

ERPS 구성방법(G.8032)

Ring 구성조건

1. 링 구성을 하기 위해서는 최소 3개 이상의 스위치가 있어야 한다.

기본설정

1. RING을 구성하려는 스위치 IP주소를 각각 다르게 한다.(192.168.0.X)
2. STP 설정을 disable로 설정

STP CIST Port Configuration

CIST Aggregated Port Configuration

Port	STP Enabled	Path Cost	Priority	Admin Edge	Auto Edge	Restricted Role	TCN	BPDU Guard	Point-to-point
-	<input checked="" type="checkbox"/>	Auto	128	Non-Edge	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Forced True

CIST Normal Port Configuration

Port	STP Enabled	Path Cost	Priority	Admin Edge	Auto Edge	Restricted Role	TCN	BPDU Guard	Point-to-point
*	<input checked="" type="checkbox"/>	<>	<>	<>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<>
1	<input type="checkbox"/>	Auto	128	Non-Edge	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Auto
2	<input type="checkbox"/>	Auto	128	Non-Edge	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Auto
3	<input type="checkbox"/>	Auto	128	Non-Edge	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Auto
4	<input type="checkbox"/>	Auto	128	Non-Edge	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Auto
5	<input type="checkbox"/>	Auto	128	Non-Edge	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Auto
6	<input type="checkbox"/>	Auto	128	Non-Edge	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Auto
7	<input type="checkbox"/>	Auto	128	Non-Edge	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Auto
8	<input type="checkbox"/>	Auto	128	Non-Edge	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Auto
9	<input type="checkbox"/>	Auto	128	Non-Edge	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Auto
10	<input type="checkbox"/>	Auto	128	Non-Edge	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Auto

Save Reset

3. 링 구성시 포트는 East->West->East->West->East->West 형태로 포트구성이 되어야 한다.

ERPS설정

1. 스위치 설정(Major 링 설정)

링구성시 한 개의 ring에는 한 개의 Ring ID만 설정(EX.모든 스위치 RING ID : 1)

Ethernet Rapid Ring Protection Switching

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

Ring type : Major

Ring ID 1 을 클릭후 (메인스위치만 해당됨)

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	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 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 DNF BPR0	NR RB DNF BPR0 9A-86-02-84-1A-0A	NR RB DNF BPR0 9A-86-02-84-1A-0A	0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Blocked	Unblocked	<input checked="" type="checkbox"/>

RPL Role설정 : RPL Owner로 설정// 메인스위치만 해당(나머지 스위치는 None 기본값)

2. MEP 설정

Information & Status

- Network Admin
- Port Configure
- PoE
- Advanced Configure
 - MAC Table
 - VLANs
 - Port Isolation
 - Loop Protection
 - Spanning Tree
 - MEP**
 - ERPS
 - IGMP Snooping
 - LLDP
- Security Configure
- QoS Configure
- Diagnostics
- Maintenance

Maintenance Entity Point Refresh

Delete	Instance	Domain	Mode	Direction	Residence Port	Level	Flow Instance	Tagged VID	This MAC	Alarm
<input checked="" type="checkbox"/>	1	Port	Mep	Down	1	0	1	3001	B0-1C-91-02-11-16	●
<input checked="" type="checkbox"/>	2	Port	Mep	Down	2	0	2	3001	B0-1C-91-02-11-17	●
<input checked="" type="checkbox"/>	3	Port	Mep	Down	3	0	3	3001	B0-1C-91-02-11-18	●
<input checked="" type="checkbox"/>	4	Port	Mep	Down	4	0	4	3001	B0-1C-91-02-11-19	●
<input checked="" type="checkbox"/>	5	Port	Mep	Down	5	0	5	3001	B0-1C-91-02-11-1A	●
<input checked="" type="checkbox"/>	6	Port	Mep	Down	6	0	6	3001	B0-1C-91-02-11-1B	●
<input checked="" type="checkbox"/>	7	Port	Mep	Down	7	0	7	3001	B0-1C-91-02-11-1C	●
<input checked="" type="checkbox"/>	8	Port	Mep	Down	8	0	8	3001	B0-1C-91-02-11-1D	●
<input type="checkbox"/>	9	Port	Mep	Down	9	0	9	3001	B0-1C-91-02-11-1E	●
<input type="checkbox"/>	10	Port	Mep	Down	10	0	10	3001	B0-1C-91-02-11-1F	●

Add New MEP Save Reset

不参与的需要删除

MEP에서 링포트를 제외한 나머지는 삭제 한다.

Maintenance Entity Point Refresh

Delete	Instance	Domain	Mode	Direction	Residence Port	Level	Flow Instance	Tagged VID	This MAC	Alarm
<input type="checkbox"/>	25	Port	Mep	Down	25	0	25	4095	9A-86-02-13-5C-1A	●
<input type="checkbox"/>	26	Port	Mep	Down	26	0	26	4095	9A-86-02-13-5C-1B	●

Add New MEP Save Reset

정상적인 링구성시 Alarm이 초록색으로 변함