

# Release Notes: ISW Series 12-Port Industrial Switches

Firmware Version 1.01.04.0001 (for all models)

*Models:*

ISW 8-10/100P, 4-SFP, PoE Switch  
ISW 8GBP, 4-SFP, PoE Switch

*Documentation Date:* 2022/02/28

*Note:*

Image ISW-TLN-8PORT\_V01.01.04.0001 is not compatible with 12-port ISW-Series platforms.

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## [ **New Release: v01.01.04.0001** ]

***These Release Notes include all feature changes and fixed bugs through release v01.01.03.0015.***

### <Software Date>

Software Build Date: 2022/02/24

### <Software Base>

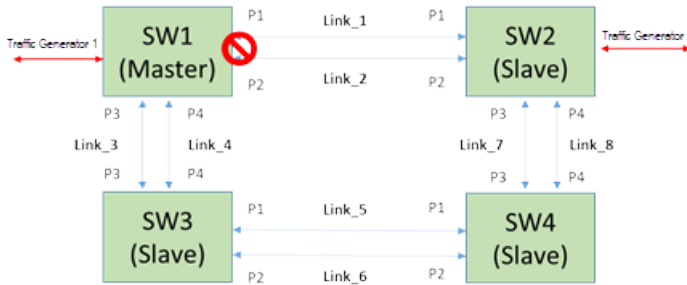
MSCC VSC7429, VSC7425 Compatible  
OS: eCos Operating System  
Version 3.65 CE Service

### <New Features>

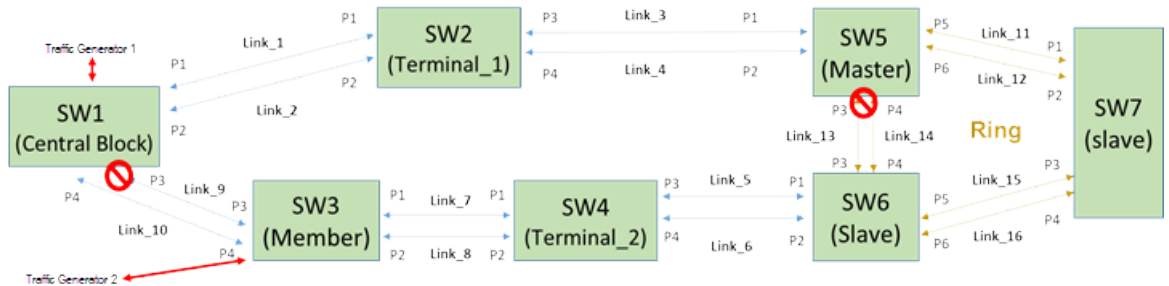
1. Support Dual Ring (Ring/Chain with LAG)
  - ➔ This feature is supported in all Ring, Chain, Coupling, Dual-homing, and Balancing Chain technologies.
- Restrictions of Dual Ring:
  - Each LAG Ring node supports only 2 ports of LAG
  - Ring topologies that have STP mixed with LAG Ring nodes are not supported
  - Only Static LAG is supported

- Supported topologies:  
Average recovery time is same as original Ring technologies (similar to rings without LAG). The recovery time is sub-50 ms.

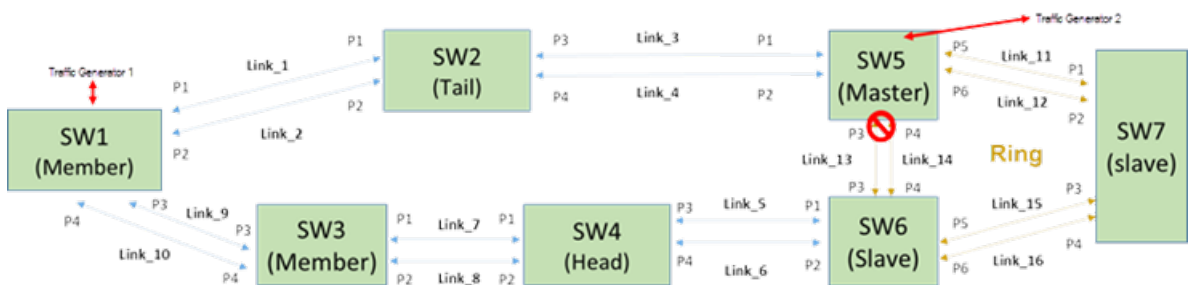
- Ring with LAG



- Balancing Chain with LAG



- Chain with LAG



- Web (allows LAGs to be configured as Ring ports)

**RingV2 Configuration**

Ring Configuration			
Index	Mode	Role	Ring Port(s)
1	Enable	Ring(Master)	Forward Port : Aggr-1 Block Port : Aggr-2
2	Enable	Ring(Slave)	Forward Port : Aggr-3 Forward Port : Aggr-4
3	Disable	Chain(Member)	Member Port : Port-1 Member Port : Port-2

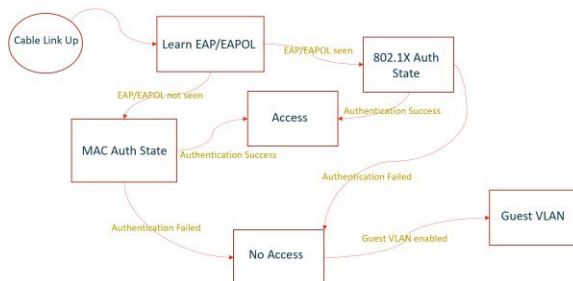
- CLI commands:  
Support LAG port can be configured for Ring node1 & node2.

```
(config-ringv2-group1)#
(config-ringv2-group1)#node1 aggregation group <LAG group ID>
(config-ringv2-group1)#node2 aggregation group <LAG group ID>
```

2. Support “Enable both MAC and 802.1X auth on same port”  
➔ 802.1X/MAC Auth auto sense mode.

- Mode States:
  - Try to authenticate through 802.1X else
  - Try to authenticate through MAC else
  - Provide Guest VLAN access (if Guest VLAN is enabled) else
  - No Access

**State chart of 802.1X/MAC auto sense mode**



Note: If enabling 802.1X on the end-station, a port bounce on the ISW will be required to perform 802.1X authentication.

- New timer parameter: Sense Period  
Used to identify if the client enabled 802.1X. Identification method is to learning if the port received EAP/EAPOL packets, the first learnt packet will be EAPOL start normally after port is linked up.
  - CLI commands:  
  
(config)#dot1x timeout sense-period <10-255>, default: 10 seconds
- New mode of port control: dot1x port-control sense  
To support, enable both MAC and 802.1X auth on same port.
  - CLI commands:  
  
(config-if)# dot1x port-control sense
- Web design for Sense Period and port-control mode

**Network Access Server Configuration**

**System Configuration**

Mode	Enabled
Reauthentication Enabled	<input type="checkbox"/>
Reauthentication Period	3600 seconds
EAPOL Timeout	30 seconds
Aging Period	300 seconds
Hold Time	10 seconds
Sense Period	10 seconds
RADIUS-Assigned QoS Enabled	<input type="checkbox"/>
RADIUS-Assigned VLAN Enabled	<input type="checkbox"/>
Guest VLAN Enabled	<input checked="" type="checkbox"/>
Guest VLAN ID	5
Max. Reauth. Count	2
Allow Guest VLAN if EAPOL Seen	<input checked="" type="checkbox"/>

**Port Configuration**

Port	Admin State	RADIUS-Assigned QoS Enabled	RADIUS-Assigned VLAN Enabled	Guest VLAN Enabled	Port State	Restart
1	Force Authorized	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Link Down	Reauthenticate Reinitialize
2	Force Authorized	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Link Down	Reauthenticate Reinitialize
3	Force Authorized	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Link Down	Reauthenticate Reinitialize
4	Force Authorized	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Link Down	Reauthenticate Reinitialize
5	Force Authorized	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Link Down	Reauthenticate Reinitialize
6	Force Authorized	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Link Down	Reauthenticate Reinitialize
7	Force Authorized	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Authorized	Reauthenticate Reinitialize
8	802.1X or MAC-based sense	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Authorized	Reauthenticate Reinitialize
9	Force Authorized	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Link Down	Reauthenticate Reinitialize
10	Force Authorized	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Link Down	Reauthenticate Reinitialize

**<Feature updates>**

1. Support TLS1.2 for HTTPs connection.
2. Enable HTTPs and HTTPs redirect by default. (By default, all HTTP sessions will be redirected to HTTPs)
3. ISW SNMP performance improvement (OID:1.3.6.1.2.1.31 and for 1.3.6.1.2.1.2.2 )  
Modify the SNMP response for 1.3.6.1.2.1.31 and for 1.3.6.1.2.1.2.2 to report only existing VLANs = do not report non-existing VLANs (Previous version will response 1~4095 VLANs if one of the ports is enabled in Trunk mode.)

**<Fixed Bugs>**

1. TSS5406: Switch reboots when I enable dot1x authentication

## Release History

For details about the contents of previous firmware releases, refer to [Release Notes for ISW Series 12-Port Industrial Switches \(version 1.01.03.0015\)](#).

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