

Configure RSTP on the RV110W

Objectives

Rapid Spanning Tree Protocol (RSTP) is a network protocol that prevents loops in the network. RSTP also configures which physical links should forward frames.

The objective of this document is to show you how to configure RSTP on the RV110W Router.

Applicable Devices

- RV110W

Software Version

- 1.2.0.9

Configure RSTP

Step 1. Log in to the web configuration utility and navigate to **Networking > LAN > RSTP**, the *RSTP* page opens:

RSTP

System Priority: 32768

Hello Time: 2 Seconds (Range: 1 - 10, Default: 2)

Max Age: 20 Seconds (Range: 6 - 40, Default: 20)

Forward Delay: 15 Seconds (Range: 4 - 30, Default: 15)

Force Version: Normal Compatible

Port	Protocol Enable	Edge	Path Cost
1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0
2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0
3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0
4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0

Save Cancel

Step 2. Choose a priority level from the *System Priority* drop-down list. The lower the system priority, the more likely the device is to become the root in the spanning tree. The default is 32768.

RSTP

System Priority: 32768

Hello Time: 2 Seconds (Range: 1 - 10, Default: 2)

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Force Version: Normal Compatible

Port	Protocol Enable	Edge	Path Cost
1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0
2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0
3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0
4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0

Save Cancel

Step 3. In the *Hello Time* field, enter the amount of time wanted for the root of the spanning tree to wait before sending hello messages.

RSTP

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Max Age: 20 Seconds (Range: 6 - 40, Default: 20)

Forward Delay: 15 Seconds (Range: 4 - 30, Default: 15)

Force Version: Normal Compatible

Port	Protocol Enable	Edge	Path Cost
1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0
2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0
3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0
4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0

Save Cancel

Step 4. In the *Max Age* field, enter the amount of time wanted for the router to wait to receive a hello message.

RSTP

System Priority: 32768

Hello Time: 2 Seconds (Range: 1 - 10, Default: 2)

Max Age: 20 Seconds (Range: 6 - 40, Default: 20)

Forward Delay: 15 Seconds (Range: 4 - 30, Default: 15)

Force Version: Normal Compatible

Port	Protocol Enable	Edge	Path Cost
1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0
2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0
3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0
4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0

Save Cancel

Step 5. In the *Forward Delay* field, enter the amount of time wanted for an interface to wait to change from a blocking to forwarding state.

RSTP

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Max Age: 20 Seconds (Range: 6 - 40, Default: 20)

Forward Delay: 15 Seconds (Range: 4 - 30, Default: 15)

Force Version: Normal Compatible

Setting Table				
Port	Protocol Enable	Edge	Path Cost	
1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	
2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	
3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	
4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	

Save Cancel

Step 6. In the *Force Version* field, select the default protocol version to use.

RSTP

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Force Version: Normal Compatible

Setting Table				
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2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	
3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	
4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	

Save Cancel

The available options are defined as follows:

- Normal — Uses RSTP.
- Compatible — Is compatible with old STP.

Step 7. In the *Setting Table*, configure the following settings:

RSTP

System Priority: 32768

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Forward Delay: 15 Seconds (Range: 4 - 30, Default: 15)

Force Version: Normal Compatible

Setting Table				
Port	Protocol Enable	Edge	Path Cost	
1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	
2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	
3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	
4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	

Save Cancel

- Protocol Enable — Check this box to enable RSTP on the port.
- Edge — Check this box to make the port an edge port (end station). Uncheck this box to make the port a link (bridge) to another STP device.

- Path Cost — Enter the Path Cost for the port. Numbers between 2-200000000 are accepted.

Step 8. Click **Save**.

RSTP

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3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0
4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0