HIKVISION

iVMS-5200 Professional Version 3.2.0 Specification

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);
- **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

SS (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

- Flexible license activation methods: online activation and offline activation.
- Startup wizard guides the user through basic operations including:
  - Adding encoding devices
  - Setting the record schedule
  - Configuring the event parameters
  - Managing the system users
- Standard ONVIF™ protocol
- Multiple devices are supported: IP cameras, IP domes, video encoders, DVRs, NVRs, alarm inputs / outputs, access controls, POS terminals, etc.
- Manage the devices by areas
- Five device adding modes available:
  - By detecting the online devices
  - By specifying the device IP address / domain name
  - By specifying an IP segment
  - By Port Segment
  - By HiDDNS
- Record
  - Two store methods:
    --Central storage: storage server (PC software based);
    --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 and server exception:
    -- Camera events: intrusion, line crossing, motion, video tampering, video loss, etc.
    --Transaction events: No Sale Operation, Refund Operation, etc.
    --Devices I/O 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
  - Send emails to notify users of the alarm info, supporting email template settings.
  - 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, and Recording Linkage.
- Role & User management
  - Add / Edit / Delete the roles and users.
  - The roles can be assigned with different permissions.
  - Two default roles are supported: system administrator and system operator.
  - 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
  - ➢ A static IP address can be set for the WAN access
  - ➢ NTP settings
  - ➢ Active directory settings
  - ➢ Support database backup and database restore
  - ➢ Download the system logs to view the details of hardware, software, events, etc.

Client

Control Client

- ● Live View
  - ➢ View real-time video from the cameras
  - ➢ 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.
  - ➢ 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
- ➢ 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
- ➢ 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 platform alarm info including time and description.
  - ➢ View the live video or pictures from the related camera.
  - ➢ 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
- ● Transact (Add-on)
  - ➢ POS Live View
    --Display transaction data alongside corresponding video
    --Receive / mark transaction alarm messages
    --Transaction info 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: Customer Traffic Distribution / Customer Traffic Trending/ Customer Gender Analysis / Conversion Rate
--Retail Traffic Analysis: Heat Map / Globe Hot Area
--Statistic table export / email / print

● Download center
➢ Search the recordings by cameras / recording type / time for backup
➢ Check the downloading tasks and status centrally
➢ Merge the recordings footages (max. 1G)
➢ Flow control settings
➢ Continuous transmission on the breakpoint
● System maintenance and management
➢ Monitor the status of physical and logical resources
➢ Search, view and back up the CMS logs and device logs
➢ 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
● 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
● Data transmission via 3G / 4G / Wi-Fi
● Add / remove cameras in My Favorites.
● 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
● 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)

Language
● Web Manager:

English, Spanish, Russian, French, Italian, Turkish, Portuguese, German

● Control / Web Client:

English, Spanish, Russian, French, Italian, Polish, Turkish, Dutch, Portuguese, German, Romanian, Czech, Bulgarian, Hungarian, Thai, Danish

Performance Specification

CMS	Performance Specification
Number of Connected Cameras Per System	Max. 1024
Number of Connected Devices Per System	Max. 1024
Number of Connected Alarm Inputs Per System	Max. 1024
Number of Connected Alarm Outputs Per System	Max. 1024
Control Clients Per System	Max. 16
Web Clients Per System	Max. 16
Mobile Clients Per System	Max. 64
Web Manager Per System	Unlimited
Number of Users	Unlimited
Number of Roles	Max. 64
User Permission Levels	Max. 100
Number of Storage Servers Per System	Max. 16
Number of Stream Server Per System	Max. 16
POS Terminals access	Max. 100
Storage Server	**Performance Specification**
Number of Cameras Per Storage Server	Max. 64
Video Storage efficiency	Max. 128 Mbps
Picture Storage efficiency	Max. 10 pictures per second
Stream Media Server	**Performance Specification**
Bandwidth of Video Input Per Stream Media Server	Max. 200*2Mbps
Bandwidth of Video Output Per Stream Media Server	Max. 200*2Mbps