HikCentral Professional V2.1.0

Communication Matrix

About this Document

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Please use this Document with the guidance and assistance of professionals trained in supporting the Product.

Source Device	Source IP Address	Source Port Number	Destination Device	Destination IP Address	Destination Port Number (Listening)	Protocol	Port Description	Destination Port Configurable (Yes/No)	NAT Mapping Required for Destination Port (Yes/No)	Authentication Mode	Encryption Mode	Enabled by Default (Yes/No)	Version	Special Scenario
System Management Service (SYS)														
Web Client, Control Client	IP address of the PC running the client	1025-65535	SYS	SYS IP Address	80	HTTP/WebSocket	Used for Web Client & Control Client access in HTTP protocol	Yes	Yes	User Name & Password	RSA2048/SHA256/AES256	Yes	All versions	
Web Client, Control Client	IP address of the PC running the client	1025-65535	SYS	SYS IP Address	443	TPS/WebSocket over	Used for Web Client & Control Client access in HTTPS protocol	Yes	Yes	User Name & Password	TLS	Yes	V1.1 and later	
Third-Party System	Third-Party System IP	1025-65535	SYS	SYS IP Address	15300	TCP	Used for receiving generic events.	Yes	Yes	None	None	No	V1.1 and later	
Third-Party System	Third-Party System IP	1025-65535	SYS	SYS IP Address	15300	UDP	Used for receiving generic events.	Yes	Yes	None	None	No	V1.1 and later	
Remote Site	Remote Site IP Address	1025-65535	SYS	SYS IP Address	14200	HTTP/HTTPS	Used for Remote Site registration to the Central System.	Yes	Yes	User Name & Password	AES256	No	V1.1 and later	
ISUP Device	ISUP Device IP Address	1025-65535	SYS	SYS IP Address	7332	TCP	Used for receiving alarm from ISUP devices.	Yes	Yes	User Name & Password	SHA256/AES128	Yes	V1.4 and later	
ISUP Device	ISUP Device IP Address	1025-65535	SYS	SYS IP Address	7334	UDP	Used for receiving alarm from ISUP devices.	Yes	Yes	User Name & Password	SHA256/AES128	Yes	V1.4 and later	
ISUP Device	ISUP Device IP Address	1025-65535	SYS	SYS IP Address	7660	TCP	Used for receiving registration from ISUP devices.	Yes	Yes	User Name & Password	SHA256/AES128	Yes	V1.4 and later	
Streaming Server	Streaming Server IP Address	1025-65535	SYS	SYS IP Address	7661	TCP	Used for getting stream from ISUP device via Streaming Server.	Yes	Yes	Security Certificate Authentication	RSA2048/SHA256/AES256	Yes	V1.4 and later	
3rd Party Devices and Hikvision Devices Accessing the System by ONVIF Protocol	ONVIF Device IP Address	1025-65535	SYS	SYS IP Address	8087 to 8096	TCP	Alarm listen port for third-party devices.	No	No	User Name & Password	None	No	All versions	Enable these ports on the Firewall when the devices share a LAN with the SYS.
Guidance Terminal	Guidance Terminal IP Address	1025-65535	SYS	SYS IP Address	8686	TCP	Listener port for listening the alarms of guidance terminal.	Yes	Yes	User Name & Password	SHA256/AES128	Yes	V2.1 and later	
ISUP Device	ISUP Device IP Address	1025-65535	SYS	SYS IP Address	6123	HTTP	Used for the picture storage of ISUP devices.	Yes	Yes	AK & SK	None	Yes	V2.1	
Digital Signage Terminal, Web Client	IP Address of Digital Signage Terminal, IP Address of PC Running Client	1025-65535	SYS	SYS IP Address	6203	HTTP	Used for the object storage of digital signage terminals.	Yes	Yes	AK & SK	None	Yes	V2.1	
Streaming Server	Streaming Server IP Address	1025-65535	SYS	SYS IP Address	7662	TCP	Signaling port for getting information of IP speakers.	Yes	Yes	Security Certificate Authentication	AES256	No	V2.1	
IP speaker accessing via Hikvision private speaker protocol	IP Address of IP speaker accessing via Hikvision private speaker protocol	1025-65535	SYS	SYS IP Address	8877	TCP	Listener port for the registration of IP speakers accessing via Hikvision private speaker protocol.	Yes	Yes	User Name & Password	MD5	No	V2.1	
IP speaker accessing via Hikvision private speaker protocol	IP Address of IP speaker accessing via Hikvision private speaker protocol	1025-65535	SYS	SYS IP Address	10015	TCP	Used for transmitting the audio data of IP speakers accessing via Hikvision private speaker protocol.	Yes	Yes	User Name & Password	MD5	No	V2.1	
pStor Server	pStor Server IP Address	1025-65535	SYS	SYS IP Address	27661	HTTP	Used for calling back the ISUP signaling.	No	No	Security Certificate Authentication	RSA2048/SHA256/AES256	No	V2.1	
Digital Signage Terminal	IP Address of Digital Signage Terminal	1025-65535	SYS	SYS IP Address	6470	TCP	Used for upgrading digital signage terminals in version 3.1 or below.	Yes	No	User Name & Password	None	No	V2.1	
Digital Signage Terminal	IP Address of Digital Signage Terminal	1025-65535	SYS	SYS IP Address	6471	TCP	Used for releasing programs to digital signage terminals in version 3.1 or	Yes	No	User Name & Password	None	No	V2.1	
Digital Signage Terminal	IP Address of Digital Signage Terminal	1025-65535	SYS	SYS IP Address	9980	HTTP	Used for uploading materials to the server.	Yes	No	User Name & Password	None	No	V2.0 and later	
Streaming Gateway (SG)														
Web Client, Control Client	IP address of the PC running the client	1025-65535	Streaming Gateway	IP address of the server running Streaming Gateway	554	RTSP	Used for getting stream for live view (real-time streaming port).	Yes	Yes	Security Certificate Authentication	RSA2048/AES256	Yes	All versions	
Web Client, Control Client	IP address of the PC running the client	1025-65535	Streaming Gateway	IP address of the server running Streaming Gateway	559	WebSocket	Used for getting stream for Google Chrome, Firefox, or Safari.	Yes	Yes	Security Certificate Authentication	RSA2048/AES256	Yes	All versions	
Web Client, Control Client	IP address of the PC running the client	1025-65535	Streaming Gateway	IP address of the server running Streaming Gateway	10000	TCP	Used for getting stream for playback (video file streaming port).	Yes	Yes	None	None	Yes	All versions	
ISUP Device	ISUP Device IP Address	1025-65535	Streaming Gateway	IP address of the server running Streaming Gateway	16000	TCP	Used for getting stream from ISUP device via plugin.	Yes	Yes	None	None	Yes	V1.4 and later	
SYS	SYS IP Address	1025-65535	Streaming Gateway	IP address of the server running Streaming Server	6001	SNMP	Used for getting the status of the Streaming Server.	No	No	None	None	Yes	All versions	
SYS	SYS IP Address	1025-65535	Streaming Gateway	IP address of the server running Streaming Server	6678	HTTPS	Used for editing configuration for Streaming Server.	No	No	None	None	Yes	All versions	
ISUP Device	ISUP Device IP Address	1025-65535	Streaming Gateway	IP address of the server running Streaming Server	16001	TCP	Used for uploading audio files by device.	Yes	Yes	None	None	No	V2.1	
Streaming Server (SMS)														
Web Client, Control Client	IP address of the PC running the client	1025-65535	Streaming Server	IP address of the server running Streaming Server	554	RTSP	Used for Streaming Service to get stream for live view (real-time	Yes	Yes	Security Certificate Authentication	RSA2048/AES256	Yes	All versions	
Web Client, Control Client	IP address of the PC running the client	1025-65535	Streaming Server	IP address of the server running Streaming Server	559	WebSocket	Used for getting stream for Google Chrome, Firefox, or Safari.	Yes	Yes	Security Certificate Authentication	RSA2048/AES256	Yes	All versions	
Web Client, Control Client	IP address of the PC running the client	1025-65535	Streaming Server	IP address of the server running Streaming Server	10000	TCP	Used for Streaming Service to get stream for playback (video file	Yes	Yes	None	None	Yes	All versions	
ISUP Device	ISUP Device IP Address	1025-65535	Streaming Server	IP address of the server running Streaming Server	16000	TCP	Used for getting stream from ISUP device via plugin.	Yes	Yes	None	None	Yes	V1.4 and later	
SYS	SYS IP Address	1025-65535	Streaming Server	IP address of the server running Streaming Server	6001	SNMP	Used for getting the status of the Streaming Server.	No	No	None	None	Yes	All versions	
SYS	SYS IP Address	1025-65535	Streaming Server	IP address of the server running Streaming Server	8208	WebSocket over TLS	Listen port for Service Manager after encrypted transmission enabled.	Yes	No	None	None	Yes	V1.5 and later	
SYS	SYS IP Address	1025-65535	Streaming Server	IP address of the server running Streaming Server	6678	HTTPS	Used for editing configuration of Streaming Server.	Yes	No: The platform can access the Streaming Server Yes: The platform cannot access the Streaming Server	None	None	Yes	All versions	
ISUP Device	ISUP Device IP Address	1025-65535	Streaming Gateway	IP address of the server running Streaming Server	16001	TCP	Used for uploading audio files by device.	Yes	Yes	None	None	No	V2.1	
pStor Service														
N/A	N/A	1025-65535	pStor Server	pStor Server IP Address	6022	TCP	Used for applying recording schedule.	No	Yes	AK & SK	None	Yes	V1.4 and later	The port should be mapped for multi-channel scenes.
N/A	N/A	1025-65535	pStor Server	pStor Server IP Address	6027	TCP	Used for writing video data.	No	Yes	AK & SK	None	Yes	V1.4 and later	The port should be mapped for multi-channel scenes.
N/A	N/A	1025-65535	pStor Server	pStor Server IP Address	6112	TCP	Used for uploading data via HTTPS.	No	Yes	AK & SK	SSL	Yes	V1.4 and later	The port should be mapped for multi-channel scenes.
SYS	SYS IP Address	1025-65535	pStor Server	pStor Server IP Address	6111	TCP	Redirection port for uploading data via HTTPS.	No	Yes	AK & SK	SSL	Yes	V1.4 and later	The port should be mapped for multi-channel scenes.
N/A	N/A	1025-65535	pStor Server	pStor Server IP Address	6041	TCP	Used for uploading data via HTTP.	No	Yes	AK & SK	None	Yes	V1.4 and later	The port should be mapped for multi-channel scenes.
N/A	N/A	1025-65535	pStor Server	pStor Server IP Address	6011	TCP	Redirection port for uploading data via HTTP.	No	Yes	AK & SK	None	Yes	V1.4 and later	The port should be mapped for multi-channel scenes.
N/A	N/A	1025-65535	pStor Server	pStor Server IP Address	6114	TCP	Used for downloading data via HTTPS.	No	Yes	AK & SK	SSL	Yes	V1.4 and later	The port should be mapped for multi-channel scenes.
N/A	N/A	1025-65535	pStor Server	pStor Server IP Address	6113	TCP	Redirection port for downloading data via HTTPS.	No	Yes	AK & SK	SSL	Yes	V1.4 and later	The port should be mapped for multi-channel scenes.
N/A	N/A	1025-65535	pStor Server	pStor Server IP Address	6040	TCP	Used for downloading data via HTTP.	No	Yes	AK & SK	None	Yes	V1.4 and later	The port should be mapped for multi-channel scenes.
SYS	SYS IP Address	1025-65535	pStor Server	pStor Server IP Address	6120	TCP	Redirection port for downloading data via HTTP.	No	Yes	AK & SK	None	Yes	V1.4 and later	The port should be mapped for multi-channel scenes.
N/A	N/A	1025-65535	pStor Server	pStor Server IP Address	6045	TCP	Used for transmitting object data.	No	Yes	AK & SK	None	Yes	V1.4 and later	The port should be mapped for multi-channel scenes.
N/A	N/A	1025-65535	pStor Server	pStor Server IP Address	6037	TCP	Used for transmitting video data.	No	Yes	AK & SK	None	Yes	V1.4 and later	The port should be mapped for multi-channel scenes.
N/A	N/A	1025-65535	pStor Server	pStor Server IP Address	6036	TCP	Used for transmitting video data.	No	Yes	AK & SK	None	Yes	V1.4 and later	The port should be mapped for multi-channel scenes.
SYS	SYS IP Address	1025-65535	pStor Server	pStor Server IP Address	6060	TCP	Used for transmitting web data.	No	Yes	AK & SK	None	Yes	V1.4 and later	The port should be mapped for multi-channel scenes.
N/A	N/A	1025-65535	pStor Server	pStor Server IP Address	6098	TCP	Used for playing media data from Stream Media Server.	No	Yes	AK & SK	None	Yes	V1.4 and later	The port should be mapped for multi-channel scenes.
N/A	N/A	1025-65535	pStor Server	pStor Server IP Address	6042	TCP	Used for forwarding storage data.	No	Yes	AK & SK	None	Yes	V1.4 and later	The port should be mapped for multi-channel scenes.
N/A	N/A	1025-65535	pStor Server	pStor Server IP Address	6038	TCP	Used for forwarding storage data.	No	Yes	AK & SK	None	Yes	V1.4 and later	The port should be mapped for multi-channel scenes.
N/A	N/A	1025-65535	pStor Server	pStor Server IP Address	6044	TCP	Used for forwarding storage data.	No	Yes	AK & SK	None	Yes	V1.4 and later	The port should be mapped for multi-channel scenes.
N/A	N/A	1025-65535	pStor Server	pStor Server IP Address	6039	TCP	Used for forwarding storage data.	No	Yes	AK & SK	None	Yes	V1.4 and later	The port should be mapped for multi-channel scenes.
N/A	N/A	1025-65535	pStor Server	pStor Server IP Address	6046	TCP	Used for transmitting RESTful data of object storage.	No	Yes	AK & SK	MD5	Yes	V1.4 and later	The port should be mapped for multi-channel scenes.
N/A	N/A	1025-65535	pStor Server	pStor Server IP Address	6201	TCP	Communication port for object storage.	No	Yes	AK & SK	None	Yes	V1.4 and later	The port should be mapped for multi-channel scenes.
SYS	SYS IP Address	1025-65535	pStor Server	pStor Server IP Address	6021	TCP	Used for login.	No	Yes	User Name & Password	None	Yes	V1.4 and later	The port should be mapped for multi-channel scenes.
pStor Cluster Service														
Web Client	IP address of the PC running pStor Cluster Service	1025-65535	pStor Cluster Service	IP address of the server running pStor Cluster Service	9012	HTTP	Used for accessing pStor Cluster Service via the web browser such as IE, Chrome, Firefox, etc.	No	No	User Name & Password	RSA	Yes	V1.6 and later	
Web Client, Control Client	IP address of the PC running the client	1025-65535	pStor Cluster Service	IP address of the server running pStor Cluster Service	6300	HTTP	Signaling gateway port used for accessing pStor Cluster Service from	No	No	AK & SK	HMAC/SHA256	Yes	V1.6 and later	
OpenAPI														
Third-Party Integration	IP Address of Third-Party Integration	1025-65535	OpenAPI Service	IP address of the PC running OpenAPI Service	443	HTTPS	Used for third-party system accessing OpenAPI.	Yes	Yes	AK & SK	SHA256	Yes	V1.5 and later	
SYS	SYS IP Address	1025-65535	OpenAPI Service	IP address of the PC running OpenAPI Service	8208	WebSocket over TLS	Listener port for Service Manager after encrypted transmission enabled.	No	No	None	None	Yes	V1.5 and later	