HikCentral Professional V2.6.0

HikCentral Professional is a software platform provided by Hikvision for integrating and managing security systems. It is designed to meet a variety of security challenges on a single platform. With HikCentral Professional, you can manage multiple individual systems with ease, such as video security, access control, security alarms, and more, as well as explore cross-system functionalities.
Daily operations become more efficient while protection of people and property improve all around. Users of all kinds are making smarter decisions.

Key Feature

Light and Efficient

- Lightweight architecture features reduced consumption of system resources
- Capable of managing multiple systems of varying sizes with consistent efficiency

Unified and Flexible

- Supports combining various application plug-ins under a unified, on-demand architecture for collaboration across business segments
- New plug-ins can be continuously developed to meet new business needs

Integrated and Open

- Compatible with virtually all Hikvision products and their abundance of applications, including deep-learning-based analytics and statistics
- Open architecture permits easy integration with third-party systems and hardware

• Features of Main Modules

Module	Features
Video	● Efficient and comprehensive video security ● Quick incident search and location, convenient event search, and quick run-through of video ● Video export as evidence ● Low bandwidth network adaptability ● Reliable and flexible storage
Access Control	● Comprehensive and flexible access management methods ● Advanced access strategies for sensitive areas ● Convenient employee badge design and printing ● Clear step-by-step guidance ● Remote personnel registration ● Automatically lock or unlock doors ● Keep doors in a remain unlocked status during an emergency ● Easily count and verify everyone's safety ● Opening door via Bluetooth and NFC
Visitor	● Digitalized visitor management ● Visitor registration in advance ● Pre-defined access permissions and traceable records ● A Watchlist function along with personalized design and printing of badges
Vehicle	● Flexible and efficient entrance & exit management ● Improved parking experience for drivers ● Self-service parking query ● Flexible billing ● Intuitive and efficient parking operation analysis and transaction analysis reports
On-Board Monitoring	● Efficient vehicle monitoring for quick response ● Reliable archive management ● Customized reports for enhanced operational efficiency
Alarm Detection	● Centrally manage various alarm sources ● Real-time display of all kinds of alarms ● Flexible linkage ● Automatic audio alarms
Intelligent Analysis	● The video-based intelligent analysis dashboard enables flexible and extensible digital applications ● Smart commercial analyses
Commercial Display	● Manage and configure content for digital signage in an intuitive manner ● Pre-installed program templates ● All programs are created visually
Time & Attendance	● Flexible attendance rule-setting ● Diverse attendance reports and customizable templates ● Easy integration with third-party payroll systems ● Supports employees searching for attendance results and submitting applications for correction
Portable Enforcement	● Quick retrieval of important recordings, long-term backups, and file-level permission management ● Automatic detection and addition of portable devices through dock stations, and detailed statistical logs for personnel and equipment use
Smart Wall	● Display videos on the wall ● Video auto-switch and scheduled playback ● Alarm pop-up on smart wall. The alarm video will be automatically played in a pop-up window on the video wall to notify the operator
Parking Lot Management	● Efficient entrance & exit management with access rules for vehicles, integration with ANPR cameras, and touch-free, non-stop vehicle authentication to help reduce rush hour

	congestion ● Improved parking experience with guidance screens and displays to find vacant spaces ● Flexible charging options including manual charge and prepayment
Evidence Management	● Convenient information collection with multi-clients (Mobile Client, Web Client, Control Client) for uploading files ● Unified management of cross-service evidence files, including videos, pictures, audios, and documents uploading in the daily operation ● Long-term backup, efficient retrieval: evidence classification, archiving, retrieval, export, one-stop management
AR	● Easily access key cameras without losing the global view ● Quick resource location through simple "Click" and "Filter" actions ● Efficient process for quick event handling from notification to acknowledgment
Patrol Management	● Design patrol schedules and routes effortlessly using an intuitive e-map interface ● Security staff check in using access control devices with all data automatically uploaded to the software ● Report anomalies during the patrol to the center via the Mobile Client ● Trigger alarms instantly if unauthorized individuals attempt to conduct patrol ● Comprehensive patrol reports enable managers to assess performance effectively
Security Inspection	● Identify a wide range of prohibited items timely and accurately, reducing labor costs and security threats ● Simplify centralized management with real-time detection results, alarm information, and live view
Emergency Mustering	● Instant response to emergencies with a click to trigger the emergency automatically or manually ● Enhanced evacuation experience with cycled broadcast of evacuation messages through IP speakers and remaining doors open along the escape route for quick assembly at muster points ● Efficient confirmation of personnel safety status at muster points, including counting and verification of everyone’s presence and checking the most recent locations of missing individuals
Remote Site Management (RSM)	● Manage multi-site systems in one place, providing a unified view of different resources, and all related events and alarms across sites. ● Multi-site solutions in terms of the number of devices, remote sites and concurrent events to be handled by the system
Maintenance	● Visualized network and device topology and alarm notifications ● Logs are available for event trackback and evidence ● Check all health status with one click or according to a preset schedule ● Clearly see the risks and exceptions
Parcel Tracking	● Easy Identification & Tracking of Parcels by linking the data from barcode systems and video systems ● Tracking through the Conveyor belt systems with smart code reader and conventional cameras ● Video Evidence Management: support Video Record Export（MP4/AVI), support Scanning Record Export by Check Point/Parcel ID/timestamp)
Dock Management	● Real-time analysis loading and unloading rate, quickly locate and playback the processes ● Vehicle dispatch process: dock reservation, ANPR, LED screen displaying queuing info, speaker for audio broadcast ● Real-time and visualized display of dock status on the Dock Map ● Statistics of vehicle operation time, waiting time, etc. by the dashboard
Canteen Consumption	● Non-contact payment, improve efficiency and upgrade experience ● Diverse consumption mode applicable to different scenarios ● Unified management enables high efficiency on management of large plant canteens

Software Specification

The following table shows the maximum performance of the SYS (System Management Server). For other detailed data and performance, refer to *Software Requirements and Performance*.

Features		Maximum Performance
General		
Manageable Resource	Encoding Devices	5,000 ***Note:*** No more than 2,048 encoding devices added by ONVIF protocol, 1,024 access control devices or elevator control devices, 128 security radars, 32 visitor terminals, 1,000 dock stations, 128 network transmission devices, , 40 entrances&exits, 2,048 guidance terminals, 4 UVSSs, 2,048 digital signages, 2,048 interactive flat panels, 2,048 fire protection devices, 1,000 scanning devices, 256 portable code scanners, and 100 payment terminals are allowed.
	Encoding Devices Supporting ONVIF Protocol	
	Access Control Devices	
	Elevator Control Devices	
	Video Intercom Devices	
	Visitor Terminals	
	Security Control Panels and Panic Alarm Devices	
	IP Speakers	
	Query Terminals	
	Guidance Terminals	
	Parking Lot Screens	
	Entrance/Exit Stations	
	On-Board Devices	
	Security Inspection Devices	
	UVSSs	
	Body Cameras	
	Dock Stations	
	Network Transmission Devices	
	Digital Signage Terminals	
	Interactive Flat Panels	
	Fire Protection Devices	
	Decoding Devices	
	BACnet Devices	
	Modbus Devices	
	Payment Terminals	
	Portable Code Scanners	
	Scanning Devices (including Hikvision smart code readers, Hikvision barcode readers, and third-party scanning devices)	
	Intelligent Analysis Servers	64
	Recording Servers	64
	Streaming Servers	64
	Cameras	Central System: 10,000 With RSM: 100,000
	Alarm Inputs (excluding security control panels and panic alarm devices)	5,000
	Alarm Inputs of Security Control Devices	10,000
	Security Control Partitions (Areas)	2,048
	Alarm Outputs	3,000
	Radar PTZ Cameras	30
	DS-5600 Series Face Recognition Terminals When Applied with Hikvision Turnstiles	32
	ANPR Cameras	3,000
	People Counting Cameras	Recommended: 3,000
	Heat Map Cameras	Recommended: 1,024
	Queue Management Cameras	Recommended: 3,000
	Thermal Cameras	Recommended: 20①
	Cameras per Area	256
	Alarm Inputs per Area	256

	Alarm Outputs per Area	256
Event	Events	10,000
	Event Receiving Without Pictures	● Average Value: 100/s ● Peak Value: 1,000/s (This value last for no more than 10 minutes.)
	Event Receiving with Pictures (Directly Stored in Recording Servers or NVRs)	● Average Value: 100/s ● Peak Value: 1,000/s (This value last for no more than 10 minutes.)
	Event Receiving with Pictures (Transmitted to Recording Servers from SYS)	100/s
	Event Receiving with Pictures (Stored in SYS)	20/s
	Events Sent to Clients	100 clients * 100 events/s **This parameter indicates the SYS' performance of sending events to both the Web Client and the Control Client. It may vary by clients' actual performance of event receiving.*
	Combined Alarm	10/s
	User-Defined Events	10,000
User and Role	Total Online Users and Persons **The persons refers to employees who are allowed to login to Self-Service, searching for attendance results, check in&out via the Mobile Client, and opening door via bluetooth.*	5,000
	Users	10,000
	Roles	3,000
Person	Persons (The persons include persons for Access Control and Time&Attendance.)	100,000
	Cards	500,000
	Fingerprints	400,000
	Irises	200,000
	Profile Pictures	100,000
	Departments	3,000
	Department Hierarchies	10
	Size of a Profile Picture	300 KB
	Total Size of Profile Pictures	300 GB
	Resigned Persons	100,000
	Resignation Types	100
Data Storage	Data Retention Period	Stored for 3 Years ***Note:*** *The value may vary by different modules. See System Requirements and Performance for details.*
	People Counting	5 million each year
	Heat Map	0.25 million each year
	ANPR Records	60 million each year
	Events	
	Alarms	
	Access Records	1.4 billion each year
	Attendance Records	55 million each year
	Visitor Records	10 million each year
	Operation Logs	5 million each year
	Service Information Logs	

	Service Error Logs	
	Recording Tags	60 million each year
Report	Total Scheduled Reports	100
	Total Data in One Scheduled Report	32,000
	Custom Reports in Time and Attendance Module	128
	GPS Report	250/s
Video & Intelligent Analysis		
Video Security	Recording Schedule	30,000
	Recording Schedule Template	200
	Users for Double Authentications	50
	Capture Triggered by Event (Directly Stored in Recording Servers)	● Average Value: 100/s ● Peak Value: 1,000/s (This value last for no more than 10 minutes.)
	Capture Triggered by Event (Stored in SYS, or transmitted to recording servers from SYS)	● Average Value: 20/s ● Peak Value: 100/s (This value last for no more than 10 minutes.)
Intelligent Recognition	Face Pictures for Intelligent Recognition	1000,000
	Face Comparison Groups	64
	Intelligent Analysis Groups	1,000
Intelligent Analysis	Total Stores	1,000
	Total Analysis Group	1,000
AR Monitoring	AR Scenes	100
	Plans	512
	Tags for Each Scene	200
	Tag Groups for Each Scene	100
Evidence Management	Cases	100,000
	Files	100,000
Smart Wall	Smart Walls	32
	Network Keyboard	8
	Views	1,000
	View Groups	100
	Views in One View Group	10
	Cameras in One View	256
	Cameras in One Window of Auto-Switch	20
	Windows of an Auto-Switch	16
	View Group of an Auto-Switch	1
Streaming Server②	Video Input Bandwidth per Streaming Server	300 × 2 Mbps
	Video Output Bandwidth per Streaming Server	300 × 2 Mbps
Access Control & Time and Attendance & Visitor		
Access Control	Access Points (Doors + Floors)	Central System: 5,000 RSM: 10,000
	Access Levels	1,024
	Access Group	1,024
	Access Schedules	32
	Templates for Card Printing	32
Time and Attendance	Schedules	128
	Break Timetable	128
	Pay Code (including overtime types and leave types)	128
	Approval Roles	100
	Approval Flows	1,000
Visitor Management	Visitors	100,000
	Visitor Registration or Reservation Records	100,000
	Visitor Email Templates	20
	Entities in Watch List	10,000
	Card Template	20

	WhatsApp Template	20
Vehicle and Parking Management		
Vehicles per List		5,000
Vehicles		500,000
Custom Vehicle Types		10
Vehicle Undercarriage Pictures		3,000
Parking Lots		10
Lanes		Total: 40 In One Parking Lot: 32
Parking Spaces		Total: 5,000 In One Floor: 1,024
Floors in All Parking Lots		128
Cards Linked with Vehicles		250,000
Temporary Cards in One Parking Lot		10,000
On-Board Monitoring		
GPS Information Report		Report a GPS information to the platform every 5s, totally 200 GPS information can be sent to the platform per second.
Fence Rules for One Vehicle		4
Deviation Rules for One Vehicle		4
Vehicles Can Be Located in One Client		64
Maximum Number of Drivers		10,000
Maximum Number of Driving Routes		1,000
Portable Enforcement		
Intercom Groups		128
Persons in One Intercom Group		100
Commercial Display		
Materials		10,000
Programs		2,000
Schedules		1,000
Quickly Released Contents		64
Security Inspection		
Analyzers		8
Walk-Through Metal Detectors		64
Broadcast		
Speaker Unit		128
Broadcast Group		128
Media Libraries		100
Patrol		
Maximum Number of Shifts of a Single Route		8
Dock Management		
Docks		500
Parcel Tracking		
Check Points		1,000
Canteen Consumption		
Number of Merchants		100
Payment Groups		512
Payment Rules		128
Meal Types		8

①: 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 limit.

②： In the Portable Enforcement module, persons performing group intercom via the streaming server of HikCentral Professional simultaneously is 400.

System Requirement

** For high stability and good performance, the following system requirements must be met.*

OS for HikCentral Professional Server	Microsoft® Windows 11 64-bit Microsoft® Windows 10 64-bit Microsoft® Windows Server 2019 64-bit Microsoft® Windows Server 2016 64-bit Microsoft® Windows Server 2012 R2 64-bit Microsoft® Windows Server 2012 64-bit Microsoft® Windows Server 2022 **For Windows Server 2012 R2, make sure it is installed with the rollup (KB2919355) updated in April, 2014.*
OS for Control Client	Microsoft® Windows 11 64-bit Microsoft® Windows 10 64-bit Microsoft® Windows Server 2019 64-bit Microsoft® Windows Server 2016 64-bit Microsoft® Windows Server 2012 R2 64-bit Microsoft® Windows Server 2012 64-bit Microsoft® Windows Server 2022 **For Windows Server 2012 R2, make sure it is installed with the rollup (KB2919355) updated in April, 2014.*
Browser Version	Google Chrome® 114 and later Firefox® 114 and later Safari® 16.6 and later Microsoft® Edge 114 and later Internet Explorer® 11 and later
Database	PostgreSQL V16.1
OS for Mobile Client	iOS 12.0 and later Android 6.0 and later
Virtual Machine	VMware® ESXi™ 6.x, ESXi™ 7.x Microsoft® Hyper-V with Windows Server 2012/2012 R2/2016 (64-bit) **The Control Client cannot run on the virtual machine.* **Refer to the Deployment Guide of HikCentral Professional on VMware Virtual Machines for how the streaming server running on the virtual machine.* **Virtual server migration is not supported.*

Recommended Hardware Specification

Processor	E-2324G(4Cores/8MB/4T/ 3.1-4.6GHz/65W)	
Memory	1 × 16GB up to 2666 MT/s DDR4 UDIMM	
Storage Controllers	Internal Controllers: SAS_H355	
Drive Bays	1T 7.2K SATA×2	
Power Supplies	Single 450W (Bronze) power supply	
Dimensions	Form Factor: Rack (1U) Chassis Width: 434.00mm (17.08 in) Chassis Depth: 595.63mm (23.45 in) (3.5”HHD) ***Note:*** These dimensions do not include: bezel, redundant PSU	
Dimensions with Package (W × D × H)	750 mm × 614 mm × 259 mm (29.53" × 24.17" × 10.2")	
Net Weight	12.2 kg	
Weight with Package	18.5 kg	
Embedded NIC	2 x 1GbE LOM Network Interface Controller (NIC) ports	
Device Access	Front Ports: 1x USB 2.0, 1 x IDRAC micro USB 2.0 management port Rear Ports: 2 x USB 3.0, VGA, serial connector	
Embedded Management	iDRAC9 with Lifecycle Controller iDRAC Direct DRAC RESTful API with Redfish	
Integrations and Connections	Integrations: Microsoft® System Center VMware® vCenter™ BMC Truesight (available from BMC) Red Hat Ansible	Connections: Nagios Core & Nagios XI Micro Focus Operations Manager i (OMi) IBM Tivoli Netcool/OMNIbus
Operating Systems	Certify XenServer Citrix® XenServer® Microsoft Windows Server® with Hyper-V Red Hat® Enterprise Linux Ubuntu Server This model is installed with Microsoft Windows Server® 2019 multilingual operating system.	SUSE® Linux Enterprise Server VMware® ESXi

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