iVMS-5200 Professional Version 3.2.210

Specification

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About this Manual

This Manual is applicable to iVMS-5200 Professional.

The Manual includes instructions for using and managing the product. Pictures, charts, images and all other information hereinafter are for description and explanation only. The information contained in the Manual is subject to change, without notice, due to firmware updates or other reasons. Please find the latest version in the company website (http://overseas.hikvision.com/en/).

Please use this user manual under the guidance of professionals.

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Legal Disclaimer

Introduction

iVMS-5200 Professional (hereafter simplified as iVMS-5200 Pro) is a flexible, scalable, high reliable and powerful central video system. Integrating with multiple surveillance systems, iVMS-5200 Pro provides the central management, information sharing, convenient connection and multi-service cooperation. It is capable of managing devices, live view, storage and playback, VCA search, alarm linkage, and so on.

Key Components

Server:
Central Management Server (CMS)
Storage Server (Optional)
Stream Media Server (SMS, optional)
Web Manager
Client:
Web Client / Control Client / Mobile Client

Running Environments

- **Operating System:**
  - ➤ Windows Server 2008 / Windows Server 2012 SP2 (64-bit);
  - ➤ Windows 7 / Windows 8 / Windows 8.1 (32/64-bit);
  - *Note:* The Storage Server must be installed on the 64-bit PC or server to work properly.
- **Browser Version:**
  - ➤ IE 8 – 11 / Chrome 27 – 35 / Firefox 21 -29 (32-bit);
- **Smartphone / Tablet Operation System:**
  - ➤ iOS 6 / iPhone 4S, iPad 2, or above
  - ➤ Android 2.3.3 / CPU@1GHz, Memory@1GB, or above

Function Features

Server

CMS
- Provide unified authentication service for clients & servers
- Provide the centralized management for the users, roles, permissions, surveillance devices, alarm device and servers
- Provide the log management and statistics function
- Provide the interface for third-party system integration
- Scalable for medium and large-size projects
- Service manager for system health monitoring

Storage Server (Optional)
- Obtain the audio and video data stream via the SMS or directly from the connected encoding device
- Extract the index information and dump the audio and video data to the storage device to realize the centralized management of the mass video & audio files.
- Provide the efficient, secure, convenient storage service for pictures with storage efficiency of 10 pictures per second.

SMS (Optional)
- Forward and distribute the audio and video data
- Support the live view via mobile control client

Web Manager

- Access to the CMS via IP address or domain name
- Support accessing by HTTPS to ensure high security
- Flexible license activation methods: online activation and offline activation
- Startup wizard guides you through basic operations including:
  - ➤ Adding encoding devices
  - ➤ Setting the record schedule
  - ➤ Configuring the event parameters
  - ➤ Managing the system users
- Standard ONVIF^{TM} protocol
- Multiple devices can be added: IP cameras, IP domes, video encoders, DVRs, NVRs, Mobile Video Recorder, mobile terminal, alarm inputs / outputs, access controls, POS systems, etc.
- Create the password for the detected online devices to activate it
- The password strength of the added device can be checked by the system for security notification
- Connectable with the third-party devices via the manufacturer's private protocol, including the network camera of Bosch, Axis, and Vivotek
- Manage the encoding devices, Mobile Video Recorder and mobile terminal by areas
- Five adding modes for encoding devices available:
  - ➤ By detecting the online devices
  - ➤ By specifying the device IP address / domain name
  - ➤ By specifying an IP segment
  - ➤ By specifying an port segment
  - ➤ By HiDDNS
- CVR (Central Video Recorder) manageable:
  - ➤ Add CVR by IP address
  - ➤ Remotely configure the CVR via web browser
  - ➤ One-touch configuration for setting the CVR storage
- Speed dome linkage for fisheye camera configurable
- Support Line Crossing Detection and Intrusion Detection for the camera.
- Record
  - ➤ Two store methods:
    --Central storage: Storage Server (PC software based) and CVR (storage device);
    --Distributed storage: DVR / NVR / IP camera (SD card)
  - ➤ Continuous recording and event triggered recording
  - ➤ Custom record schedule: All-day Template, Weekday Template, Weekend Template and Custom Template

- Events & Alarm
  - Detect camera events, transaction events, alarm input, access control, device exception, server exception, Mobile Video Recorder event and custom event:
    -- Intrusion, Line Crossing
    --Camera events: Intrusion, Line Crossing, Motion, Video Tampering, Video Loss, etc.
    --Transaction events: No Sale Operation, Refund Operation, etc.
    --Devices alarm inputs
    --Access control: Legal Card Authenticated, Card and Passcode Authenticated, etc.
    --Device exception: Device Offline, HDD Full, HDD Read / Write Error, etc.
    --Server exception
    --Mobile Video Recorder event: Speeding (GPS) Alarm, Fence Crossing Alarm, Deviation Alarm, HDD Full, Illegal Login, etc.
    --Custom event: customize new event rules to analyze the received data packages of the integrated third-party system
  - Send emails to notify users of the alarm information with email template configurable
  - Set the arming template for the events: All-day Template, Weekday Template, Weekend Template and Custom Template
  - Set the alarm level: high, medium, low
  - Set multiple event linkage actions: Trigger Pop-up Image of Camera, Audible Warning (voice text is supported), PTZ Linkage, Alarm Output Linkage, Recording Linkage and Alarm Notification (for camera and transaction event)
- Role & User management
  - The default password of the admin user must be changed at first-time login
  - Support resetting the password for the admin user
  - The user account will be frozen for 10 minutes after 5 failed password attempts
  - Add / Edit / Delete the roles and users
  - The roles can be assigned with different permissions
  - Two default roles are supported: administrators and operators
  - The role name, expiry date and text description can be set for the roles
  - The users can be assigned with the roles to obtain the corresponding permissions
  - The user name, expiry date and text description can be set for the users
  - Two types user status are supported: normal and freeze.
  - PTZ control permission level (1~100) can be set
  - Domain users can be imported in batches
  - The user can be forced logout by admin
- Access Control Configuration (Add-on)
  - Add / edit / delete the access controllers
  - Two connection modes for access controllers: COM Port and TCP/IP
  - Manage the doors by groups
  - People management: department / person
  - Card management: blank card / normal card / card reported loss
  - Custom week plan, holiday group and template
  - Schedule door status to remain open / remain closed
  - Allocate permissions by person / by department / by

access control point / by door group
  - Different access control types such as normal card, visitor card, super card, etc.
  - Password authentication
  - Multi-card authentication
  - First card keeps the door always open
  - Anti-passback
  - Multi-door interlocking
  - Case trigger
- System Configuration & Maintenance
  - The log files can be saved for One Week / Half a Month / One Month / Six Months
  - The license plate data can be saved for One Week / One Month / Three Months / Six Months
  - The GIS data can be saved for One Week / One Month / Three Months / Six Months
  - A static IP address can be set for the WAN access
  - NTP settings
  - Active directory settings
  - Map API URL can be set for displaying the electronic map.
  - Support database backup and database restore
  - Download the system logs to view the details of hardware, software, events, etc.

Client

Control Client

- Access to the CMS via IP address or domain name
- Login with domain user
- The user account will be frozen after 5 failed password attempts
- Access multiple CMSs at the same time and switching CMSs is available
- Live view
  - CMS switchable
  - View real-time video from the cameras
  - View real-time video uploaded from the connected mobile terminal
  - PTZ control; 256 presets / 16 patrols / 1 pattern
  - PTZ control lock/unlock
  - Public view and private view
  - Camera auto-switch / View auto-switch / All cameras auto-switch
  - Manual recording
  - Capture
  - Instant playback
  - Custom window division
  - Fisheye expansion modes: Fisheye, Panorama, PTZ, etc.
  - Operate the speed dome linkage for the fisheye camera
  - Auxiliary screen preview
  - Digital zoom
  - Two-way audio
  - Turn on / off the audio in live view; adjust the volume
  - Camera status detection
  - Arming control
- Playback
  - Normal playback for continuous recordings
  - Event playback for recordings triggered by events such as motion detection, video loss, video tampering, etc.
  - POS playback for recordings containing POS information

- Smart playback based on motion analysis / intrusion / line crossing events
- Async / Sync playback for up to 16 cameras
- Playback in fisheye expansion mode
- Add default, customized tag to mark the important video footage
- Play back the tagged video footage
- Playback by files / timeline
- Lock / unlock the recordings for file protection
- Download the recordings by files / date
- Merge the recordings (max. 1G)
- Reverse playback
- Single-frame backward
- Playback frame-by-frame
- Slow forward / fast forward
- Turn on / off the audio in playback; adjust the volume
- Provide video thumbnail on the timeline
- Accurate positioning for playback
- Digital zoom
- Video clipping
- Capture
- Set the screen layout
- **Alarm center**
  - Display event alarm info including alarm time, alarm name, alarm status, etc.
  - Display system alarm info including time and description
  - View the live video or pictures from the related camera
  - Add the mark to the alarm information
  - Acknowledge the event alarm with text description
  - Arming control for event alarm
  - Clear the alarm manually
  - Enable / disable the alarm audio
  - Enable / disable alarm triggered pop-up image
- **E-map**
  - Local map file (*.png / *.jpg / *.bmp / *.svg)
  - Main maps and sub maps for the areas
  - Max. 5-level sub maps
  - Add / edit / delete the hot region on the map
  - Add / edit / delete hot spots (camera / alarm input / alarm output / access control) on the map
  - Set the monitoring area for camera hot spots
  - Set the name, icon and description for the hot regions and hot spots
  - View the live video and alarm info on the map
  - Set commonly used location as the preset (max. 10)
  - Zoom in / zoom out on the map
  - Capture and edit the map picture
- **People counting statistic**
- **Heat map statistic**
- **License plate recognition (LPR, Add-on)**
  - LPR info capture and storage (vehicle surveillance snapshot, plate numbers, etc.)
  - Auto display the recognized license plate info while live view
  - Search based on time, cameras, plate No. etc.
- **Access control sub-system (Add-on)**
  - Control the doors: Open Door / Close Door / Remain Open / Remain Closed
  - Display the door status via different icons
  - View real-time access events and card holders
  - Search and view the historical access events
  - Auto time synchronization
  - Configure card dispenser

- **Transaction (Add-on)**
  - POS Live View
    - --Display transaction data alongside corresponding video
    - --Receive / mark transaction alarm messages
    - --Transaction information video overlay / separate display
  - Transaction Event
    - --Transactions while no customer is present alert
    - --Drawer open too long alert
    - --Ability to pull a customizable report based on exception rules previously set-up, such as No Sale, Refund, any transaction below $0.10 / over $200, specific product / department sales, transaction before 9PM / shop close, etc.
  - POS search
    - --Quick Search based on invoice number
    - --Advanced Search based on the time / price range / the items description / quantity range etc.
    - --Fast review based on transaction info thumbnails
  - POS playback
    - --Play back the transaction data alongside corresponding video
    - --Export the recordings and transaction info
  - POS integration
    - --Via Hikvision NVR SDK (TCP/IP, RS232)
    - --Via NCR Radiant System Protocol V1.0
    - --Via Hikvision Private POS Protocol (XML)

- **Business Intelligence (Add-on)**
  - --Transaction Data Analysis: Employee Transaction Report / Commodity Sales Volume / Top Selling
  - --People Counting Analysis: Traffic Distribution / Traffic Trending/ Customer Gender Analysis / Conversion Rate
  - --Retail Traffic Analysis: Heat Map / Globe Hot Area
  - --Mobile Video Recorder Data Analysis: Mileage Statistics / Network Traffic / Online Duration
  - --Export / email / print the BI statistics

- **GIS Map**
  - Locate the Mobile Video Recorder and mobile terminal on map
  - Track the Mobile Video Recorder in real time
  - Play back the history driving route
  - View the live video of Mobile Video Recorder
  - Search the history alarm of the Mobile Video Recorder
  - Send message to the Mobile Video Recorder
  - Distance measurement
  - Edit the color and picture of the Mobile Video Recorder icon shown on the map
- **Download center**
  - Search the recordings by cameras / recording type / time / tag for backup
  - Check the downloading tasks and status centrally
  - Merge the recordings footages (max. 1G)
  - Flow control settings
  - Continuous transmission on the breakpoint
  - Download the player for playing back the record files
- **System maintenance and management**
  - Monitor the status of physical and logical resources
  - Search, view and back up the CMS logs and device logs
  - Set the CMS cascading parameters
  - Configure the general parameters
    - --View Scale: Full Screen / 4:3 / 16:9 / Original

Resolution.
--Network Performance: Normal / Better / Best.
--Play Performance: Shortest Delay / Self-adaptive
--Picture Format: JPEG / BMP
--Maximum Mode: Maximize / Full Screen
--Enable / disable Screen Toolbar Display
--Enable / disable Auto-login
--Enable / disable Prioritize the Playback of Record Files on Storage Server
--Enable / disable Main / sub stream auto-adaptive
--Enable / disable Record Two-way Audio
--Enable / disable highlight for Motion
--Enable / disable VCA rule
--Set local saving path of videos / pictures / audios
--Set FTP parameters
--Set keyboard and joystick parameters
--Set alarm sounds by local audio files or voice engine (require support of the OS)
--Lock / unlock the client
--Broadcast

Web Client

- Access to the CMS via IP address or domain name
- Support accessing by HTTPS to ensure high security
- Live view
  - View real-time video from the cameras
  - PTZ control; 256 presets / 16 patrols / 1 pattern
  - Manual recording
  - Capture
  - Instant playback
  - Digital zoom
  - Two-way audio
  - Turn on / off the audio in live view; adjust the volume
  - Set the screen layout
- Playback
  - Playback by files / timeline
  - Async / Sync playback for up to 16 cameras
  - Download the recordings for backup
  - Reverse playback
  - Playback frame-by-frame
  - Slow forward / fast forward
  - Turn on / off the audio in playback; adjust the volume
  - Video clipping
  - Capture
  - Set the screen layout
- Local configuration
  - Set the network transmission settings
    --Network Performance: Normal / Better / Best.
    --Snapshot Picture Format: JPEG / BMP
    --Enable / disable Auto-change Stream Type
  - Set local saving path of videos / pictures

Mobile Client

- Access to the CMS via IP address or domain name
- Login with domain user

- The user account will be frozen after 5 failed password attempts
- Data transmission via 3G / 4G / Wi-Fi
- Add / remove cameras in My Favorites
- Upload the real-time video taken by the camera of the mobile terminal to the Control Client for live view
- Live View
  - View real-time video from the cameras
  - PTZ control
  - Turn on / off the audio in live view
  - Set the video quality
  - Manual recording
  - Capture
- Playback
  - Search by date / storage mode
  - Play back the recordings
  - Turn on / off the audio in playback
  - Video clipping
  - Capture
- Receive and display the alarm notification and view the alarm related live video or recording
- Display the camera details including appearance, online status, PTZ control, etc.
- View / delete the captured images and video clips
- Provide flow statistics of Current Day / Current Month / History
- Business intelligence (iPad)

Supported Languages

- Web Manager (including Remote Configuration and VCA Configuration), Service Manager and plug-in are available in English, French, German, Italian, Japanese, Portuguese, Russian, Simplified Chinese, Spanish, Traditional Chinese, and Turkish.

- Web Client, Control Client (including Access Control) and Mobile Client are available in Bulgarian, Czech, Danish, Dutch, English, French, German, Hungarian, Italian, Japanese, Polish, Portuguese, Russian, Simplified Chinese, Spanish, Thai, Traditional Chinese, and Turkish.

- Installation Package is available in English, French, German, Italian, Japanese, Portuguese, Russian, Spanish, Traditional Chinese, and Turkish.

Performance Specification

CMS	Performance Specification
Number of Connected Channels per System	Maximum 2048
Number of Connected Encoding Devices or Mobile Video Recorders per System	Maximum 1024
Number of Connected Mobile Terminals per System	Maximum 64
Number of Connected Alarm Inputs per System	Maximum 2048
Number of Connected Alarm Outputs per System	Maximum 2048
Control Clients per System	Maximum 16
Web Clients per System	Maximum 16
Mobile Clients per System	Maximum 64
Web Managers per System	Unlimited
Number of Users	Unlimited
Number of Roles	Maximum 64
User Permission Levels	Maximum 100
Number of Storage Servers per System	Maximum 16
Number of Stream Media Server per System	Maximum 16
POS Systems Access	Maximum 100
Storage Server	**Performance Specification**
Number of Cameras per Storage Server	Maximum 64
Video Storage Efficiency	Maximum 128 Mbps
Picture Storage Efficiency	Maximum 10 pictures per second
Storage Space of Single Storage Server	Maximum 100 TB, Minimum 100 GB
Stream Media Server	**Performance Specification**
Video Input Bandwidth per Stream Media Server	Maximum 200 × 2 Mbps
Video Output Bandwidth per Stream Media Server	Maximum 200 × 2 Mbps