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:

System Priority:	32768 💌			
Hello Time:	2	Seconds (Range	: 1 - 10, Default: 2)	
Max Age:	20	Seconds (Range	: <mark>6 - 40, De</mark> fault: 20)	
Forward Delay:	<mark>1</mark> 5	Seconds (Range	: <mark>4</mark> - 30, Default: 15)	
Force Version:	Normal	Compatible		
Setting Table				
2 March 10				
Po	ort	Protocol Enable	Edge	Path Cost
Po	nt 1	Protocol Enable	Edge V	Path Cost 0
Po	1 2	Protocol Enable	Edge	Path Cost 0 0
Po	nt 1 2 3	Protocol Enable	Edge	Path Cost 0 0 0 0
Po	ort 1 2 3 4	Protocol Enable	Edge	Path Cost 0 0 0 0 0 0

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.

System Priority:	32768 🗸					
lello Time:	2 5	Seconds (Range: 1 - 10,	Default: 2)			
ax Age:	20 \$	Seconds (Range: 6 - 40,	Default: 20)			
orward Delay:	15 5	Seconds (Range: 4 - 30,	Default: 15)			
orce Version:	Normal © 0	Compatible				
Setting Table	Pro	atacal Enabla	Edan	Path Cast		
Setting Table Port	Pro	otocol Enable	Edge	Path Cost	1	
Setting Table Port	: Pro	otocol Enable	Edge I	Path Cost		
Setting Table Port 1 2	: Pro	otocol Enable	Edge V	Path Cost 0 0		
Setting Table Port 1 2 3	: Pro	otocol Enable	Edge V V	Path Cost 0 0 0		-
Setting Table Port 1 2 3 4	Pro 2	otocol Enable	Edge V V V	Path Cost 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		_
Setting Table Port 2 3 4		otocol Enable	Edge V V V	Path Cost 0 0 0 0		

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					
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				
Setting Table					
Setting Table Por	t Protocol Enable	Edge	Path Cost		
Setting Table Por	t Protocol Enable	Edge	Path Cost 0		
Setting Table Por	t Protocol Enable	Edge V	Path Cost 0 0		
Setting Table Por	t Protocol Enable 1 2 3	Edge V V	Path Cost 0 0 0		
Setting Table Por	t Protocol Enable 1	Edge V V V	Path Cost 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		

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 C	Compatible				
Setting Table						
Setting Table Port	t F	Protocol Enable	Edge	Path Cost		
Setting Table Port	t F 1	Protocol Enable	Edge	Path Cost 0		
Setting Table Port 1 2	t F 1 2	Protocol Enable	Edge IV IV	Path Cost 0 0		
Setting Table Port	t F 1 2 3	Protocol Enable	Edge V V	Path Cost 0 0 0		-
Setting Table Port 2 3 4	t F 1 2 3	Protocol Enable	Edge V V V	Path Cost 0 0 0 0 0		

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						
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				
Setting Table						
Po	rt	Protocol Enable	Edge	Path Cost		
			Lugo	1 dai 000t		
	1			0]	
	1		V V V	0]	
	1 2 3		2030 20 20 20 20 20 20 20 20 20 20 20 20 20	0 0 0		
	1 2 3 4		V V V V V	0 0 0 0 0		

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

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			
Setting Table					
Po	ort	Protocol Enable	Edge	Path Cost	
	1			0	
	2			0	
	3			0	
	4			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 👻					
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				
Setting Table						
Por	rt	Protocol Enable	Edge	Path Cost		
	1			0		
	2			0		
:	3			0		
	4			0		
821/0	0					

• 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						
System Priority:	32768 👻					
Hello Time:	2	Seconds (Range: 1 - 10,	Default: 2)			
Max Age:	20	Seconds (Range: 6 - 40, I	Default: 20)			
Forward Delay:	15	Seconds (Range: 4 - 30, I	Default: 15)			
Force Version:	Normal	Compatible				
Setting Table						
Por	t I	Protocol Enable	Edge	Path Cost		
1	1			0		
2	2			0		
3	3			0		
4	4			0		
	Oreast					
Save	Cancel					