Purpose

This document describes the SX3000 communication matrix.

Intended

This document is intended for:

- Network planners
- System engineers
- Field engineers
- Network shift engineers
- Network operators
- Administration engineers

Organization

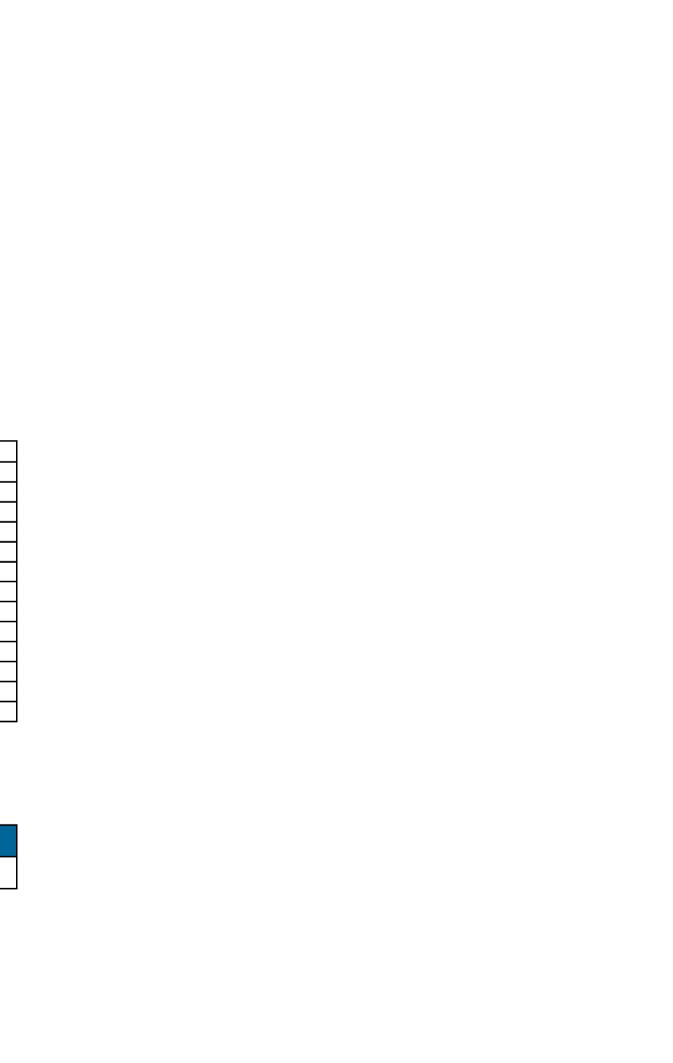
This document consists of the following parameters:

Source Device	Name of the source device.
Source IP Address	IP address of the source device.
Source Port	Number of the source port or source port number range.
Destination Device	Name of the destination device.
Destination IP Address	IP address of the destination device.
Destination Port	Number or number range of the destination ports. Primarily the listening ports on the Server.
Protocol	Protocols used at the transport layer, such as TCP, UDP, and SCTP.
Port Description	Details of the services provided on the listening port.
Listening Port Configurable	Indicates whether the listening port can be changed on the web UI or the CLI.
Authentication Mode	Authentication mode on the port, for example, authentication using the user name and password.
Encryption Mode	Encryption mode used on the port.
Plane	Plane to which the listening ports belong. For example, service ports and user management ports.
Version	Version of the destination device that corresponds to the listening port.
Special Scenario	Special scenario where the listening port is used.

Change History

Changes between document issues are cumulative. The latest document issue contains all the changes in earlier issues.

Issue	Date	Description
01	2015/4/27	Announced by New Rock Technologies, Inc.



Source Device	Source IP Address	Source Port	Destination Device	Destination IP Address	Destination Port	Protocol	Port Description	Listening Port Configurable (Y/N)	Authenticatio n Mode	Encryption Mode	Plane
-	Random	Random	SX3000	SX3000 IP Address	5060	UDP	The signaling service port used for receiving SIP messages from terminals. It can be configured through the Web GUI. The default value is 5060 and the valid range is 5060 to 9999.		None	None	Service
-	Random	Random	SX3000	SX3000 IP Address	5061	TLS	The signaling service port used for receiving TLS encryption messages from terminals. Can be configured through the Web GUI. The default value is 5061 and the valid range is 5061 to 9999.	Yes	None	TLS	Service
SX3000	SX3000 IP address (on the SIP server side)	5080~5084	SIP server	Random	Random	UDP	After Heartbeat is enabled on the Advance > System interface, the SX3000 will enable ports 5080 to 5084 as the source ports of the OPTIONS messages sent to the correspond SIP servers 1 to 5.	No	None	None	Service
SX3000	SX3000 IP	Min. UDP port number to (min. RTP port number -1)	SIP server	Random	Random	UDP	Signaling service port used for sending and receiving SIP messages between the SX3000 and the SIP server. It ranges between the min. UDP port number and (min. RTP port number -1). The min. UDP port number can be configured on the Web GUI of the SX3000, and it is 10000 by default.		None	None	Service

-	Random	Random	SX3000	SX3000 IP Address	Min. RTP port number to (min. RTP port number +4799)	UDP	The port on the SX3000 that is used to send and receive RTP messages. It ranges between the min. RTP port number to (min. RTP port number +4799). The min. RTP port number can be configured on the Web GUI of the SX3000, and it is 30000 by default.	Yes	None	None	Service
-	Random	Random	SX3000	SX3000 IP Address	Min. RTP port number to (min. RTP port number +4799)	UDP	RTP port number can be configured on the Web management interface of the SX3000, and it is 30000 by default.	Yes	None	SRTP	Service
-	Random	Random	SX3000	SX3000 IP Address	443	TCP	The HTTPS port for accessing SX3000 Web GUI	No	User name/password	HTTPS	Manageme nt
-	Random	Random	SX3000	SX3000 IP Address	443	ТСР	The port for upgrading SX3000	No	None	HTTPS	Manageme nt
-	Random	Random	SX3000	SX3000 IP Address	80	ТСР	The HTTP port for accessing SX3000 Web GUI	No	User name/password	None	Manageme nt
-	Random	Random	SX3000	SX3000 IP Address	22	ТСР	The SSH port for accessing SX3000	No	User name/password	SSH	Manageme nt
-	Random	Random	SX3000	SX3000 IP Address	23	TCP	The TCP port for accessing SX3000 via telnet	No	User name/password	None	Manageme nt
-	Random	Random	SX3000	SX3000 IP Address	7547	ТСР	The monitoring port for SX3000 TR069	No	None	None	Service
SX3000	SX3000 IP Address	Random ports above 1023	Time server	Random	123	UDP	The port used by the SX3000 to send NTP requests to the time server	No	None	None	Service
-	Random	123	SX3000	SX3000 IP Address	Random ports above 1023	UDP	The port used by the SX3000 to receive NTP responses from the time server	No	None	None	Service

-	SX3000	Random ports above 50000	SFTP server	Random	22	ТСР	The port used by the SX3000 to upload the files to SFTP server or download the files from SFTP server		None	SSH	Manageme nt
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