HIKVISION®

HikCentral Professional

HikCentral Professional is an integrated security software designed to meet versatile security challenges in one intuitive platform: from managing individual systems such as video security, access control, intrusion alarm, etc., to collaborating multiple systems under a unified architecture. While protecting people and property, it makes daily operations more efficient, and helps various kinds of users make smarter decisions.



Key Feature

Home Page

- Providing three predefined Home page modes on Web Client, including system installation and management mode, security control and management mode, and attendance management mode
- Supports customizing Home page mode on Web Client
- Supports customizing control panel on Control Client
- Supports switching Home page mode for visualization and non-visualization management
- Providing different report dashboards for resource status, intelligent analysis results, access records, vacant parking spaces, alarms, etc., on the Home page of Web Client

Wizard

• Providing wizards for video management, access control, vehicle management, alarm detection, and digital signage management on Web Client

Live View and Playback

- Up to 256 channels live view simultaneously
- Custom window division configurable
- Viewing maps and real-time events during live view and playback
- Stream type self-adaptive, transcoded playback, and frame- extracting playback
- Fisheye dewarping of multi-channel
- Controlling PTZ in visualization way
- Supports decoding stream from cameras with high-definition, such as PanoVu series camera

Visual Tracking

Recording and Storage

- Recording schedule for continuous recording, event recording and command recording
- Storing videos on encoding devices, Hybrid SANs, cloud storage servers, pStors
- Providing main storage and auxiliary storage
- Providing video copy-back
- Storing alarm pictures on NVRs, Hybrid SANs, cloud storage servers, pStors, or HikCentral server
- Supports search of VCA event related videos, video footages, and event triggered video footages.

Event and Alarm Management

- Camera linkage, alarm pop-up window and multiple linkage actions
- Multiple events for video security, access control, resource group, resource maintenance, etc.
- Supports adding combined alarms in a visualization way





Access Control, Elevator Control, and Video Intercom

- Setting schedules for free access status and access forbidden status of doors or floors
- Supports multiple access modes for both card reader authentication and person authentication
- Supports assigning an access level to persons, assigning access levels to persons, assigning access levels to person groups, and assigning access levels to an access group
- Supports advanced functions such as multi-factor authentication, anti-passback, and multi-door interlocking
- Controlling door or floor status in real-time
- Calling indoor station by the Control Client
- Calling the platform by door station and indoor station, and answering the call by the Control Client

Person and Visitor Management

- Getting person information from added devices
- Provides multiple types of credentials, including card number, face, and fingerprint, for composite authentications
- Visitor registration and check-out

Security Control

- Real-time alarm management for added security control panels
- Adding zone as hot spot on E-map and viewing the video of the linked camera
- Event and alarm linkage with added cameras, including pop-up live view, captured picture
- Subscribing the events that the Control Client can display in real-time
- Acknowledging the received alarm on the Control Client

Time and Attendance

- Setting different attendance rules for various scenarios, such as normal shift and man-hour shift
- Customizing overtime levels and setting corresponding work hour rate
- Supports assigning shift schedule to person group or person(s), or adding temporary schedule
- Supports multiple types of reports according to different needs and sending reports to specified emails regularly

Entrance and Exit Control

- Managing parking lot, entrances and exits, and lanes.
- Supports linking a LED screen with lane for information display
- Setting entry & exit rules for vehicles in the vehicle lists as well as vehicles not in any vehicle lists
- Entrance and exit control based on license plate recognition, card, or video intercom
- Viewing real-time and history vehicle information and controlling barrier gate manually on the Control Client

Temperature Screening

- Displaying the skin-temperature and whether wearing a mask or not about the recognized persons in real time
- Triggering events and alarms when detects abnormal temperature and no mask worn
- Viewing reports about skin-surface temperature and mask-wearing

Face and Body Recognition

- Displaying the information of the recognized persons in real-time
- Searching history records of recognized persons, including searching in captured pictures, searching matched persons, searching by features of persons, and searching frequently appeared persons

Intelligent Analysis

- Supports setting resource groups and analyzing data by different groups
- Supports intelligent analysis reports including people counting, people density analysis, queue analysis, heat analysis, pathway analysis, person feature analysis, temperature analysis, and vehicle analysis
- Displaying the number of people in specified regions in real-time



Digital Signage

- Supports static materials, including picture, video, audio, TXT file, document, static web page, Android APP, etc.
- Supports dynamic materials, including Streaming Server, network camera, URL, etc.
- Supports uploading up to 10,000 material file. Each file size cannot exceed 4 GB
- Creating normal program, attendance program, and people counting & temperature screening program
- Managing up to 2,000 programs. Program's resolution cannot exceed 4K
- Supports creating a loop schedule, customizing a schedule, or creating schedule by day, by week, or by default
- Managing up to 1,000 schedules
- Supports cut-in program, and cut-in message

Third-Party Integration

• Sending the original attendance data to a third-party database (Microsoft® SQL Server, MySQL, PostgreSQL, or Oracle), thus the client can access third-party T&A and payment system

Network Management

- Managing network transmission devices such as switches, displaying the network connection and hierarchical relationship of the managed resources by a topology
- Viewing the network details between the device nodes in the topology, such as downstream and upstream rate, port information, etc. and checking the connection path
- Exporting the topology and abnormal data to check the device connection status and health status



Software Specification

The following table shows the maximum performance of the HikCentral Professional server. For other detailed data and performance, refer to *Software Requirements & Hardware Performance*.

	Features	Maximum Performance
	Cameras	General Performance: $3,000^{①}$ High Performance: $10,000^{②}$ High Performance (RSM): $100,000^{③}$
	Managed Device IP Addresses *Including Encoding Devices, Access Control Devices, Elevator Control Devices, Security Control Devices, Digital Signage Terminals, and Remote Sites	General Performance: 1,024 $^{(1)}$ High Performance: 2,048 $^{(2)}$
	Video Intercom Devices Alarm Inputs (Including Zones of Security Control Devices)	2,048 3,000
	Alarm Outputs	3,000
	Dock Stations Security Radars and Radar PTZ Cameras	1,500 30
Devices and	Alarm Inputs of Security Control Devices DS-5600 Series Face Recognition Terminals When Applied	2,048
Resources	with Hikvision Turnstiles Recording Servers	32 64
	Streaming Servers	64 8
	Security Audit Server DeepinMind Server	64
	ANPR Cameras People Counting Cameras	3,000 Recommended: 300
	Heat Map Cameras Thermal Cameras	Recommended: 70 Recommended: 20 ^③
	Queue Management Cameras Digital Signage Terminals	Recommended: 300 1,024
	Areas Cameras per Area	3,000 256
	Alarm Inputs per Area Alarm Outputs per Area	256 256 256
Recording	Recording Schedule	General Performance: 3,000 ^① High Performance: 10,000 ^②
	Recording Schedule Template	200 General Performance: 3,000 ^①
	Event and Alarm Rules	High Performance: 10,000 ^② General Performance: 100/s ^①
Event & Alarm	Storage of Events or Alarms without Pictures	High Performance: 1,000/s ²
	Events or Alarms Sent to Clients *The clients include Control Clients and Mobile Clients.	120/s 100 Clients/s
Picture	Picture Storage *Including event/alarm pictures, face pictures, and vehicle pictures.	20/s (Stored in SYS Server) 80/s (Stored in Recording Server)
	Regular Report Rules Event or Alarm Rules in One Event/Alarm Report Rule	100 32
Reports	Records in One Sent Report Resources Selected in One Report *With this limitation, you can generate a neat and clear	10,000 or 10 MB 20
	report via the Control Client and it costs less time. 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
		Visitor Records	10 million
		Operation Logs	5 million
		Service Information Logs	5 million
		Service Error Logs	5 million
		Recording Tags	60 million
		Concurrent Accesses via Web Clients, Control Clients, and OpenAPI Clients	100
	Users and Roles	Concurrent Accesses via Mobile Clients and OpenAPI Clients	100
		Users	3,000
		Roles	3,000
-		Vehicle Lists	100
		Vehicles per Vehicle List	5,000
	Vehicle (ANPR)	Under Vehicle Surveillance Systems	4
		Vehicle Undercarriage Pictures	3,000
F		Lanes	8
	Entrance & Exit	Cards Linked with Vehicles	250,000
-		Vehicle Passing Frequency in Each Lane	1 Vehicle/s
	F	Persons with Profiles for Face Comparison	1,000,000
	Face Comparison	Face Comparison Groups	64
-		Persons in One Face Comparison Group	1,000,000
	Person	Person Group	3,000
		Person Group Hierarchies	10
		Persons with Credentials for Access Control	50,000
		Visitors	10,000
		Total Credentials (Card + Fingerprint)	250,000
		Cards	250,000
	Access Control	Fingerprints	200,000
		Profiles	50,000
		Access Points (Doors + Floors)	1,024
		Access Levels	512
		Access Schedules	32
ŀ		Persons for Time and Attendance	10,000
	Time and	Shift Schedules	128
	Attendance	Major Leave Types	64
		Minor Leave Types of One Major Type	128
F		Decoding Devices	32
		Smart Walls	32
		Views	1,000
	Smooth Mall		100
	Smart Wall	View Groups	
		Views in One View Group	10
		Cameras in One View	150
-		Views Auto-Switched Simultaneously	32
	Intelligent	Resource Groups for Intelligent Recognition	1,000
	Recognition	Resources in One Group	64
		Materials	10,000
	Digital Signage	Programs	2,000
	Digital Signage	Schedules	1,000
		Schedules	1,000



Streaming Server's Maximum Performance		
Video Input Bandwidth per Streaming Server	300 × 2 Mbps	
Video Output Bandwidth per Streaming Server	300 × 2 Mbps	

(1): The general performance requires Intel[®] Xeon[®] E3-1220 or higher.

(2): The high performance requires Intel[®] Xeon[®] E5-2620 or higher.

③: 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.



Hardware Specification



Processor	Intel® Xeon® E-2124		
	16G DDR4 DIMM slots, Supports UDIMM, up to 2666 MT/s, 64GB Max.		
Memory	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) <i>Note:</i> These dimensions do not include: bezel, redundant PSU		
Dimensions with Package	750 mm × 614 mm × 259 mm		
(W × D × H)	(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 [®] 2016 multilingual operating system.	SUSE® Linux Enterprise Server VMware® ESXi	



System Requirement

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

Feature	Description
	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)
OS for HikCentral Professional	Microsoft [®] Windows Server 2012 (64-bit)
Server	Microsoft [®] Windows Server 2012 R2 (64-bit)
	Microsoft [®] Windows Server 2016 (64-bit)
	Microsoft [®] Windows Server 2019 (64-bit)
	*For Windows 8.1 and Windows Server 2012 R2, make sure it is installed with the rollup (KB2919355)
	updated in April, 2014.
	Microsoft [®] Windows 7 SP1 (32/64-bit)
	Microsoft [®] Windows 8.1 (32/64-bit)
	Microsoft [®] Windows 10 (64-bit)
	Microsoft [®] Windows Server 2008 R2 SP1 (64-bit)
OS for Control Client	Microsoft [®] Windows Server 2012 (64-bit)
Os for control client	Microsoft [®] Windows Server 2012 R2 (64-bit)
	Microsoft [®] Windows Server 2016 (64-bit)
	Microsoft [®] Windows Server 2019 (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 Visitor Terminal	Android 7.1 and later
	Internet Explorer 11 and above
Browser Version	Chrome 61 and above
browser version	Firefox 57 and above
	Safari 11 and above (running on Mac OS X 10.3/10.4)
Database	PostgreSQL V11.8
	iOS 10.0 and later
OS for Smartphone	Android phone OS version 5.0 or later, and dual-core CPU with 1.5 GHz or above, and at least 2G
	RAM
OS for Tablet	iOS 10.0 and later
	Android tablet with Android OS version 5.0 and later
	VMware [®] ESXi™ 6.x
Virtual Machine	Microsoft [®] Hyper-V with Windows Server 2012/2012 R2/2016 (64-bit)
	*The Streaming Server and Control Client cannot run on the virtual machine.
	*Virtual server migration is not supported.







Distributed by

 \square

L

HIKVISION[®]

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

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

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

Hikvision Thailand T +662-275-9949 sales.thailand@hikvision.com Hikvision Europe T +31-23-5542770 sales.eu@hikvision.com

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

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

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

Hikvision Malaysia T +601-7652-2413 sales.my@hikvision.com Hikvision UK & Ireland T +01628-902140 sales.uk@hikvision.com

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

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

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

Hikvision Vietnam T +84-974270888 sales.vt@hikvision.com Hikvision UAE T +971-4-4432090 salesme@hikvision.com

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

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

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

Hikvision Hong Kong T +852-2151-1761 info.hk@hikvision.com Hikvision Russia T +7-495-669-67-99 saleru@hikvision.com

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

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

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

Hikvision Colombia sales.colombia@hikvision.com

© Hikvision Digital Technology Co., Ltd. 2019 | Data subject to change without notice |