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

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
	Video Intercom Devices	5,000
	Guidance Screens	512
	Visitor Terminals	32
	Dock Stations	1,500
	Network Transmission Devices	128
	Mobile Devices	1,000
	Entrance/Exit Stations	40
	Query Terminals	16
	DeepinMind Server	64
	Recording Servers	64
	Streaming Servers	64
	Areas	3,000
	Cameras	10,000 With RSM: 100,000
	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: 20[1]
	Queue Management Cameras	Recommended: 300
	Cameras per Area	256
	Alarm Inputs per Area	256
	Alarm Outputs per Area	256
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 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
	Heat Map	0.25 million
	ANPR Records	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
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.*	20

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
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	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	20,000
	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

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

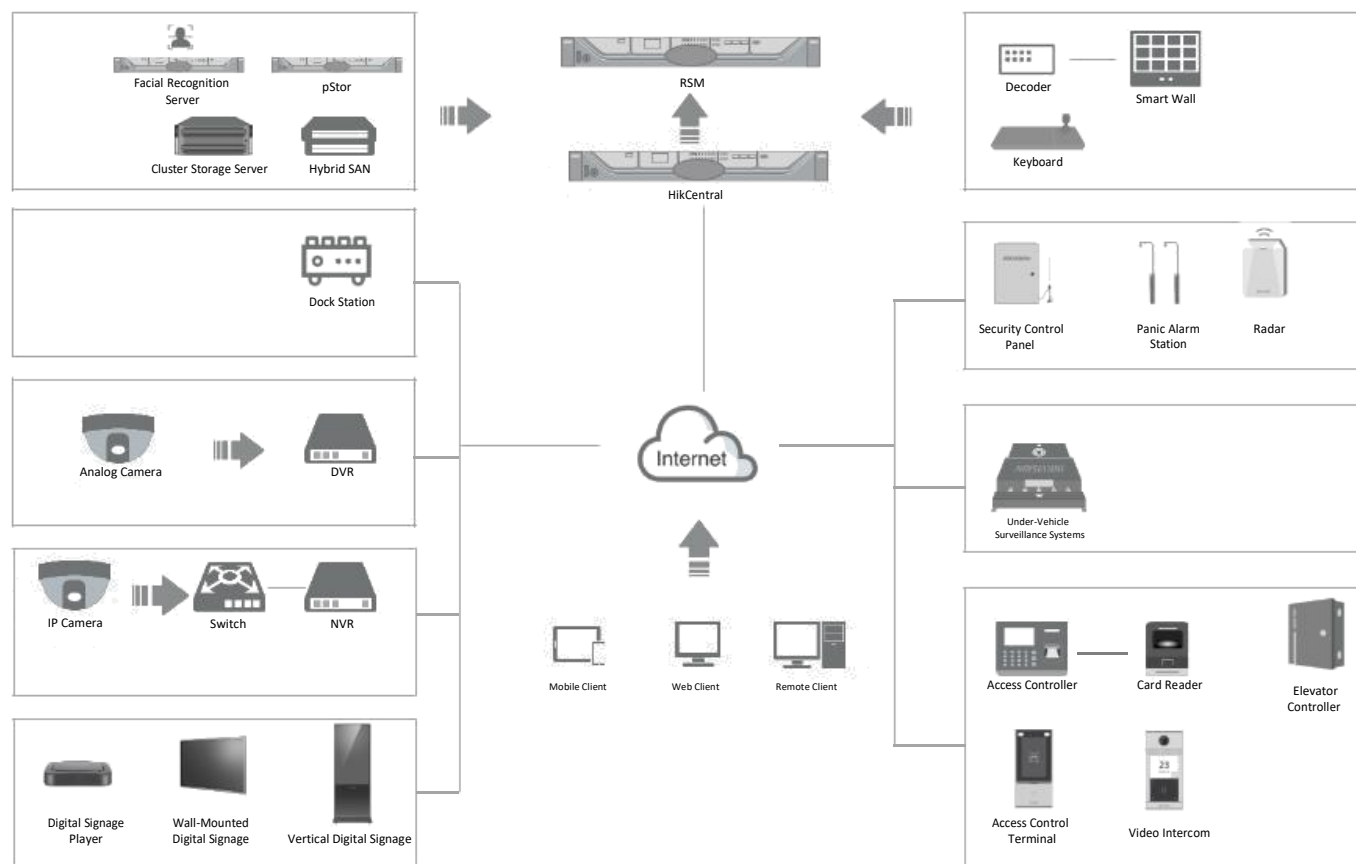| **Broadcast**	
Broadcast Group	128
Media Libraries	100

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 CentOS 7.2 64-bit** CentOS 7.4 64-bit** CentOS 7.6 64-bit** **For Windows 8.1 and Windows Server 2012 R2, make sure it is installed with the rollup (KB2919355) updated in April, 2014.* *** Special Version edition to support LINUX environment installation, contact Hikvision technical center for more details*
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 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.*

Typical Application

Facial Recognition Server	pStor	RSM	Decoder — Smart Wall
Cluster Storage Server	Hybrid SAN	HikCentral	Keyboard

Dock Station

Security Control Panel | Panic Alarm Station | Radar

Analog Camera → DVR

Internet

Under-Vehicle Surveillance Systems

IP Camera → Switch — NVR

Mobile Client | Web Client | Remote Client

Access Controller — Card Reader | Elevator Controller

Digital Signage Player | Wall-Mounted Digital Signage | Vertical Digital Signage

Access Control Terminal | Video Intercom

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	

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