Project 7

Failure Detection in ring (Node failure)

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Objectives:

1. Design a ring network and monitor the switches status through openflow functions
    1. Create a mininet topo, and save the switch status every t time.
2. Implement an algorithm to react to the switch failure
    1. Implementation 1 - reactive: look at the openflow messages (failure, etc.)
    2. Implementation 1 – proactive: check the switch status and react accordingly (group table)
3. Test the algorithm with different traffic generators (D-ITG, iperf)
    1. D-itg: http://www.grid.unina.it/software/ITG/
    2. Iperf: https://iperf.fr/
4. Display the results
    1. Delay, pkt loss with and without the implemented algorithm

Templates: *sar_application_SDN.py*