

HikCentral Professional

Communication Matrix

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Source Device	Source IP Address	Source Port Number Destination Device	Destination IP Address	Destination Port Number	Protocol	Port Description	Destination Port Configurable	NAT Mapping Required for Destination Port	Authentication Mode	Encryption Mode	Enabled by Default	Version	Special Scenario
System Management Ser				(Listening)		Used for Web Client & Control Client	(Yes/No)	(Yes/No)	User Name &	RSA2048/SHA25	(Yes/No)		
Web Client, Control Client Web Client, Control	IP address of the PC running the client IP address of the PC running		SYS IP Address	80	HTTP/WebSocket	used for Web Client & Control Client access in HTTP protocol Used for Web Client & Control Client	Yes	Yes	User Name & Password User Name &	6/AES256	Yes	All versions	
Client Third-Party System	the client Third-Party System IP	1025-65535 SYS 1025-65535 SYS	SYS IP Address SYS IP Address	443 15300	TPS/WebSocket over TCP	access in HTTPS protocol Used for receiving generic events.	Yes Yes	Yes Yes	Password None	TLS None	Yes	V1.1 and later V1.1 and later	
Third-Party System Remote Site	Third-Party System IP Remote Site IP Address	1025-65535 SYS 1025-65535 SYS	SYS IP Address SYS IP Address	15300 14200	UDP HTTP/HTTPS	Used for receiving generic events. Used for Remote Site registration to	Yes Yes	Yes Yes	None User Name &	None AES256	No No	V1.1 and later V1.1 and later	
ISUP Device	ISUP Device IP Address	1025-65535 SYS	SYS IP Address	7332	TCP	the Central System. Used for receiving alarm from ISUP	Yes	Yes	Password User Name &	SHA256/AES128	Yes	V1.4 and later	
ISUP Device	ISUP Device IP Address	1025-65535 SYS	SYS IP Address	7334	UDP	devices. Used for receiving alarm from ISUP	Yes	Yes	Password User Name &	SHA256/AES128	Yes	V1.4 and later	
ISUP Device	ISUP Device IP Address	1025-65535 SYS	SYS IP Address	7660	TCP	devices. Used for receiving registration from ISUP devices.	Yes	Yes	Password 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/SHA25 6/AES256	Yes	V1.4 and later	
3rd Party Devices and Hikvision Devices Accessing the System by Open Network Video	Open Network Video Interface Device IP Address	1025-65535 SYS	SYS IP Address	8087 to 8096	ТСР	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.
Interface Protocol Guidance Terminal	Guidance Terminal IP	1025-65535 SYS	SYS IP Address	8686	TCP	Listener port for listening the alarms of guidance	Yes	Yes	User Name &	SHA256/AES128	Yes	V2.1 and later	
	Address	1025-65535 SYS	SYS IP Address	6123	нттр	terminal. Used for the picture storage of ISUP	Yes	Yes	Password		Yes	V2.1	
Digital Signage Terminal,	ISUP Device IP Address IP Address of Digital Signage					devices.			AK & SK	None			
Web Client	Terminal, IP Address of PC Running Client	1025-65535 SYS	SYS IP Address	6203	HTTP	Used for the object storage.	Yes	Yes	AK & SK	None	Yes	V2.1	
Streaming Server IP speaker accessing via	Streaming Server IP Address	1025-65535 SYS	SYS IP Address	7662	TCP	Signaling port for getting information of IP speakers. Listener port for the registration of IP	Yes	Yes	Security Certificate Authentication	AES256	No	V2.1	
Hikvision private speaker protocol		1025-65535 SYS	SYS IP Address	8877	TCP	speakers accessing via Hikvision private speaker protocol.	Yes	Yes	User Name & Password	MD5	No	V2.1	
	IP Address of IP speaker accessing via Hikvision	1025-65535 SYS	SYS IP Address	10015	TCP	Used for transmitting the audio data of IP speakers accessing via Hikvision	Yes	Yes	User Name &	MD5	No	V2.1	
protocol pStor Server	private speaker protocol pStor Server IP Address	1025-65535 SYS	SYS IP Address	27661	HTTP	private speaker protocol. Used for calling back the ISUP	No	No	Password Security Certificate	RSA2048/SHA25	No	V2.1	
Digital Signage Terminal	IP Address of Digital Signage	1025-65535 SYS	SYS IP Address	6470	TCP	signaling. Used for upgrading digital signage	Yes	No	Authentication User Name &	6/AES256 None	No	V2.1	
Digital Signage Terminal	Terminal IP Address of Digital Signage Terminal	1025-65535 SYS	SYS IP Address	6471	TCP	terminals in version 3.1 or below. Used for releasing programs to digital	Yes	No	Password User Name &	None	No	V2.1	
Digital Signage Terminal	Terminal IP Address of Digital Signage Terminal	1025-65535 SYS	SYS IP Address	9980	нттр	signage terminals in version 3.1 or Used for uploading materials to the server.	Yes	No	Password User Name & Password	None	No	V2.0 and later	
Third-Party System	IP Address of Third-Party System	1025-65535 SYS	SYS IP Address	15310	НТТР	Used for receiving generic events.	Yes	Yes	None	None	No	V2.2 and later	
Third-Party System	IP Address of Third-Party System	1025-65535 SYS	SYS IP Address	15443	HTTPS	Used for receiving generic events.	Yes	Yes	None	None	No	V2.2 and later	
ISUP Device	IP Address of ISUP Device	1025-65535 SYS	SYS IP Address	8555	TCP	Used for transfering files with devices and downloading pictures from	Yes	Yes	User Name & Password	SHA256/AES128	Yes	V2.2 and later	
Streaming Server Streaming Gateway (SG)	IP Address of Streaming Server	1025-65535 SYS	SYS IP Address	7664	TCP	Used for transfering audio files between the streaming server and	No	No	Security Certificate Authentication	AES256	No	V2.2 and later	
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/AES25	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/AES25 6	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 Gateway	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 Gateway IP address of the server	6678	HTTPS	Used for editing configuration for Streaming Server. Used for uploading audio files by	No	No	None	None	Yes	All versions	
ISUP Device	IP Address of ISUP Device	1025-65535 Streaming Gateway	running Streaming Gateway IP address of the server	16001	TCP	device.	Yes	Yes	None	None	No	V2.1	
Streaming Server (SMS)	IP Address of ISUP Device	1025-65535 Streaming Gateway	running Streaming Gateway	16003	TCP	Broadcasting port for pushing audio	Yes	Yes	None	None	Yes	V2.2 and later	
Web Client, Control Client	IP address of the PC running the client	1025-65535 Streaming Server	IP address of the Streaming Server	554	RTSP	Used for Streaming Service to get stream for live view (real-time	Yes	Yes	Security Certificate Authentication	RSA2048/AES25 6	Yes	All versions	
Web Client, Control Client	IP address of the PC running the client	1025-65535 Streaming Server	IP address of the Streaming Server	559	WebSocket	Used for getting stream for Google Chrome, Firefox, or Safari.	Yes	Yes	Security Certificate Authentication	RSA2048/AES25 6	Yes	All versions	
Web Client, Control Client	IP address of the PC running the client	1025-65535 Streaming Server	IP address of the Streaming Server IP address of the Streaming	10000	TCP	Used for Streaming Service to get stream for playback (video file Used for getting stream from ISUP	Yes	Yes	None	None	Yes	All versions	
ISUP Device	ISUP Device IP Address	1025-65535 Streaming Server	Server IP address of the Streaming	16000	TCP	device via plugin. Used for getting the status of the	Yes	Yes	None	None	Yes	V1.4 and later	
SYS	SYS IP Address SYS IP Address	1025-65535 Streaming Server 1025-65535 Streaming Server	Server IP address of the Streaming	6001 8208	SNMP WebSocket over TLS	Streaming Server.	No Yes	No No	None	None	Yes	All versions V1.5 and later	
SYS	SYS IP Address	1025-65535 Streaming Server	Server IP address of the Streaming Server	6678	HTTPS	encrypted transmission enabled. Used for editing configuration of Streaming Server.	Yes	No: The platform can access the Streaming Server Yes: The platform cannot	None	None	Yes	All versions	
OpenAPI Client	IP address of the PC running	1025-65535 Streaming Server	IP address of the server	83	TCP	Used for getting stream for live view	YES	access the Streaming Server YES	Security Certificate	RSA2048/AES25	Yes	V2.3 and later	
OpenAPI Client	the client IP address of the PC running	1025-65535 Streaming Server	running Streaming Server IP address of the server	1935	TCP	play back (HLS streaming port). Used for getting stream for live view	YES	YES	Authentication Security Certificate	6 RSA2048/AES25	Yes	V2.3 and later	
pStor Service	the client		running Streaming Server			(RTMP streaming port).			Authentication	ь			The port should be mapped for
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	multi-channel scenes. The port should be mapped for
N/A N/A	N/A N/A	1025-65535 pStor Server 1025-65535 pStor Server	pStor Server IP Address pStor Server IP Address	6027	TCP	Used for writing video data. Used for uploading data via HTTPS.	No No	Yes	AK & SK	None	Yes	V1.4 and later	multi-channel scenes. The port should be mapped for
sys	SYS IP Address	1025-65535 pStor Server	pStor Server IP Address	6111	TCP	Redirection port for uploading data	No	Yes	AK & SK	SSL	Yes	V1.4 and later	multi-channel scenes. The port should be mapped for
N/A	N/A	1025-65535 pStor Server	pStor Server IP Address	6041	TCP	Via HTTPS. Used for uploading data via HTTP.	No	Yes	AK & SK	None	Yes	V1.4 and later	multi-channel scenes. The port should be mapped for
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	multi-channel scenes. 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. The port should be mapped for
N/A	N/A	1025-65535 pStor Server	pStor Server IP Address	6037	TCP	Used for transmitting video data.	No No	Yes	AK & SK	None	Yes	V1.4 and later	multi-channel scenes. The port should be mapped for
N/A SYS	N/A SYS IP Address	1025-65535 pStor Server 1025-65535 pStor Server	pStor Server IP Address pStor Server IP Address	6036	TCP	Used for transmitting video data. Used for transmitting web data.	No No	Yes	AK & SK	None	Yes	V1.4 and later	multi-channel scenes. The port should be mapped for
N/A	SYS IP Address N/A	1025-65535 pStor Server 1025-65535 pStor Server	pStor Server IP Address	6098	TCP	Used for playing media data from	No No	Yes	AK & SK AK & SK	None	Yes	V1.4 and later	multi-channel scenes. The port should be mapped for
N/A	N/A	1025-65535 pStor Server	pStor Server IP Address	6042	TCP	Stream Media Server. Used for forwarding storage data.	No	Yes	AK & SK	None	Yes	V1.4 and later	multi-channel scenes. The port should be mapped for
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	multi-channel scenes. 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	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	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 pStor Cluster Service	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.
Web Client	IP address of the PC running	1025-65535 pStor Cluster Service	IP address of the server	9012	нттр	Used for accessing pStor Cluster Service via the web browser such as	No	No	User Name &	RSA	Yes	V1.6 and later	
Web Client, Control	the client IP address of the PC running	1025-65535 pStor Cluster Service	running pStor Cluster Service IP address of the server	6300	нттр	IE, Chrome, Firefox, etc. Signaling gateway port used for	No	No	Password AK & SK	HMAC/SHA256	Yes	V1.6 and later	
Client OpenAPI	the client		running pStor Cluster Service	0300	mir	accessing pStor Cluster Service from	NO	NO	Livy ox 3V	mnc/snAZ5b	163	, a and ideer	
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 BeeAgent	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	
BeeAgent Server In SYS	Ip Address of BeeAgent	1025-65535 BeeAgent Server in Da	IP Address of BeeAgent Server	9208	WebSocket	Used for BeeAgent service management in database to	No	Yes	SK	None	Yes	V2.2	
	Server In SYS	The second second in the	l and a server					1	I	. John		1	
Postgres	Server III 313					communicate with BeeAgent service							