

SDN CTS

Comprehensive OpenFlow based Conformance test suite



Software Defined Networking (SDN) has emerged as a new paradigm of networking. SDN is radically changing how networking products are designed built & operated to achieve business agility.

In the pre-SDN environment, products that delivered [network](#) services primarily stood alone and were interoperable with other products through [IEEE](#) or [IETF](#) standards. For emerging SDN/NFV environments, delivering network services requires deep, cross-product integration and interoperability between products.

SDN switch as compared to Classical Switch, high-level routing decisions are moved to a separate Controller while data portion still resides on Switch. The OpenFlow Switch and Controller communicate via the OpenFlow protocol, which defines messages, such as packet-received, send-packet-out, modify-forwarding-table, and get-stats

L&T TS has developed SDN CTS as automated solution based on ONF conformance standards. This Automated Conformance Test Suite contains open source based OFT framework and the additional test scripts that are developed by L&T TS. SDN CTS tool shall serve OEM in performing pre-certification of their Switch for OpenFlow compliance.

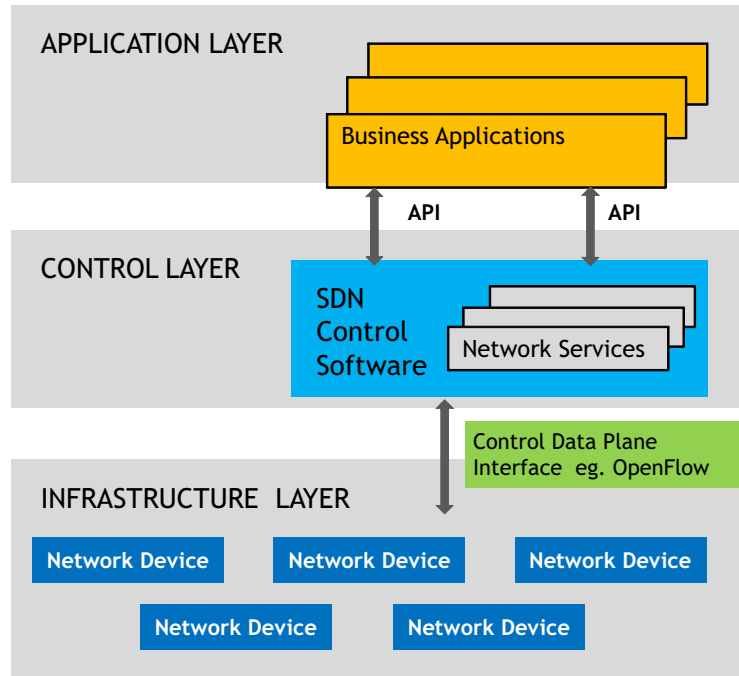


SDN CTS

Comprehensive OpenFlow based Conformance test suite

Solution Highlights

- Comprehensive Test suit to validate the compliance of OpenFlow enabled switches with ONF CTS 1.0 specifications
- SDN CTS is targeted for pre-certification conformance testing for customers
- Test Scripts are available for the categories: Basic Sanity, Flow Modification, Flow Matching, Counters, Action, Async Messages, Message Types, and Error Messages & OpenFlow Protocol Messages



Capability Summary of SDN CTS

1. Provision for executing individual test case & all test scripts in single pass
2. Capability of verifying Physical & Virtual infrastructure
3. Detailed logging mechanism to ascertain reason for failures
4. Flexible framework to add new test scenarios and can be used to automate future conformance test scripts (ONF CTS V1.3)

Key Differentiators

1. Reduces cost & time as the pre-certificate tool is based on ONF specification
2. Robust Automation Framework that can simulate data plane traffic required for validating the test case
3. Flexible framework that can be enhanced for validating other south bound protocols

L&T Technology Services is a wholly owned subsidiary of L&T providing engineering services to its customers worldwide. It operates in diverse industry segments such as Industrial Products, Medical Devices, Transportation, Telecom and Hi-tech & Process Engineering. The company also offers solutions in the areas of Mechanical engineering Services, Embedded Systems Services, Product Lifecycle Management (PLM), Engineering Analytics and Power Electronics and M2M and the Internet of Things (IoT).



L&T Technology Services