



# **HikCentral Access Control System Requirements & Performance**

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## Chapter 1 System Requirements

<b>OS for Server*</b>	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 <i>*For Windows 8.1 and Windows Server 2012 R2, make sure it is installed with the rollup (KB2919355) updated in April, 2014.</i>
<b>OS for Mobile Client</b>	iOS 10.0 and later Android 6.0 and later
<b>Database</b>	PostgreSQL V11.8
<b>Browser</b>	Google Chrome® 90 and above Firefox® 90 and above Safari® 11 and above Microsoft® Edge 89 and above Internet Explorer® 11 and above

\*Server refers to SYS (System Management Server).

## Chapter 2 Server Performance

SYS Configurations				
Feature	Desktop		Server	
	Low-End	Medium-End	Medium-End	High-End
<b>CPU</b>	Intel® Core™ i3-8100 @ 3.60 GHz	Intel® Core™ i5-8100 @ 3.60 GHz	Intel® Xeon® E-2124 @ 3.30 GHz	Intel® Xeon® Silver 4110 @ 2.10 GHz
<b>RAM</b>	4 GB	8 GB	16 GB	16 GB
<b>NIC</b>	GbE Network Interface Card	GbE Network Interface Card	GbE Network Interface Card	GbE Network Interface Card
<b>Disk for OS</b>	Micron 1300 SATA SSD	Micron 1300 SATA SSD	Micron 1300 SATA SSD	Micron 1300 SATA SSD
<b>Disk Capacity</b>	At least 256 GB	At least 256 GB	At least 256 GB	At least 256 GB
<b>OS</b>	Microsoft® Windows 10 64-bit	Microsoft® Windows 10 64-bit	Microsoft® Windows Server 2019 64-bit	Microsoft® Windows Server 2019 64-bit
Maximum Performance				
Manageable Resources				
<b>Managed Device IP Addresses</b> <i>*Including Access Control Devices and Elevator Control Devices</i>	64	256	1,024	
<b>Alarm Inputs</b>	64	512	3,000	5,000
<b>Alarm Outputs</b>	64	512	1,024	3,000
<b>Access Points (Doors + Floors)</b>	64	256	512	1,024
<b>Video Intercom Devices</b>	256	1,024	3,000	5,000

<b>Network Transmission Devices</b>	16	32	64	64
<b>Recording Servers</b>	4	16	32	64
<b>Areas</b>	256	512	1,024	3,000
<b>Event &amp; Alarm</b>				
<b>Event and Alarm Rules</b>	32	64	3,000	10,000
<b>User-Defined Event Rules</b>	32	64	3,000	10,000
<b>Events or Alarms Sent to Clients</b> <i>*The Clients refer to the Mobile Clients.</i>	<ul style="list-style-type: none"> <li>● 10 events or alarms/s</li> <li>● 50 Clients/s</li> </ul>	<ul style="list-style-type: none"> <li>● 20 events or alarms/s</li> <li>● 100 Clients/s</li> </ul>	<ul style="list-style-type: none"> <li>● 120 events or alarms/s</li> <li>● 100 Clients/s</li> </ul>	<ul style="list-style-type: none"> <li>● 120 events or alarms/s</li> <li>● 100 Clients/s</li> </ul>
<b>Map</b>				
<b>Maps Linked to Each Area</b>	1	64	64	64
<b>Resolution</b>	8192×8192			
<b>Size for Each Map</b>	10 MB			
<b>Maps</b>	64	128	512	1,024
<b>Alarm Inputs on Maps in Total</b>	64	512	3,000	5,000
<b>Alarm Outputs on Maps in Total</b>	64	512	1,024	3,000
<b>Access Points on Maps in Total</b>	64	256	512	1,024
<b>User &amp; Role</b>				
<b>Roles</b>	8	100	1,000	3,000
<b>Users</b>	50	100	1,000	3,000
<b>Roles Assigned to One User</b>	8	16	50	100
<b>Storage</b>				
<b>Data Retention Period</b>	Stored for 3 Years			
<b>Picture Storage</b> <i>*Including event and alarm pictures, face pictures</i>	10/s (Stored on SYS)	20/s (Stored on SYS)	20/s (Stored in SYS Server)	20/s (Stored in SYS Server)

Person				
Persons	3,000	10,000	30,000	50,000
Person Group Hierarchies	10			
Cards	15,000	50,000	150,000	250,000
Fingerprints	6,000	20,000	120,000	200,000
Profile Pictures	3,000	10,000	30,000	50,000
Irises	6,000	20,000	60,000	100,000
Resigned Persons	5,000	15,000	50,000	100,000
Resignation Types	100			
Size of Each Profile Picture	Recommended: 200 KB			
Access Control				
Access Levels	50	128	256	512
Access Points in One Access Level	4	32	32	32
Access Schedules	32			
Speed of Applying Persons' Access Level Settings to Device	<ul style="list-style-type: none"><li>● Total time duration for applying 100 cards: 5 seconds</li><li>● Total time duration for applying 100 fingerprints: 150 seconds</li><li>● Total time duration for applying 100 face credentials: 90 seconds</li><li>● Total time duration for applying 100 iris credentials: 5 seconds</li></ul>			
Anti-Passback Rules	16	32	64	128
Emergency Mustering				
Emergency Counting Groups	100			
Persons in Each Emergency Counting Groups	30	100	300	500
Time and Attendance				
Persons for Time and Attendance	300	50,000	50,000	50,000
Timetables	128			

<b>Shifts</b>	32	128	128	128
<b>Holidays</b>	32			
<b>Predefined Attendance Reports</b>	37			
<b>Custom Layouts Based on Predefined Reports</b>	512			
<b>Custom New Reports Based on All Available Fields of System</b>	128			
<b>Overtime Types</b>	128			
<b>Leave Types</b>	128			
<b>Download Center</b>				
<b>Concurrent Downloading Tasks</b>	5			
<b>Download Center Historical Records</b>	5,000			
<b>Total Tasks to be Downloaded</b>	500			
<b>Employee Self-Service</b>				
<b>Online Employees (at the same time)</b>	300	1,000	1,000	1,000
<b>Approval Roles</b>	60	100	100	100
<b>Approval Flows</b>	50	1,000	1,000	1,000
<b>Review Nodes of an Approval Flow</b>	5	100	100	100





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