###### Port Flap Detection

Port flapping results from instability in the network where the ports toggles up and down within a short span of time. The port flapping results in network to re-converge when the state of the port/link changes. Port Flap Detection feature will detect port flaps and apply a hold timer before changing the state of the port to down

***Objective:***

Enable port flap detection and set the necessary parameters.

***Procedure:***

* Enable port flap detection.
  + oc-if:interfaces interface <port-id> config link-flap- detect true
* Set the time window to detect the link flaps.
  + oc-if:interfaces interface <port-id> config link-flap- detect-time <detect-time value> (default = 10s)
* Set the number of link flaps that would occur during the time window that will trigger a port down.
  + oc-if:interfaces interface <port-id> config link-flap- count <flap-count value> (default = 5s)
* Set the amount of time the link should be held down when too many link flaps have been detected.
  + oc-if:interfaces interface <port-id> config link-flap- hold-time <hold-time value> (default = 300s)
* Verify the settings:

5162-001> show ettps ettp 42

+ Ettp +

| KEY | VALUE |

+ + +

| Name | 42 |

| Description | 42 |

| Type | ettp |

| Admin Status | True |

| Mode | auto |

| Link Flap Detect | True |

| Link Flap Count | 5 |

| Link Flap Detect Time | 10 |

| Link Flap Hold Time | 300 |

| Duplex | full |

| Port Speed | 100Gb |

| Flow Control | off |

| Auto Negotiation | False |

| Forward Error Correction | auto |

+ + +

* Verify the statistics:

5162-001> show ettps ettp 2 statis

+ Ettp +

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| | | KEY | | | VALUE | | |
| + |  | + |  | + |
| | | Name | | | 2 | | |
| | |  | | |  | | |
| | |  | In Bytes | | 0 | | |
| | |  | In Unicast Packets | | 0 | | |
| | |  | In Errors | | 0 | | |
| | |  | Out Unicast Pkts | | 0 | | |
| | |  | Out Errors | | 0 | | |
| | |  | In Pkts | | 0 | | |
| | |  | Out Bytes | | 15834974 | | |
| | |  | Out Pkts | | 138696 | | |

| Link Flap Events | 0 |

+ + +

Test Case Results:

Passed: Yes No Verified by Date/Time Comments