265+.

- The above parameters are estimated and for reference only. Under the same resolution and frame rate, the bitrate of different camera manufacturers may be different. Moreover, the decoding performance may also be different for different manufacturers.

Server Requirements (Storage Server and Stream Media Server)

Minimum	Processor	Intel® Core™ 2 Duo E6850 3.0 GHz
	Memory	4 GB of RAM
	HDD	80 GB Hard Drive
	NIC	100/1000 Mbps Ethernet Network Interface Card
	Video Card	Standard SVGA Video Card
Recommended	Processor	Quad Core Intel® Xeon® E5640 2.66 GHz
	Memory	16 GB of RAM
	Operating System	64-bit Operating System
	HDD	80 GB SATA II Hard Drive
	NIC	GbE Network Interface Card
	Video Card	Standard SVGA Video Card

Specifications

Model	iVMS-4200		
Database	SQLite		
Client	General	User	Support up to 50 users and one super user
		E-map	Support up to 256 maps
		Encoding Device	Support up to 256 encoding devices
		Decoding Device	Support up to 64 decoding devices
		Group	Support up to 256 groups Support up to 256 channels for each group
		Channel	Support up to 1024 channels for all groups
		Storage Server	Support up to 16 Storage Servers
		Stream Media Server	Support up to 16 Stream Media Servers
	Video	Live View	Support up to 64-ch live view at a time
		Auxiliary Screen Preview	Support up to 4 auxiliary screens for live view
		Playback	Support up to 16-ch playback at a time
		Synchronous Playback	Support up to 16-ch synchronous playback
		Download	Support up to 16 downloading tasks at a time
	Access Control	Person/Room	Support up to 10,000 persons/rooms Support up to 5 cards for each person/room
		Organization	Support up to 10 hierarchies
		Fingerprint	Support up to 10 fingerprints per person, and 100,000 fingerprints in total
		Access Control Device	Support up to 16 access control devices
		Access Control Point	Support up to 64 access control points
		Template	Support up to 255 templates
		Permission	Support up to 16 access control permissions
		Door Station	Support up to 16 door stations
		Indoor Station/Master Station	Support up to 512 indoor stations or master stations
		Time and Attendance Data	Retention period of attendance result: one year Retention period of original data: three months
		Shift	Support up to 64 shifts
		Attendance Report	Support 18 reports: check-in/out correction report, leave and business trip report, attendance summary, attendance details report, abnormal attendance report, overtime report, card swiping log report, total overtime monthly report, overtime details monthly report, attendance monthly report, start/end-work time report, department attendance report, valid card swiping record report, attendance daily report, first check-in and last check-out report, continuous absence, continuous early leave, and continuous early late report
	Security Control Panel	Security Control Panel	Support up to 256 security control panels
		Zone	Support up to 2048 zones
Storage Server		User	Support up to 32 users
		Recording Performance	Support up to 64-ch ×2 Mbps at a time
		VOD Performance	Support up to 64-ch ×2 Mbps at a time
		iVMS-4200 Client	Support up to 128 iVMS-4200 clients connected to the Storage Server
Stream Media Server		Incoming/Outgoing Stream	Support up to 64-ch incoming video stream Support up to 200-ch outgoing video stream