Release Notes: ISW Series 8-Port Industrial Switches

Firmware Version 1.01.04.0001 (for all models)

Models:
ISW 4-10/100P, 2-10/100T, 2-SFP, PoE Switch (FE)
ISW 4GbP, 2GbT, 2-SFP, PoE Switch (GE)

Documentation Date: 2022/02/28

Note:
Image ISW-TLN-12PORT_V01.01.04.0001 is not compatible with 8-port ISW-Series platforms.

[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
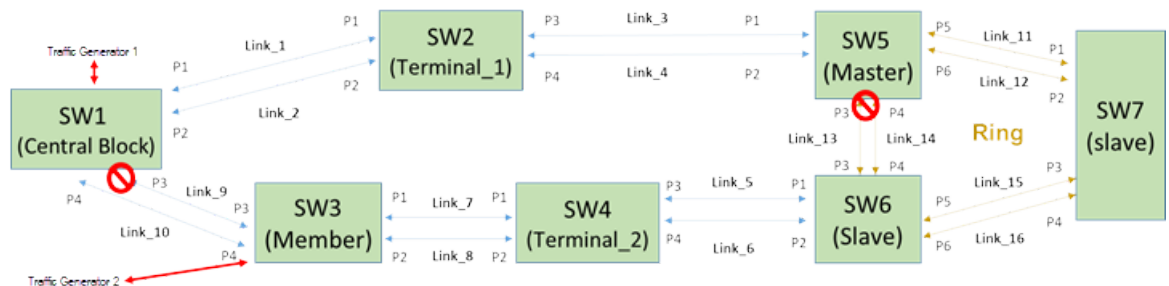   - Only Static LAG is supported

- Supported topologies:

Average recovery time is same as original Ring technologies (similar to rings without LAG). The recovery time is sub-50 ms.
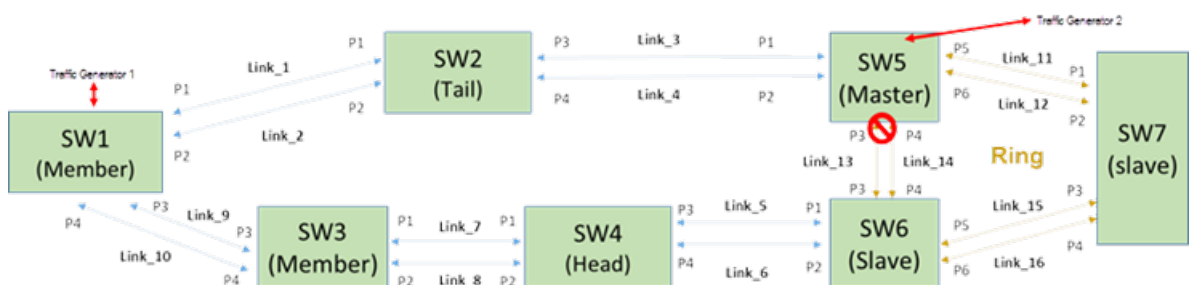
- Ring with LAG
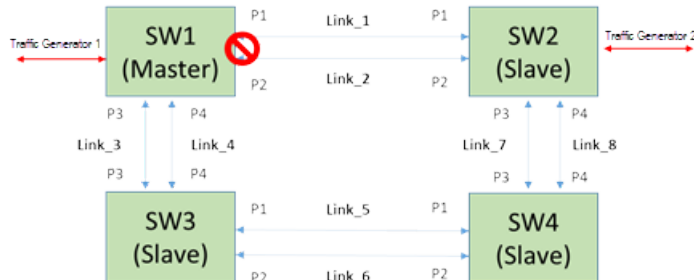
- Balancing Chain with LAG

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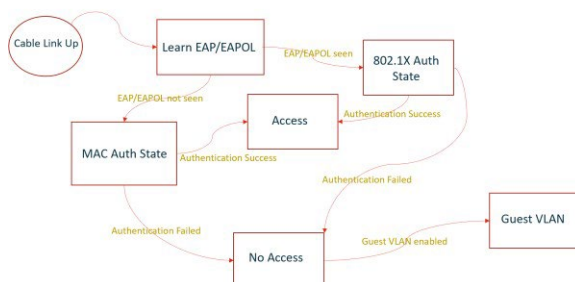
Note: If enabling 802.1X on the end-station, a port bounce on the ISW will be required to perform 802.1X authentication.

- New timer parameter: Sense Period
  Used to identify if the client enabled 802.1X. Identification method is to learning ifthe 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

<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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