SDN Test Cases Development and Implementation

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Abstract—**The evolution of information technology and the explosive growth in Internet data have rendered traditional ways of providing information services and their infrastructure no longer appropriate. Data storage, computing and Internet services are moving toward virtualization and cloud computing. However, the performance of this network architecture needs to be examined to improve network bandwidth utilization. Google's success in using the Software-Defined Networking (SDN) to achieve a system utilization rate as high as 90% stimulated widespread development of SDN. This work conducts SDN research and develops a test platform for conformance and interoperability analysis.**

Keyword—**Software-Defined Networking (SDN), Test Cases, Open Networking Foundation (ONF), Device Under Test (DUT), RYU**

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