

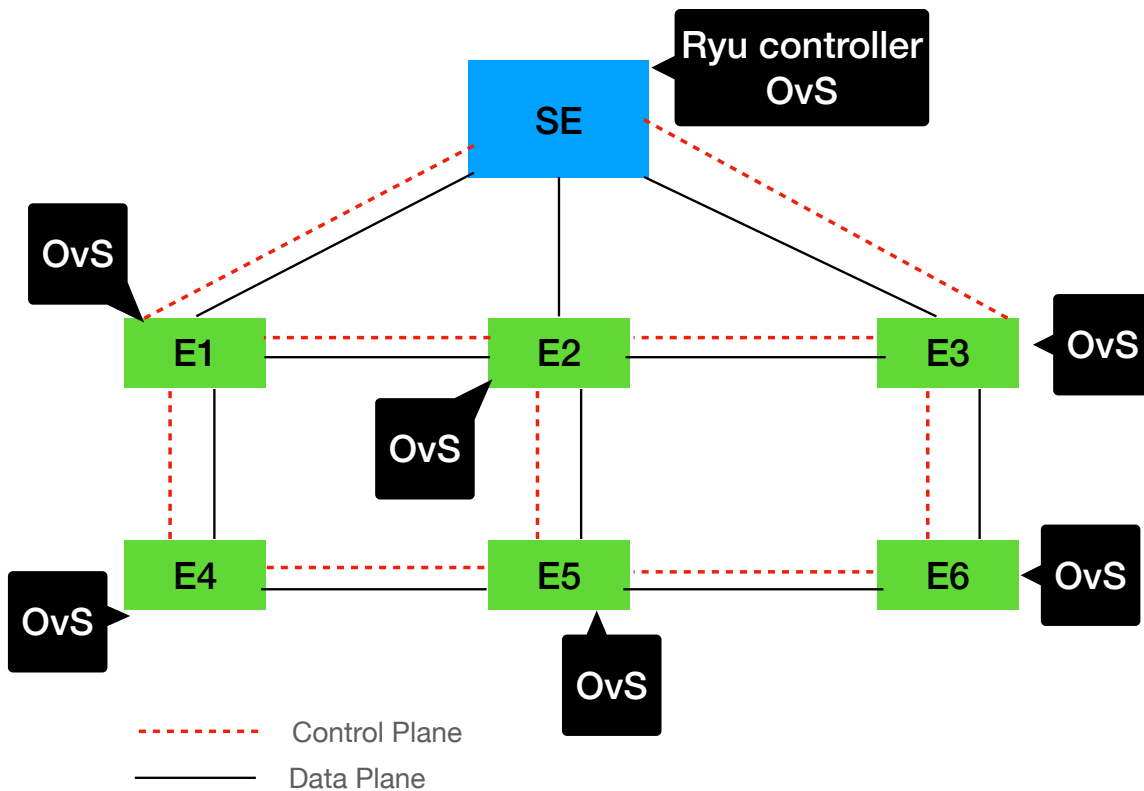
Test a Primary Route of Static Routing

SDN Testbed

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Network Setup & Assumptions



1. Test with the code in Github [https://github.com/tawanmeow/privacy-sdn-logfile/tree/main/flowrules_x]

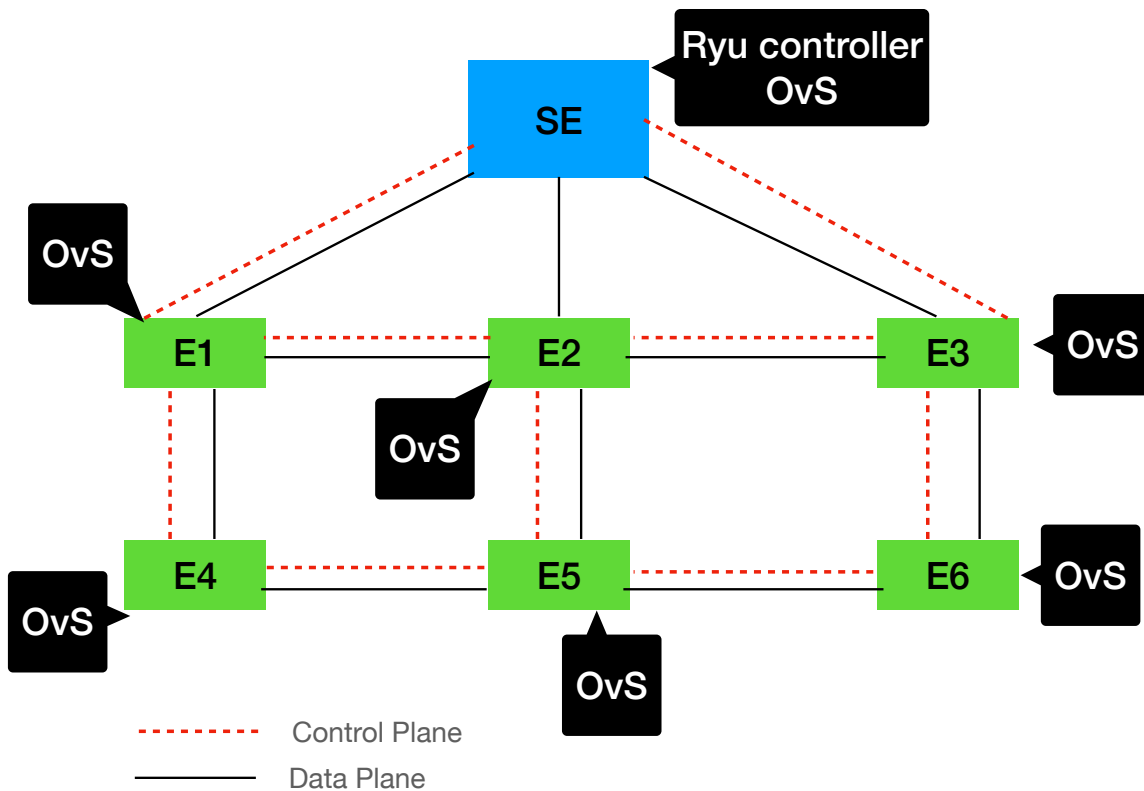
Assumptions:

1. Control plane and Data plane are separated interface (out-of-band mode)
2. Control plane always up and connect to the controller
3. No link failure occur
4. Reactive mode (Static routing)

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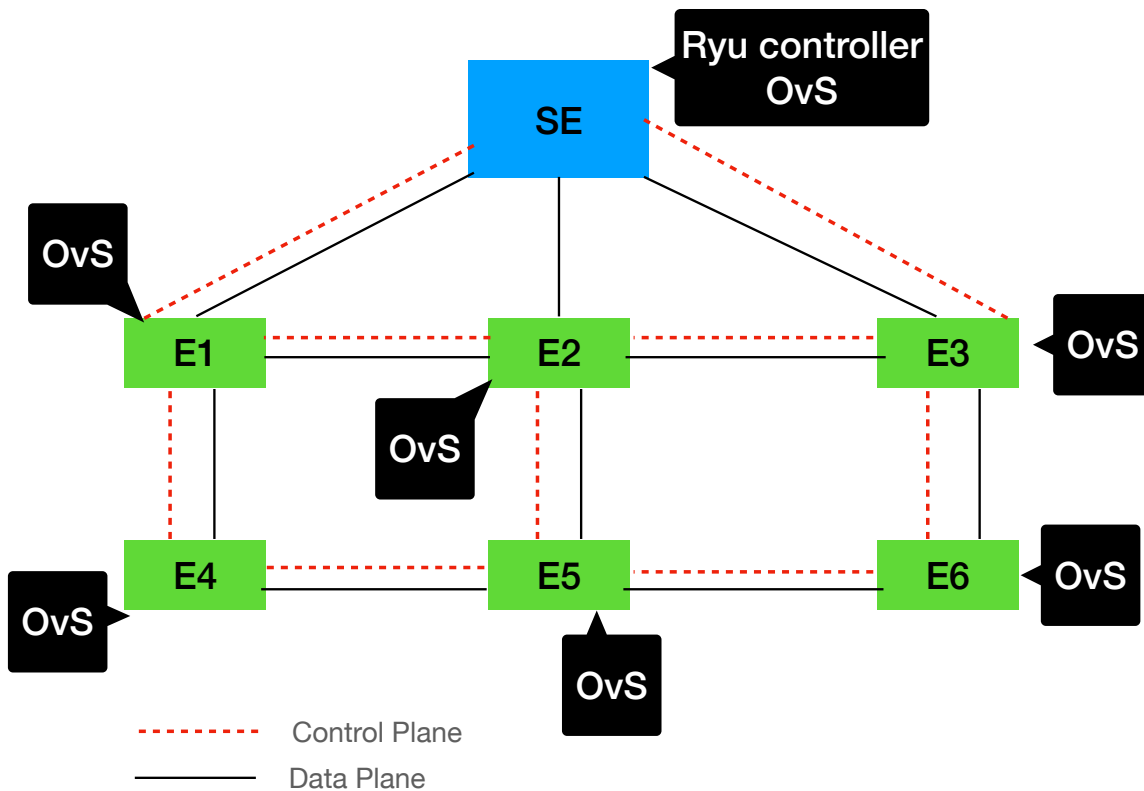
1. Controller has flow rules
2. OvS does not has a flow table
3. OvS knows only where its bridges connect to

Test the network connectivity



1. Every edge node sends the packets to SE
> use iperf3 & check tcpdump
> record the pcap
2. Every edge nodes sends the packets to each other
> use iperf3
> record the pcap

Test max flows



1. Every edge node sends simultaneously the maximum packets to SE
 - > use iperf3 & check tcpdump
 - > record the pcap
 - > record the packet drop of every node and SE
 - > See how much the SE can receive the packet
 - > See how much the packet delay
 - > See the node CPU utilization (using `top` command) of every node

Expected results: if the every edge node increases the traffic, we will see more packet drops (corresponding to increasing cpu utilization)

