###### Configuration of Service Activation Test Generator.

***Objective:***

Objective is to configure service activation test generator. SAOS 10.5 release and onwards supports both Service Activation Test (also called benchmarking tests) Generator and Reflector.

**G**

**R**

**fd1 fd1**

fp\_NNI fp\_NNI fp\_UNI



fp\_UNI

PE PE

***SAT Configuration***

***Procedure:***

* Setup the Fowarding Domains and classifiers and flow points in CLI:
  + Enter “config”
    - fds fd fd1 mode vpws
    - classifiers classifier VLAN-UNTAGGED filter-entry vtag-stack untagged-exclude-priority-tagged true
    - fps fp fp\_UNI logical-port 1 fd-name fd1 classifier- list VLAN-UNTAGGED
    - fps fp fp\_NNI logical-port 2 fd-name fd1 classifier- list VLAN-UNTAGGED
* Setup the SAT configuration on the flow point provisioned. Below is the example to configure basic throughput test. The SAT is only running on Untagged traffic in this example:
  + sat entity ent1 role generator mode in-service port 1
  + sat test-profile testp1 bandwidth 1000 throughput-test true dst-mac <SAT Reflector Mac>
  + sat test-instance testin1 profile testp1 flow-point- id fp\_UNI
* Enable the SAT globally as well as the test instance.
  + sat sat-global admin-state enabled
  + sat entity ent1 admin-state enabled
  + sat test-instance testin1 admin-state enabled
* The SAT generator is now active. Once the remote reflector is activated, generator will start generating test packets and reflector will reflect packets.
* The SAT entities, profile created and the test instance created in the above steps can be verified using below commands
  + show sat entities

+

SAT ENTITY +

| Parameter | Value |

+ + +

| Admin-State | Enabled |

| Mode | In-Service |

| Role | Generator |

| Entity-Name | ent1 |

| Port | 18 |

| Allocated-Hw-Sessions | 1 |

| Num-Test-Instances-Enabled | 1 |

| Num-Test-Instances-Configured | 1 |

| Gen-Num-Test-Instances-Running | 0 |

| Id | 1 |

| Available-Hw-Sessions | 127 |

| Gen-Bw-Used-By-Running-Tests | 0 |

| Oper-State | Disabled |

| Slot-Id | 1 |

| Local-Mac | 54:C3:3E:86:34:0A |

| Bw-Available | 10000 |

+ + +

* + show sat test-profiles

+ SAT TEST PROFILES +

| Parameter | Value |

+ + +

| Test-Profile-Name | testp1 |

| Latency-Test | False |

| Y1564-Suite | False |

| Pdu-Type | ethernet |

| Color-Validation | True |

| Bandwidth | 1000 |

| Outage-Test | False |

| Duration | tOnce |

| Excess-Bandwidth | 0 |

| Sampling-Interval | 1 |

| C-Pcp | pcp0 |

| Frameloss-Test | False |

| Encap-Type | untagged |

| Max-Samples | 10 |

| Throughput-Test | True |

| Max-Searches | 7 |

| Frameloss-Start-Bw | maximum-throughput |

| Pcp-Validation | True |

| Dst-Mac | <Reflector Mac-add>|

| Pdv-Test | False |

| C-Color | green |

| Tpid | 0x8100 |

| Vid-Validation | True |

| Interval | tCompletion |

| Rfc2544-Suite | False |

| Hw-Sessions-Required | 1 |

| Num-Of-Ref | 1 |

| Id | 1 |

+ + +

* + show sat test-instances

+ SAT TEST INSTANCES +

| Parameter | Value |

+ + +

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| | | Test-Instance-Name | | | testin1 |  | | |
| | | Profile | | | testp1 |  | | |
| | | Untagged | | | False |  | | |
| | | Admin-State | | | enabled |  | | |
| | | Flow-Point-Id | | | fp\_UNI |  | | |
| | | Current-Interval | | | 0 |  | | |
| | | Active-Dst-Mac | | | <Reflector | Mac-add> | | |
| | | Assoc-Entity | | | ent1 |  | | |
| | | Total-Intervals | | | 0 |  | | |
| | | Oper-State | | | disabled |  | | |
| | | Active-Untagged-Data | | | True |  | | |

| Last-Iteration-Start-Timestamp | 1970-01-01T00:00:00Z |

| Active-Start-Bw | 0 |

| Id | 1 |

+ + +

* The SAT entities, profile created and the test instance created in the above steps can be deleted using below commands
  + sat test-instance testin1 admin-state disabled
  + no sat test-instance testin1
  + no sat test-profile testp1
  + sat entity ent1 admin-state disabled
  + no sat entity ent1

Test Case Results:

Passed: Yes No Verified by Date/Time Comments