**Test Name**

Base connectivity test and validation with LLDP and advanced tools.

**Test Abstract**

The purpose of this test is to determine the ability to quickly validate connectivity on the interconnecting links and determine adjacent neighbors quickly. Determine incorrect cabling and alert on the issue.

The tests will include link failures, node failures, and NOS configuration changes on service connections.

**Test Topology**

A Side

B Side

Leaf / TOR

Spine / EOR

Border / Access



Dell

Srvr4

Dell

Srvr5

Dell

Srvr6

Dell

Srvr3

Dell

Srvr2

Dell

Srvr1



VPN Access

**Testbed Requirements**

Each switching and routing device in the network to utilize LLDP and any other available tooling to quickly and accurately determine if a cable is not connected according to provided diagram. If cabled incorrectly, determine what is connected in that devices place.

Automation support for configuring and polling LLDP and other tools as required.

**Detailed Steps**

Test1: Basic reporting of connectivity status after connecting the POD devices and provisioning baseline.

Test2: Unplug a random cable or set of cables, verify disconnect is reported.

Test3: Cycle device power, monitor alerting and connectivity status.

**Results**

(Record data loss and service outage time for link down, node down, and configuration scenarios)

**Observations**

Verify initial POD connectivity accuracy.

Verify operationally capable of quickly identifying outage location.

**Defects**

(Note any observed defects and anticipated severity; e.g., Critical, Major, Minor)

**Conclusions**

(Note conclusions based on Test Results and Observations)