



INSCAPE DATA CORORATION

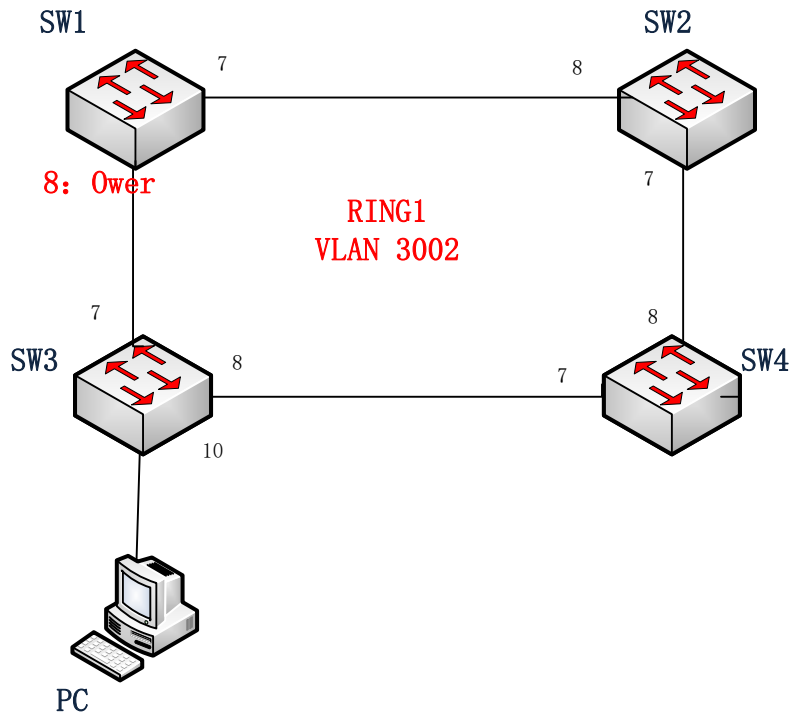
ERPS (Ethernet Ring Protection Switching) CONFIGURATION EXAMPLES

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1 Single-Ring Configuration

Form SW1 - SW4 to a single ring through ERPS, Users can ping SW1-SW4 in PC, also can ping them if Ring is disconnected.



1. Set the IP of SW1-SW4 as (192.168.2.1) - (192.168.2.4), and set the port to trunk port, which is used to connect with the ring.

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IP Configuration

Mode	Host
DNS Server 0	No DNS server
DNS Server 1	No DNS server
DNS Server 2	No DNS server
DNS Server 3	No DNS server
DNS Proxy	<input type="checkbox"/>

IP Interfaces

Delete	VLAN	DHCPv4			IPv4		Enable	DHCPv6		IPv6	
		Enable	Fallback	Current Lease	Address	Mask Length		Rapid Commit	Current Lease	Address	Mask Length
<input type="checkbox"/>	1	<input type="checkbox"/>	0		192.168.2.2	24	<input type="checkbox"/>	<input type="checkbox"/>			

Add Interface

IP Routes

Delete	Network	Mask Length	Gateway	Next Hop VLAN
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Add Route

Save Reset

Global VLAN Configuration

Allowed Access VLANs: 1
 Ethertype for Custom S-ports: 88A8

Port VLAN Configuration

Port	Mode	Port VLAN	Port Type	Ingress Filtering	Ingress Acceptance	Egress Tagging	Allowed VLANs	Forbidden VLANs
* <>		1 <>		<input checked="" type="checkbox"/>	<>	<>	1	
1	Access	1	C-Port	<input checked="" type="checkbox"/>	Tagged and Untagged	Untag All	1	
2	Access	1	C-Port	<input checked="" type="checkbox"/>	Tagged and Untagged	Untag All	1	
3	Access	1	C-Port	<input checked="" type="checkbox"/>	Tagged and Untagged	Untag All	1	
4	Access	1	C-Port	<input checked="" type="checkbox"/>	Tagged and Untagged	Untag All	1	
5	Access	1	C-Port	<input checked="" type="checkbox"/>	Tagged and Untagged	Untag All	1	
6	Access	1	C-Port	<input checked="" type="checkbox"/>	Tagged and Untagged	Untag All	1	
7	Trunk	1	C-Port	<input checked="" type="checkbox"/>	Tagged and Untagged	Untag Port VLAN	1-4095	
8	Trunk	1	C-Port	<input checked="" type="checkbox"/>	Tagged and Untagged	Untag Port VLAN	1-4095	
9	Access	1	C-Port	<input checked="" type="checkbox"/>	Tagged and Untagged	Untag All	1	
10	Access	1	C-Port	<input checked="" type="checkbox"/>	Tagged and Untagged	Untag All	1	

2. Set SW1 as Ring1, the type is Major, and set control VLAN as 3002. Enable APS Protocol in MEP, the type is R-APS. And set Port 7 as the East port, Port 8 as the West port. Port 8 is as the owner.

Maintenance Entity Point

Delete	Instance	Domain	Mode	Direction	Residence Port	Level	Flow Instance	Tagged VID	This MAC	Alarm
<input type="checkbox"/>	1	Port	Mep	Down	7	0		3002	9A-86-03-3B-69-08	<input checked="" type="checkbox"/>
<input type="checkbox"/>	2	Port	Mep	Down	8	0		3002	9A-86-03-3B-69-09	<input checked="" type="checkbox"/>

Add New MEP Save Reset

vlan

MEP Configuration

Instance Data

Instance	Domain	Mode	Direction	Residence Port	Flow Instance	Tagged VID	EPS Instance	This MAC
9	Port	Mep	Down	9		3003	2	9A-86-03-3B-58-0A

Instance Configuration

Level	Format	Domain Name	MEG id	MEP id	Tagged VID	Syslog	cLevel	cMEG	cMEP	cAIS	cLCK	cLoop	cConfig
0	ITU ICC		ICCD00MEG0000	1	3003	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Peer MEP Configuration

Delete	Peer MEP ID	Unicast Peer MAC	cLOC	cRDI	cPeriod	cPriority	cDEG
No Peer MEP Added							

Add New Peer MEP

Functional Configuration

Continuity Check				APS Protocol				
Enable	Priority	Frame rate	TLV	Enable	Priority	Cast	Type	Last Octet
<input type="checkbox"/>	0	1 f/sec	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	Multi	R-APS	1

Fault Management Performance Monitoring

TLV Configuration

Organization Specific TLV (Global)				
OUI First	OUI Second	OUI Third	Sub-Type	Value
0	0	12	1	2

TLV Status

Peer MEP ID	CC Organization Specific						CC Port Status		CC Interface Status	
	OUI First	OUI Second	OUI Third	Sub-Type	Value	Last RX	Value	Last RX	Value	Last RX
No Peer MEP Added										

Link State Tracking

Enable

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- IPv6 MLD Snooping
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Ethernet Rapid Ring Protection Switching

Delete	Ring ID	East Port	West Port	Ring Type	Interconnected Node	Major RRing ID	Alarm
<input type="checkbox"/>	1	7	8	Major	No	1	●

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Rapid Ring Configuration 1

Auto-refresh ☐

Instance Data

Ring ID	East Port	West Port	East Port SF MEP	West Port SF MEP	East Port APS MEP	West Port APS MEP	Ring Type
1	7	8	7	8	7	8	Major Ring

Instance Configuration

Configured	WTR(Wait to Restore) Time	Revertive	VLAN config
●	1min	<input checked="" type="checkbox"/>	VLAN Config

RPL Configuration

RPL Role	RPL Port	Clear
RPL_Owner	West Port	<input type="checkbox"/>

Instance State

Protection State	East Port	West Port	Transmit APS	East Port Receive APS	West Port Receive APS	WTR Remaining	RPL Un-blocked	No APS Received	East Port Block Status	West Port Block Status	FOP Alarm
Idle	OK	OK	NR RB BPR1	NR RB BPR1 9A-86-03-3B-69-08	NR RB BPR1 9A-86-03-3B-69-08	0	●	●	Unblocked	Blocked	●

3. Set SW2-SW4 as Ring1, the type is Major, and set control VLAN as 3002. Enable APS Protocol in MEP, the type is R-APS. And set Port 7 as the East port, Port 8 as the West port. Different in the configuration of Port 8 in SW1, **no need to** set the port 8 of SW2-SW4 as the Owner.

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Rapid Ring Configuration 1

Auto-refre

Instance Data

Ring ID	East Port	West Port	East Port SF MEP	West Port SF MEP	East Port APS MEP	West Port APS MEP	Ring
1	7	8	7	8	7	8	Major

Instance Configuration

Configured	WTR(Wait to Restore) Time	Revertive	VLAN config
●	1min	<input checked="" type="checkbox"/>	VLAN Config

RPL Configuration

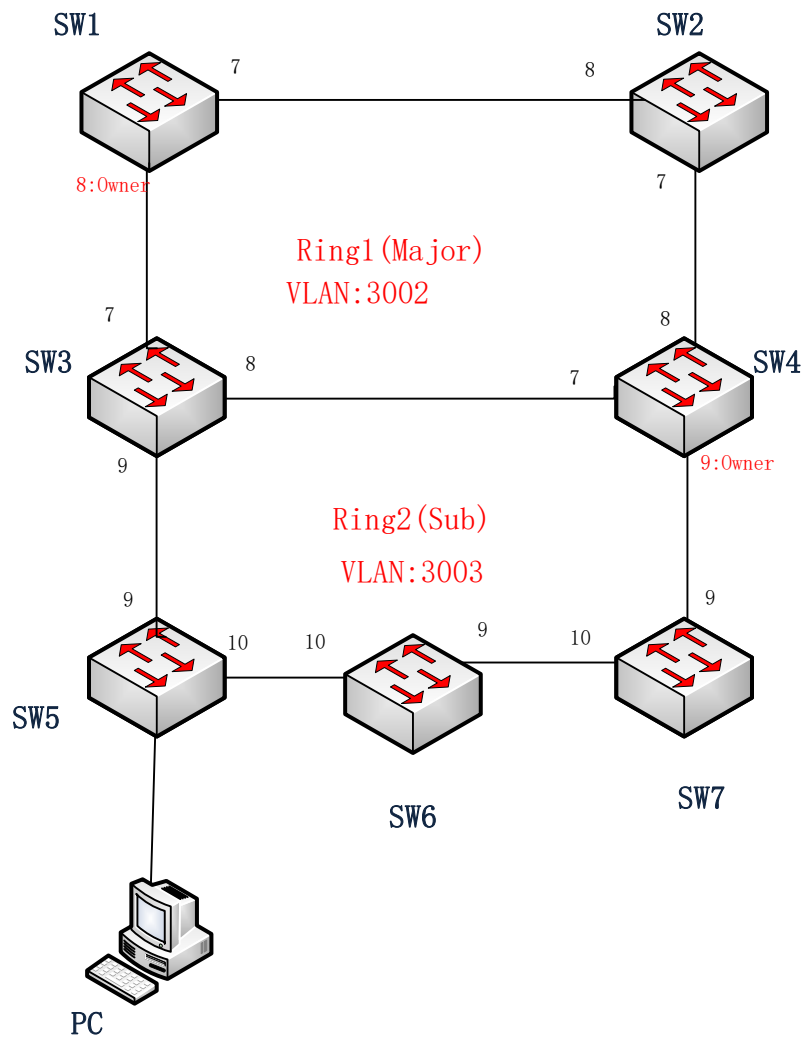
RPL Role	RPL Port	Clear
None	None	<input type="checkbox"/>

Instance State

Protection State	East Port	West Port	Transmit APS	East Port Receive APS	West Port Receive APS	WTR Remaining	RPL Un-blocked	No APS Received	East Port Block Status	West Port Block Status	FOP Alarm
Idle	OK	OK	NR RB BPR1	NR RB BPR1 9A-86-03-3B-69-08	NR RB BPR1 9A-86-03-3B-69-08	0	●	●	Unblocked	Blocked	●

2 Coupling-ring Configuration

Form SW1 - SW7 to a coupling ring through ERPS, Users can ping SW1-SW7 in PC, also can ping them if Ring is disconnected.



1. Set the IP of SW1-SW7 as (192.168.2.1) - (192.168.2.7), and set the port to trunk port, which is used to connect with the ring.

IP Configuration

Mode: Host

DNS Server 0: No DNS server

DNS Server 1: No DNS server

DNS Server 2: No DNS server

DNS Server 3: No DNS server

DNS Proxy: ☐

IP Interfaces

Delete	VLAN	DHCPv4			IPv4		DHCPv6			IPv6	
		Enable	Fallback	Current Lease	Address	Mask Length	Enable	Rapid Commit	Current Lease	Address	Mask Length
<input type="checkbox"/>	1	<input type="checkbox"/>	0		192.168.2.2	24	<input type="checkbox"/>	<input type="checkbox"/>			

Add Interface

IP Routes

Delete	Network	Mask Length	Gateway	Next Hop VLAN
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Add Route

Save Reset

Global VLAN Configuration

Allowed Access VLANs: 1

Ethertype for Custom S-ports: 88A8

Port VLAN Configuration

Port	Mode	Port VLAN	Port Type	Ingress Filtering	Ingress Acceptance	Egress Tagging	Allowed VLANs	Forbidden VLANs
*	<>	1	<>	<input checked="" type="checkbox"/>	<>	<>	1	
1	Access	1	C-Port	<input checked="" type="checkbox"/>	Tagged and Untagged	Untag All	1	
2	Access	1	C-Port	<input checked="" type="checkbox"/>	Tagged and Untagged	Untag All	1	
3	Access	1	C-Port	<input checked="" type="checkbox"/>	Tagged and Untagged	Untag All	1	
4	Access	1	C-Port	<input checked="" type="checkbox"/>	Tagged and Untagged	Untag All	1	
5	Access	1	C-Port	<input checked="" type="checkbox"/>	Tagged and Untagged	Untag All	1	
6	Access	1	C-Port	<input checked="" type="checkbox"/>	Tagged and Untagged	Untag All	1	
7	Trunk	1	C-Port	<input checked="" type="checkbox"/>	Tagged and Untagged	Untag Port VLAN	1-4095	
8	Trunk	1	C-Port	<input checked="" type="checkbox"/>	Tagged and Untagged	Untag Port VLAN	1-4095	
9	Trunk	1	C-Port	<input checked="" type="checkbox"/>	Tagged and Untagged	Untag Port VLAN	1-4095	
10	Trunk	1	C-Port	<input checked="" type="checkbox"/>	Tagged and Untagged	Untag Port VLAN	1-4095	

Save Reset

2. Set SW1 as Ring1, the type is Major, and set control VLAN as 3002. Enable APS Protocol in MEP, the type is R-APS. And set Port 7 as the East port, Port 8 as the West port. Port 8 is as the owner. New added VLAN 3003 to protect Ring1 from message in Ring2.

Maintenance Entity Point

Delete	Instance	Domain	Mode	Direction	Residence Port	Level	Flow Instance	Tagged VID	This MAC	Alarm
<input type="checkbox"/>	Z	Port	Mep	Down	7	0		3002	9A-86-03-3B-69-08	●
<input type="checkbox"/>	8	Port	Mep	Down	8	0		3002	9A-86-03-3B-69-09	●

Add New MEP Save Reset

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Instance Data

Instance	Domain	Mode	Direction	Residence Port	Flow Instance	Tagged VID	EPS Instance	This MAC
9	Port	Mep	Down	9		3003	2	9A-86-03-3B-58-0A

Instance Configuration

Level	Format	Domain Name	MEG id	MEP id	Tagged VID	Syslog	cLevel	cMEG	cMEP	cAIS	cLCK	cLoop	cConfig
0	ITU ICC		IC0000MEG0000	1	3003	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Peer MEP Configuration

Delete	Peer MEP ID	Unicast Peer MAC	cLOC	cRDI	cPeriod	cPriority	cDEG
No Peer MEP Added							

Add New Peer MEP

Functional Configuration

Continuity Check				APS Protocol				
Enable	Priority	Frame rate	TLV	Enable	Priority	Cast	Type	Last Octet
<input type="checkbox"/>	0	1 f/sec	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	Multi	R-APS	1

Fault Management

Performance Monitoring

TLV Configuration

Organization Specific TLV (Global)				
OUI First	OUI Second	OUI Third	Sub-Type	Value
0	0	12	1	2

TLV Status

Peer MEP ID	CC Organization Specific					CC Port Status		CC Interface Status		
	OUI First	OUI Second	OUI Third	Sub-Type	Value	Last RX	Value	Last RX	Value	Last RX
No Peer MEP Added										

Link State Tracking

Enable

☐

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Ethernet Rapid Ring Protection Switching

Delete	Ring ID	East Port	West Port	Ring Type	Interconnected Node	Major RRing ID	Alarm
<input type="checkbox"/>	1	7	8	Major	No	1	<input checked="" type="checkbox"/>

Add New Ring Group

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Rapid Ring Configuration 1

Auto-refresh ☐ Refresh

Instance Data

Ring ID	East Port	West Port	East Port SF MEP	West Port SF MEP	East Port APS MEP	West Port APS MEP	Ring Type
1	7	8	7	8	7	8	Major Ring

Instance Configuration

Configured	WTR(Wait to Restore) Time	Revertive	VLAN config
<input checked="" type="checkbox"/>	1min	<input checked="" type="checkbox"/>	VLAN Config

RPL Configuration

RPL Role	RPL Port	Clear
RPL_Owner	West Port	<input type="checkbox"/>

Instance State

Protection State	East Port	West Port	Transmit APS	East Port Receive APS	West Port Receive APS	WTR Remaining	RPL Unblocked	No APS Received	East Port Block Status	West Port Block Status	FOP Alarm
Idle	OK	OK	NR RB BPR1	NR RB BPR1	NR RB BPR1	0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Unblocked	Blocked	<input checked="" type="checkbox"/>

Save Reset

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Rapid Ring VLAN Configuration 1

Delete	VLAN ID
<input type="checkbox"/>	1
<input type="checkbox"/>	3003

Add New Entry Back

Save Reset

3. Set SW2 as Ring1, the type is Major, and set control VLAN as 3002. And set Port 7 as the East port, Port 8 as the West port. New added VLAN 3003 to protect Ring1 from message in Ring2. The configuration of MEP is same with step 3.

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Maintenance Entity Point

Refresh

Delete	Instance	Domain	Mode	Direction	Residence Port	Level	Flow Instance	Tagged VID	This MAC	Alarm
<input type="checkbox"/>	7	Port	Mep	Down	7	0		3002	9A-86-03-3C-79-08	●
<input type="checkbox"/>	8	Port	Mep	Down	8	0		3002	9A-86-03-3C-79-09	●

Add New MEP
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Ethernet Rapid Ring Protection Switching

Delete	Ring ID	East Port	West Port	Ring Type	Interconnected Node	Major RRing ID	Alarm
<input type="checkbox"/>	1	7	8	Major	No	1	●

Add New Ring Group
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Rapid Ring Configuration 1

Auto-refresh Refresh

Instance Data

Ring ID	East Port	West Port	East Port SF MEP	West Port SF MEP	East Port APS MEP	West Port APS MEP	Ring Type
1	7	8	7	8	7	8	Major Ring

Instance Configuration

Configured	WTR(Wait to Restore) Time	Revertive	VLAN config
●	1min	<input checked="" type="checkbox"/>	VLAN Config

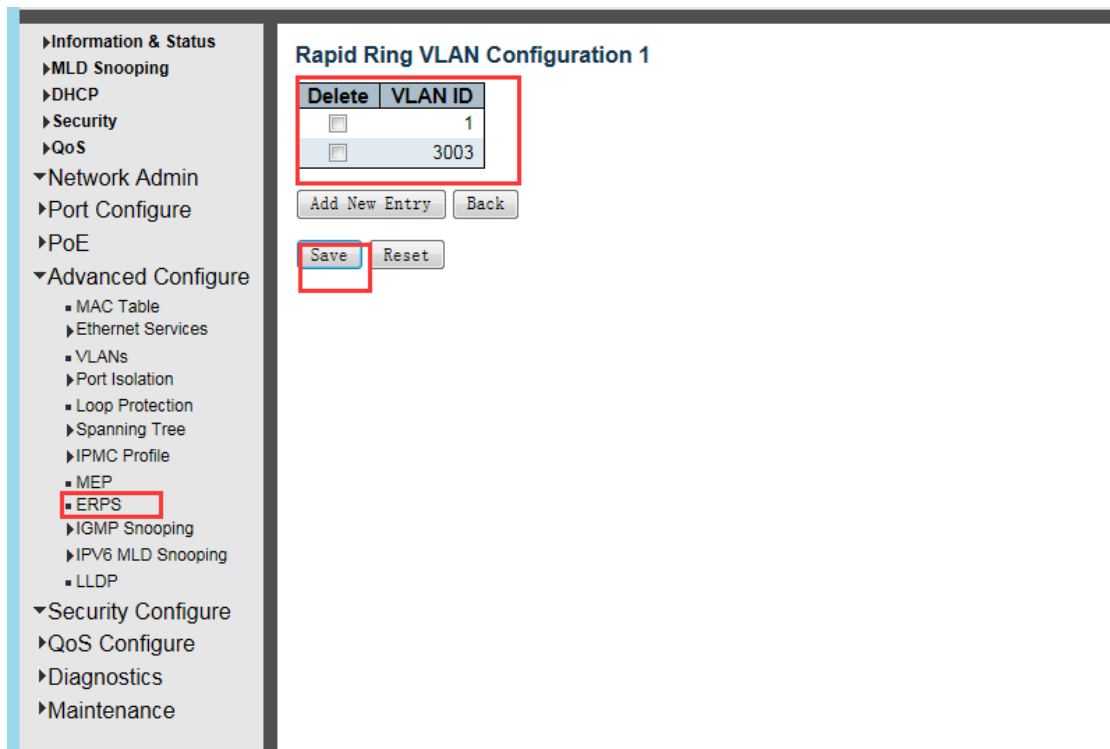
RPL Configuration

RPL Role	RPL Port	Clear
None	None	<input type="checkbox"/>

Instance State

Protection State	East Port	West Port	Transmit APS	East Port Receive APS	West Port Receive APS	WTR Remaining	RPL Un-blocked	No APS Received	East Port Block Status	West Port Block Status	FOP Alarm
Idle	OK	OK		NR RB BPR1 9A-86-03-3B-69-08	NR RB BPR1 9A-86-03-3B-69-08	0	●	●	Unblocked	Unblocked	●

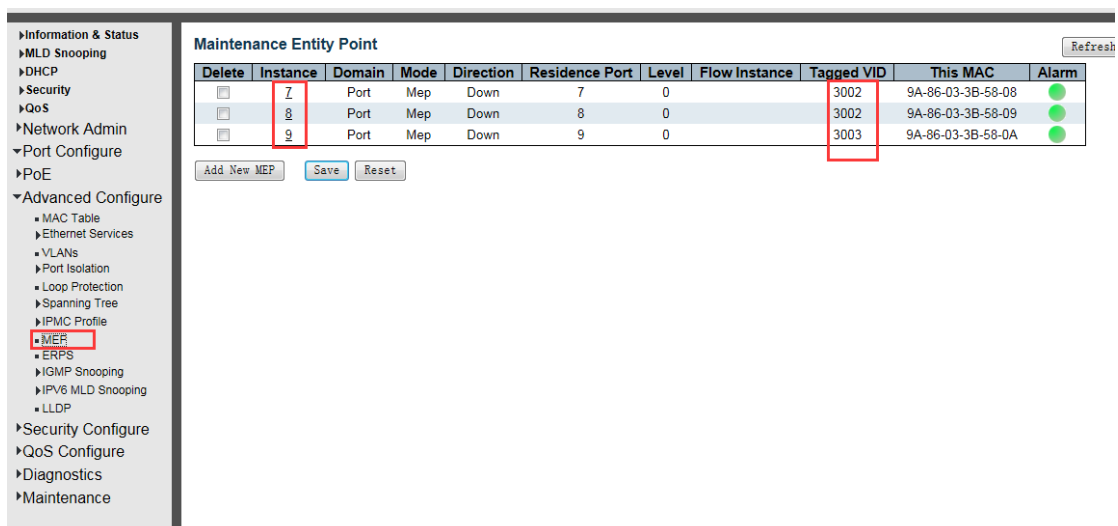
Save
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4. Set port 7-8 of SW3 as Ring1, the type is Major, and set control VLAN as 3002. And set Port 7 as the East port, Port 8 as the West port. New added VLAN 3003 to protect Ring1 from message in Ring2.

Set port 9-10 of SW3 as Ring2, the type is Major, and set control VLAN as 3003. And set Port 9 as the East port, Port 10 as the West port. New added VLAN 3002 to protect Ring2 from message in Ring1. Click Interconnected Node for RING1 and RING2.

RING1:



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Ethernet Rapid Ring Protection Switching

Delete	Ring ID	East Port	West Port	Ring Type	Interconnected Node	Major RRing ID	Alarm
<input type="checkbox"/>	1	7	8	Major	Yes	1	●
<input type="checkbox"/>	2	9	-	Sub	Yes	1	●

Add New Ring Group
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Rapid Ring Configuration 1

Auto-refresh ☐ Refresh

Instance Data

Ring ID	East Port	West Port	East Port SF MEP	West Port SF MEP	East Port APS MEP	West Port APS MEP	Ring Type
1	7	8	7	8	7	8	Major Ring

Instance Configuration

Configured
WTR(Wait to Restore) Time
Revertive
VLAN config

RPL Configuration

RPL Role	RPL Port	Clear
None	None	<input type="checkbox"/>

Instance State

Protection State	East Port	West Port	Transmit APS	East Port Receive APS	West Port Receive APS	WTR Remaining	RPL Un-blocked	No APS Received	East Port Block Status	West Port Block Status	FOP Alarm
Idle	OK	OK		NR RB BPR1 9A-86-03-3B-69-08	NR RB BPR1 9A-86-03-3B-69-08	0	●	●	Unblocked	Unblocked	●

Save
Reset

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Delete	VLAN ID
<input type="checkbox"/>	1
<input type="checkbox"/>	3003

Add New Entry
Back

Save
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RING2:

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Rapid Ring Configuration 2

Auto-refresh ☐ Refresh

Instance Data

Ring ID	East Port	West Port	East Port SF MEP	West Port SF MEP	East Port APS MEP	West Port APS MEP	Ring Type
2	9	0	9	0	9	0	Sub Ring

Instance Configuration

Configured	WTR(Wait to Restore) Time	Revertive	VLAN config
<input checked="" type="checkbox"/>	1min	<input checked="" type="checkbox"/>	VLAN Config

RPL Configuration

RPL Role	RPL Port	Clear
None	None	<input type="checkbox"/>

Sub-Ring Configuration

Ring Type	Topology Change
Sub Ring	<input checked="" type="checkbox"/>

Instance State

Protection State	East Port	West Port	Transmit APS	East Port Receive APS	West Port Receive APS	WTR Remaining	RPL Un-blocked	No APS Received	East Port Block Status	West Port Block Status	FOP Alarm
Idle	OK	OK		NR RB BPR0 9A-86-03-3B-3F-0A		0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Unblocked	Unblocked	<input checked="" type="checkbox"/>

Save Reset

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Rapid Ring VLAN Configuration 2

Delete	VLAN ID
<input type="checkbox"/>	1
<input type="checkbox"/>	3002

Add New Entry Back

Save Reset

5. Same configuration with SW3 for SW4. The different is need to set port 9 as the owner.

Rapid Ring Configuration 2 Auto-refresh ☐ Refresh

Instance Data

Ring ID	East Port	West Port	East Port SF MEP	West Port SF MEP	East Port APS MEP	West Port APS MEP	Ring Type
2	9	0	9	0	9	0	Sub Ring

Instance Configuration

Configured ☒ WTR(Wait to Restore) Time Revertive ☒ VLAN config ☒

RPL Configuration

RPL Role	RPL Port	Clear
RPL_Owner	East Port	<input type="checkbox"/>

Sub-Ring Configuration

Ring Type	Topology Change
Sub Ring	<input checked="" type="checkbox"/>

Instance State

Protection State	East Port	West Port	Transmit APS	East Port Receive APS	West Port Receive APS	WTR Remaining	RPL Un-blocked	No APS Received	East Port Block Status	West Port Block Status	FOP Alarm
Idle	OK	OK	NR RB BPR0			0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Blocked	Unblocked	<input checked="" type="checkbox"/>

[Save](#) [Reset](#)

6. Set SW5 as Ring2, the type is Sub, and set control VLAN as 3003. And set Port 9 as the East port, Port 10 as the West port. New added VLAN 3002 to protect Ring2 from message in Ring1. Configuration of MEP is same with Step 3.

Maintenance Entity Point Re

Delete	Instance	Domain	Mode	Direction	Residence Port	Level	Flow Instance	Tagged VID	This MAC	Alarm
<input type="checkbox"/>	9	Port	Mep	Down	9	0		3003	9A-86-03-3A-3C-0A	<input checked="" type="checkbox"/>
<input type="checkbox"/>	10	Port	Mep	Down	10	0		3003	9A-86-03-3A-3C-0B	<input checked="" type="checkbox"/>

[Add New MEP](#) [Save](#) [Reset](#)

Rapid Ring Configuration 2 Auto-refresh ☐ Refresh

Instance Data

Ring ID	East Port	West Port	East Port SF MEP	West Port SF MEP	East Port APS MEP	West Port APS MEP	Ring Type
2	9	10	9	10	9	10	Sub Ring

Instance Configuration

Configured ☒ WTR(Wait to Restore) Time Revertive ☒ VLAN config ☒

RPL Configuration

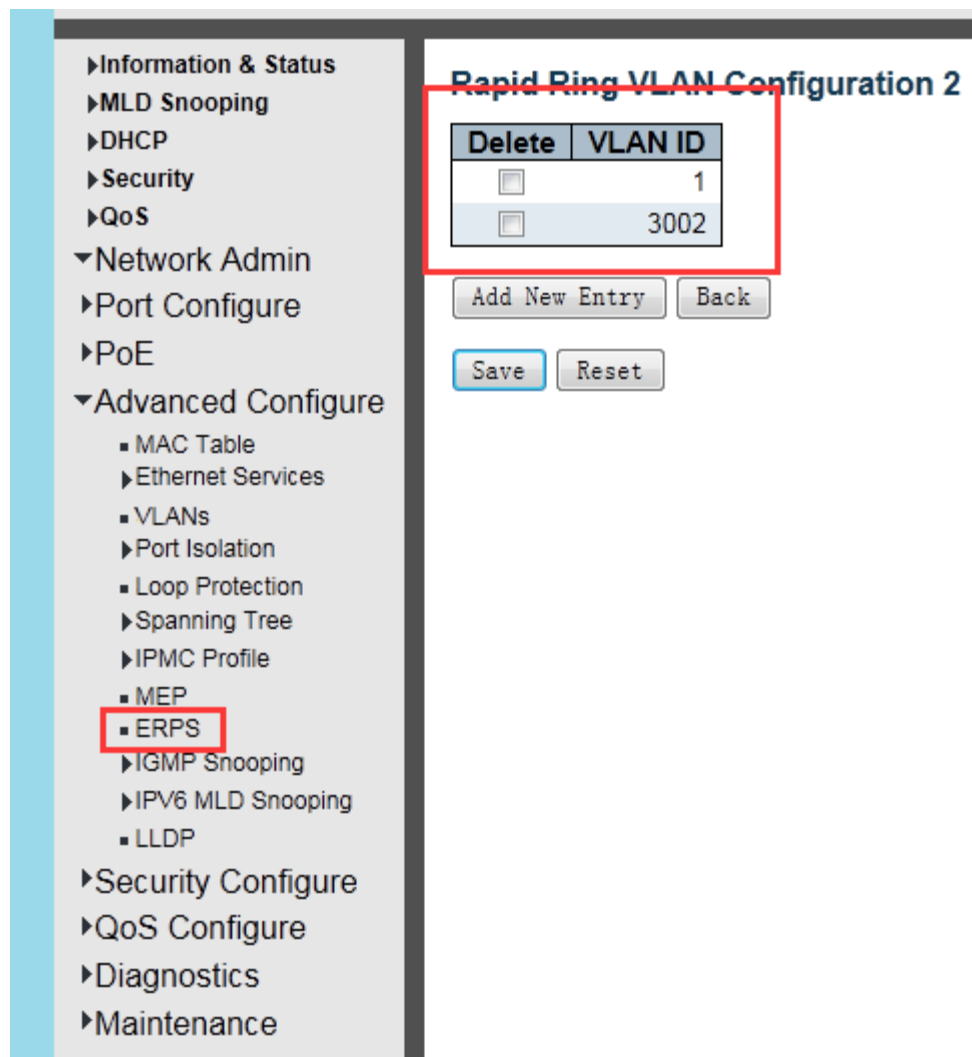
RPL Role	RPL Port	Clear
None	None	<input type="checkbox"/>

Sub-Ring Configuration

Ring Type	Topology Change
Sub Ring	<input checked="" type="checkbox"/>

Instance State

Protection State	East Port	West Port	Transmit APS	East Port Receive APS	West Port Receive APS	WTR Remaining	RPL Un-blocked	No APS Received	East Port Block Status	West Port Block Status	FOP Alarm
Idle	OK	OK		NR RB BPR0 9A-86-03-3B-3F-0A		0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Unblocked	Unblocked	<input checked="" type="checkbox"/>

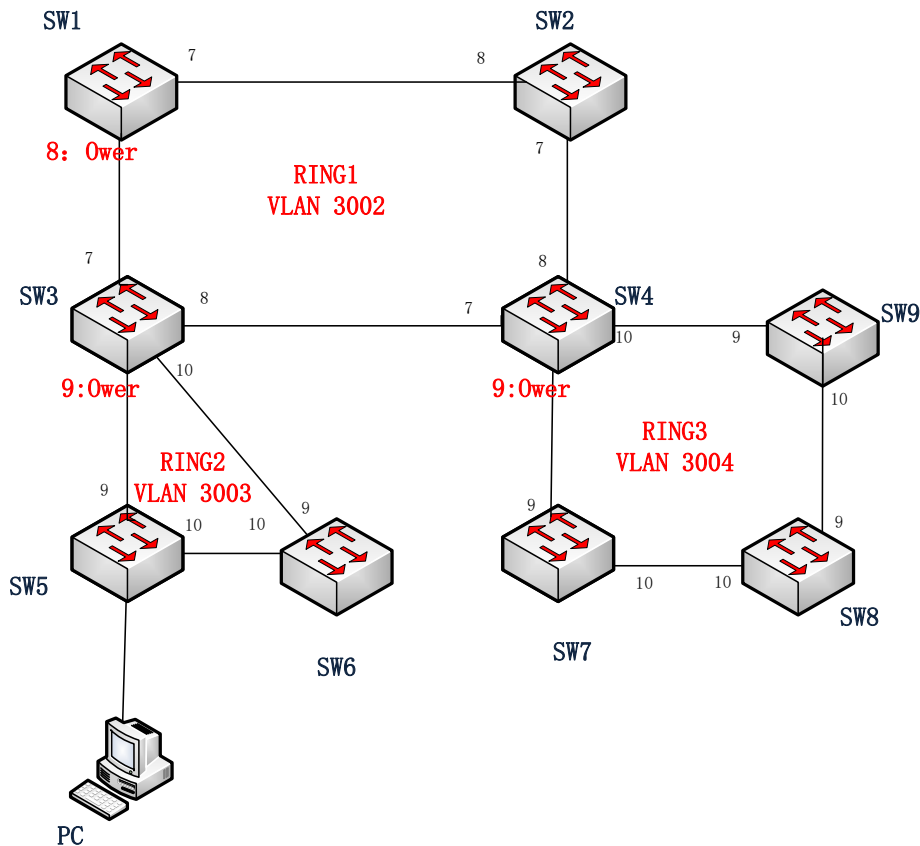


7. Configuration of SW6 & SW7 is same with SW5.

8. Test the configuration result. Users can ping SW1-SW7 in PC, also can ping them if the ring is connected.

3 Intersecting-ring Configuration

Form SW1 - SW9 to a intersecting ring through ERPS, Users can ping SW1-SW9 in PC, also can ping them if Ring is disconnected.



2. Set the IP of SW1-SW9 as (192.168.2.1) - (192.168.2.9), and set the port to trunk port, which is used to connect with the ring.

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IP Configuration

Mode	Host
DNS Server 0	No DNS server
DNS Server 1	No DNS server
DNS Server 2	No DNS server
DNS Server 3	No DNS server
DNS Proxy	<input type="checkbox"/>

IP Interfaces

Delete	VLAN	DHCPv4			IPv4		DHCPv6			IPv6	
		Enable	Fallback	Current Lease	Address	Mask Length	Enable	Rapid Commit	Current Lease	Address	Mask Length
<input type="checkbox"/>	1	<input type="checkbox"/>	0		192.168.2.2	24	<input type="checkbox"/>	<input type="checkbox"/>			

Add Interface

IP Routes

Delete	Network	Mask Length	Gateway	Next Hop VLAN
--------	---------	-------------	---------	---------------

Add Route

Save Reset

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IPv6 MLD Snooping

LLDP

Security Configure

Global VLAN Configuration

Allowed Access VLANs

1

Ethertype for Custom S-ports

88A8

Port VLAN Configuration

Port	Mode	Port VLAN	Port Type	Ingress Filtering	Ingress Acceptance	Egress Tagging	Allowed VLANs	Forbidden VLANs
*	<>	1	<>	<input checked="" type="checkbox"/>	<>	<>	1	
1	Access	1	C-Port	<input checked="" type="checkbox"/>	Tagged and Untagged	Untag All	1	
2	Access	1	C-Port	<input checked="" type="checkbox"/>	Tagged and Untagged	Untag All	1	
3	Access	1	C-Port	<input checked="" type="checkbox"/>	Tagged and Untagged	Untag All	1	
4	Access	1	C-Port	<input checked="" type="checkbox"/>	Tagged and Untagged	Untag All	1	
5	Access	1	C-Port	<input checked="" type="checkbox"/>	Tagged and Untagged	Untag All	1	
6	Access	1	C-Port	<input checked="" type="checkbox"/>	Tagged and Untagged	Untag All	1	
7	Trunk	1	C-Port	<input checked="" type="checkbox"/>	Tagged and Untagged	Untag Port VLAN	1-4095	
8	Trunk	1	C-Port	<input checked="" type="checkbox"/>	Tagged and Untagged	Untag Port VLAN	1-4095	
9	Trunk	1	C-Port	<input checked="" type="checkbox"/>	Tagged and Untagged	Untag Port VLAN	1-4095	
10	Trunk	1	C-Port	<input checked="" type="checkbox"/>	Tagged and Untagged	Untag Port VLAN	1-4095	

Save

Reset

3. Set SW1 as Ring1, the type is Major, and set control VLAN as 3002. Enable APS Protocol in MEP, the type is R-APS. And set Port 7 as the East port, Port 8 as the West port. Port 8 is as the owner. New added VLAN 3003 & 3004 to protect Ring1 from message in Ring2 & Ring3.

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Maintenance Entity Point

Refresh

Delete	Instance	Domain	Mode	Direction	Residence Port	Level	Flow Instance	Tagged VID	This MAC	Alarm
<input type="checkbox"/>	1	Port	Mep	Down	7	0		3002	9A-86-03-3B-69-08	<input checked="" type="checkbox"/>
<input type="checkbox"/>	8	Port	Mep	Down	8	0		3002	9A-86-03-3B-69-09	<input checked="" type="checkbox"/>

Add New MEP

Save

Reset

vlan

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MEP Configuration

Refresh

Instance Data

Instance	Domain	Mode	Direction	Residence Port	Flow Instance	Tagged VID	EPS Instance	This MAC
9	Port	Mep	Down	9		3003	2	9A-86-03-3B-58-0A

Instance Configuration

Level	Format	Domain Name	MEG id	MEP id	Tagged VID	Syslog	cLevel	cMEG	cMEP	cAIS	cLCK	cLoop	cConfig
0	ITU ICC		IC0000MEG0000	1	3003	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Peer MEP Configuration

Delete	Peer MEP ID	Unicast Peer MAC	cLOC	cRDI	cPeriod	cPriority	cDEG
No Peer MEP Added							

Add New Peer MEP

Functional Configuration

Continuity Check				APS Protocol				
Enable	Priority	Frame rate	TLV	Enable	Priority	Cast	Type	Last Octet
<input type="checkbox"/>	0	1 f/sec	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	Multi	R-APS	1

Fault Management

Performance Monitoring

TLV Configuration

Organization Specific TLV (Global)				
OUI First	OUI Second	OUI Third	Sub-Type	Value
0	0	12	1	2

TLV Status

Peer MEP ID	CC Organization Specific					CC Port Status		CC Interface Status		
	OUI First	OUI Second	OUI Third	Sub-Type	Value	Last RX	Value	Last RX	Value	Last RX
No Peer MEP Added										

Link State Tracking

Enable

☐

Save

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Ethernet Rapid Ring Protection Switching

Delete	Ring ID	East Port	West Port	Ring Type	Interconnected Node	Major RRing ID	Alarm
<input type="checkbox"/>	1	7	8	Major	No	1	<input checked="" type="checkbox"/>

Add New Ring Group

Save

Reset

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Rapid Ring Configuration 1

Auto-refresh ☐ Refresh

Instance Data

Ring ID	East Port	West Port	East Port SF MEP	West Port SF MEP	East Port APS MEP	West Port APS MEP	Ring Type
1	7	8	7	8	7	8	Major Ring

Instance Configuration

Configured	WTR(Wait to Restore) Time	Revertive	VLAN config
<input checked="" type="checkbox"/>	1min	<input checked="" type="checkbox"/>	VLAN Config

RPL Configuration

RPL Role	RPL Port	Clear
RPL_Owner	West Port	<input type="checkbox"/>

Instance State

Protection State	East Port	West Port	Transmit APS	East Port Receive APS	West Port Receive APS	WTR Remaining	RPL Un-blocked	No APS Received	East Port Block Status	West Port Block Status	FOP Alarm
Idle	OK	OK	NR RB BPR1 9A-86-03-3B-69-08	NR RB BPR1 9A-86-03-3B-69-08	0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Unblocked	Blocked	<input checked="" type="checkbox"/>	

Save Reset

Information & Status
 ▶ MLD Snooping
 ▶ DHCP
 ▶ Security
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Rapid Ring VLAN Configuration 1

Delete	VLAN ID
<input type="checkbox"/>	1
<input type="checkbox"/>	3003
Delete	3004

Add New Entry Back

Save Reset

4. Configuration of SW2 is same with SW1.

5. Set port 7-8 of SW3 as Ring1, the type is Major, and set control VLAN as 3002. And set Port 7 as the East port. New added VLAN 3003 & 3004 to protect Ring1 from message in Ring2 & Ring3.

Set port 9-10 of SW3 as Ring2, the type is Major, and set control VLAN as 3003. And set Port 9 as the East port, Port 10 as the West port. New added VLAN 3002 & 3004 to protect Ring2 from message in Ring1 & Ring3.

Maintenance Entity Point Refresh

Delete	Instance	Domain	Mode	Direction	Residence Port	Level	Flow Instance	Tagged VID	This MAC	Alarm
<input type="checkbox"/>	7	Port	Mep	Down	7	0		3002	9A-86-03-3B-58-08	
<input type="checkbox"/>	8	Port	Mep	Down	8	0		3002	9A-86-03-3B-58-09	
<input type="checkbox"/>	9	Port	Mep	Down	9	0		3003	9A-86-03-3B-58-0A	
<input type="checkbox"/>	10	Port	Mep	Down	10	0		3003	9A-86-03-3B-58-0B	

Ethernet Rapid Ring Protection Switching

Delete	Ring ID	East Port	West Port	Ring Type	Interconnected Node	Major RRing ID	Alarm
<input type="checkbox"/>	1	7	8	Major	No	1	
<input type="checkbox"/>	2	9	10	Major	No	2	

RING1:

Rapid Ring Configuration 1 Auto-refresh ☐ Refresh

Instance Data

Ring ID	East Port	West Port	East Port SF MEP	West Port SF MEP	East Port APS MEP	West Port APS MEP	Ring Type
1	7	8	7	8	7	8	Major Ring

Instance Configuration

☒ Configured ☐ WTR(Wait to Restore) Time ☐ Revertive ☐ VLAN config

☒ VLAN Config

RPL Configuration

RPL Role	RPL Port	Clear
None	None	<input type="checkbox"/>

Instance State

Protection State	East Port	West Port	Transmit APS	East Port Receive APS	West Port Receive APS	WTR Remaining	RPL Un-blocked	No APS Received	East Port Block APS	West Port Block APS	FOP Alarm

- Information & Status
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Rapid Ring VLAN Configuration 1

Delete	VLAN ID
<input type="checkbox"/>	1
Delete	3003
Delete	3004

Add New Entry
Back

Save
Reset

RING2:

- Information & Status
- MLD Snooping
- DHCP
- Security
- QoS
- Network Admin
- Port Configure
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Rapid Ring Configuration 2

Auto-refresh ☐ Refresh

Instance Data

Ring ID	East Port	West Port	East Port SF MEP	West Port SF MEP	East Port APS MEP	West Port APS MEP	Ring Type
2	9	10	9	10	9	10	Major Ring

Instance Configuration

Configured	WTR(Wait to Restore) Time	Revertive	VLAN config
<input checked="" type="checkbox"/>	1min	<input checked="" type="checkbox"/>	VLAN Config

RPL Configuration

RPL Role	RPL Port	Clear
RPL_Owner	East Port	<input type="checkbox"/>

Instance State

Protection State	East Port	West Port	Transmit APS	East Port Receive	West Port Receive	WTR Remaining	RPL Un-blocked	No APS Received	East Port Block	West Port Block	FOP Alarm

- Information & Status
- MLD Snooping
- DHCP
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 - IGMP Snooping

Rapid Ring VLAN Configuration 2

Delete	VLAN ID
<input type="checkbox"/>	1
Delete	3002
Delete	3004

Add New Entry
Back

Save
Reset

6. Set Port 9-10 of SW5 as Ring2, the type is Major, and set control VLAN as 3003. And set Port 9 as the East port, Port 10 as the West port. New added VLAN 3002 & 3004 to protect Ring2 from message in Ring1 & Ring3.

Rapid Ring Configuration 2 Auto-refresh

Instance Data

Ring ID	East Port	West Port	East Port SF MEP	West Port SF MEP	East Port APS MEP	West Port APS MEP	Ring Ty
2	9	10	9	10	9	10	Major Rir

Instance Configuration

Configured	WTR(Wait to Restore) Time	Revertive	VLAN config
<input checked="" type="checkbox"/>	1min	<input checked="" type="checkbox"/>	VLAN Config

RPL Configuration

RPL Role	RPL Port	Clear
None	None	<input type="checkbox"/>

Instance State

Protection State	East Port	West Port	Transmit APS	East Port Receive	West Port Receive	WTR Remaining	RPL Un-blocked	No APS Received	East Port Block	We Po Rlo

Rapid Ring VLAN Configuration 2

Delete	VLAN ID
<input type="checkbox"/>	1
Delete	3002
Delete	3004

Add New Entry Back

Save Reset

7. Configuration of SW4 is same with SW3.

8. Configuration of SW6-9 is same with SW5.