HikCentral Professional

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 surveillance ● 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
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
Mobile 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
Digital signage	● 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
Maintenance	● Visualized network and device topology and alarm notifications ● Logs are available for event trackback and evidence

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	Managed Devices **Including Encoding Devices, Access Control Devices, Elevator Control Devices, Security Control Devices, Digital Signage Terminals, Interactive Flat Panels, Remote Sites, Guidance Terminals, and IP Speakers*	2,048
	Encoding Devices Supporting ONVIF Protocol	2,048
	Video Intercom Devices	5,000
	Guidance Screens	512
	Visitor Terminals	32
	Dock Stations	1,500
	Network Transmission Devices	128
	Mobile Devices	1,000
	Fire Protection Devices	2,048
	Entrance/Exit Stations	40
	Query Terminals	16
	DeepinMind Server	64
	Recording Servers	64
	Streaming Servers	64
	Cameras	10,000 With RSM: 100,000
	Maximum Number of Fisheye Cameras	10,000
	Maximum Number of Cameras for People Counting	
	Alarm Inputs	5,000
	Alarm Outputs	3,000
	Security Radars and Radar PTZ Cameras	30
	Zones of Security Control Partitions	2,048
	Security Control Partitions (Areas)	256
	DS-5600 Series Face Recognition Terminals When Applied with Hikvision Turnstiles	32
	ANPR Cameras	3,000
	People Counting Cameras	Recommended: 300
	Heat Map Cameras	Recommended: 70
	Thermal Cameras	Recommended: 20①
	Queue Management Cameras	Recommended: 300
	Cameras per Area	256
	Alarm Inputs per Area	
	Alarm Outputs per Area	
Event & Alarm	Event and Alarm Rules	10,000
	Storage of Events or Alarms Without Pictures	1,000/s
	Storage of Events or Alarms with Pictures	20/s (Stored in SYS) 80/s (Stored in Recording Server)
	Events or Alarms Sent to Clients **The clients include Web Client, Control Clients and Mobile Clients.*	120/s 100 Clients/s
	Combined Alarm	10/s
	User-Defined Events	10,000
User and Role	Concurrent Accesses via Web Clients and Control Clients	100
	Concurrent Accesses via Mobile Clients	100

	Users	3,000
	Roles	3,000
	Users for Double Authentications	50
Person	Person Group	3,000
	Person Group Hierarchies	10
	Size of a Profile Picture	300 KB
	Total Size of Profile Pictures	300 GB
Data Storage	Data Retention Period	Stored for 3 Years
	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	Scheduled Report Rules of Event and Alarm	100
	Event or Alarm Rules in One Event/Alarm Report Rule	32
	Records in One Sent Report	10,000 or 10 MB
	Resources Selected in One Report **With this limitation, you can generate a neat and clear report via the Control Client and it costs less time.*	32
	Maximum Number of Stores	1,000
Video & Intelligent Analysis		
Recording	Recording Schedule	30,000
	Recording Schedule Template	200
Face Comparison	Face Pictures for Comparison	1,000,000
	Face Comparison Groups	64
	Persons in One Face Comparison Group	1,000,000
	Storage of Face Comparison Events Without Pictures	1,000/s
	Storage of Face Comparison Events with Pictures	100/s (Stored in Recording Server)
Intelligent Recognition	Intelligent Analysis Groups	1,000
	Resources in One Group	64
	Persons for Intelligent Recognition	1000,000
Evidence Management	Evidences	100,000
	Evidence Files	5,000,000
Smart Wall	Decoding Devices	32
	Smart Walls	32
	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 Server	Video Input Bandwidth per Streaming Server	200 × 2 Mbps
	Video Output Bandwidth per Streaming Server	200 × 2 Mbps
Access Control & Time and Attendance & Visitor		
Access Control	Persons with Credentials for Access Control	50,000
	Total Credentials (Card + Fingerprint)	250,000
	Cards	250,000
	Fingerprints	200,000

	Irises	100,000
	Profiles	50,000
	Access Points (Doors + Floors)	1,024
	Access Levels	512
	Access Schedules	32
	Templates for Card Printing	32
Time and Attendance	Persons for Time and Attendance	10,000
	Shift Schedules	128
	Major Leave Types	64
	Minor Leave Types of One Major Type	128
	Holidays	32
	Break Timetable	128
	Custom Rules for T&A Status on Device	128
Visitor Management	Visitors	100,000
	Visitor Check-In or Reservation Records	100,000
	Visitor Email Templates	20
	Entities in Watch List	10,000
Vehicle and Parking Management		
Vehicles per List		5,000
Vehicles		500,000
Custom Vehicle Types		10
Under Vehicle Surveillance Systems (UVSSs)		4
Vehicle Undercarriage Pictures		3,000
Storage of ANPR Alarm Without Pictures		1,000/s
Storage of ANPR Alarm with Picture		20/s (Stored in SYS) 100/s (Stored in Recording Server)
Parking Lots		10
Lanes		Total: 40 In One Parking Lot: 32
Parking Spaces		Total: 3,000 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
Vehicle Passing Frequency in Each Lane		1 Vehicle/s
Mobile Monitoring		
Fence Rules for One Vehicle		4
Vehicles Can Be Located in One Client		64
Retention Period of GPS Data		6 Months
Retention Period of Statistics Data		3 Years
Maximum Number of Drivers		10,000
Maximum Number of Driving Routes		1,000
Digital Signage		
Materials		10,000
Programs		2,000
Schedules		1,000
Release Records		1,000
Video Walls		512
Applications for Interactive Flat Panel		1,000
Security Inspection		
Analyzers		8
Walk-Through Metal Detectors		64
Security Inspection Channels		1,000
Broadcast		
IP Speakers		2048
Speaker Unit		128

Broadcast Group	128
Media Libraries	100
Patrol	
Maximum Number of Shifts of a Single Route	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 limitation.

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 8.1 64-bit Microsoft® Windows 7 SP1 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 2008 R2 SP1 64-bit **For Windows 8.1 and 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 8.1 64-bit Microsoft® Windows 7 SP1 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 2008 R2 SP1 64-bit **For Windows 8.1 and Windows Server 2012 R2, make sure it is installed with the rollup (KB2919355) updated in April, 2014.*
Browser Version	Google Chrome® 84 and above Firefox® 84 and above Safari® 11 and above Microsoft® Edge 89 and above Internet Explorer® 11 and above
Database	PostgreSQL V11.8
OS for Mobile Client	iOS 10.0 and above Android 6.0 and above
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	Intel® Xeon® E-2124	
Memory	16G DDR4 DIMM slots, Supports UDIMM, up to 2666 MT/s, 64GB Max. Supports registered ECC	
Storage Controllers	Internal Controllers: SAS_H330 Software RAID: PERC S140 External HBAs: 12Gbps SAS HBA (non-RAID) Boot Optimized Storage Subsystem: 2x M.2 240GB (RAID 1 or No RAID), 1x M.2 240GB (No RAID Only)	
Drive Bays	1T 7.2K SATA×2	
Power Supplies	Single 250W (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 ***Note:*** This model is installed with Microsoft Windows Server® 2016 multilingual operating system.	
Virtual Machines	VMware® ESXi	

Distributed by

Headquarters
No.555 Qianmo Road, Binjiang District,
Hangzhou 310051, China
T +86-571-8807-5998
overseasbusiness@hikvision.com

Hikvision USA
T +1-909-895-0400
sales.usa@hikvision.com

Hikvision Europe
T +31-23-5542770
sales.eu@hikvision.com

Hikvision UK & Ireland
T +01628-902140
sales.uk@hikvision.com

Hikvision UAE
T +971-4-4432090
salesme@hikvision.com

Hikvision Russia
T +7-495-669-67-99
saleru@hikvision.com

Hikvision Australia
T +61-2-8599-4233
salesau@hikvision.com

Hikvision Italy
T +39-0438-6902
info.it@hikvision.com

Hikvision South Africa
Tel: +27 (10) 0351172
sale.africa@hikvision.com

Hikvision Singapore
T +65-6684-4718
sg@hikvision.com

Hikvision Korea
T +82-(0)31-731-8817
sales.korea@hikvision.com

Hikvision India
T +91-22-28469900
sales@pramahikvision.com

Hikvision Brazil
T +55 11 3318-0050
Latam.support@hikvision.com

Hikvision France
T +33(0)1-85-330-450
info.fr@hikvision.com

Hikvision Spain
T +34-91-737-16-55
info.es@hikvision.com

Hikvision Poland
T +48-22-460-01-50
info.pl@hikvision.com

Hikvision Canada
T +1-866-200-6690
sales.canada@hikvision.com

Hikvision Turkey
T +90 (216)521 7070- 7074
sales.tr@hikvision.com

Hikvision Kazakhstan
T +7-727-9730667
nikia.panfilov@hikvision.ru

Hikvision Tashkent
T +99-87-1238-9438
uzb@hikvision.ru

Hikvision Indonesia
T +62-21-2933759
Sales.Indonesia@hikvision.com

Hikvision Thailand
T +662-275-9949
sales.thailand@hikvision.com

Hikvision Malaysia
T +601-7652-2413
sales.my@hikvision.com

Hikvision Vietnam
T +84-974270888
sales.vt@hikvision.com

Hikvision Hong Kong
T +852-2151-1761
info.hk@hikvision.com

Hikvision Colombia
sales.colombia@hikvision.com

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