

Abstract

Software Defined Networking paradigm provides logically centralized controller that directly control the packet-handling functionality in the underlying switches. OpenFlow is an open standard managed by the Open Networking Foundation. It specifies a protocol through which a remote controller can modify the behaviour of networking devices through a well-defined forwarding instruction set. Floodlight Controller adds and removes flow-entries from the Flow Table on behalf of experiments. It is required that the controller uses the network resources efficiently.

The aim of this project is to replace an existing module of Floodlight-OpenFlow Controller which forwards the packet based on the Shortest First Algorithm with an optimised multipath routing algorithm which will make more use of available network resources in order to minimize the risk of traffic congestion.