

## HikCentral Professional 1.4.2

### Central Management System for Video Surveillance and Access Control

HikCentral Professional is a comprehensive central management system (CMS) that brings together powerful video surveillance and access control systems of any size. The modern and powerful desktop, web, and mobile clients can access the centralized system from anywhere. A key benefit of HikCentral Professional is the flexibility to add functions and services from collaborative partners, making it possible to tailor the CMS to specific needs and requirements. This highly efficient platform can be deployed on preloaded servers, virtual machines, and cloud services.

HikCentral Professional has the power to manage multiple security systems from a single point of command and control. Video, access, intercom and alarm points are brought together and managed through a modern graphical user interface, thereby reducing overall operational costs.

Licenses last a lifetime with one-time purchase and support remains free. HikCentral Professional is modular; customers can purchase only what is needed and add more advanced modules any time with simple licensing. HikCentral Professional also has the flexibility to integrate with third-party access control, automation, central monitoring and other systems using the OpenSDK or, without any coding, HikCentral Optimus middleware.



#### Key Components

- System Management Service (SYS)
- Application Data Service (ADS)
- Streaming Server (Optional)
- Web Client/Control Client/Mobile Client

#### SYS Server

- Centralized Management for Users, Roles, Permissions, Surveillance Devices, and Servers
- Normal and Hot Spare Installation Modes
- Unified Authentication Service for Clients and Servers
- Manages Logs and Statistic Functions
- Scalable for Small to Large Projects
- Service Manager for System Health Monitoring
- Streaming Gateway Distributes Audio, Video and Signaling

#### ADS Server

- Processes and stores the system's application data

#### Streaming Server

- Forwards and Distributes Audio and Video with Increased Capacity

#### Web Client

##### General

- Access the system via IP Address or Domain Name
- Wizards Guide Basic Operations:
  - Add Video Encoding Devices
  - Add Access Control Devices and Configure Permissions
  - Add Event Settings for Cameras, Devices, Server and More
  - Add System Users and Roles and Assign the Permissions
- ONVIF™ Protocol is Supported
- Restore or Reset Passwords for Detected Online Devices
- Upgrade Device Firmware
- Manage Resources (Cameras, Alarm Inputs, Alarm Outputs, Access Points, UVSS) by Logical Areas

##### License Management

- Online or Offline Activation, Updating and Deactivation
- Set Added Cameras for Facial Recognition, ANPR and Thermal Cameras

#### Encoding Device Management

- Add Multiple Devices: Network Cameras, Video Encoders, NVRs, etc.
- Activate Inactive Encoding Devices with a Password
- System Checks Encoding Device Password Strength
- Six Adding Modes for Hikvision Protocol Are Available:
  - Add Devices Detected in the Same Subnet as Server or Client
  - Specify Device IP Address or Domain Name
  - Add New Device to HikCentral Professional and Hik-Connect
  - Add Devices that Have Been Added to a Hik-Connect Account
  - Specify IP Segment
  - Specify Port Segment
  - Import in Batch

#### Access Control Device Management

- Activate Inactive Access Control Devices with a Password
- System Checks Access Control Device Password Strength
- Five Adding Modes for Hikvision Protocol Are Available:
  - Add Devices Detected in the Same Subnet as Server or Client
  - Specify Device IP Address
  - Specify IP Segment
  - Specify Port Segment
  - Import in Batch
- Three Adding Modes for Hikvision Home Protocol Are Available:
  - Specify the Device ID and Key
  - Specify an ID Segment
  - Import in Batch
- Set Time Zone for the Device

#### Dock Station Management

- System Checks Dock Station Password Strength
- Four Adding Modes for Dock Station Are Available:
  - Specify Device IP Address
  - Specify IP Segment
  - Specify Port Segment
  - Import in Batch
- Set Time Zone for the Device

## Remote Sites Management

- Add Remote Site to Central System (with RSM module).
- Three Adding Modes for Remote Sites Are Available:
  - Specify Remote Site IP Address or Domain Name
  - Add Remote Site Registered to the Central System.
  - Import in Batch
- Select Alarms Configured on Remote Site to Receive in Central System.
- Backup Remote Site Database in Central System Manually or Regularly
- Synchronize Resources Updates in Central System (Added Cameras, Deleted Cameras and Renamed Cameras) with Remote Site

## Distributed Deployment: SYS and ADS Services on Different Servers:

- Add ADS to the System and Set Standby Server if Necessary
- Transmission Encrypted Between ADS and Other Services and Clients
- Notify Admin User with Fault Details if ADS or Standby ADS Fail
- Standby ADS Takes Over Automatically if ADS Fails
- Manually Switch to Standby ADS if Necessary

## Streaming Server Management

- Add Streaming Server by IP Address on LAN or WAN
- Enable and Configure WAN Access

## Recording Server Management

- Add Hybrid Storage Area Network (SAN) or pStor as Recording Servers
- Add Hybrid SAN and pStor by IP Address
- Enable and Configure WAN Access
- Remotely Configure Added Hybrid SAN, NVR or pStor via Web Browser
- One-Touch Configuration for Hybrid SAN
- Setup Hybrid SAN N+1 Hot Spare
- Enable Automatic Network Replenishment (ANR)

## Recording

- Two Video File Storage Methods:
  - Encoding Device: DVR/NVR/Network Camera (SD Card)
  - Recording Server: Hybrid SAN, NVR or pStor
- Remote Site Cameras Can Record to the Central System's Hybrid SAN, NVR or pStor
- Continuous, Event Triggered, and Command Triggered Recording
- Set Schedule to Backup Video to Select Storage Location
- Set Recording Schedule: Default and Custom Templates
- Enable Auxiliary/Duplicate Storage Location

## Picture Storage

- Store Pictures from Devices (i.e., Alarm, Face and License Plate Pictures) on SYS Server, Hybrid SAN, NVR or pStor
- Store User Added Pictures (i.e., Vehicles' Original Undercarriages, Static Maps) on the SYS Server

## Facial Recognition Server Management

- Add Facial Recognition Server by IP Address
- Enable and configure WAN Access
- Link Cameras and Face Comparison Groups with FR Server

## Smart Wall Management

- Activate Inactive Decoding Devices with a Password
- System Checks Decoding Device Password Strength
- Four Adding Modes for Decoding Devices Are Available:
  - Add Devices Detected in the Same Subnet as Server or Client
  - Specify Device IP Address
  - Specify IP Segment
  - Specify Port Segment
- Cascade via Video Wall Controller for Cross-Decoder Functions
  - Add Smart Walls and Map Decoding Outputs to Windows
- Access Point Parameters
  - Edit Basic Information
  - Door Contact: Normally Open / Normally Closed
  - Exit Button Type: Normally Open / Normally Closed
  - Open Duration(s)
  - Extended Open Duration(s)
  - Door Open Timeout Alarm
  - Duress Code
  - Super Password
  - Dismiss Code
  - Free Access Schedule
- Access Forbidden Schedule
- Set Related Camera(s) to View the Video on Control Client
  - Edit Application Settings
  - Entry and Exit Counting
  - Multi-Door Interlocking
  - Anti-Passback

- Control First Person In
- Edit Hardware Settings
  - Edit Card Reader Parameters: OK LED, Error LED and Buzzer Polarity
  - Set Card Reader's Access Mode
  - Set Minimum Card Swiping Interval
  - Specify Delay for Keypad Entry Reset
  - Enable Failed Card Attempt Alarm
  - Enable Tampering Detection
- Link Facial Recognition Terminals with Access Point for Turnstile

## Events and Alarms

- Set System-Monitored Events for System Resources:
  - Camera Events: Motion, Video Loss, Line Crossing, etc.
  - Access Point Events: Access Events, Door Status Events, etc.
  - Device Alarm Input Events
  - Face Comparison Events: Face or Mismatch
  - LPR/ANPR Events: License Plate Match or Mismatch
  - UVSS Exception: UVSS Online or Offline
  - Remote Site Exception: Site Offline
  - Device Exceptions: Device Offline, HDD Full, HDD Read/Write Error, etc. (Including Encoding, Access Control and Dock Station Devices)
  - Server Exceptions: High Temperature, Bad Disk, Disk Loss, etc. (Including Streaming, Recording, FR, SYS and ADS Servers)
  - User Events: User Login or Logout
  - User-Defined Events
  - Generic Events Base on Data Received via TCP or UDP
- Active Control Trigger Threshold Can Prevent Duplicate Alarms
- Set Event Linkage Actions Including Recording, Tagging, Picture Capture, Alarm Output, PTZ Action, Emailing and User-Defined Events
- Send Emails with Event Information Using Custom Email Templates
- Create Generic Events Base on Data Received via TCP or UDP and Trigger Events and Alarms
- Create User-Defined Events to Be Triggered via Control Client
- Trigger Events as Alarms and Set Alarm Linkage Actions Including Related Cameras, Related Maps, Pop-Up Window, Display on Smart Wall (Decoder or Graphics), Audible Alert and User-Defines Event
- Save Event as Alarm when Editing Event
- Detect Remote Site Camera Alarms in Central System
- Detect Alarms from: Camera, Door, Input, LPR/ANPR, Person, Remote Site, Device, Server Exception, User, User-Defined and Generic Events
- Set Arming Schedule for Events: Default and Custom Templates
- Set Arming for Alarms: Default and Custom Schedule Templates or Dynamic Event-Based Arming and Disarming
- Alarm Priorities: High, Medium, Low or Custom
- Alarm Categories: True, False, to Be Acknowledged or to Be Verified

## Map Management

- Link E-Map to Area
- Search Locations on Integrated Google Maps
- Set Current Site Location on Google Map
- Add/Edit/Delete Hot Region on the Map
- Add/Edit/Delete Hot Spots (Camera/Alarm Input/Alarm Output, Door, UVSS) on the Map
- Add Labels with Descriptions on the Map
- Set Pathway for Second Generation Fisheye Cameras

## Vehicle Management

- Add Vehicle Information Manually (Make, Model and Color)
- Import Vehicle Information Using Pre-Defined Template
- Set Effective Period for Added Vehicles

## Person Management

- Add Person Information One by One
- Add Custom Properties to Person Information
- Import Information of Multiple Persons in Batch Using an Excel File
- Import Information of Multiple Persons in Batch from the AD Domain
- Import Multiple Persons' Profiles in Batch
- Import Person Information from Added Devices
- Profile Picture Formats: JPG, JPEG and PNG
- Use Profile Picture as Face Credential for Access via Face Recognition
- Issue Cards to Multiple Persons in Batch
- Report Card Loss for Person and Issue a Temporary Card
- Cancel Card Loss if Lost Card is Found

## Access Control

- Create Access Groups for Persons with Same Access Permissions
- Group Access Points into Access Levels and Set Schedule to Define the Authorized Time Periods
- Assign the Access Level to Access Group
- Apply All Access Groups to Devices Manually or Regularly
- Set Access Control Weekly and Holiday Schedules

## Time and Attendance

- Group Persons into Attendance Groups

- Add/Delete Shift Schedules
- Assign Shift Schedules to Attendance Groups
- Add/Delete Access Control Checkpoints
- Search the Attendance Records
- Correct Single Person's Attendance Record
- Correct Multiple Persons' Attendance Records

#### Face Comparison Group

- Group Persons into Face Comparison Groups
- Set Similarity Threshold When Adding Face Comparison
- Apply Face Comparison Groups to Devices

#### Dock Station Group

- Group Persons into Dock Station Groups
- Link Dock Station Groups to Dock Stations to Copy Person's Body Camera Records to the Linked Dock Station(s)

#### Role and User Management

- Default Admin Password Must Be Changed on First Login
- Admin User Password Can Be Changed
- Admin Can Reset Other Users' Passwords
- Lockout User's IP Address 10–60 min. after 1–5 Failed Login Attempts
- Add/Edit/Delete Roles and Users
- Set Role's Permission Enabled Schedule Template
- Assign Roles Permissions for Logical Area Display, Resource Access, and User Permissions
- Two Default Roles Exist: Administrator and Operator
- Set Role Name, Expiry Date, and Text Description
- Assign Roles to Users to Grant Configured Permissions
- Set User Name, Expiry Date, and Text Description
- Users' Statuses Can Be Set to Active or Inactive
- Set PTZ Control Permission Level from 1 to 100
- Import AD Domain Users in Batch
- Admin Can Force User to Log Out

#### Security Settings

- Lockout User's IP Address 10–60 min. after 1–5 Failed Login Attempts
- Set Minimum Password Strength to Weak, Medium or Strong
- Set Maximum Password Age from 1 to 365 Days
- Lock Control Client After Period 10 to 30 Minutes of Inactivity

#### System Configuration and Maintenance

- Normal Settings:
  - Create Name for Current Site
  - Enable Google Maps, Configure API URL, and Customize Map Icons
  - Set the Desired Day for First Day of the Week
  - Set the Desired Unit of Temperature to Celsius, Fahrenheit, or Kelvin
  - Set the Alarm Thresholds for Server CPU and RAM Usage
- Network Settings:
  - Enable and Configure Network Time Protocol (NTP)
  - Enable and Configure Active Directory (AD)
  - Link AD Person Information with HikCentral Person Information
  - Enable System to Receive Generic Events via TCP and UDP
  - From Central System, Enable Remote Site Registration
  - From Remote Site, Register with Central System
  - Configure WAN Access with Static IP Address or Domain Name
  - Adjust Network Timeout for Configurations on the Web Client
  - Set Device Access Mode to Automatic or Proxy Server
  - Select Server NIC to Be Used by the SYS Server
- Storage Settings:
  - Set Storage Location on SYS Server and Picture Storage Quota
  - Set Retention Periods for Stored Events, Tags, Data, Records, Logs
- Create Schedule Templates for Recording, Arming, Access, Permissions and Holidays
- Email Settings:
  - Configure Email Settings and Test
  - Create Email Templates with Data Variables
- Configure Regular Reporting of Events, Alarms, Vehicles, People Counts, Queues, Heat Maps, Pathway Analyses, Thermal Camera Temperatures, and Attendance Records
- Enable Evidence Collection with SFTP Server and Customize Selectable Evidence Attributes
- Advance Settings:
  - Set Transfer Protocol to HTTP or HTTPS
  - Set Unique IDs for Cameras for Use with Network Keyboard
  - Set Working Mode for DS-5600 Facial Recognition Series
  - Export Service Component Certificate for Other Servers
  - Adjust Health Check Frequencies
  - Add Fuzzy Search Rules for License Plate Searches
  - Configure Server as Host or Spare Server
  - Reset Network Information After Changing Network Domain
  - View Database Password
- Backup and Restore Database

#### Live View

- View Live Camera Video from Current Site or Remote Site
- Control PTZ Cameras with Advance Functions
- Switch Instant Playback In-Place
- Digitally Zoom in on Live and Instant Playback Video
- Save Snapshots with Zoom on the Client's Machine
- Record Live and Instant Playback Video to the Client's Machine
- Enable Two-Way Audio
- Perform Fisheye Expansion
- Switch Between Main Stream, Sub-Stream and Smooth Stream
- Display Stream Resolution and Frame Rate
- Turn Audio On/Off on Live and Instant Playback Video
- Set Window Division up to 64 Windows
- Show Video Full Screen without Sidebars
- POS Live View:
  - Display Transaction Data Alongside Corresponding Video
  - Transaction Information Video Overlay or Separate Display

#### Playback

- Playback Recorded Camera Video from Current Site or Remote Site
- Select Storage Location Source (e.g., Main or Auxiliary)
- Playback by Timeline with Accurate Date and Time Positioning
- Advance Single-Frame Forward per Click
- Adjust Playback Speed from 1/16x to 16x
- Turn Audio On/Off and Adjust Volume
- Record Playback Video and Snapshots to the Client's Machine
- Digitally Zoom in on Playback Video
- Perform Fisheye Expansion
- Switch Between Stream Types (e.g., Main and Smooth Stream)
- Display Stream Resolution and Frame Rate
- Set Window Division up to 16 Windows
- Show Video Full Screen without Sidebars

#### Local Configuration

- Configure Network Transmission Settings:
  - Enable GPU Hardware Decoding
  - Set Default Global Stream to Main, Sub or Smooth Stream
  - Set Window Division Threshold for Auto-Switching Stream Types
  - Adjust Network Timeout for Web Client Application Operations
  - Set Video Caching to Small, Medium or Large (1, 6 or 15 Frames)
  - Set Captured Snapshot Format to BMP or JPEG
  - Set Device Access Mode: Default, Judge Automatically, Directly Access or Proxy
- View Local Saving Paths for Videos and Pictures

#### Control Client

##### General

- Log in to SYS via IP Address or Domain Name
- Log in as Normal or Domain User
- Synchronize with SYS Configuration Information
- Orderly Control Panel with Customizable Arrangement
- Every Module Can Be Opened as One or More Auxiliary Screens
- Supports GPU Hardware Decoding of Video
- Adaptive Monitoring Window Division is Intuitive and Convenient
- Receives and Manages Alarms
- Change Client User's Password
- Switch User
- Manually and Automatically Locking Control Client
- Monitor Client Machine's CPU, RAM and Network Usage

##### Monitoring

- Monitoring Module Provides Live View and Playback
- Live View and Playback Modes Both Offer:
  - Public and Private View Management and Use
  - Viewing of Maps
  - Turn Audio On/Off and Adjust Volume
  - Digitally Zoom in on Video
  - Save Snapshots with Zoom on the Client's Machine
  - Save Video as it Plays to Client's Machine or Evidence Server
  - Print Captured Snapshot with Time, Name and Description
  - Tag Important Video for Subsequent Review
  - Perform Fisheye Expansion/Dewarping
  - Display Detailed Camera Status and Diagnosis
  - Switch Between Stream Types (e.g., Main, Sub and Smooth Stream)
  - Smooth Stream Auto-Adjusts Bit Rates for Slow Networks
  - Send Video to Smart Wall (Graphics or Decoder)
  - Perform Video Content Analysis (VCA) Searches and Playback
  - Trigger User-Defined Event
  - Access Control Lockdown All
  - Access Control Release All
  - Quick Access to Live View, Playback and System Settings

- Live View Also Offers:
  - Four Auxiliary Monitoring Screens Are Supported
  - View Real-Time Video from Cameras
  - Single-Window Auto-Switch Cameras from Area, View or Group
  - PTZ Camera Controls:
    - On-Screen Drag Pan/Tilt, Scroll Zoom, and 3D Positioning
    - Advanced On-Screen Sidebar Controls
    - Customizable PC Keyboard Controls
    - Hikvision Network Joystick/Keyboard Controller
    - Lock PTZ Control for 5 to 30 Minutes or Click to Unlock
  - Enable Two-Way Audio
  - Trigger Alarm Outputs on Devices
  - Control Arming
  - Switch to Instant Playback on Any Video
  - View Real-Time Events: Resource, Face and Access Events
  - Manage Graphics Card Smart Walls
- Playback Also Offers:
  - Playback by Timeline with Accurate Date and Time Positioning
  - Video Thumbnail Timeline for Quickly Locating Incidents
  - Filter Playback by Recording and Tag Types and Storage Location
  - Playback up to 16 Cameras Asynchronously or Synchronously
  - Frame-Extracting Playback Works with Little Bandwidth
  - Lock and Unlock Video Files for Overwrite Protection
  - Export Video with Format Conversion, Protection and Player
  - Play Forward with Single-Frame Forward per Click
  - Play Reverse with Single-Frame Reverse per Click
  - Adjust Playback Speed from 1/16x to 16x Forward and Reverse
  - Drag the Timeline to Skim Through Video Forward and Reverse

### Map Control

- View Geographic Resource Locations on the Map
- Open Live and Playback of Cameras, UVSS and Doors on the Map
- Arm and Disarm Cameras, UVSS, Doors and Alarm Inputs on the Map
- Search and View Camera Alarm History and Alarm Inputs on the Map
- Receive Notification Message on the Map When an Alarm is Triggered
- Jump to the Hot Region Maps
- Zoom in and out on the Map
- Select Resources on the Map
- Add Labels with Descriptions on the Map
- Print Map
- Locate Resource on the Map
- View Live Video or Playback of Resources on the Map

### Alarm Center

- Display Alarm Information Including Alarm Time Name Status, etc.
- Display System Alarm Information Including Time and Description
- Playback Recorded Video Relating to the Alarm
- View Live Video from Related Camera
- Play Alarm Related Video on a Smart Wall
- Add a Tag to the Alarm Information
- Acknowledge Alarm and Enter a Text Description
- Acknowledge Multiple Alarms in Batch
- Control Arming of Alarms
- Sort Alarms by Selected Property
- Manually Clear Alarms
- Enable/Disable Alarm Audio
- Enable/Disable Alarm Triggered Pop-Up Window
- Search Event and Alarm Log Files
- Manually Trigger User-Defined Events

### LPR/ANPR Control

- View Video and Recognized License Plate Numbers from LPR Cameras
- Mark the Detected Vehicle
- Add Detected Vehicles to a Vehicle List
- Search Logs of Recognized License Plates and Related Information
- Search Logs of Passing Vehicles Having No License Plate

### UVSS Control

- View Captured Undercarriage Pictures and License Plate Numbers of Passing Vehicles
- Mark Points of Interest on Undercarriage Pictures
- Mark the Detected Vehicle
- Add Detected Vehicles to a Vehicle List
- Search Logs of Recognized License Plates and Related Information

### Face Comparison

- View Capture Camera's Live View and View Detected and Matched Persons
- View The Face Comparison Information
- Add Mismatched Persons to Person List
- Upload A Face Picture to Search the Video When the Face Picture Captured
- Subscribe to Receive Face Matched/Mismatched Events from All the

### Face Comparison Groups

### Access Control

- View Live Video of Access Points' Related Camera(s)
- Playback Recorded Video Files of Door's Related Camera(s)
- Set Access Points to Lock/Unlock or Remain Locked/Unlocked
- View the Card Swiping Records in Real-Time
- Search Access Control Events Triggered on Added Access Points
- Subscribe to Receive Access Events from All the Access Points
- Forgive Anti-Passback Violations
- Entry & Exit Counting
- Handle Opening Door Request from Video Access Control Terminal

### Video Search

- Search Video Files Stored on Local Devices or Recording Server
- Search Video by Time Range, Tag, Lock Status, Segment, or Interval
- Search Main or Auxiliary Storage Locations
- Search Transaction Event by Keywords in the POS Transaction
- Search ATM Events by Card Number
- Search Video, Pictures and Audio Stored on Dock Station
- Set VCA Rules After the Fact to Quickly Find Video of Events
- Play Video Clips Returned from Search
- Download Video Clips Returned from Search

### Report

- Generate Report from People Counting Cameras to View Number of People Entered, Exited, or Both Entered and Exited
- Generate Report from Queue Analysis Cameras to Show Number of Queue Exceptions, Number of Persons in Each Queue, Waiting Duration and Queue Length
- Generate Report from Heat Map Cameras to Analyze the Visit Times and Dwell Time and Location of Customers
- Generate Report from Pathway Analysis Camera to Analyze People Counting on the Pathways in a Shopping Mall
- Generate Report from Thermal Cameras to Show the Number of Exceptions (Temperature too High/Low) and Maximum/Minimum Temperature of Different Thermometry Points
- Generate Report from LPR/ANPR to Show Number of Passing Vehicles Detected During Specified Time Period
- Export and Save Report on Local PC

### Health Monitoring

- Status Overview of Resources Including Cameras, Recorders, UVSS, Access Points, Access Control Devices, Dock Stations, Remote Sites, Decoding Devices, SYS Server, Recording Servers, Streaming Servers and Facial Recognition Servers
- Detailed Pages for Cameras, Encoding Devices, UVSS, Access Points, Access Control Devices, Recording Servers and Streaming Servers

### Smart Wall

- Smart Wall (Decoding Device)
  - Decode and Display Camera Video Streams on the Smart Wall
  - View Camera Status
  - Switch the Live View Stream to Main or Sub Stream
  - Control PTZ Cameras
  - Control Window Division on Each Monitor
  - Switch to Playback
  - Auto-Switch Between Saved Smart Wall Views
  - Create a Roaming Window of Any Size and Location on Smart Wall
  - Enlarge and Restore Windows
  - View and Export Window Numbers and Camera IDs for Reference when Using a Network Keyboard to Control the Smart Wall
- Smart Wall (Graphics Card)
  - Display all Contents (Cameras, Access Points, Maps, Face Comparison Groups) in Live View on Smart Wall
  - Send Individual Cameras to Smart Wall
  - Display Resources of Area on Smart Wall
  - Display Map on Smart Wall
  - Display View and View Group on Smart Wall
  - Display Alarm's Related Video on Smart Wall
  - Display Health Monitoring Page on Smart Wall

### Tools

- Open VSPlayer to Play Downloaded Video
- Broadcast Audio Through Added Devices
- Control Alarm Outputs of Added Devices
- Start and Stop Two-Way Audio with Individual Devices

### Download Center

- Check Downloading Tasks and Status
- Continuous Transmission on the Breakpoint
- Download VSPlayer to Playback Video Files

## Audit Trail

- Search Logs of SYS, Remote Site, Cameras and Smart Walls
- Backup Log Files

## System Settings

- General Parameters:
  - Set Main, Sub or Smooth Stream for Default Global Usage
  - Set the Window Size Proportion Threshold for Automatically Switching Between Main Stream and Sub-Stream
  - Network Timeout: Default Waiting Time for the Control Client
  - Picture Format: BMP/JPEG
  - Maximum Mode: Maximize/Full Screen
  - Time Zone: Device Time or Client Time
  - Time Difference: Show the Time Difference
  - Set Download Rate Limit for Downloading from pStor
  - Toggle Auto-Login
  - Toggle Resume Last Interface
  - Toggle Display of Each Window's Number
- Image Parameters:
  - View Scale: Full Screen (Stretch) or Original Resolution (Fit)
  - Window Scale: 4:3 or 16:9
  - Video Caching: Small, Medium or Large (1, 6 or 15 Frames)
  - Toggle Continuous Decoding with Switching Window Division
  - Toggle Motion Highlight
  - Toggle VCA Rule Display
  - Toggle GPU Hardware Decoding
  - Toggle Transaction Information in Live View and Playback
  - Toggle Temperature Information in Live View and Playback
- File Parameters: Set Saving Path for Videos, Pictures and Packages
- Configure Keyboard and Joystick Parameters
- Configure Live View and Playback Settings:
  - Configure Icons in Live View and Playback Toolbars
  - Toggle Always Display Toolbar
- Set Alarm Sounds to Local Audio Files or Voice Engine (Requires OS Support)
- Set Auto-Refresh Interval of Control Client Health Monitoring

## Mobile Client

### General

- Access the SYS via IP Address
- Log in with Normal or Domain User
- Log in with HTTP or HTTPS Transfer Protocol
- Switch User Account
- Add/Remove Cameras to/from My Favorites
- Search Cameras in Different Sites
- Display Camera Details Including Online Status, PTZ Control, Etc.
- Access and Control Facial Recognition Devices (Open/Close Door)
- Add Person with Details Including Face Picture to System
- Add Person to Face Comparison Group
- Subscribe Events of All Access Points and Face Comparison Groups (Only on Tablet)
- Manage and Share Saved Snapshots and Video Clips
- Set Device Access Mode for Video to Default, Judge Automatically, Directly Access or Proxy Mode for Live View and Playback
- Toggle Display of Detection Frames (Motion, Fire, Temperature, Etc.)
- Auto-Refresh Thumbnails on Logical Resources Page and Favorites
- Use Time Zone of Mobile Device or System Resource Device
- Display Time Zone Offset in the Time
- Toggle Notifications
- Toggle Preference for Hardware Decoding
- Display Current and Historical Network Traffic Flow Statistics
- Update the Mobile Client to New Version When Available

### Live View

- View Live Camera Video
- View Live Video from Access Point's Related Cameras
- View Real-Time Images from UVSS (Only on Tablet)
- Control PTZ Cameras
- Turn Audio On/Off in Live View

- Switch Between Main Stream and Sub-Stream
- Set Main Stream or Sub Stream as Default Stream
- Save Snapshots with Zoom on the Mobile Device and Share
- Record Live Video on the Mobile Device and Share
- Enable Two-Way Audio
- Digitally Zoom in to Video with Intuitive Touchscreen Gestures
- Perform Fisheye Dewarping with Intuitive Touchscreen Gestures
- Lock and Unlock Doors
- Display Persons' Real-Time Access Records and Information
- View Passing Vehicles' Recognized License Plate Number and Time
- View Passing Vehicles' Time, UVSS Images, License Plate Numbers and Saved Vehicle Information (Only on Tablet)
- Mark Points of Interest on Undercarriage Pictures (Only on Tablet)
- Add Detected Vehicles to a Vehicle List
- View Real-Time and Previous Face Comparisons with Similarity Percentage, Person's Information and Time of Capture
- Add Mismatched Persons to a Person List
- Trigger User-Defined Events Manually

### Playback

- Playback Recorded Video Files
- Playback 1 to 4 Channels per Page Synchronously or Asynchronously
- Search by Date and Storage Mode
- Storage Modes Include Encoding Device and Hybrid SAN
- Turn Audio On/Off in Playback
- Record Playback Video on the Mobile Device and Share
- Save Snapshots with Zoom on the Mobile Device and Share
- Digitally Zoom in to Video with Intuitive Touchscreen Gestures
- Switch Between Main Stream and Sub-Stream
- Perform Fisheye Dewarping with Intuitive Touchscreen Gestures
- Enable Transcoded Playback with New Stream Parameters
- PIP Mode Displays Channel's Live View Inside Playback Video
- Scale Playback Timeline with Touchscreen Spread and Pinch
- Tag Segments of View for Subsequent Review

### View Mode

- Display Public and Private Views
- View Live and Playback in View Mode

### Receive Alarms

- Receive and Display Alarms with Related Live Video or Playback
- View the Alarm Time According to Current Site and Remote Site
- Filter Alarms by Priority, Status and Category
- View Alarm Sources on Related Maps
- Acknowledge Alarms

### Map Control (Only on Tablet)

- View Geographic Locations of Resources on Maps
- Live View and Playback Cameras, UVSS and Doors on Maps
- Search Historical Alarms of Cameras, Inputs, UVSS and Doors on Maps
- Jump to Hot Regions Maps
- Zoom in and out on Maps
- Select Resources on Maps
- Add Labels with Descriptions on Maps
- Locate Resource on Maps
- Control Access Points on Maps
- Search and View Access Records

### Search (Only on Tablet)

- Search Tagged Video and VCA Event-Related Video
- Search Records of Passing Vehicles and View Details
- Search Persons' Access Records and View Details
- Add Person to a Person List

### Business Intelligence (BI) Report (Only on Tablet)

- Heat Map Report
- Temperature Report
- Queue Analysis Report
- People Counting Report
- Vehicle ANPR Report
- Pathway Analysis Report

# Software Specifications

Feature		Maximum Performance
General	Cameras	Centralized Deployment: 3,000 <sup>1</sup> Distributed Deployment: 10,000 <sup>2</sup> Central System (RSM): 100,000 <sup>3</sup>
	Managed Device IP Addresses <i>*Including Encoding and Access Control Device and Remote Sites</i>	Centralized Deployment: 1,024 <sup>1</sup> Distributed Deployment: 2,048 <sup>2</sup>
	Alarm Inputs	3,000
	Alarm Outputs	3,000
	Dock Stations	1,500
	DS-5600 Series Face Recognition Terminals When Applied with Hikvision Turnstiles	32
	Facial Recognition Servers	64
	Recording Servers	64
	Streaming Servers	64
	LPR/ANPR Cameras	3,000
	People Counting Cameras	Recommended: 300
	Heat Map Cameras	Recommended: 70
	Thermal Cameras	Recommended: 20 <sup>4</sup>
	Queue Management Cameras	Recommended: 300
	Areas	3,000
	Cameras per Area	256
	Alarm Inputs per Area	256
	Alarm Outputs per Area	256
	Event & Alarm	Event and Alarm Rules
Storage of Events or Alarms without Pictures		Centralized Deployment: 100/s Distributed Deployment: 1000/s
Events or Alarms Sent to Clients <i>*The clients include Control Clients and Mobile Clients</i>		120/s 100 Clients/s
Arming Schedule Templates		200
Picture Storage <i>*Including event/alarm, face and vehicle pictures</i>		20/s (Stored in SYS Server) 120/s (Stored in Recording Server)
Picture	Regular Report Rules	100
	Event or Alarm Rules in One Event/Alarm Report Rule	32
Reports	Records in One Sent Report	10,000 or 10 MB (whichever comes first)
	Resources Selected for One Report <i>*With this limitation, you can generate a neat and clear report via the Control Client and it costs less time</i>	<ul style="list-style-type: none"> <li>• 20 People Counting Cameras for One People Counting Report</li> <li>• 20 LPR/ANPR Cameras for One Vehicle Analysis Report</li> <li>• 20 Queues for One Queue Analysis Report</li> <li>• 20 Presets for One Temperature Report</li> </ul>
	Data Retention Period	Stored for 3 Years
Data Storage	People Counting	5 million
	Heat Map	0.25 million
	ANPR	60 million
	Events	60 million
	Alarms	60 million
	Access Records	1.4 billion
	Attendance Records	55 million
	Operation Logs	5 million
	Service Information Logs	5 million
	Service Error Logs	5 million
Users and Roles	Recording Tags	60 million
	Concurrent Access via Web Clients, Control Clients, and OpenSDK Clients	100 clients
	Concurrent Access via Mobile Clients and OpenSDK Clients	100 clients
Vehicle (ANPR)	Users	3,000
	Roles	3,000
	Vehicle Lists	100
Face Comparison	Vehicles per Vehicle List	5,000
	Under Vehicle Surveillance Systems	4
	Vehicle Undercarriage Pictures	3,000
Access Control	Persons with Profiles for Face Comparison	1,000,000
	Face Comparison Groups	64
	Persons in One Face Comparison Group	1,000,000
Time and Attendance	Persons with Credentials for Access Control	50,000
	Cards	250,000
	Fingerprints	200,000
	Access Points	512
	Access Groups	64
Smart Wall (Decoding Devices)	Access Levels	128
	Access Schedules	32
	Persons for Time and Attendance	10,000
Smart Wall (Graphics Cards)	Attendance Groups	64
	Shift Schedules	128
	Decoding Devices	32
Streaming Gateway	Smart Walls	32
	Views (Displayed Content Configurations)	1,000
	View Groups	100
Streaming Server	Views Auto-Switched Simultaneously	32
	Smart Walls (Monitors)	4/client
	Video Input Bandwidth per SYS Server	200 Channels max. and 400 Mbps max.
Streaming Server	Video Output Bandwidth per SYS Server	200 Streams max. and 400 Mbps max.
	Video Input Bandwidth per Streaming Server	300 Channels max. and 600 Mbps max.
	Video Output Bandwidth per Streaming Server	300 Streams max. and 600 Mbps max.

- <sup>1</sup> For one site, the maximum number of the added encoding devices, access control devices, and security control devices in total is 1,024. If the number of the manageable cameras (including the cameras directly added to the site and the cameras connected to these added devices) exceeds 3,000, the exceeded cameras cannot be imported to the areas.
- <sup>2</sup> For one site with Application Data Server deployed independently, the maximum number of the added encoding devices, access control devices, and security control devices in total is 2,048. If the number of the manageable cameras (including the cameras directly added to the system and the cameras connected to these added devices) exceeds 10,000, the exceeded cameras cannot be imported to the areas.
- <sup>3</sup> For one site, if the number of the manageable cameras (including the cameras managed on the current site and the cameras from the Remote Sites) in the Central System exceeds 100,000, the exceeded cameras cannot be managed in the Central System.
- <sup>4</sup> This recommended value refers to the number of thermal cameras connected to the system directly. It depends on the maximum performance (data processing and storage) in the situation when the managed thermal cameras uploading temperature data to the system. For thermal cameras connected to the system via NVR, there is no such limitation.

## Server Hardware Specifications

Feature	HikCentral-VSS-Base/HW/64Ch	HikCentral-VSS-Base/HW/300Ch
Server Model	Dell PowerEdge R240 (E575)	
Processor	E3-1220 V5 (4-Core, 3.0 GHz)	
Operating System	Microsoft® Windows Server 2012 R2 (Supported by Microsoft® until 10/10/2023)	
Memory	16 GB DDR4, 2400 MT/s UDIMMS	
Storage	1 TB SATA × 2, 3.5" enterprise SATA 7.2k HDDs, 120 GB SATA SSD x1	
RAID	H330 RAID controller with RAID 1	
NIC	1 GbE × 2	
Chassis	1U, rack mount	
Battery	CR-2032 coin cell/lithium/0.0032 kg	
Power Supply	250 W cabled PSU	
Server Dimensions (W x D x H)	18.99" × 22.36" × 1.69" (482.38 mm × 567.92 mm × 42.8 mm)	
Server Weight	20.9 lb (9.5 kg)	
Package Dimensions (W x D x H)	29.53" × 24.17" × 10.2" (750 mm × 614 mm × 259 mm)	
Package Weight	34.8 lb (15.8 kg)	
Warranty and Support	Includes 3-year Dell ProSupport Plus Service Agreement with 4-Hour On-site Response. See Maintenance Guide of Dell All-In-One Server for details.	

\* These are the specifications of the all-in-one server packages offered. These preloaded servers are intended to simplify server selection, purchase and setup.

\* HikCentral Professional may be purchased without a server, and the server specifications may differ. See System Requirements and Performance document for more details.

## System Requirements

System Component	
Operating System for Server	Microsoft® Windows 7 SP1 (64-bit) Microsoft® Windows 8.1 (64-bit) Microsoft® Windows 10 (64-bit) Microsoft® Windows Server 2008 R2 SP1 (64-bit) Microsoft® Windows Server 2012 (64-bit) Microsoft® Windows Server 2012 R2 (64-bit) Microsoft® Windows Server 2016 (64-bit) *For Windows 8.1 and Windows Server 2012 R2, ensure installation of cumulative update KB2919355 from May, 2014.
Operating System for Control Client	Microsoft® Windows 7 (32/64-bit) Microsoft® Windows 8 (32/64-bit) Microsoft® Windows 8.1 (32/64-bit) Microsoft® Windows 10 (64-bit) Microsoft® Windows Server 2008 R2 SP1 (64-bit) Microsoft® Windows Server 2012 (64-bit) Microsoft® Windows Server 2012 R2 (64-bit) Microsoft® Windows Server 2016 (64-bit) *For Windows 8.1 and Windows Server 2012 R2, make sure it has cumulative update KB2919355 from May, 2014.
Database on Server	PostgreSQL V9.6.10 *This version is included with a new HikCentral Professional installation. Updating HikCentral does not update the PostgreSQL version.
Browser for Web Client	Internet Explorer 10/11 and above (32-bit) Chrome 61 and above (32-bit) Firefox 57 and above (32-bit) Safari 11 and above (running on Mac OS X 10.13/10.14)
Operating System for Web Client	iOS 9.0 or later Android 4.4 or later, 1.5 GHz dual-core CPU or better, 2 GB RAM or more
Virtual Machine for Server	VMware® ESXi™ 6.x Microsoft® Hyper-V with Windows Server 2012/2012 R2/2016 (64-bit) *The Streaming Server and Control Client cannot run on the virtual machine. *Changing the VM configuration after activating HikCentral will invalidate the license. Please deactivate, adjust VM and then reactivate.
Failover Cluster	Microsoft® Windows Server 2008 R2 SP1 64-bit Microsoft® Windows Server 2012 64-bit RoseReplicatorPlus_5.1.0_175-x64

\* Server refers to SYS server in centralized deployment, and SYS as well as ADS server in distributed deployment.

\* See System Requirements and Performance document for more details.

# Available Models

Category	Description	Detail	Model	MSRP (USD)
<b>Video Surveillance System (VSS)</b>				
The VSS base licenses are available with or without a physical server, and enable all standard features for a fully functional VSS. Each server can only use one VSS base licenses. Optional expansion and add-on module licenses are described below.				
<b>VSS Base</b>	All-In-One Server	64 Channels	HikCentral-VSS-Base/HW/64Ch	\$11,961
		300 Channels	HikCentral-VSS-Base/HW/300Ch	\$29,170
	Software license only	4 Channels	HikCentral-VSS-Base/4Ch	\$913
		16 Channels	HikCentral-VSS-Base/16Ch	\$2,170
		64 Channels	HikCentral-VSS-Base/64Ch	\$5,983
<b>VSS Expansion</b>	Add one video channel. Orders of multiple channels are provided as one indivisible license key.		HikCentral-VSS-Base/300Ch	\$23,191
<b>VSS Modules</b>	Smart wall module for integrated video wall management.		HikCentral-VSS-1Camera	\$98
	Automatic number plate recognition (ANPR) module for Hikvision LPR camera integration.		HikCentral-SmartWall-Base	\$4,348
	Automatic number plate recognition (ANPR) module for Hikvision LPR camera integration.		HikCentral-ANPR-Base	\$2,391
	Under-vehicle surveillance system (UVSS) base for management of four (4) Hikvision UVSS.		HikCentral-UVSS-Base	\$9,500
	Facial recognition module for Hikvision facial recognition camera and NVR integration.		HikCentral-FacialReco-Base	\$7,050
	Business Intelligence module enables reporting from people counting, queue analysis and heat mapping cameras.		HikCentral-BI Report-Base	\$2,717
Thermal report module enables statistical reporting of temperature data from one (1) Hikvision thermal cameras.		HikCentral-Thermal Report-Base/1Ch	\$543	
<b>Access Control System (ACS)</b>				
The ACS base licenses are available without a server, and they enable all standard features for a fully functional ACS. Each server can only use one ACS base license. Optional expansion and add-on module licenses are described below.				
<b>ACS Base</b>	Software license only	2 Doors	HikCentral-ACS-Base/2Door	\$1,085
		16 Doors	HikCentral-ACS-Base/16Door	\$2,170
<b>ACS Expansion</b>	Add one door. Orders of multiple add-on doors are provided as one indivisible license key.		HikCentral-ACS-1Door	\$98
<b>ACS Modules</b>	Attendance module enables all shift management and attendance reporting functionality.		HikCentral-Attendance	\$2,717
<b>Remote Site Manager (RSM)</b>				
The RSM base license is available with or without a server and enables management of two (2) HikCentral servers in one system. The RSM allows scaling a system beyond one HikCentral server up to 100k cameras. Optional expansion licenses are described below.				
<b>RSM Base</b>	RSM Server with software <sup>1</sup>	2 Sites	HikCentral-RSM-Base/HW/E3/2Site	\$17,609
	Software license only	2 Sites	HikCentral-RSM-Base/2Site	\$11,630
<b>RSM Expansion</b>	Add one site. Orders of multiple add-on sites are provided as one indivisible license key.		HikCentral-RSM-1Site	\$1,200
<b>High Availability Software (HAS)</b>				
High availability software to implement a standby server for one or more HikCentral Professional host servers and ensure the CMS system remains operational even when the host server is down. RoseReplicator Plus is the preferred high availability solution for HikCentral Professional servers where maximal uptime is important.				
<b>HAS</b>	RoseReplicator Plus	USB key with 1 year warranty	RoseReplicatorPlus For Windows(USBKEY1)	\$7,033
		USB key with 3 year warranty	RoseReplicatorPlus For Windows(USBKEY3)	\$8,389

<sup>1</sup> The RSM server offered supports up to 18,000 cameras among the connected HikCentral Professional sites.