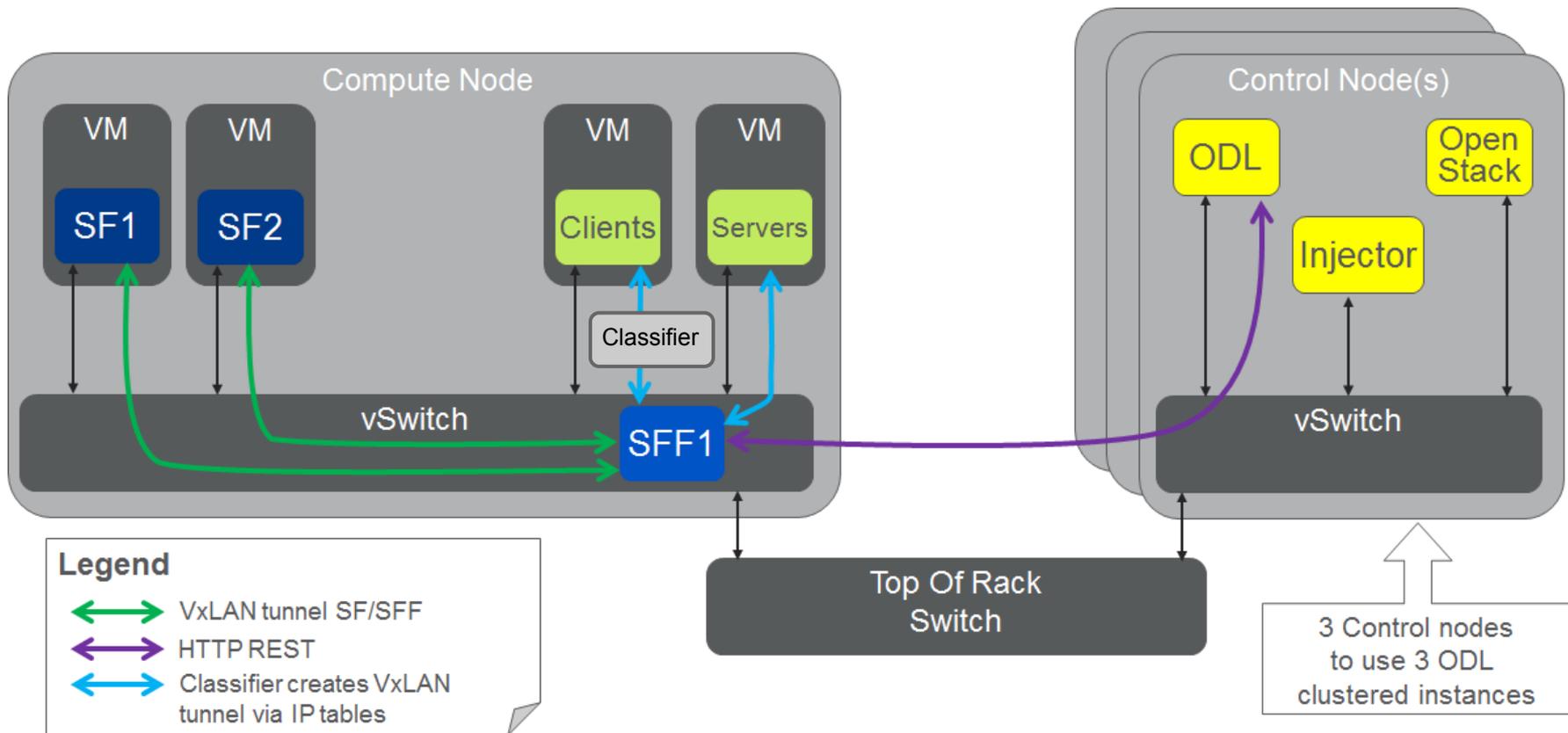# OPNFV SFC

Initial Setup
The Initial version of SFC in OPNFV

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First Attempt, more versions in later slides

OPNFV SFC Initial NW Topology

Results: Platform Dependencies

These all need to be "negotiated" with the OPNFV TSC

- A Lab for the demo (Ericsson lab)
- We need a version of OVS that has NSH
  - No oficial OVS NSH patch available until the IETF NSH spec is formalized
  - 2 versions available, which to use???
    - Cisco patch uses kernel
    - Intel version uses dpdk (much faster)
- DPDK 2.0
- Linux Kernel 2.6 or later, preferable Ubuntu 14.04
- Control Node:
  - OpenDaylight SFC (clustered)
  - Openstack (Horizon included)
  - HA => 3 control nodes for clustered ODL SFC

- Compute Node:
  - OVS (with NSH)
  - Kvm
  - VNF
  - libvirt
  - In the future, we'll want more control nodes, with 1 SFF per control node
- Traffic Generator
  - This host can be used for jump-start
- NICs
  - 1-10 G on compute node
  - 1-10 G on traffic generator
- Control ToR L2 switch to connect the 5 different nodes
- ToR 10G for Compute <= => Traffic generator

Use Cases, Testing, etc

Possible Types of SF's for different use cases

- FW (openwrt)
- QoS (rate limiting?) bronze members get less bandwidth
- Parental control
    - playboy.com gets blocked, facebook.com doesn't
- Header Enrichment would be nice, but may be problematic due to TCP Proxy problems

We need to write test cases for Yardstick

- Test cases
    - RSP 1, packets go to that SF only
    - RSP 2, packets go to 2 SFs
    - No packets are dropped
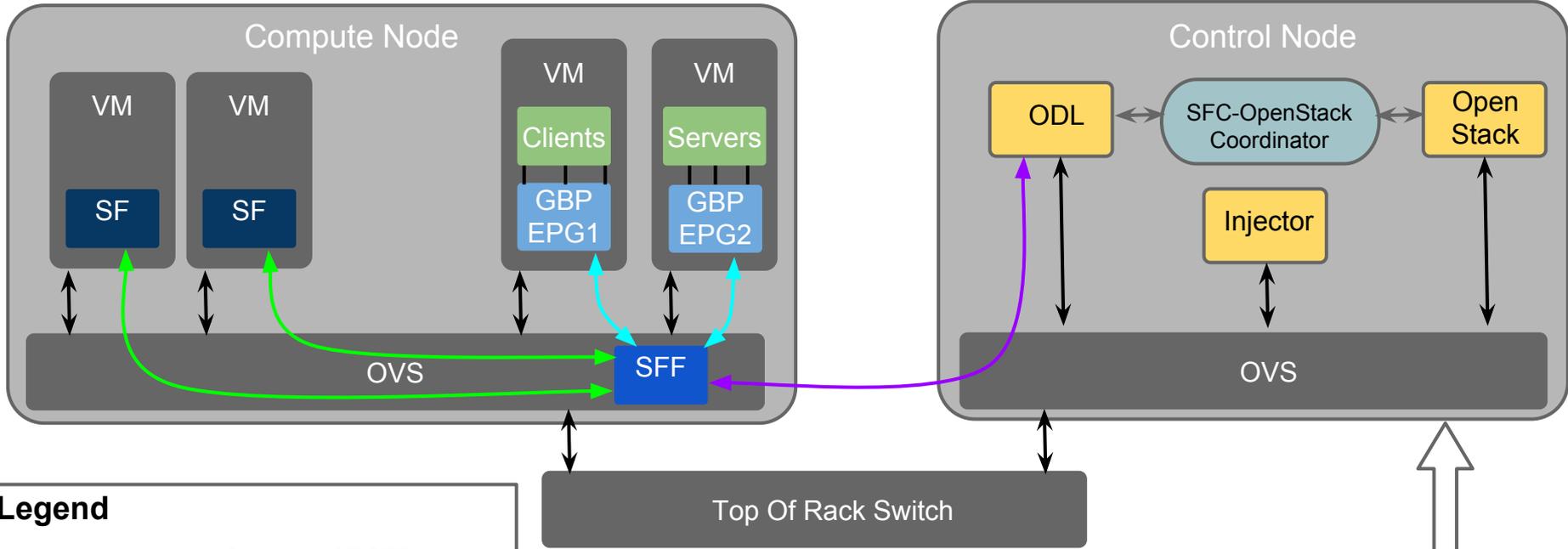- Just send an email to Ana Cunha with these cases, and she'll get things setup

Open Daylight SFC code

- We need a concrete version of all ODL source code that will be built, and updated as needed
- This would also serve to get patches for critical ODL bugs
- Lets just start this way, instead of waiting until later when its critical

OPNFV SFC code

- We may need an OPNFV git repo to store SFC changes specific to OPNFV

OPNFV SFC Initial NW Topology, V2