Add and Configure Access Rules on RV130 and RV130W

Objective

Network devices provide basic traffic filtering capabilities with access rules. An access rule is a single entry in an Access Control List (ACL) that specifies a permit or deny rule (to forward or drop a packet) based on the protocol, a source and destination IP address, or network configuration.

The objective of this document is to show you how to add and configure an Access Rule on the RV130 and RV130W.

Applicable Devices

- RV130
- RV130W

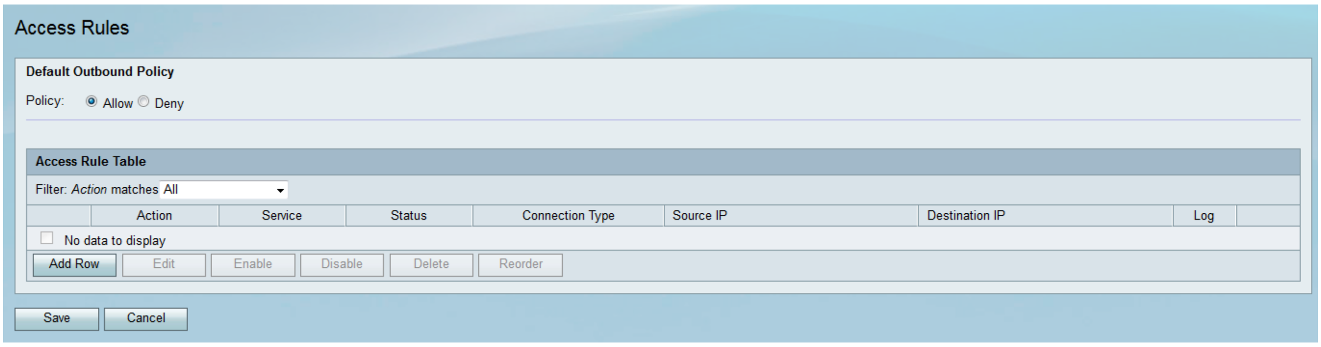
Software Versions

- Version 1.0.1.3

Add and Configure an Access Rule

Setting Default Outbound Policy

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



Access Rules

Default Outbound Policy

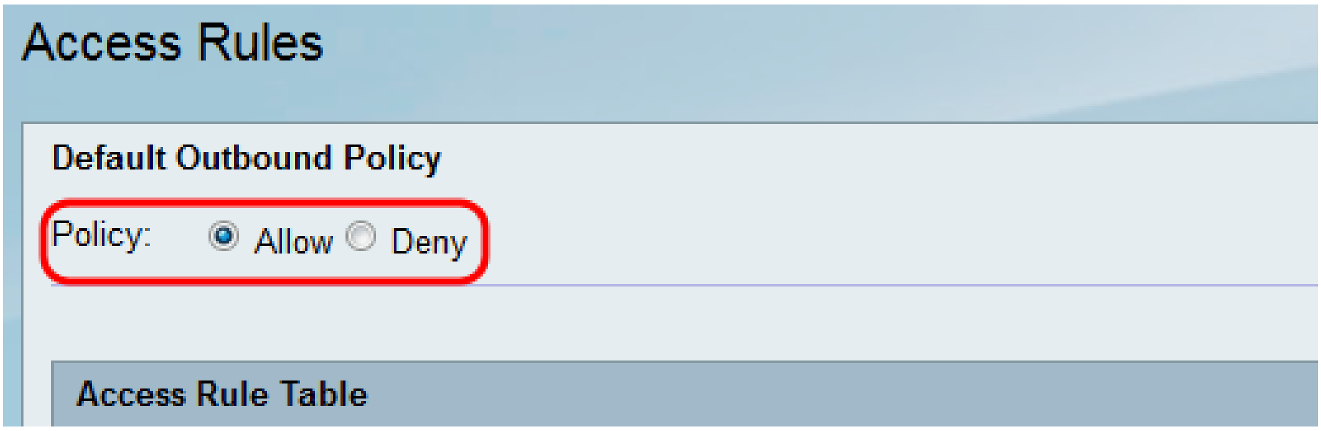
Policy: ● Allow ○ Deny

Access Rule Table

Filter: *Action* matches All

	Action	Service	Status	Connection Type	Source IP	Destination IP	Log
□ No data to display							

Step 2. In the *Default Outbound Policy* area, click the desired radio button to choose a policy for outbound traffic. The policy is applied whenever there are no access rules or Internet access policies configured. The default setting is **Allow**, which allows all traffic to the Internet to pass through.



Access Rules

Default Outbound Policy

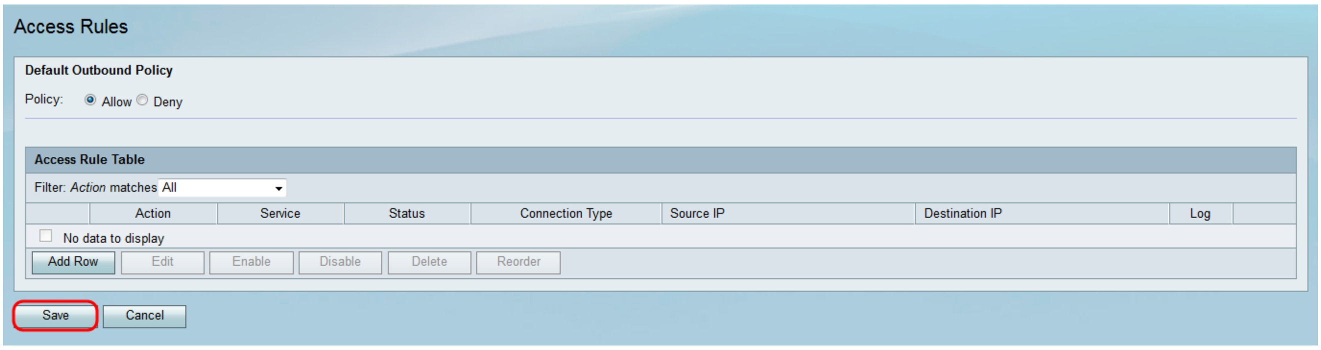
Policy: ● Allow ○ Deny

Access Rule Table

The available options are defined as follows:

- Allow — Permit all types of traffic going out from the LAN to the Internet.
- Deny — Block all types of traffic going out from the LAN to the Internet.

Step 3. Click **Save** to save the settings.



Access Rules

Default Outbound Policy

Policy: ● Allow ○ Deny

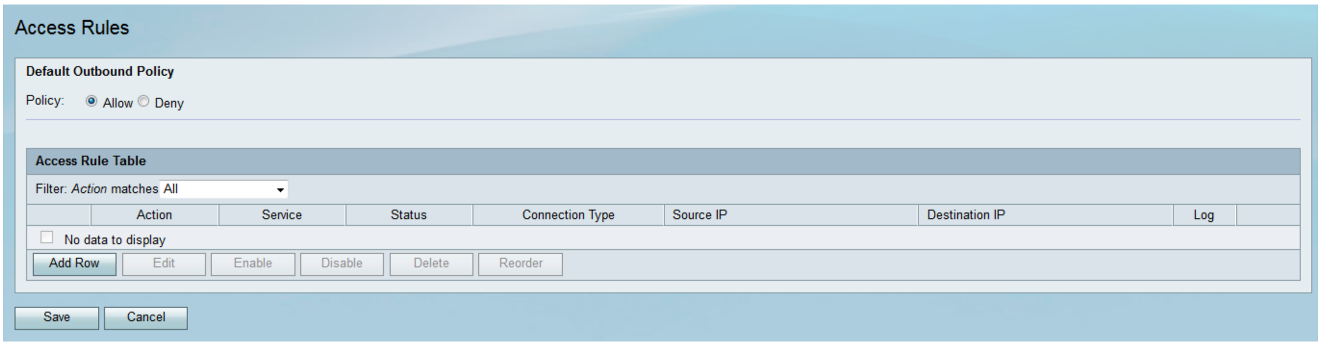
Access Rule Table

Filter: *Action* matches All

	Action	Service	Status	Connection Type	Source IP	Destination IP	Log
□ No data to display							

Adding an Access Rule

Step 1. Log in to the web configuration utility and choose **Firewall > Access Rules**. The *Access Rules* window opens:



Access Rules

Default Outbound Policy

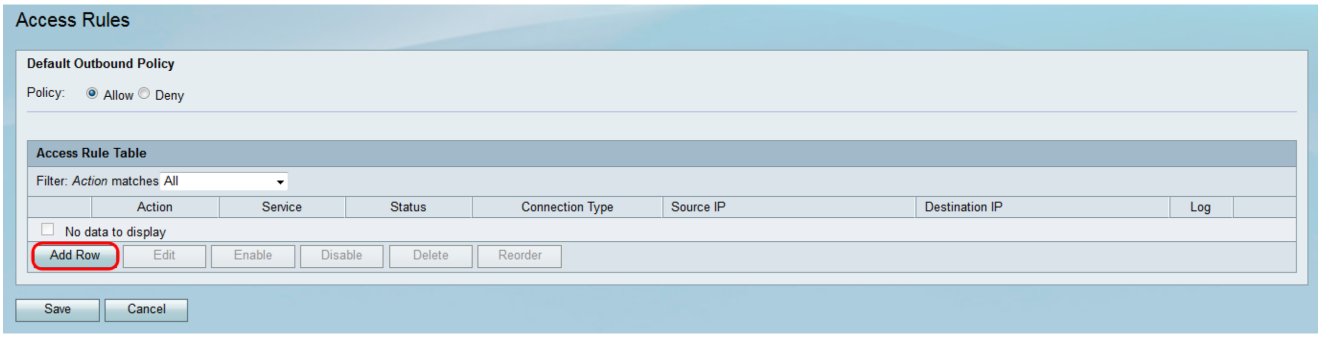
Policy: ● Allow ○ Deny

Access Rule Table

Filter: *Action* matches All

	Action	Service	Status	Connection Type	Source IP	Destination IP	Log
□ No data to display							

Step 2. Click **Add Row** in the *Access Rule Table* to add a new access rule.



Access Rules

Default Outbound Policy

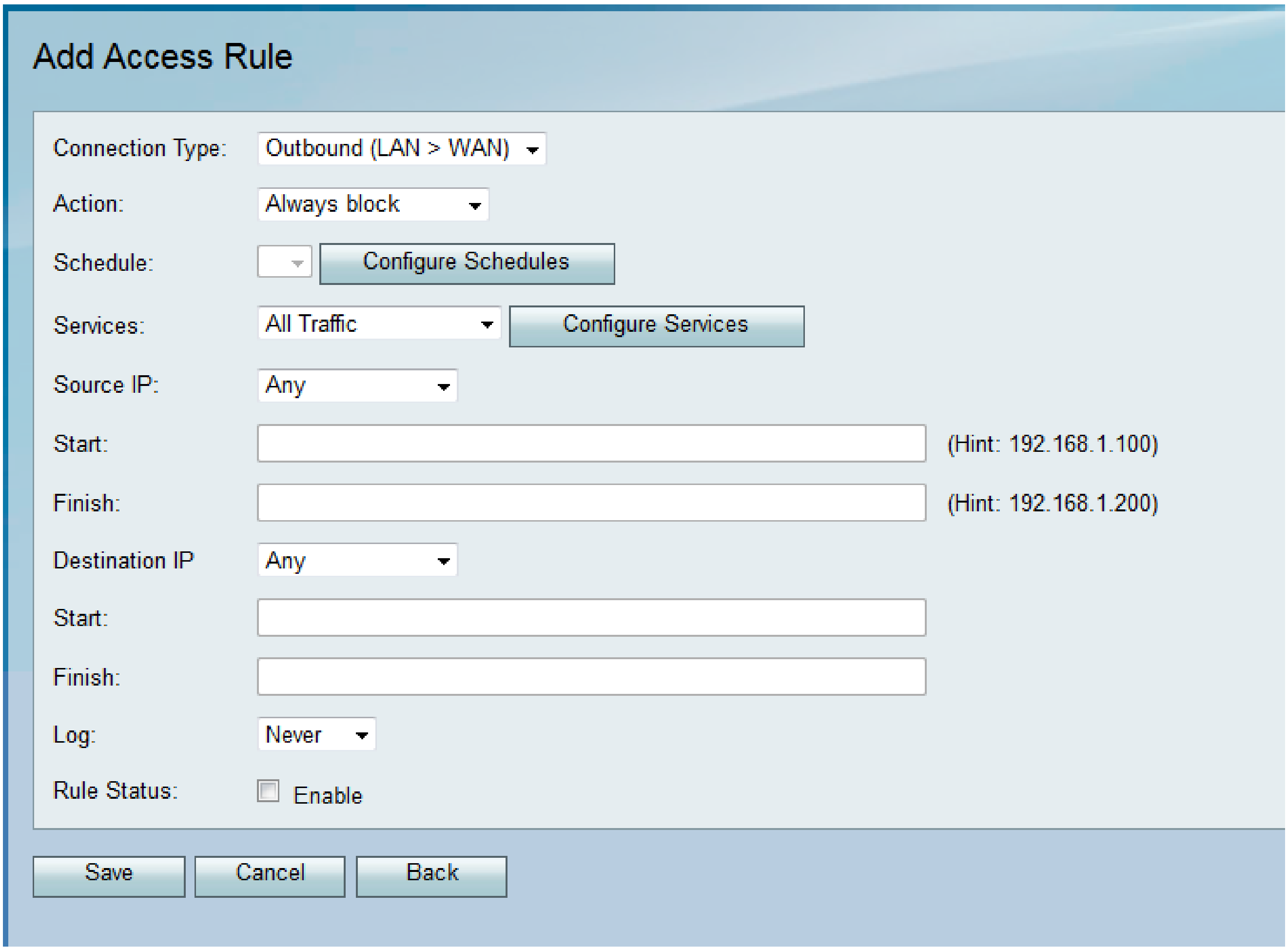
Policy: ● Allow ○ Deny

Access Rule Table

Filter: *Action* matches All

□	Action	Service	Status	Connection Type	Source IP	Destination IP	Log
□	No data to display						

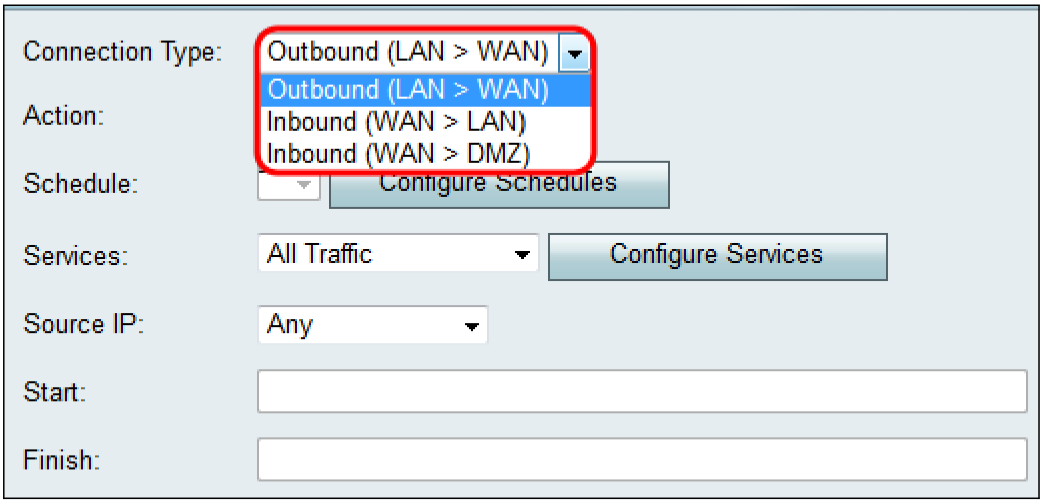
The *Add Access Rule* page opens:



Add Access Rule

Connection Type:	Outbound (LAN > WAN)
Action:	Always block
Schedule:	
Services:	All Traffic
Source IP:	Any
Start:	(Hint: 192.168.1.100)
Finish:	(Hint: 192.168.1.200)
Destination IP	Any
Start:	
Finish:	
Log:	Never
Rule Status:	□ Enable

Step 3. From the *Connection Type* drop-down list, choose the type of traffic for which the rule applies.



Connection Type: Outbound (LAN > WAN)

Action:

Schedule:

Services: All Traffic

Source IP: Any

Start:

Finish:

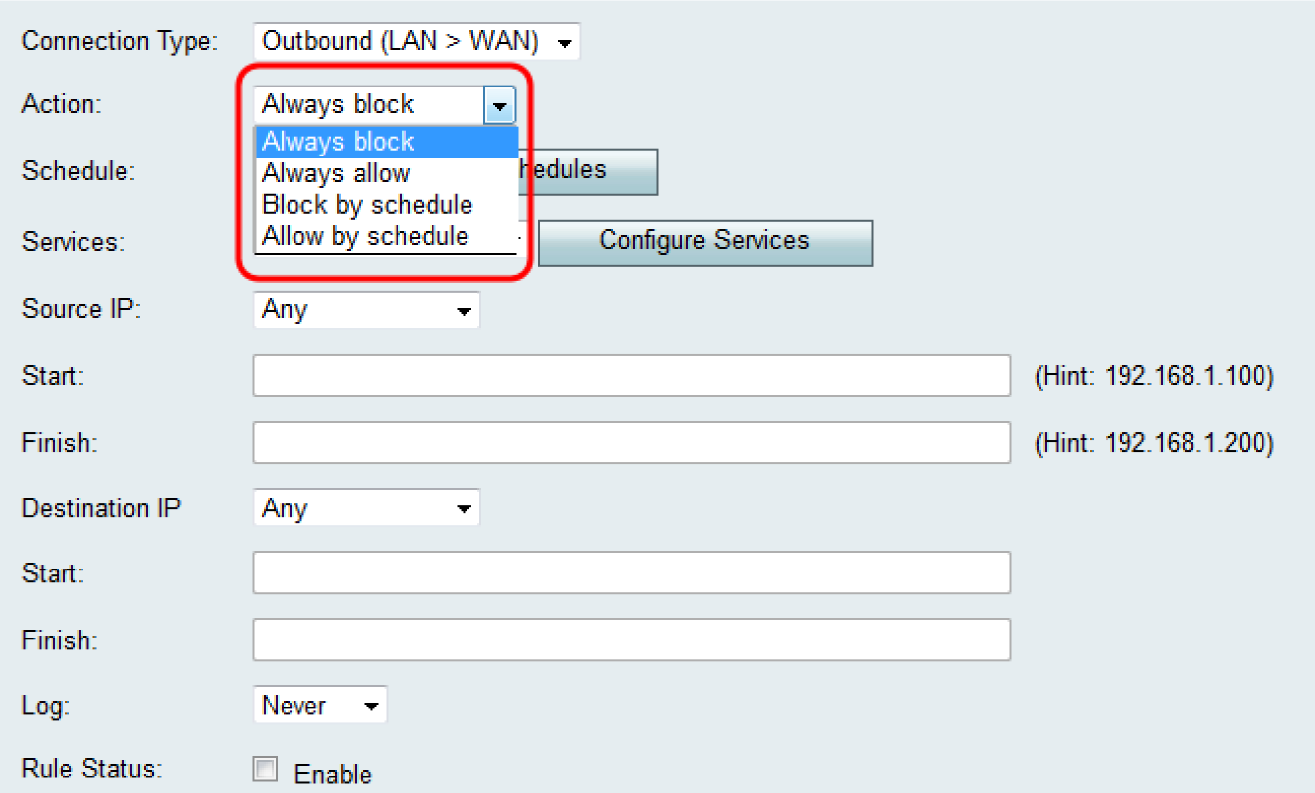
The available options are defined as follows:

- Outbound (LAN > WAN) — The rule affects packets that come from the local network (LAN) and go out to the Internet (WAN).

- Inbound (WAN > LAN) — The rule affects packets that come from the Internet (WAN) and go into the local network (LAN).

- Inbound (WAN > DMZ) — The rule affects packets that come from the Internet (WAN) and go into the demilitarized zone (DMZ) subnetwork.

Step 4. From the *Action* drop-down list, choose the action to be taken when a rule is matched.



Connection Type: Outbound (LAN > WAN)

Action: Always block

Schedule:

Services:

Source IP: Any

Start: (Hint: 192.168.1.100)

Finish: (Hint: 192.168.1.200)

Destination IP Any

Start:

Finish:

Log: Never

Rule Status: □ Enable

The available options are defined as follows:

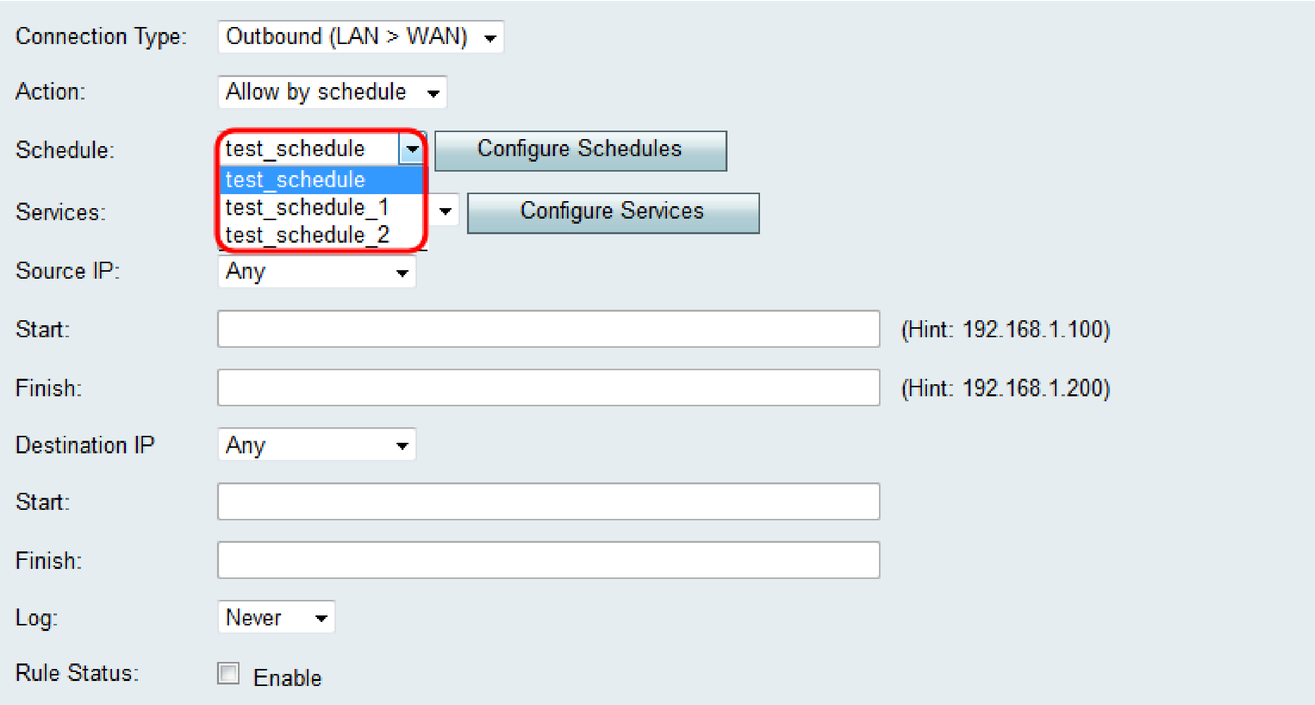
- Always Block — Always deny access if the conditions are matched. Skip to Step 6.

- Always Allow — Always permit access if the conditions are matched. Skip to Step 6.

- Block by schedule — Deny access if the conditions are matched during a preconfigured schedule.

- Allow by schedule — Permit access if the conditions are matched during a preconfigured schedule.

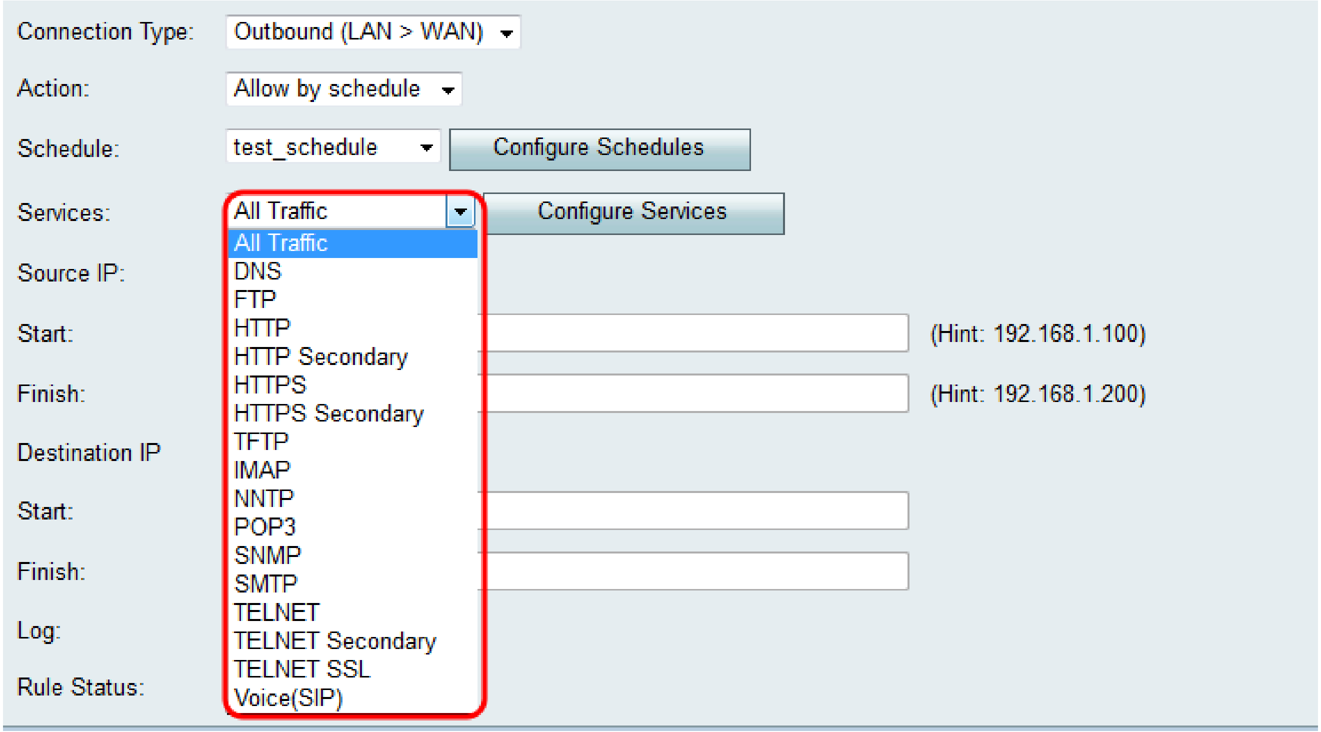
Step 5. If you chose **Block by schedule** or **Allow by schedule** in Step 4, choose the appropriate schedule from the *Schedule* dropdown list.



Connection Type:	Outbound (LAN > WAN)
Action:	Allow by schedule
Schedule:	test_schedule
Services:	
Source IP:	Any
Start:	(Hint: 192.168.1.100)
Finish:	(Hint: 192.168.1.200)
Destination IP	Any
Start:	
Finish:	
Log:	Never
Rule Status:	□ Enable

Note: To create or edit a schedule, click **Configure Schedules**. Refer to *Configuring Schedules on the RV130 and RV130W* for more information and guidelines.

Step 6. Choose the type of service the access rule applies for from the *Services* drop-down list.



Connection Type:	Outbound (LAN > WAN)
Action:	Allow by schedule
Schedule:	test_schedule
Services:	All Traffic
Source IP:	
Start:	(Hint: 192.168.1.100)
Finish:	(Hint: 192.168.1.200)
Destination IP	
Start:	
Finish:	
Log:	
Rule Status:	

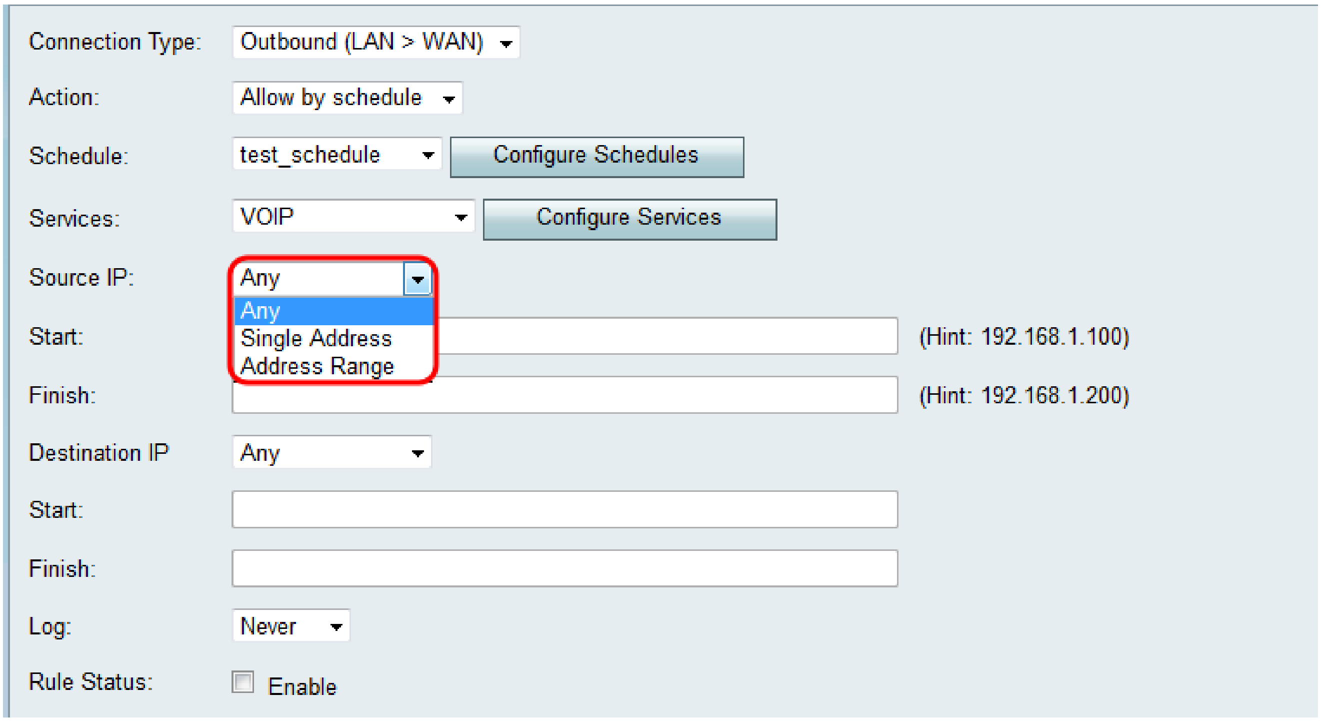
Note: If you want to add or edit a service, click **Configure Services**. Refer to *Service Management Configuration on the RV130 and RV130W* for more information and guidelines.

Configuring Source and Destination IP for Outbound traffic

Follow the steps in this section if **Outbound (LAN > WAN)** was selected as the Connection Type in Step 3 of *Adding an Access Rule.*

Note: If an inbound Connection Type was selected in Step 3 of Adding an Access Rule, skip to the next section: *Configuring Source and Destination IP for Inbound traffic*.

Step 1. Choose how you would like to define the Source IP from the *Source IP* drop-down list. For outbound traffic, the Source IP refers to the address or addresses (in the LAN) to which the Firewall rule would apply.



Connection Type: Outbound (LAN > WAN)

Action: Allow by schedule

Schedule: test_schedule

Services: VOIP

Source IP: Any

Start: (Hint: 192.168.1.100)

Finish: (Hint: 192.168.1.200)

Destination IP Any

Start:

Finish:

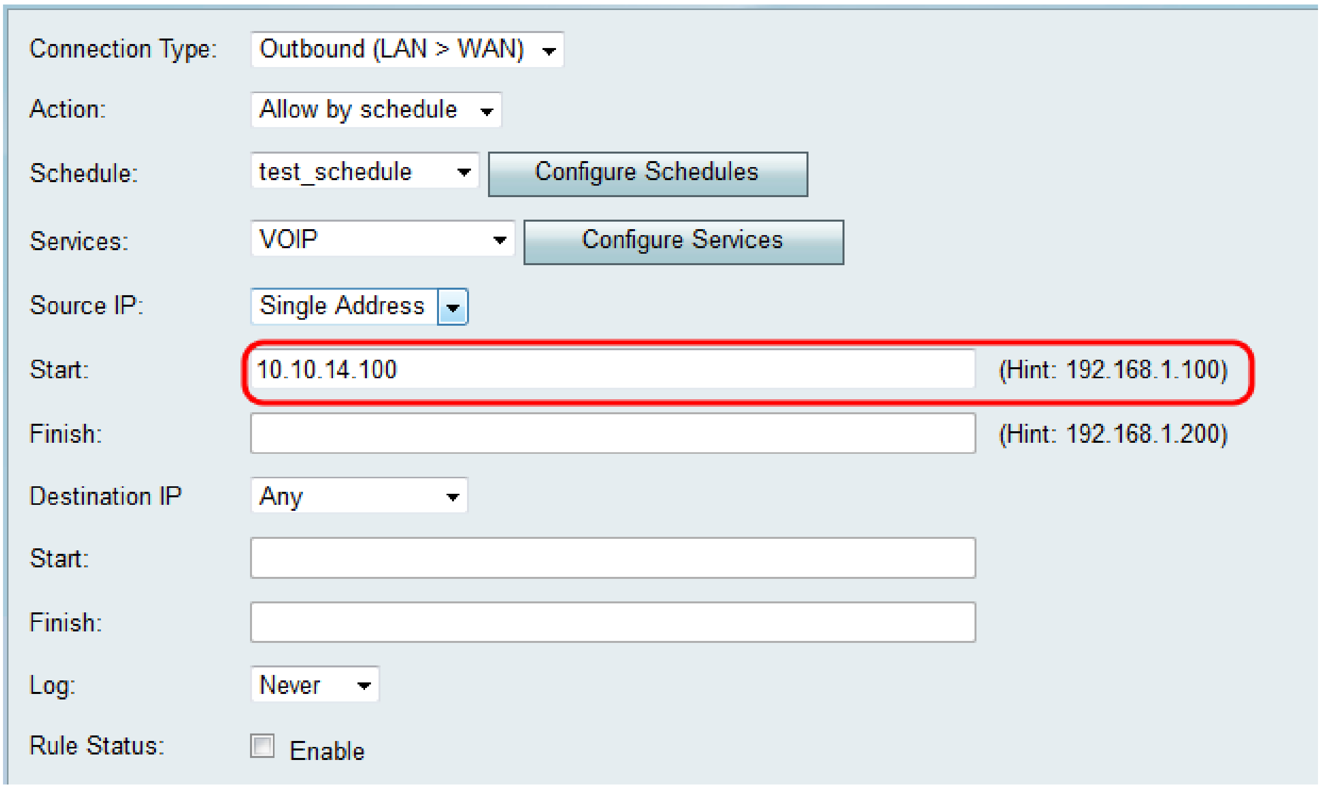
Log: Never

Rule Status: □ Enable

The available options are defined as follows:

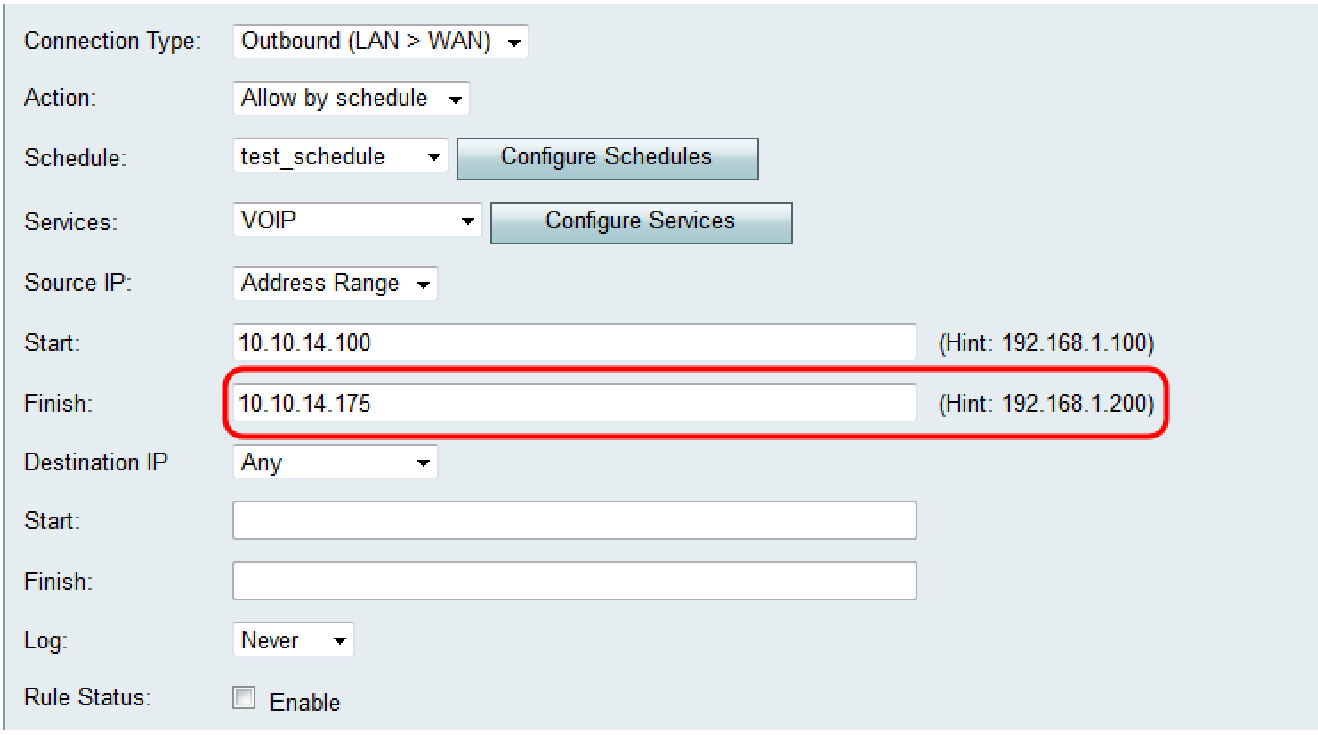
- Any — Applies to traffic originating from any IP address in the local network. Therefore, leave the *Start* and *Finish* fields blank. Skip to Step 4 if you choose this option.
- Single Address — Applies to traffic originating from a single IP address in the local network. Enter the IP address in the *Start* field.
- Address Range — Applies to traffic originating from a range of IP addresses in the local network. Enter the starting IP address of the range in the *Start* field and the ending IP address in the *Finish* field in order to set the range.

Step 2. If you chose **Single Address** in Step 1, enter the IP address that will be applied to the access rule in the *Start* field, and then skip to Step 4. If you chose **Address Range** in Step 1, enter a starting IP address that will be applied to the access rule in the *Start* field.



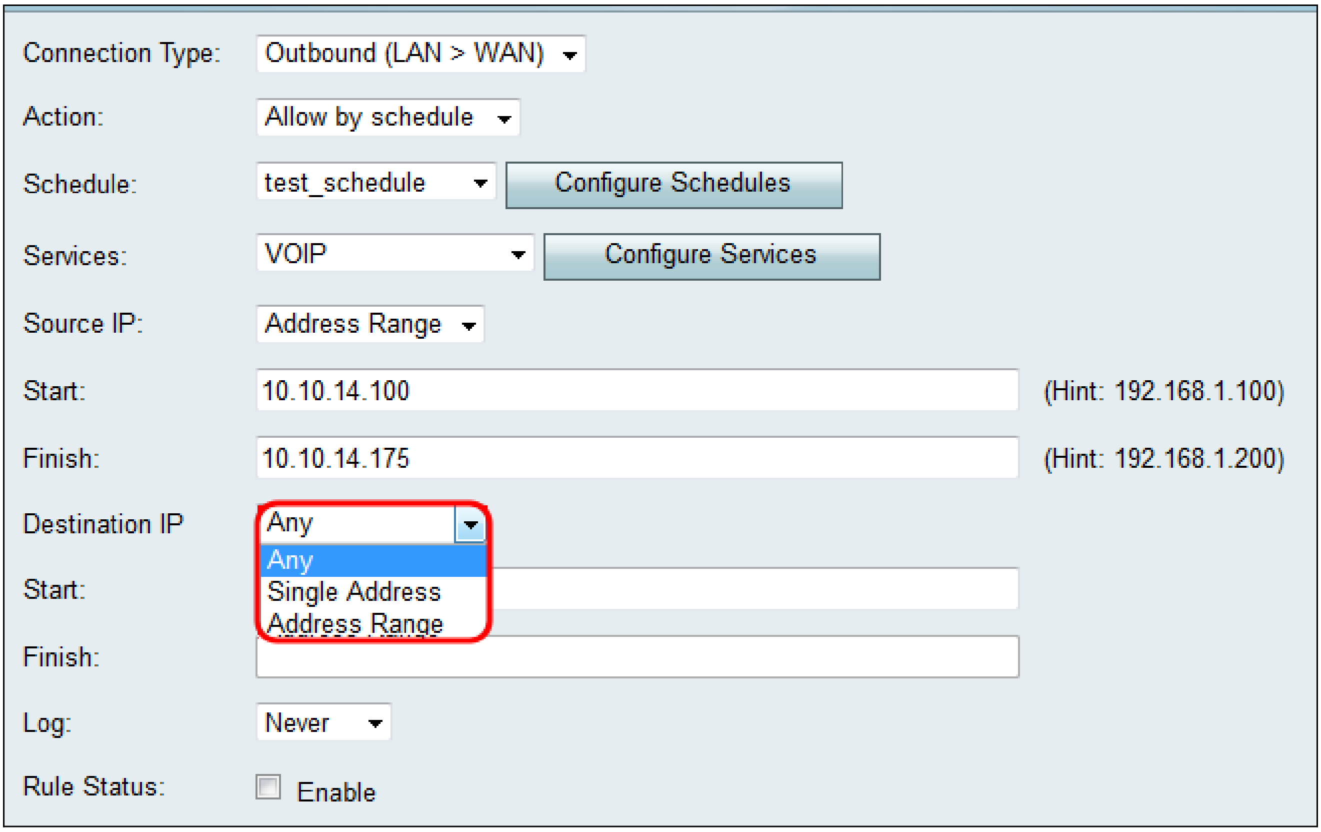
Connection Type:	Outbound (LAN > WAN)	
Action:	Allow by schedule	
Schedule:	test_schedule	Configure Schedules
Services:	VOIP	Configure Services
Source IP:	Single Address	
Start:	10.10.14.100	(Hint: 192.168.1.100)
Finish:		(Hint: 192.168.1.200)
Destination IP	Any	
Start:		
Finish:		
Log:	Never	
Rule Status:	□ Enable	

Step 3. If you chose **Address Range** in Step 1, enter the ending IP address that will encapsulate the IP address range for the access rule in the *Finish* field.



Connection Type:	Outbound (LAN > WAN)	
Action:	Allow by schedule	
Schedule:	test_schedule	Configure Schedules
Services:	VOIP	Configure Services
Source IP:	Address Range	
Start:	10.10.14.100	(Hint: 192.168.1.100)
Finish:	10.10.14.175	(Hint: 192.168.1.200)
Destination IP	Any	
Start:		
Finish:		
Log:	Never	
Rule Status:	□ Enable	

Step 4. Choose how you would like to define the Destination IP from the *Destination IP* drop-down list. For outbound traffic, the Destination IP refers to the address or addresses (in the WAN) to which traffic is permitted or denied from the local network.



Connection Type: Outbound (LAN > WAN)

Action: Allow by schedule

Schedule: test_schedule

Services: VOIP

Source IP: Address Range

Start: 10.10.14.100 (Hint: 192.168.1.100)

Finish: 10.10.14.175 (Hint: 192.168.1.200)

Destination IP: Any

Start:

Finish:

Log: Never

Rule Status: □ Enable

The available options are defined as follows:

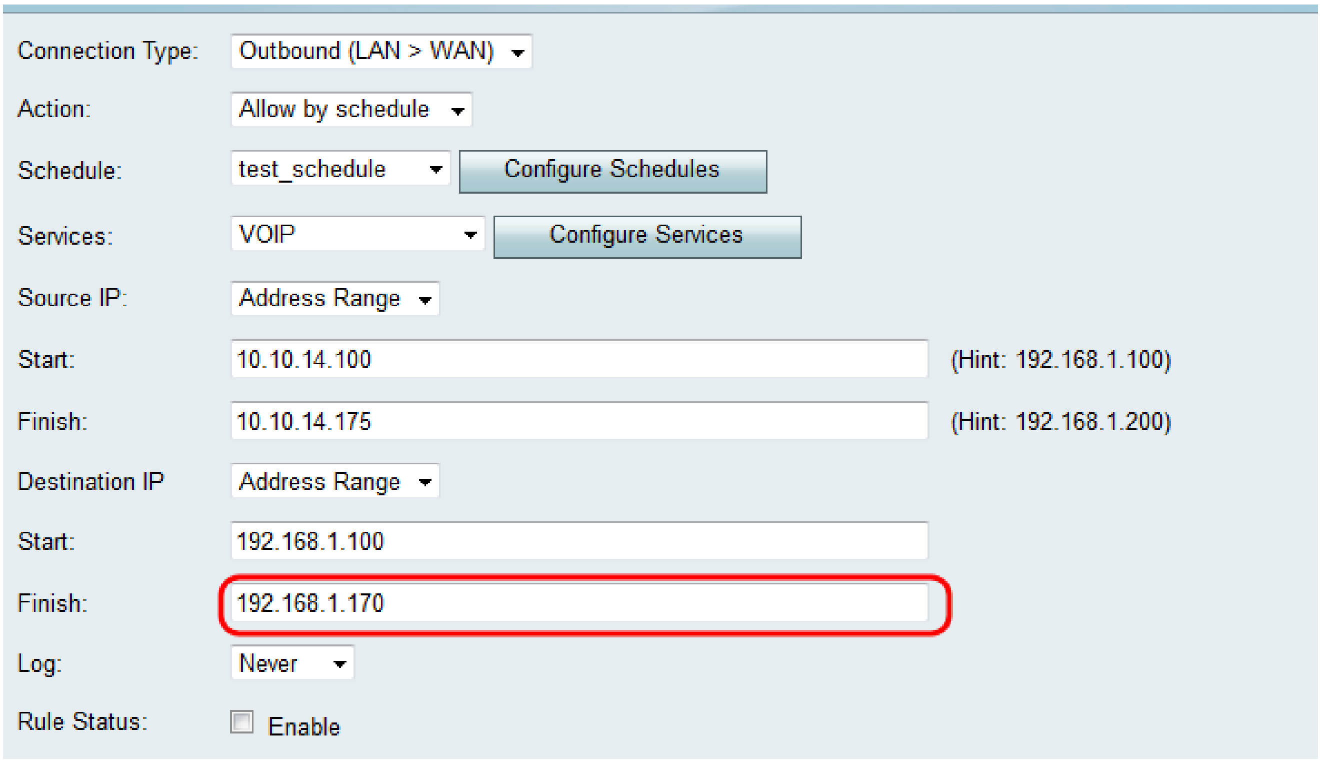
- Any — Applies to traffic headed towards any IP address in the public Internet. Therefore, leave the *Start* and *Finish* fields blank.

- Single Address — Applies to traffic headed towards a single IP address in the public Internet. Enter the IP address in the *Start* field.

- Address Range — Applies to traffic headed towards a range of IP addresses in the public Internet. Enter the starting IP address of the range in the *Start* field and the ending IP address in the *Finish* field in order to set the range.

Step 5. If you chose **Single Address** in Step 4, enter the IP address that will be applied to the access rule in the *Start* field. If you chose **Address Range** in Step 4, enter a starting IP address that will be applied to the access rule in the *Start* field.

Step 6. If you chose **Address Range** in Step 4, enter the ending IP Address that will encapsulate the IP Address range for the access rule in the *Finish* field.

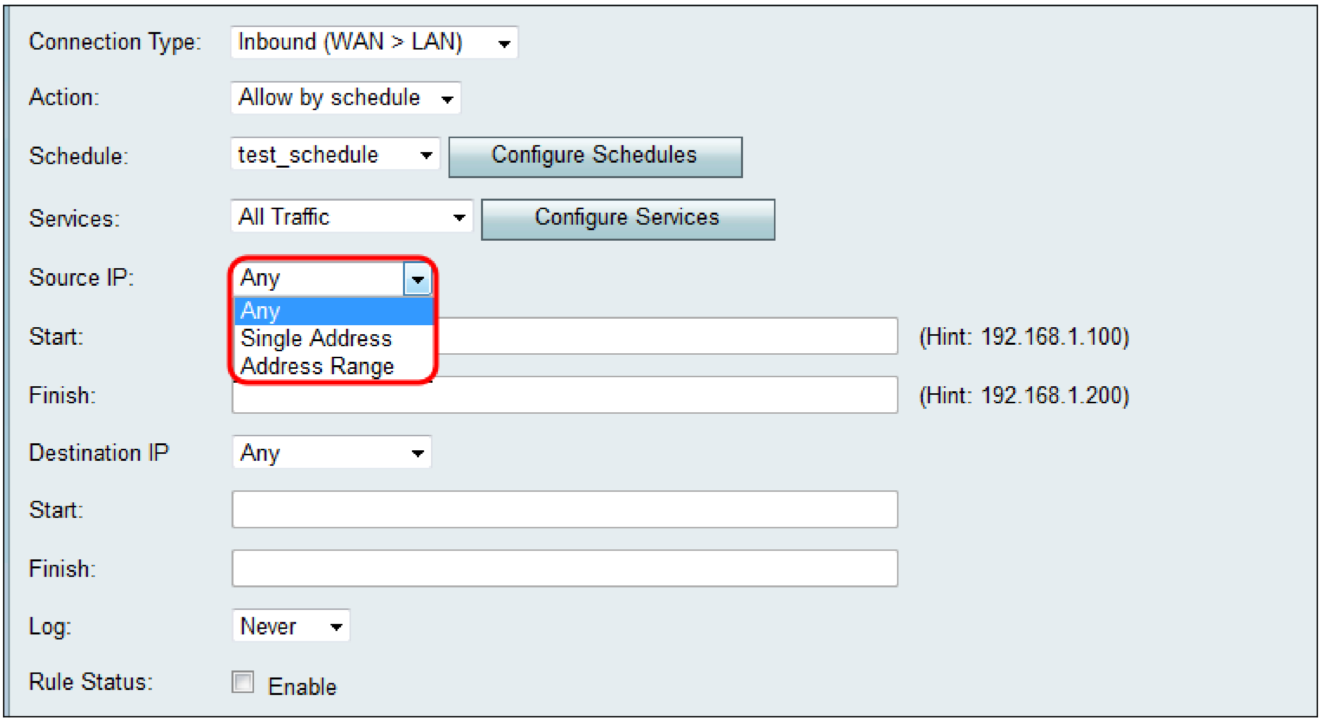


Connection Type:	Outbound (LAN > WAN)	
Action:	Allow by schedule	
Schedule:	test_schedule	Configure Schedules
Services:	VOIP	Configure Services
Source IP:	Address Range	
Start:	10.10.14.100	(Hint: 192.168.1.100)
Finish:	10.10.14.175	(Hint: 192.168.1.200)
Destination IP	Address Range	
Start:	192.168.1.100	
Finish:	192.168.1.170	
Log:	Never	
Rule Status:	□ Enable	

Configuring Source and Destination IP for Inbound traffic

Follow the steps in this section if **Inbound (WAN > LAN)** or **Inbound (WAN > DMZ)** was selected as the Connection Type in Step 3 of *Adding an Access Rule*.

Step 1. Choose how you would like to define the Source IP from the *Source IP* drop-down list. For inbound traffic, the Source IP refers to the address or addresses (in the WAN) to which the Firewall rule would apply.



Connection Type: Inbound (WAN > LAN)

Action: Allow by schedule

Schedule: test_schedule

Services: All Traffic

Source IP: Any

Start: (Hint: 192.168.1.100)

Finish: (Hint: 192.168.1.200)

Destination IP Any

Start:

Finish:

Log: Never

Rule Status: □ Enable

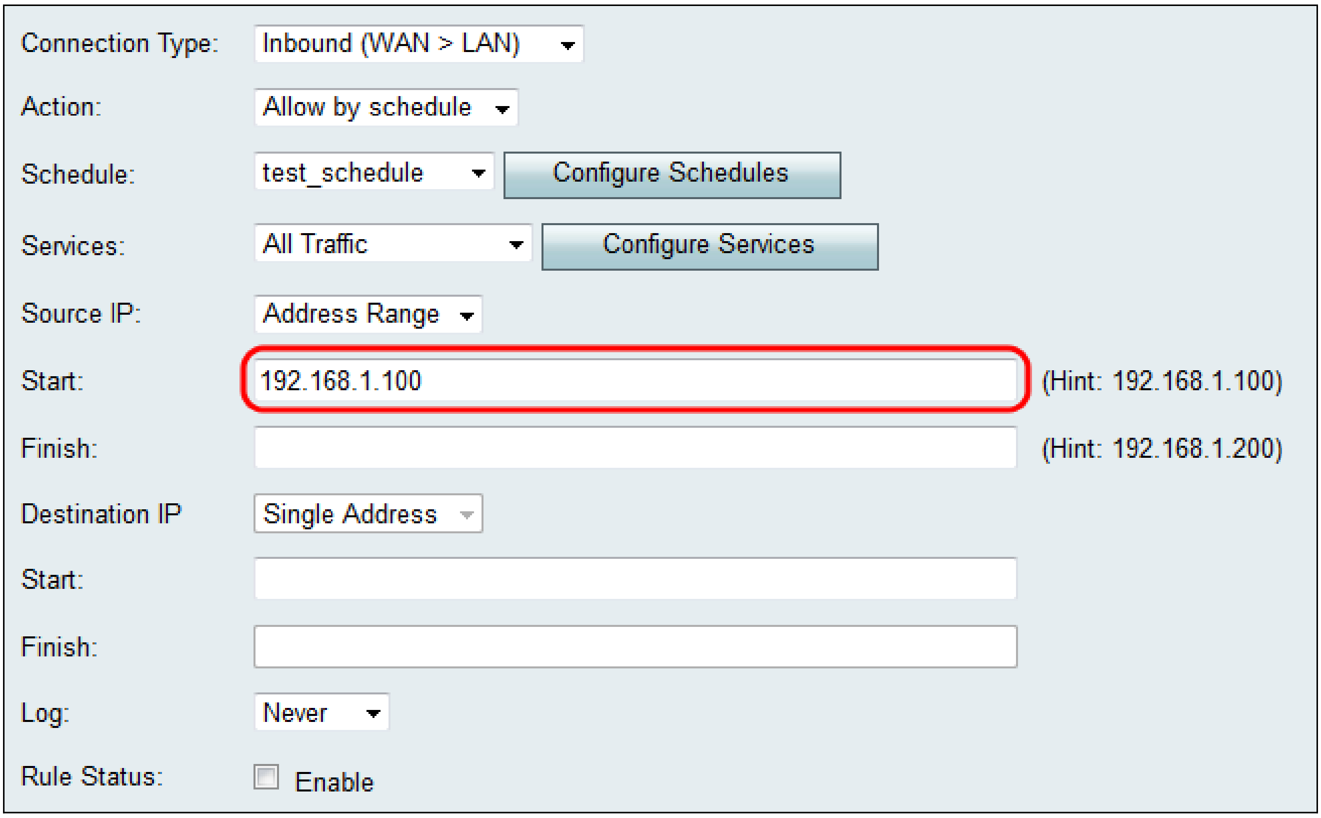
The available options are defined as follows:

- Any — Applies to traffic originating from any IP address in the public Internet. Therefore, leave the *Start* and *Finish* fields blank. Skip to Step 4 if you choose this option.

- Single Address — Applies to traffic originating from a single IP address in the public Internet. Enter the IP address in the *Start* field.

- Address Range — Applies to traffic originating from a range of IP addresses in the public Internet. Enter the starting IP address of the range in the *Start* field and the ending IP address in the *Finish* field in order to set the range.

Step 2. If you chose **Single Address** in Step 1, enter the IP address that will be applied to the access rule in the *Start* field, and then skip to Step 4. If you chose **Address Range** in Step 1, enter a starting IP address that will be applied to the access rule in the *Start* field.



Connection Type: Inbound (WAN > LAN)

Action: Allow by schedule

Schedule: test_schedule

Services: All Traffic

Source IP: Address Range

Start: 192.168.1.100 (Hint: 192.168.1.100)

Finish: (Hint: 192.168.1.200)

Destination IP Single Address

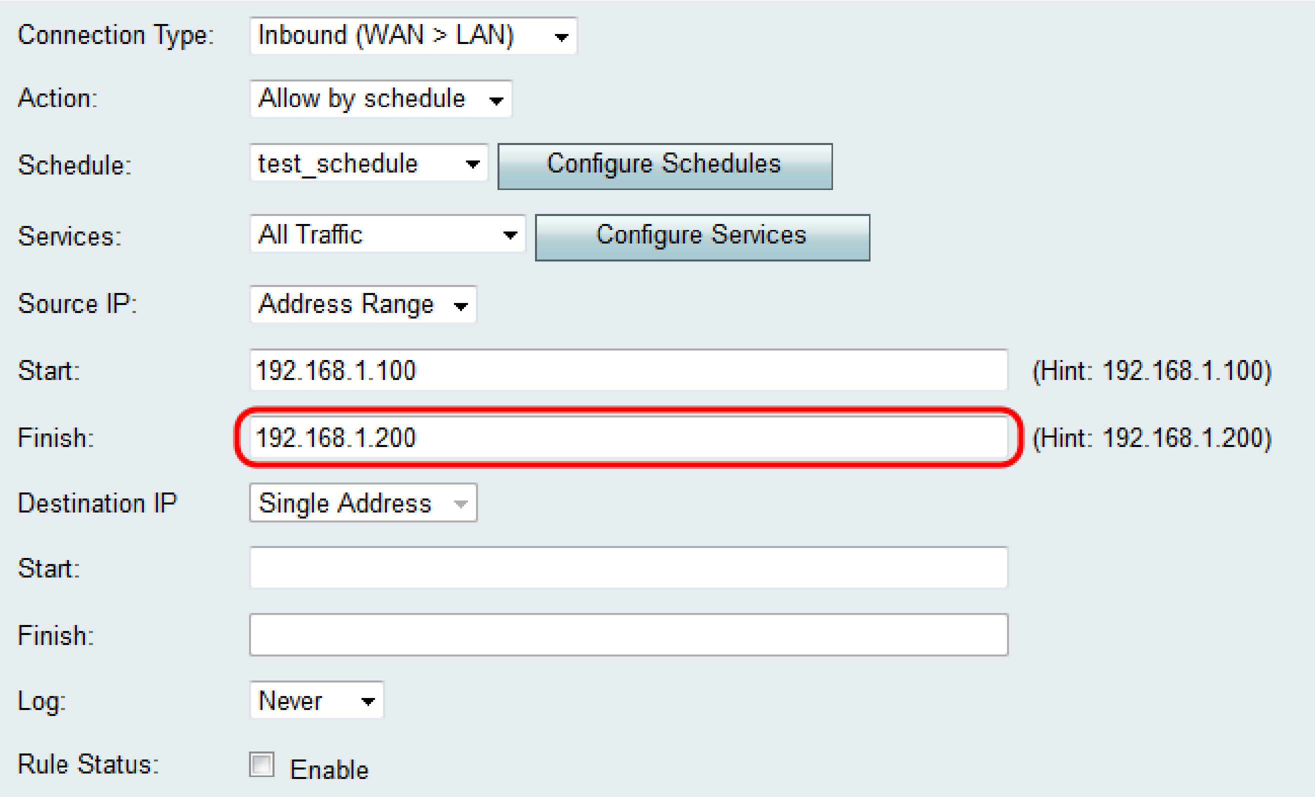
Start:

Finish:

Log: Never

Rule Status: □ Enable

Step 3. If you chose **Address Range** in Step 1, enter the ending IP address that will encapsulate the IP address range for the access rule in the *Finish* field.



Connection Type: Inbound (WAN > LAN)

Action: Allow by schedule

Schedule: test_schedule

Services: All Traffic

Source IP: Address Range

Start: 192.168.1.100 (Hint: 192.168.1.100)

Finish: 192.168.1.200 (Hint: 192.168.1.200)

Destination IP Single Address

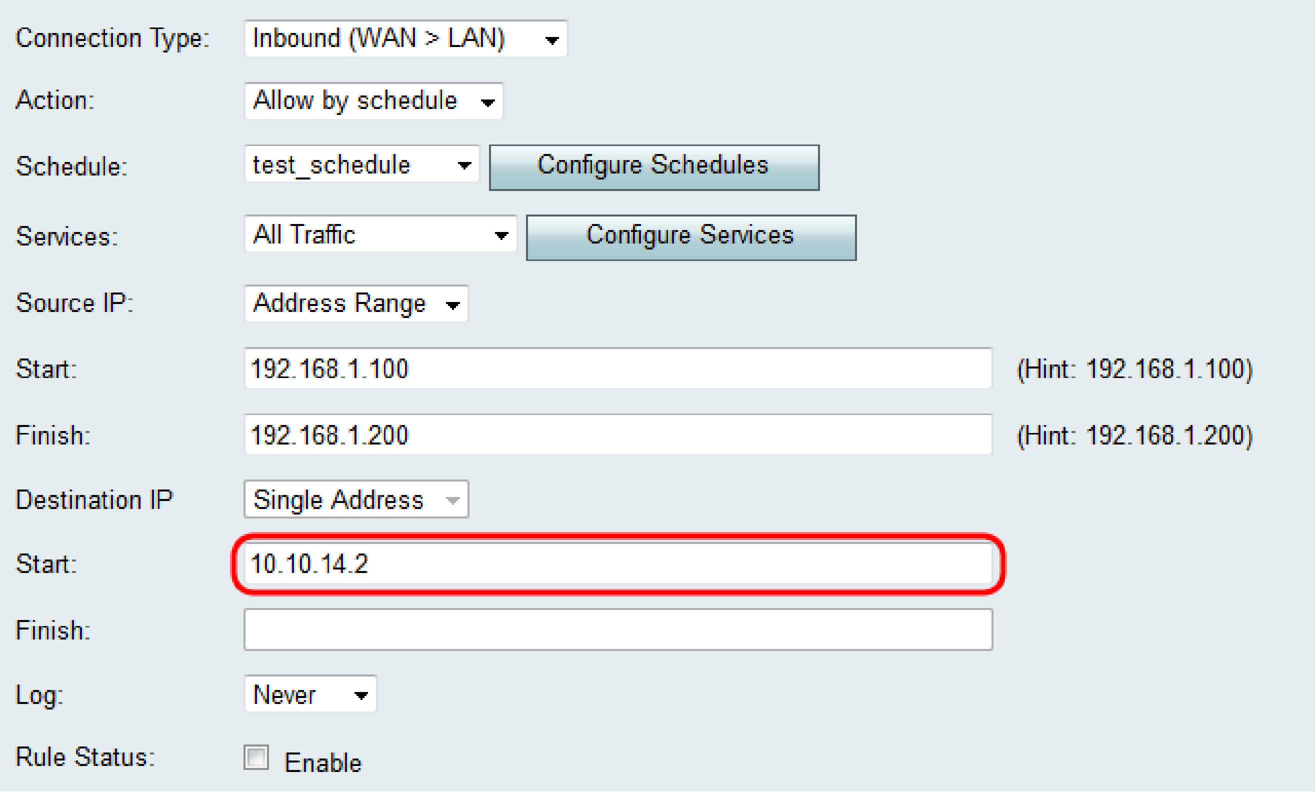
Start:

Finish:

Log: Never

Rule Status: □ Enable

Step 4. Enter a Single Address for the Destination IP in the *Start* field below the *Destination IP* drop-down list. For inbound traffic, the Destination IP refers to the address (in the LAN) to which traffic is permitted or denied from the public Internet.

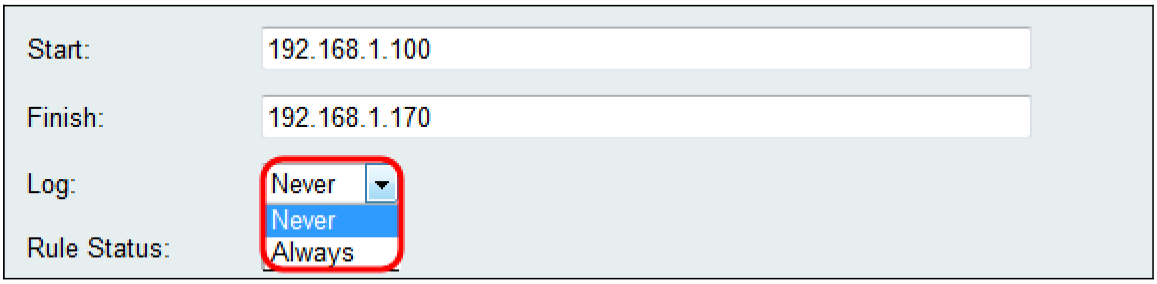


Connection Type:	Inbound (WAN > LAN)	
Action:	Allow by schedule	
Schedule:	test_schedule	
Services:	All Traffic	
Source IP:	Address Range	
Start:	192.168.1.100	(Hint: 192.168.1.100)
Finish:	192.168.1.200	(Hint: 192.168.1.200)
Destination IP	Single Address	
Start:	10.10.14.2	
Finish:		
Log:	Never	
Rule Status:	□ Enable	

Note: If **Inbound (WAN > DMZ)** was selected as the Connection Type in Step 3 of *Adding an Access Rule*, the Single Address for the Destination IP is automatically configured with the IP address of the enabled DMZ host.

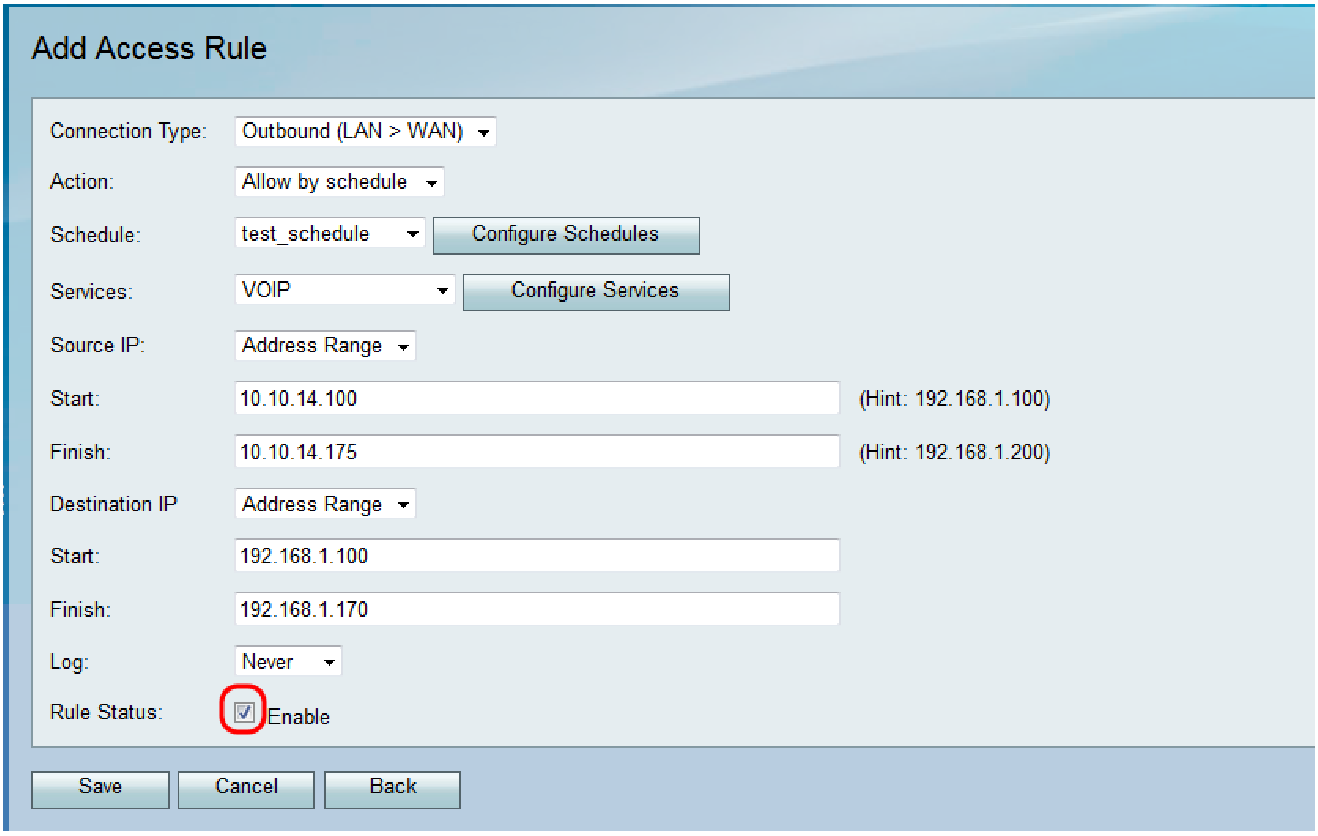
Logging and Enabling the Access Rule

Step 1. Select **Always** in the *Log* drop-down list if you want the router to create logs whenever a packet matches a rule. Select **Never** if want logging to never occur when a rule is matched.



Start:	192.168.1.100
Finish:	192.168.1.170
Log:	Never
Rule Status:	

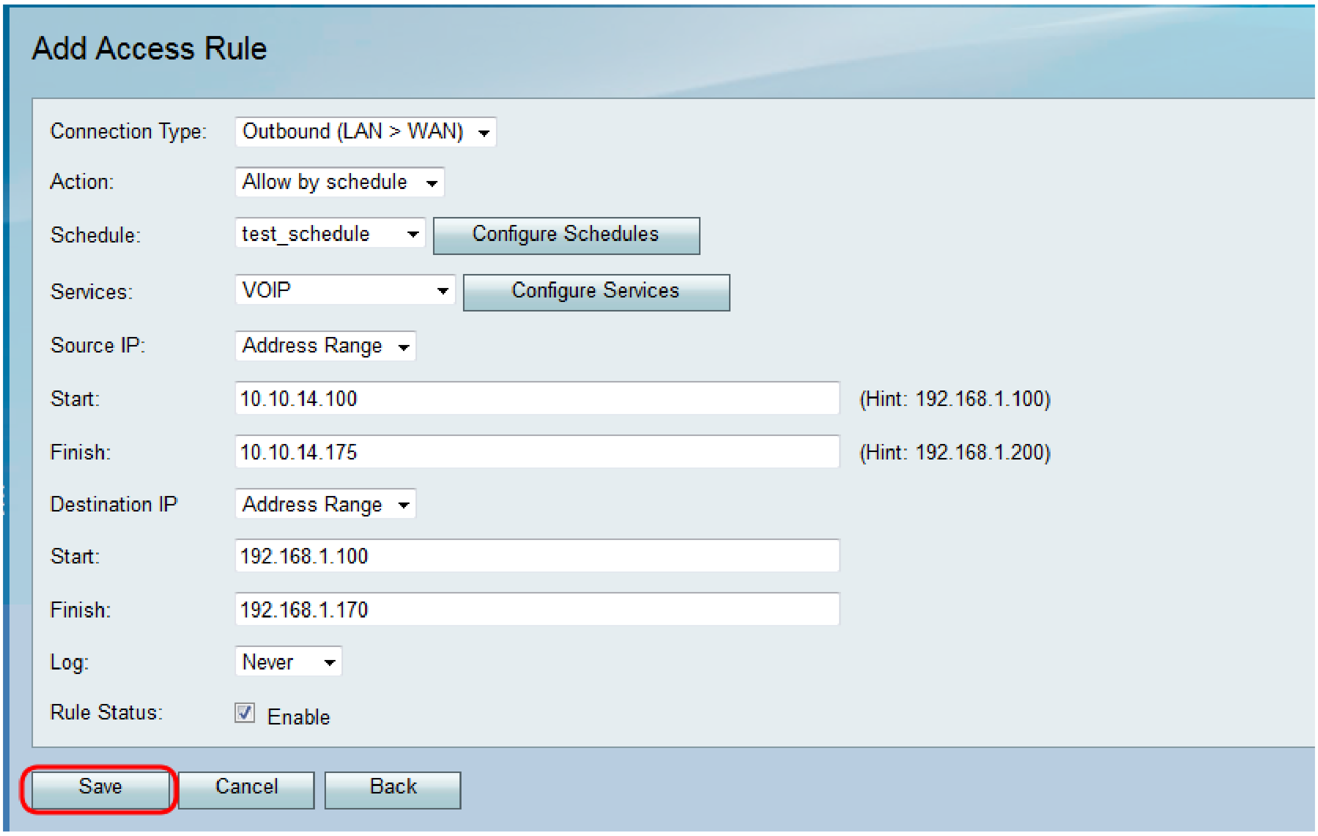
Step 2. Check the **Enable** checkbox to enable the access rule.



Add Access Rule

Connection Type:	Outbound (LAN > WAN)	
Action:	Allow by schedule	
Schedule:	test_schedule	Configure Schedules
Services:	VOIP	Configure Services
Source IP:	Address Range	
Start:	10.10.14.100	(Hint: 192.168.1.100)
Finish:	10.10.14.175	(Hint: 192.168.1.200)
Destination IP	Address Range	
Start:	192.168.1.100	
Finish:	192.168.1.170	
Log:	Never	
Rule Status:	☑ Enable	

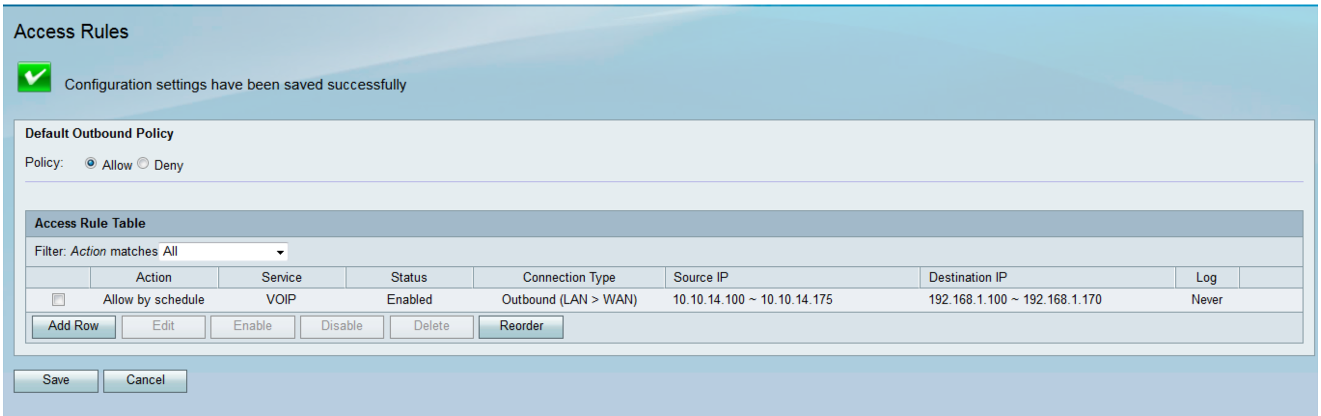
Step 3. Click **Save** to save your settings.



Add Access Rule

Connection Type:	Outbound (LAN > WAN)	
Action:	Allow by schedule	
Schedule:	test_schedule	Configure Schedules
Services:	VOIP	Configure Services
Source IP:	Address Range	
Start:	10.10.14.100	(Hint: 192.168.1.100)
Finish:	10.10.14.175	(Hint: 192.168.1.200)
Destination IP	Address Range	
Start:	192.168.1.100	
Finish:	192.168.1.170	
Log:	Never	
Rule Status:	☑ Enable	

The *Access Rule Table* is updated with the newly configured access rule.



Access Rules

✓ Configuration settings have been saved successfully

Default Outbound Policy

Policy: ● Allow ○ Deny

Access Rule Table

Filter: *Action* matches All

	Action	Service	Status	Connection Type	Source IP	Destination IP	Log
□	Allow by schedule	VOIP	Enabled	Outbound (LAN > WAN)	10.10.14.100 ~ 10.10.14.175	192.168.1.100 ~ 192.168.1.170	Never