

HikCentral Professional V2.1.0

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	Destination Port	Authentication Mode	Encryption Mode	Enabled by Default	Version	Special Scenario
System Management Se Web Client, Control	ervice (SYS) IP address of the PC running			(Listening)		Used for Web Client & Control Client	(Yes/No)	(Yes/No)	User Name &	RSA2048/SHA25	(Yes/No)		
Client Web Client, Control	the client IP address of the PC running	1025-65535 SYS	SYS IP Address	80	HTTP/WebSocket	access in HTTP protocol Used for Web Client & Control Client	Yes	Yes	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	Password None	TLS None	Yes	V1.1 and later V1.1 and later	
Third-Party System	Third-Party System IP	1025-65535 SYS	SYS IP Address	15300	UDP	Used for receiving generic events. Used for Remote Site registration to	Yes	Yes	None User Name &	None	No	V1.1 and later	
Remote Site	Remote Site IP Address	1025-65535 SYS	SYS IP Address	14200	HTTP/HTTPS	the Central System. Used for receiving alarm from ISUP	Yes	Yes	Password User Name &	AES256	No	V1.1 and later	
ISUP Device	ISUP Device IP Address	1025-65535 SYS	SYS IP Address	7332	ТСР	devices. Used for receiving alarm from ISUP	Yes	Yes	Password	SHA256/AES128	Yes	V1.4 and later	
ISUP Device	ISUP Device IP Address	1025-65535 SYS	SYS IP Address	7334	UDP	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	ТСР	Used for receiving registration from ISUP devices.	Yes	Yes	User Name & Password	SHA256/AES128		V1.4 and later	
Streaming Server	Streaming Server IP Address	1025-65535 SYS	SYS IP Address	7661	ТСР	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 ONVIF Protocol	ONVIF 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.
Guidance Terminal	Guidance Terminal IP Address	1025-65535 SYS	SYS IP Address	8686	ТСР	Listener port for listening the alarms of guidance	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	НТТР	terminal. Used for the picture storage of ISUP	Yes	Yes	AK & SK	None	Yes	V2.1	
Digital Signage Terminal,	IP Address of Digital Signage		515 II Address	0123		devices. Used for the object storage of digital	103	163	AK & SK	None	163		
Web Client	Terminal, IP Address of PC Running Client	1025-65535 SYS	SYS IP Address	6203	НТТР	signage terminals.	Yes	Yes	AK & SK	None	Yes	V2.1	
Streaming Server	Streaming Server IP Address	1025-65535 SYS	SYS IP Address	7662	ТСР	Signaling port for getting information of IP speakers.	Yes	Yes	Security Certificate Authentication	AES256	No	V2.1	
IP speaker accessing via Hikvision private	IP Address of IP speaker accessing via Hikvision	1025-65535 SYS	SYS IP Address	8877	ТСР	Listener port for the registration of IP speakers accessing via Hikvision	Yes	Yes	User Name & Password	MD5	No	V2.1	
speaker protocol IP speaker accessing via	private speaker protocol IP Address of IP speaker					private speaker protocol. Used for transmitting the audio data							
Hikvision private speaker protocol	accessing via Hikvision private speaker protocol	1025-65535 SYS	SYS IP Address	10015	ТСР	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	НТТР	Used for calling back the ISUP signaling.	No	No	Security Certificate Authentication	RSA2048/SHA25 6/AES256	No	V2.1	
Digital Signage Terminal	IP Address of Digital Signage Terminal	1025-65535 SYS	SYS IP Address	6470	ТСР	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	ТСР	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	НТТР	Used for uploading materials to the server.	Yes	No	User Name & Password	None	No	V2.0 and later	
Streaming Gateway (SG)			IP address of the server							RSA2048/AES25			
Web Client, Control Client Web Client, Control	the client IP address of the PC running The address of the PC running	1025-65535 Streaming Gateway	running Streaming Gateway IP address of the server	554	RTSP	Used for getting stream for live view (real-time streaming port). Used for getting stream for Google	Yes	Yes	Security Certificate Authentication Security Certificate	RSA2048/AES25 6 RSA2048/AES25	Yes	All versions	
Client	the client	1025-65535 Streaming Gateway	running Streaming Gateway	559	WebSocket	Chrome, Firefox, or Safari.	Yes	Yes	Authentication	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	ТСР	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	ТСР	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	ТСР	Used for uploading audio files by device.	Yes	Yes	None	None	No	V2.1	
Streaming Server (SMS) Web Client, Control	IP address of the PC running	1025-65535 Streaming Server	IP address of the server	554	RTSP	Used for Streaming Service to get	Yes	Yes	Security Certificate	RSA2048/AES25	Yes	All versions	
Client Web Client, Control	the client IP address of the PC running		running Streaming Server IP address of the server	559	WebSocket	stream for live view (real-time Used for getting stream for Google	Yes	Yes	Authentication Security Certificate	6 RSA2048/AES25	Yes	All versions	
Client Web Client, Control	the client IP address of the PC running	1025-65535 Streaming Server	running Streaming Server IP address of the server	10000	TCP	Chrome, Firefox, or Safari. Used for Streaming Service to get	Yes	Yes	Authentication	6 None	Yes	All versions	
Client	the client	1025-65535 Streaming Server	running Streaming Server IP address of the server	16000	ТСР	stream for playback (video file Used for getting stream from ISUP			None				
ISUP Device	ISUP Device IP Address		running Streaming Server IP address of the server	6001	SNMP	device via plugin. Used for getting the status of the	Yes	Yes	None	None	Yes	V1.4 and later	
SYS	SYS IP Address	1025-65535 Streaming Server	running Streaming Server IP address of the server			Streaming Server. Listen port for Service Manager after	No	No	None	None	Yes	All versions	
SYS	SYS IP Address	1025-65535 Streaming Server	running Streaming Server	8208	WebSocket over TLS	encrypted transmission enabled.	Yes	No: The platform can access	None	None	Yes	V1.5 and later	
SYS	SYS IP Address	1025-65535 Streaming Server	IP address of the server running Streaming Server IP address of the server	6678	HTTPS	Used for editing configuration of Streaming Server.	Yes	the Streaming Server Yes: The platform cannot access the Streaming Server	None	None	Yes	All versions	
ISUP Device pStor Service	ISUP Device IP Address	1025-65535 Streaming Gateway	running Streaming Server	16001	ТСР	Used for uploading audio files by device.	Yes	Yes	None	None	No	V2.1	
N/A	N/A	1025- 65535 pStor Server	pStor Server IP Address	6022	ТСР	Used for applying recording schedule.	No	Yes	AK & SK	None	Yes	V1.4 and later	The port should be mapped for
N/A	N/A	1025-	pStor Server IP Address	6027	ТСР	Used for writing video 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- nStor Server	pStor Server IP Address	6112	ТСР	Used for uploading data via HTTPS.	No	Yes	AK & SK	SSL		V1.4 and later	The port should be mapped for
SYS	SYS IP Address	1025- nStor Server	pStor Server IP Address	6111	ТСР	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- nStor Server	pStor Server IP Address	6041	ТСР	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- nStor Server	pStor Server IP Address	6011	ТСР	Redirection port for uploading data	No	Yes	AK & SK	None	Yes	V1.4 and later	multi-channel scenes. The port should be mapped for
,	,	1025-				via HTTP.							multi-channel scenes. The port should be mapped for
N/A	N/A	65535 pstor Server	pStor Server IP Address	6114	ТСР	Used for downloading data via HTTPS. Redirection port for downloading	No	Yes	AK & SK	SSL	Yes	V1.4 and later	multi-channel scenes. The port should be mapped for
NI/A	N/A	65535 pstor server	pStor Server IP Address	6113		data via HTTPS.	No	Yes	AK & SK	SSL	Yes	V1.4 and later	multi-channel scenes. The port should be mapped for
N/A	N/A	65535 pStor Server	pStor Server IP Address	6040	TCP	Used for downloading data via HTTP. Redirection port for downloading	No	Yes	AK & SK	None	Yes	V1.4 and later	multi-channel scenes. The port should be mapped for
SYS	SYS IP Address	65535 pstor server	pStor Server IP Address	6120	TCP	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	65535 pStor Server	pStor Server IP Address	6045	TCP	Used for transmitting object data.	No	Yes	AK & SK	None	Yes	V1.4 and later	multi-channel scenes. The port should be mapped for
N/A	N/A	65535 pstor server	pStor Server IP Address	6037	ТСР	Used for transmitting video data.	No	Yes	AK & SK	None		V1.4 and later	multi-channel scenes. The port should be mapped for
N/A	N/A	65535 pStor Server	pStor Server IP Address	6036	ТСР	Used for transmitting video data.	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	6060	ТСР	Used for transmitting web data.	No	Yes	AK & SK	None	Yes	V1.4 and later	multi-channel scenes.
N/A	N/A	1025- 65535 pStor Server	pStor Server IP Address	6098	ТСР	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. The port should be mapped for
N/A	N/A	1025- 65535 pStor Server	pStor Server IP Address	6042	ТСР	Used for forwarding storage data.	No	Yes	AK & SK	None		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	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	ТСР	Used for forwarding storage data.	No	Yes	AK & SK	None		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	ТСР	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	ТСР	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	SYS IP Address	1025- 65535 pStor Server	pStor Server IP Address	6021	ТСР	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	ID address of the DC		ID address of the			Used for accessing pStor Cluster			Hear Name C				
Web Client	IP address of the PC running the client	1025-65535 pStor Cluster Service	IP address of the server running pStor Cluster Service	9012	НТТР	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	НТТР	Signaling gateway port used for accessing pStor Cluster Service from	No	No	AK & SK	HMAC/SHA256	Yes	V1.6 and later	
OpenAPI	IP Address of Third-Party	100- 5-5-	IP address of the PC running			Used for third-party system accessing							
Third-Party Integration	Integration	1025-65535 OpenAPI Service	OpenAPI Service IP address of the PC running	443	HTTPS	OpenAPI. Listener port for Service Manager	Yes	Yes	AK & SK	SHA256		V1.5 and later	
SYS	SYS IP Address	1025-65535 OpenAPI Service	OpenAPI Service	8208	WebSocket over TLS	after encrypted transmission enabled.	No	No	None	None	Yes	V1.5 and later	