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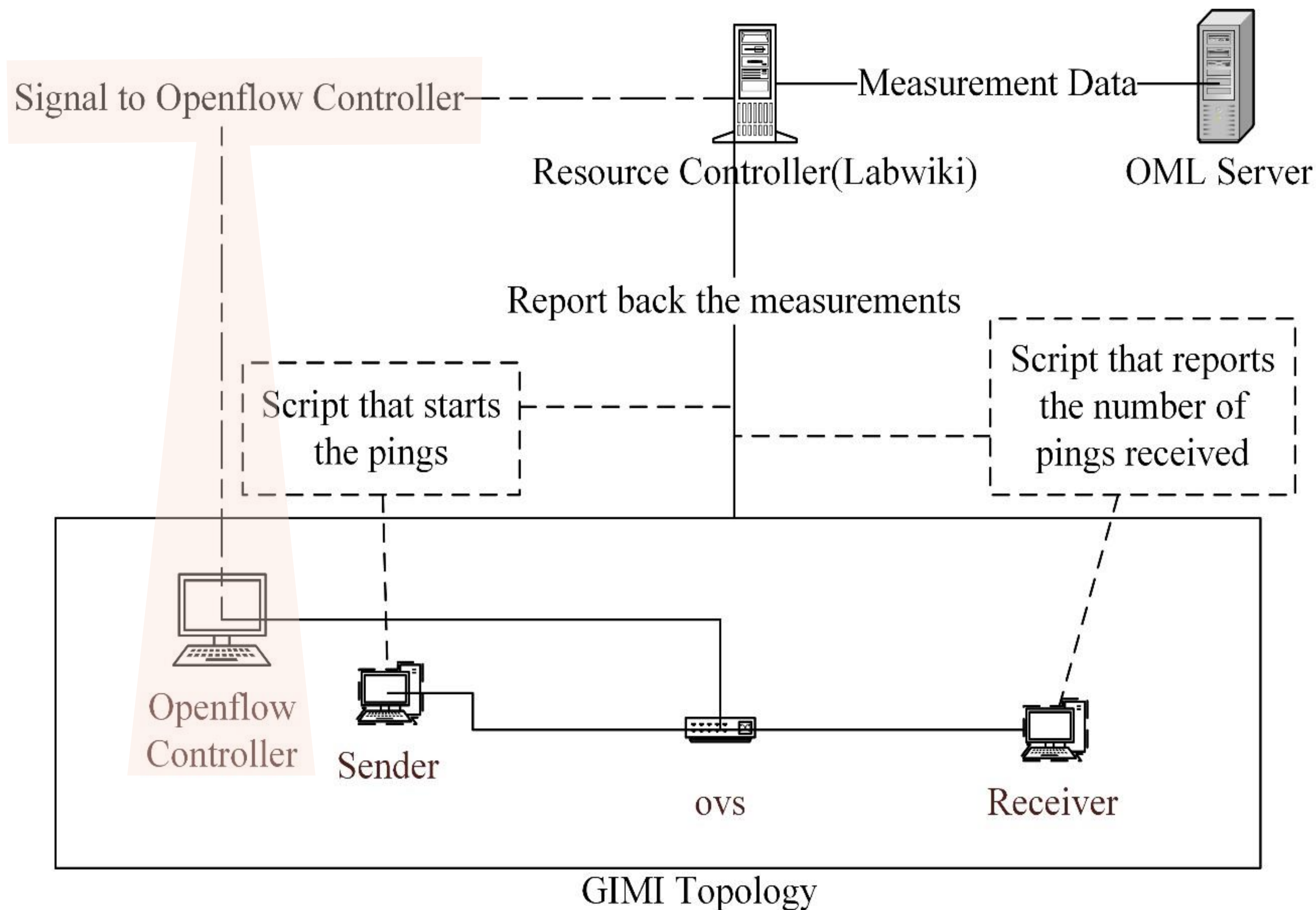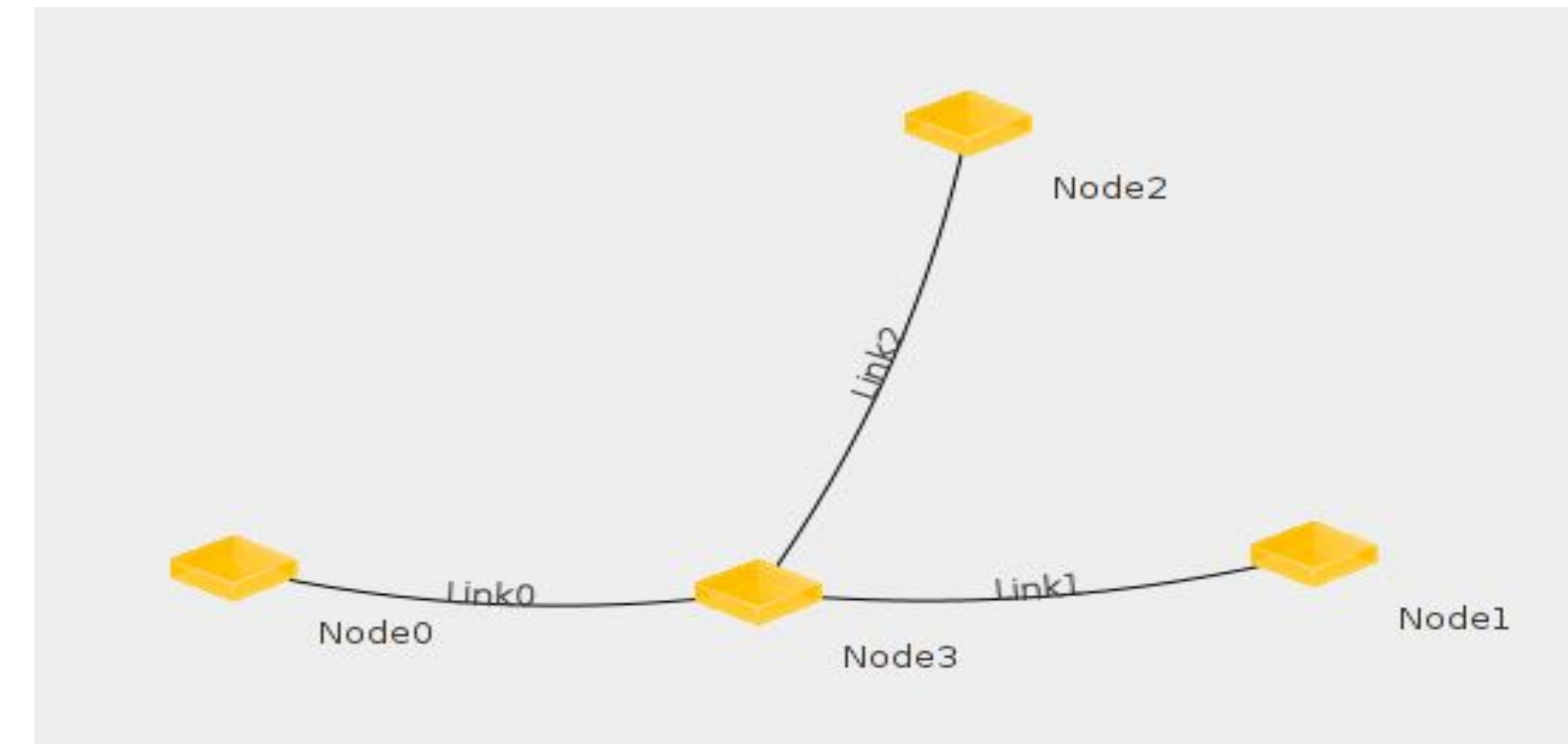COLLEGE of TECHNOLOGY

Simulation of Ping Attack on GIMI

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Goal

Detecting the possibility of a ping attack using GIMI measurements and using OpenFlow to stop the flow if any such situation is encountered.

GIMI Topology

Experiment

- Node 0 acts as a sender node that starts the pings. A third party application runs on this node which when called by Labwiki , initiates the ping process.
- Node 3 acts as an OVS that's being controlled by an Openflow controller(Node2) which can manipulate the flows between the sender and receiver.
- Node 1 acts as the receiver node which receives the pings. Another third party application runs on this node which keeps track of the number of ICMP requests coming in and reports it back to the OMF controller(Labwiki).
- Labwiki receives these measurements from the Receiver Node(Node1) and if the count reaches a particular threshold, it sends a command to the Openflow controller so that the malicious flow can be stopped.