

# Service Management on the RV130 and RV130W

## Objective

A firewall is set of measures created to protect a network by blocking access to unwanted users. The use of a service applies a protocol to a certain range of ports on the firewall. A service is a protocol that applies to a range of ports. Services take certain actions under different protocols.

The objective of this document is to show you how to manage services on the RV130 and RV130W.

## Applicable Devices

- RV130
- RV130W

## Configuring Service Management

### Adding a Service

Step 1. Log in to the web configuration utility and choose **Firewall > Service Management**. The *Service Management* page opens:



The screenshot shows the 'Service Management' page with a table of services. The table has columns for Service Name, Protocol, Start Port, and End Port. Below the table are buttons for 'Add Row', 'Edit', 'Delete', 'Save', and 'Cancel'.

Service Name	Protocol	Start Port	End Port
All Traffic	All		
DNS	UDP	53	53
FTP	TCP	21	21
HTTP	TCP	80	80
HTTP Secondary	TCP	8080	8080
HTTPS	TCP	443	443
HTTPS Secondary	TCP	8443	8443
TFTP	UDP	69	69
IMAP	TCP	143	143
NNTP	TCP	119	119
POP3	TCP	110	110
SNMP	UDP	161	161
SMTP	TCP	25	25
TELNET	TCP	23	23
TELNET Secondary	TCP	8023	8023
TELNET SSL	TCP	992	992
Voice(SIP)	TCP & UDP	5060	5061
VOIP	TCP & UDP	55555	55556

Step 2. Click **Add Row** to add a new Service to the *Service Management Table*.

Service Management

Service Name	Protocol	Start Port	End Port
All Traffic	All		
DNS	UDP	53	53
FTP	TCP	21	21
HTTP	TCP	80	80
HTTP Secondary	TCP	8080	8080
HTTPS	TCP	443	443
HTTPS Secondary	TCP	8443	8443
TFTP	UDP	69	69
IMAP	TCP	143	143
NNTP	TCP	119	119
POP3	TCP	110	110
SNMP	UDP	161	161
SMTP	TCP	25	25
TELNET	TCP	23	23
TELNET Secondary	TCP	8023	8023
TELNET SSL	TCP	992	992
Voice(SIP)	TCP & UDP	5060	5061
VOIP	TCP & UDP	55555	55556

Buttons: Add Row, Edit, Delete, Save, Cancel

Step 3. Enter a name for the new service in the *Service Name* column.

TELNET Secondary	TCP	8023	8023
TELNET SSL	TCP	992	992
Voice(SIP)	TCP & UDP	5060	5061
VOIP	TCP & UDP	55555	55556
DATA	TCP		

Buttons: Add Row, Edit, Delete

Step 4. Select a protocol for the new service in the *Protocol* column.

TELNET SSL	TCP	992	992
Voice(SIP)	TCP & UDP	5060	5061
VOIP	TCP & UDP	55555	55556
DATA	TCP		

Buttons: Add Row, Edit, Delete

The available options are defined as follows:

- TCP — Protocol used to transmit data from an application to the network. TCP is typically used for applications where information transfer must be complete and packets are not dropped. TCP determines when internet packets requires to be re-sent and stops the flow of data until all packets are successfully transferred.
- UDP — Protocol used for client/server network applications based on the Internet Protocol (IP). The main purpose of this protocol is for live applications. (VOIP, games etc.) UDP is faster than TCP because there is no form of data flow control and any collisions and errors will not be corrected. UDP prioritizes speed.
- TCP & UDP — This protocol utilizes both TCP and UDP.
- ICMP — Protocol that sends errors messages and is responsible for error-handling in the network. Use this protocol to get a notification when the network has issues with the delivery of packets.

Step 5. Enter a starting port for the new service in the *Start Port* column. The port numbers are divided into three ranges. The Well Known Ports range from 0 to 1023, the Registered Ports range from 1024 through 29151, and the Dynamic and/or Private Ports range from 49152 to 65535. If your service requires custom or temporary permissions for automatic allocation of ephemeral ports, choose a port number from the Dynamic and/or Private Ports range. If your service requires specific permissions and requests Registered Port access assigned by the Internet Assigned Numbers Authority, choose a port number from the Registered Port range. In a few cases, if your service has superuser privileges and requests

network sockets to bind to an IP address, choose a port from the Well Known Ports range.

<input type="checkbox"/>	TELNET SSL	TCP	992	992
<input type="checkbox"/>	Voice(SIP)	TCP & UDP	5060	5061
<input type="checkbox"/>	VOIP	TCP & UDP	55555	55556
<input type="checkbox"/>	DATA	TCP	1088	

Step 6. Enter an ending port for the new service in the *End Port* column.

<input type="checkbox"/>	TELNET SSL	TCP	992	992
<input type="checkbox"/>	Voice(SIP)	TCP & UDP	5060	5061
<input type="checkbox"/>	VOIP	TCP & UDP	55555	55556
<input type="checkbox"/>	DATA	TCP	1088	1089

Step 7. Click **Save** to save the new service.

<input type="checkbox"/>	SMTP	TCP	25	25
<input type="checkbox"/>	TELNET	TCP	23	23
<input type="checkbox"/>	TELNET Secondary	TCP	8023	8023
<input type="checkbox"/>	TELNET SSL	TCP	992	992
<input type="checkbox"/>	Voice(SIP)	TCP & UDP	5060	5061
<input type="checkbox"/>	VOIP	TCP & UDP	55555	55556
<input type="checkbox"/>	DATA	TCP	1088	1089

The router will upload and process the newly configured service.

<input type="checkbox"/>	HTTP	TCP	80	80
<input type="checkbox"/>	HTTP Secondary	TCP	8080	8080
<input type="checkbox"/>	HTTPS	TCP	443	443
<input type="checkbox"/>	HTTPS Secondary	TCP	8443	8443
<input type="checkbox"/>	TFTP	UDP	69	69
<input type="checkbox"/>	IMAP	TCP	143	143
<input type="checkbox"/>	NNTP	TCP	119	119
<input type="checkbox"/>	POP3	TCP	110	110
<input type="checkbox"/>	SNMP	UDP	161	161
<input type="checkbox"/>	SMTP	TCP	25	25
<input type="checkbox"/>	TELNET	TCP	23	23
<input type="checkbox"/>	TELNET Secondary	TCP	8023	8023
<input type="checkbox"/>	TELNET SSL	TCP	992	992
<input type="checkbox"/>	Voice(SIP)	TCP & UDP	5060	5061
<input type="checkbox"/>	VOIP	TCP & UDP	55555	55556
<input type="checkbox"/>	DATA	TCP	1088	1089

The *Service Management Table* will update with the new service.

<input type="checkbox"/>	Service Name	Protocol	Start Port	End Port
<input type="checkbox"/>	All Traffic	All		
<input type="checkbox"/>	DNS	UDP	53	53
<input type="checkbox"/>	FTP	TCP	21	21
<input type="checkbox"/>	HTTP	TCP	80	80
<input type="checkbox"/>	HTTP Secondary	TCP	8080	8080
<input type="checkbox"/>	HTTPS	TCP	443	443
<input type="checkbox"/>	HTTPS Secondary	TCP	8443	8443
<input type="checkbox"/>	TFTP	UDP	69	69
<input type="checkbox"/>	IMAP	TCP	143	143
<input type="checkbox"/>	NNTP	TCP	119	119
<input type="checkbox"/>	POP3	TCP	110	110
<input type="checkbox"/>	SNMP	UDP	161	161
<input type="checkbox"/>	SMTP	TCP	25	25
<input type="checkbox"/>	TELNET	TCP	23	23
<input type="checkbox"/>	TELNET Secondary	TCP	8023	8023
<input type="checkbox"/>	TELNET SSL	TCP	992	992
<input type="checkbox"/>	Voice(SIP)	TCP & UDP	5060	5061
<input type="checkbox"/>	VOIP	TCP & UDP	55555	55556
<input type="checkbox"/>	DATA	TCP	1088	1089

## Delete a Service

Step 1. On the *Service Management* page, check the checkbox next to the service you wish

to delete.

Service Management Table					
<input type="checkbox"/>	Service Name	Protocol	Start Port	End Port	
	All Traffic	All			
	DNS	UDP	53	53	
	FTP	TCP	21	21	
	HTTP	TCP	80	80	
	HTTP Secondary	TCP	8080	8080	
	HTTPS	TCP	443	443	
	HTTPS Secondary	TCP	8443	8443	
	TFTP	UDP	69	69	
	IMAP	TCP	143	143	
	NNTP	TCP	119	119	
	POP3	TCP	110	110	
	SNMP	UDP	161	161	
	SMTP	TCP	25	25	
	TELNET	TCP	23	23	
	TELNET Secondary	TCP	8023	8023	
	TELNET SSL	TCP	992	992	
	Voice(SIP)	TCP & UDP	5060	5061	
<input type="checkbox"/>	VOIP	TCP & UDP	55555	55556	
<input checked="" type="checkbox"/>	DATA	TCP	1088	1089	

Step 2. Click **Delete** to delete the service.

Service Management Table					
<input type="checkbox"/>	Service Name	Protocol	Start Port	End Port	
	All Traffic	All			
	DNS	UDP	53	53	
	FTP	TCP	21	21	
	HTTP	TCP	80	80	
	HTTP Secondary	TCP	8080	8080	
	HTTPS	TCP	443	443	
	HTTPS Secondary	TCP	8443	8443	
	TFTP	UDP	69	69	
	IMAP	TCP	143	143	
	NNTP	TCP	119	119	
	POP3	TCP	110	110	
	SNMP	UDP	161	161	
	SMTP	TCP	25	25	
	TELNET	TCP	23	23	
	TELNET Secondary	TCP	8023	8023	
	TELNET SSL	TCP	992	992	
	Voice(SIP)	TCP & UDP	5060	5061	
<input type="checkbox"/>	VOIP	TCP & UDP	55555	55556	
<input checked="" type="checkbox"/>	DATA	TCP	1088	1089	

Step 3. Click **Save** to save changes.

Service Management

Service Management Table				
<input type="checkbox"/>	Service Name	Protocol	Start Port	End Port
<input type="checkbox"/>	All Traffic	All		
<input type="checkbox"/>	DNS	UDP	53	53
<input type="checkbox"/>	FTP	TCP	21	21
<input type="checkbox"/>	HTTP	TCP	80	80
<input type="checkbox"/>	HTTP Secondary	TCP	8080	8080
<input type="checkbox"/>	HTTPS	TCP	443	443
<input type="checkbox"/>	HTTPS Secondary	TCP	8443	8443
<input type="checkbox"/>	TFTP	UDP	69	69
<input type="checkbox"/>	IMAP	TCP	143	143
<input type="checkbox"/>	NNTP	TCP	119	119
<input type="checkbox"/>	POP3	TCP	110	110
<input type="checkbox"/>	SNMP	UDP	161	161
<input type="checkbox"/>	SMTP	TCP	25	25
<input type="checkbox"/>	TELNET	TCP	23	23
<input type="checkbox"/>	TELNET Secondary	TCP	8023	8023
<input type="checkbox"/>	TELNET SSL	TCP	992	992
<input type="checkbox"/>	Voice(SIP)	TCP & UDP	5060	5061
<input type="checkbox"/>	VOIP	TCP & UDP	55555	55556

The router will upload and process the newly configured service.

Service Management Table				
<input type="checkbox"/>	Service Name	Protocol	Start Port	End Port
<input type="checkbox"/>	All Traffic	All		
<input type="checkbox"/>	DNS	UDP	53	53
<input type="checkbox"/>	FTP	TCP	21	21
<input type="checkbox"/>	HTTP	TCP	80	80
<input type="checkbox"/>	HTTP Secondary	TCP	8080	8080
<input type="checkbox"/>	HTTPS	TCP	443	443
<input type="checkbox"/>	HTTPS Secondary	TCP	8443	8443
<input type="checkbox"/>	TFTP	UDP	69	69
<input type="checkbox"/>	IMAP	TCP	143	143
<input type="checkbox"/>	NNTP	TCP	119	119
<input type="checkbox"/>	POP3	TCP	110	110
<input type="checkbox"/>	SNMP	UDP	161	161
<input type="checkbox"/>	SMTP	TCP	25	25
<input type="checkbox"/>	TELNET	TCP	23	23
<input type="checkbox"/>	TELNET Secondary	TCP	8023	8023
<input type="checkbox"/>	TELNET SSL	TCP	992	992
<input type="checkbox"/>	Voice(SIP)	TCP & UDP	5060	5061
<input type="checkbox"/>	VOIP	TCP & UDP	5555	5556
<input checked="" type="checkbox"/>	DATA	TCP	1088	1089

The *Service Management Table* will update with the deleted service removed.

Service Management Table				
<input type="checkbox"/>	Service Name	Protocol	Start Port	End Port
<input type="checkbox"/>	All Traffic	All		
<input type="checkbox"/>	DNS	UDP	53	53
<input type="checkbox"/>	FTP	TCP	21	21
<input type="checkbox"/>	HTTP	TCP	80	80
<input type="checkbox"/>	HTTP Secondary	TCP	8080	8080
<input type="checkbox"/>	HTTPS	TCP	443	443
<input type="checkbox"/>	HTTPS Secondary	TCP	8443	8443
<input type="checkbox"/>	TFTP	UDP	69	69
<input type="checkbox"/>	IMAP	TCP	143	143
<input type="checkbox"/>	NNTP	TCP	119	119
<input type="checkbox"/>	POP3	TCP	110	110
<input type="checkbox"/>	SNMP	UDP	161	161
<input type="checkbox"/>	SMTP	TCP	25	25
<input type="checkbox"/>	TELNET	TCP	23	23
<input type="checkbox"/>	TELNET Secondary	TCP	8023	8023
<input type="checkbox"/>	TELNET SSL	TCP	992	992
<input type="checkbox"/>	Voice(SIP)	TCP & UDP	5060	5061
<input type="checkbox"/>	VOIP	TCP & UDP	55555	55556