



Test Report (TR S2510-PoE-DC)
Patch Version 2.2.0C Build 71585

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1. Introduction

The document communicates the test result for mentioned test-cases of TR S2510-PoE-DC.

2. About this test report

This Test Report provides information of support for adequate multicast group entries for snooping support.

Present software version- Version 2.2.0C Build 71585;

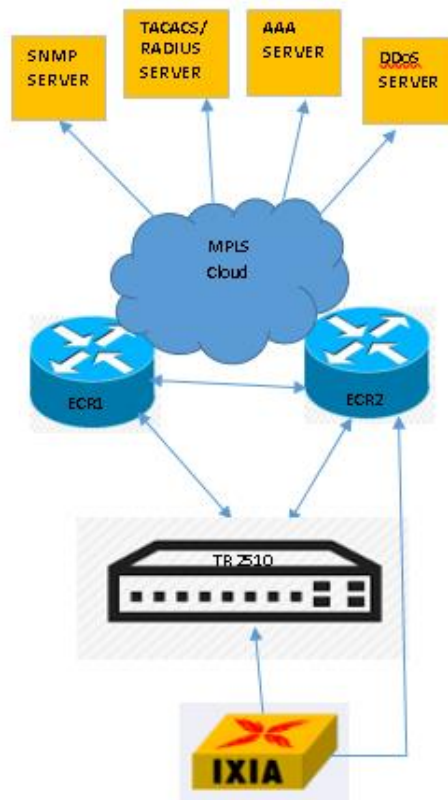
Present hardware version- V1.0;

3. Test Reports

A. RJIL-IP-QA-DS-SYS-027

To check Switch support for adequate multicast group entries for snooping support.

Topology



Configuration:

```
vlan 1,890,4094
!
!
!
ip igmp-snooping
ip igmp-snooping dlf-drop
ip igmp-snooping querier
!
!
!
!
!
!
!
!
!
!
!
!
!
!
!
!
snmp-server community 0 public RW
snmp-server trap-add-hostname
!
Switch_config#show running-config int g0/3
Building configuration...

Current configuration:
!
interface GigaEthernet0/3
 switchport pvid 4094
```

Spirent Test Device configuration:

Create Devices - Select Protocols

Steps

- Select Ports
- Select Protocols
- Select Encapsulation
- Configure Devices
- Configure IGMP
- Preview

Select Protocols

Select the protocols to enable on the devices
Application protocols (e.g. HTTP, FTP, SIP and Video) are configured through the Application Layer Wizard

Protocol Technologies

None (Traffic only device) Access Routing and MPLS Switching

Protocol Name	Enable	IP Versions Supported		
		IPv4	IPv6	IPv4 & IPv6 (Dual Stack)
Access				
802.1X	<input type="checkbox"/>	•	•	•
DHCP-PD Relay Agent	<input type="checkbox"/>		•	•
DHCPv4	<input type="checkbox"/>	•		
DHCPv4 Relay Agent	<input type="checkbox"/>	•		
DHCPv4 Server	<input type="checkbox"/>	•		
DHCPv6 Relay Agent	<input type="checkbox"/>		•	•
DHCPv6/PD	<input type="checkbox"/>		•	•
DHCPv6/PD Server	<input type="checkbox"/>		•	•
IPv6 Autoconfiguration	<input type="checkbox"/>		•	•
L2TPv2	<input type="checkbox"/>	•		
PPPoE	<input type="checkbox"/>	•	•	•
PPPoL2TPv2	<input type="checkbox"/>	•	•	
Multicast				
IGMP	<input checked="" type="checkbox"/>	•	•	•
IGMP Querier	<input type="checkbox"/>	•		•
MLD	<input type="checkbox"/>		•	•
MLD Querier	<input type="checkbox"/>		•	•
Other				
ANCP	<input type="checkbox"/>	•		•

Create Devices - Configure IGMP

Steps

- Select Ports
- Select Protocols
- Select Encapsulation
- Configure Devices
- Configure IGMP
- Preview

Configure IGMP

Configure IGMP protocol options
Use the Test Configuration browser to modify additional options

Version:

Number of groups:

Starting group IP: Step per port:

Device-Group Mapping:

Source Specific

Filter Mode:

Include Exclude

Filtered Sources:

None (empty source-list)

Use existing device

Custom Range

Start:

Step:

Prefix:

Count:

StreamBlock Editor - Port //11/5 : StreamBlock 25

General | Frame | Groups | Rx Port | Preview

Active Name: StreamBlock 25

Frame size (Bytes)(With CRC and signature field)

Fixed Size: 128

Increment Step: 1 (power of 2)

Decrement Min: 128

Random Max: 256

Auto Avg: 192

iMX Default

Streamblock load option

Load mode: Fixed

Percent (%) 10

Frames/sec (fps) 84459

Inter-Burst Gap (bytes) 1344

Inter-Burst Gap (msec) 1344

Inter-Burst Gap (nsec) 1344

bps 100000000

Kbps 100000

Mbps 100

L2 Rate (bps) 100000000

Settings

Scheduling priority: 0

Burst size: 1

Start delay (bytes): 0

Inter-frame gap unit: Gap (bytes)

Inter-frame gap: 12

Packet

Payload fill constant (hex): 0000

Payload fill type: Constant

Insert FCS error

Include Signature Field

High Speed Result Analysis

Enable AnalyzerPreload

Name	Value
[-] Frame	
[-] EthernetII	
[-] Destination MAC	01:00:5E:00:00:01
MAC Modifier	Count=512;Step=00:00:00:00:00:01
Source MAC	00:10:94:00:00:02
EtherType (hex)	<auto> 88B5

Test Result:

1.

```
Switch_config#show ip igmp-snooping groups

The total number of groups      255

Vlan Group          Type Port(s)
-----
4094 225.0.0.1       IGMP g0/4
4094 225.0.0.2       IGMP g0/4
4094 225.0.0.3       IGMP g0/4
4094 225.0.0.4       IGMP g0/4
4094 225.0.0.5       IGMP g0/4
4094 225.0.0.6       IGMP g0/4
4094 225.0.0.7       IGMP g0/4
4094 225.0.0.8       IGMP g0/4
4094 225.0.0.9       IGMP g0/4
4094 225.0.0.10      IGMP g0/4
4094 225.0.0.11      IGMP g0/4
4094 225.0.0.12      IGMP g0/4
4094 225.0.0.13      IGMP g0/4
4094 225.0.0.14      IGMP g0/4
4094 225.0.0.15      IGMP g0/4
4094 225.0.0.16      IGMP g0/4
4094 225.0.0.17      IGMP g0/4
4094 225.0.0.18      IGMP g0/4
```

2.

Port //11/5		108,108,092	864,864,736	844,594	0
Port //11/6		0	0	0	844,595
Port //11/7		0	0	0	0
Port //11/8		0	0	0	0

3.

```
Switch_config#show int g0/3
GigaEthernet0/3 is up, line protocol is up
  Ifindex is 3, unique port number is 3
  Hardware is Giga-TX, address is 5ccc.ff19.2e59 (bia 5ccc.ff19.2e59)
  MTU 1500 bytes, BW 1000000 kbit, DLY 10 usec
  Encapsulation ARPA
  Auto-Duplex(Full), Auto-Speed(1000Mb/s), Flow-Control Off
  5 minutes input rate 713028980 bits/sec, 696317 packets/sec
  5 minutes output rate 16135 bits/sec, 31 packets/sec
    Received 22978469 packets, 2941244544 bytes
      0 broadcasts, 22978469 multicasts
```

4.

```
Switch_config#show int g0/3
GigaEthernet0/3 is up, line protocol is up
  Ifindex is 3, unique port number is 3
  Hardware is Giga-TX, address is 5ccc.ff19.2e59 (bia 5ccc.ff19.2e59)
  MTU 1500 bytes, BW 1000000 kbit, DLY 10 usec
  Encapsulation ARPA
  Auto-Duplex(Full), Auto-Speed(1000Mb/s), Flow-Control Off
  5 minutes input rate 736385811 bits/sec, 719126 packets/sec
  5 minutes output rate 13692 bits/sec, 26 packets/sec
    Received 28045940 packets, 3589880832 bytes
      0 broadcasts, 28045940 multicasts
```