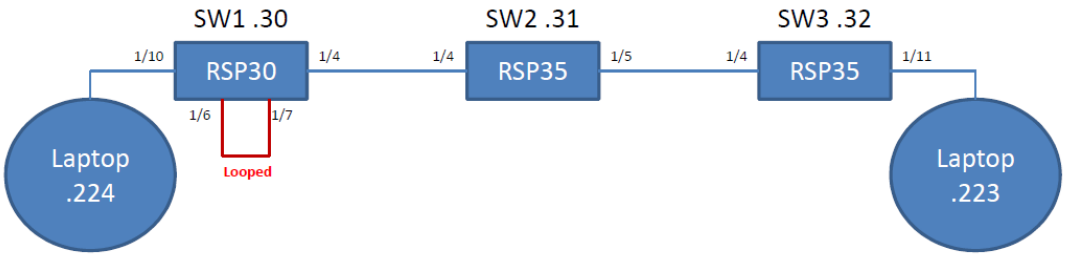
HiOS: HTML- How to use RSPAN

John M - 2024-02-16 - HiOS

This guide is designed to assist in the configuration of RSPAN on the layer 2 switches. The configurations can be used in a 2 switch RSPAN network using SW1 and SW3 switch configurations. If the network is larger than 3 switches us the SW2 configuration in all the switches between the start and end switches.

Network Topology

Switch 1 will be the switch that is doing the port mirroring. In this setup port 10 is being mirrored to port 6, port 6 is looped back to port 7 on VLAN 10, (it is important to turn RSTP off on ports 6 and 7 of switch 1), VLAN 10 is then forwarded across the uplinks to switch 3 port 11 where the mirrored packets can be monitored. Note: the loop connection should be connected after switch 1 is fully configured.



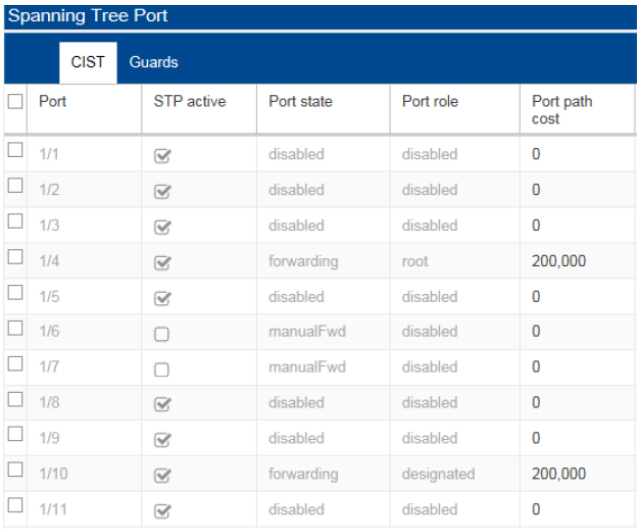
Switch Configuration:

SW1

The VLANs will need to be configured as T for the uplink port and – for the looped ports in the comm vlan. Spanning tree needs to be disabled on the looped ports. Port mirroring needs to be enabled, the destination port selected, the source port enabled with the TX/RX selected for the type, and the RSPAN VLAN ID and the Destination VLAN ID need to be configured. See Screen shots below for reference.

VLAN Configuration

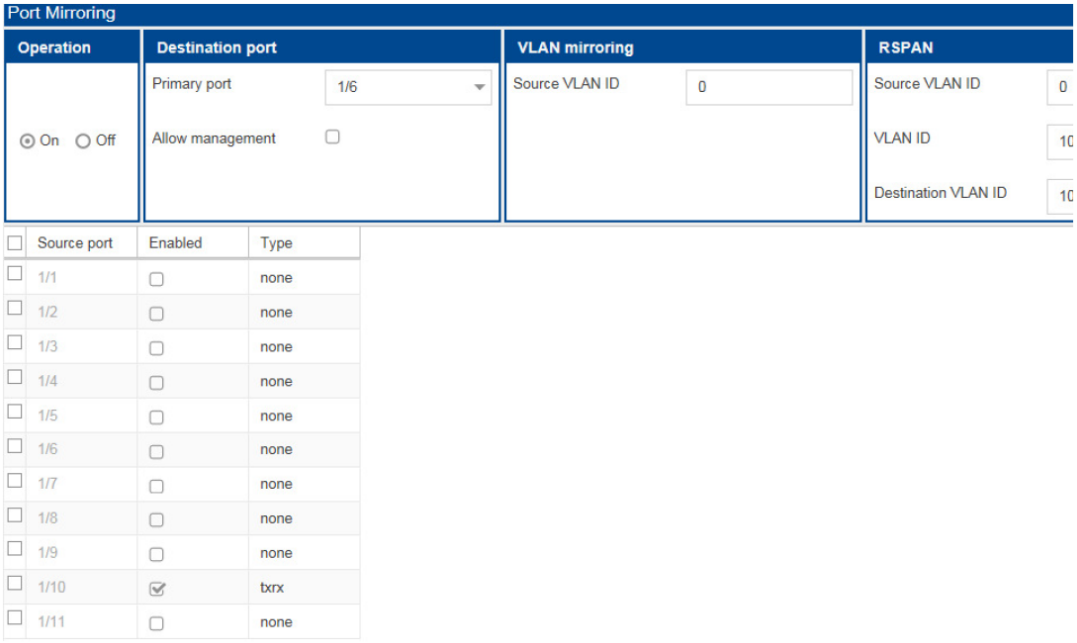
	VLAN ID	Status	Creation time	Name	1/1	1/2	1/3	1/4	1/5	1/6	1/7	1/8	1/9	1/10	1/11
☐	1	other	06s	default	U	U	U	T	U	-	-	U	U	U	U
☐	10	permanent	09s		-	-	-	T	-	-	-	-	-	-	-



Spanning Tree Port

CIST | Guards

☐	Port	STP active	Port state	Port role	Port path cost
☐	1/1	☑	disabled	disabled	0
☐	1/2	☑	disabled	disabled	0
☐	1/3	☑	disabled	disabled	0
☐	1/4	☑	forwarding	root	200,000
☐	1/5	☑	disabled	disabled	0
☐	1/6	☐	manualFwd	disabled	0
☐	1/7	☐	manualFwd	disabled	0
☐	1/8	☑	disabled	disabled	0
☐	1/9	☑	disabled	disabled	0
☐	1/10	☑	forwarding	designated	200,000
☐	1/11	☑	disabled	disabled	0



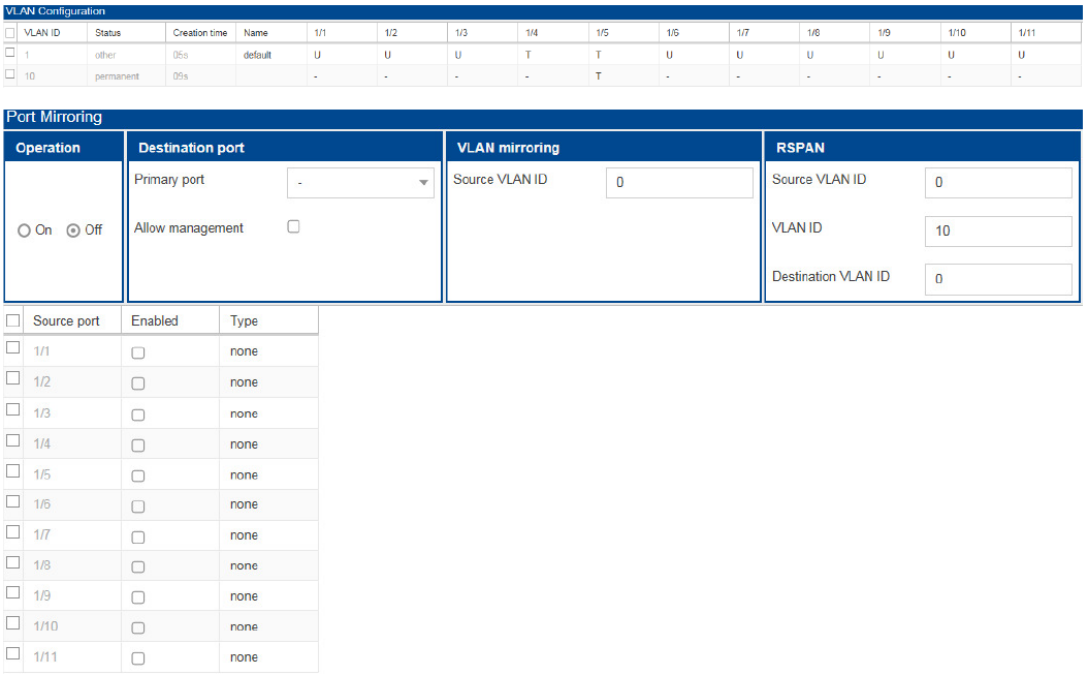
Port Mirroring

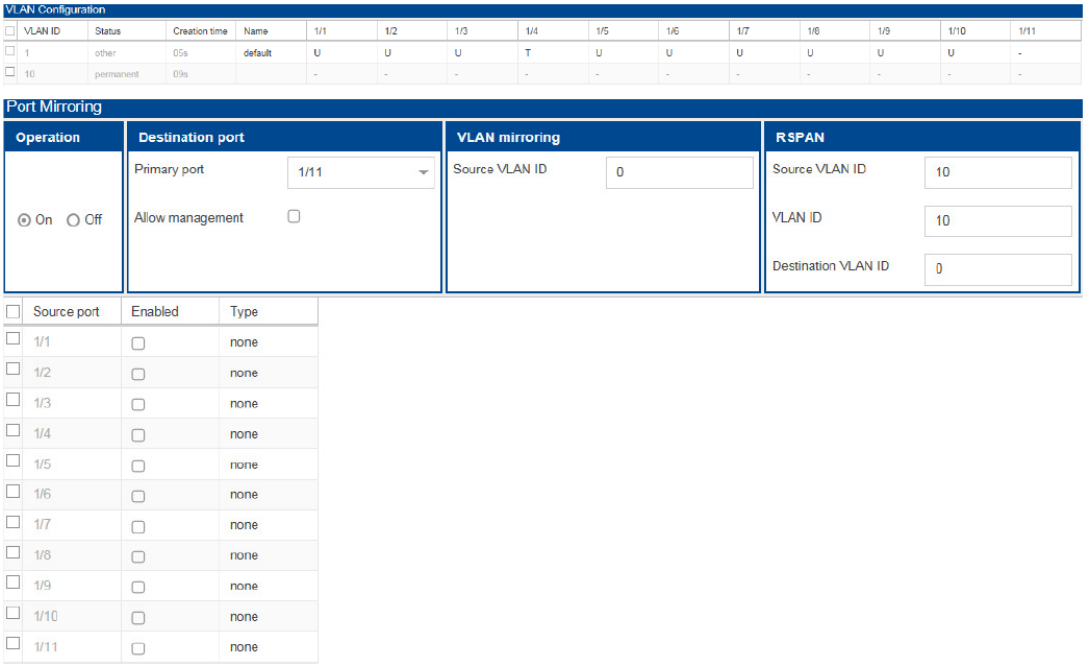
Operation	Destination port	VLAN mirroring	RSPAN
◉ On ○ Off	Primary port: 1/6	Source VLAN ID: 0	Source VLAN ID: 0
	Allow management: ☐		VLAN ID: 10
			Destination VLAN ID: 10

☐	Source port	Enabled	Type
☐	1/1	☐	none
☐	1/2	☐	none
☐	1/3	☐	none
☐	1/4	☐	none
☐	1/5	☐	none
☐	1/6	☐	none
☐	1/7	☐	none
☐	1/8	☐	none
☐	1/9	☐	none
☐	1/10	☑	txrx
☐	1/11	☐	none

SW2

The VLANs will need to be configured as T for the uplink ports. In the Port mirroring tab RSPAN VLAN ID needs to be configured. See Screen shots below for reference



SW3

Finally use the screen shots to as a guide for switch 3 configuration of VLANs and port mirroring/RSPAN The VLANs will need to be configured as T for the uplink port and – for the destination port in the comm vlan. Port mirroring needs to be enabled, the destination port selected, and the RSPAN Source VLAN ID and the VLAN ID need to be configured. See Screen shots below for reference.