

METHOD AND SYSTEM FOR DETECTION OF LOOP BETWEEN CONTROL PLANE AND DATA PLANE BASED ON SOFTWARE DEFINED NETWORK (SDN)

Abstract

This invention relates to a method and system for detecting a loop between a control plane and a data plane in a Software Defined Network (SDN) having a SDN controller being connectable to a plurality of network elements in the data plane. The method comprises: monitoring and intercepting a flow-mod message and a packet-out message from the SDN controller to the network element; updating a forwarding graph according to flow-mod message in response to intercepting the flow-mod message; analysing the information in the packet-out message against the forwarding graph associated to the network element to determine whether a loop exists in response to intercepting the packet-out message; and raising an action ticket in response to determining a loop exists.

Figure 6 to accompany the abstract