Using Open vSwitch for service function chain (SFC) and SFC proxy to realize NFV

November 17, 2015
Yukihiro Nakagawa, Yosuke Takano, Chunghan Lee, Ryouichi Mutoh, and Naoki Oguchi
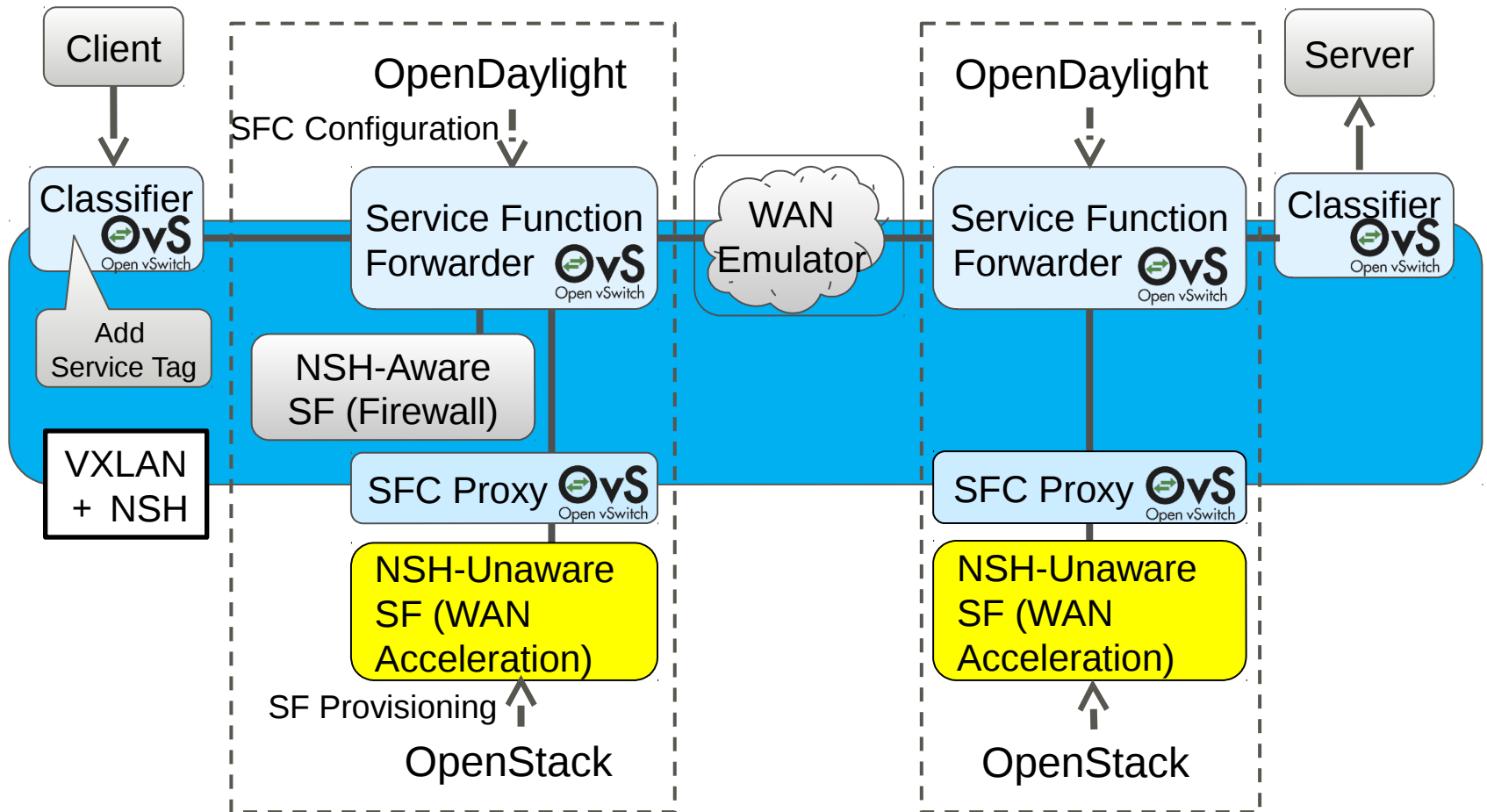Fujitsu Laboratories Ltd.

Service Function Chain (SFC)

- A Service Function Chain (SFC) is an ordered set of service functions and Network Service Header (NSH) is a service tag for SFC.

- By changing the service tag, we can provide service function(s) to a customer on demand.

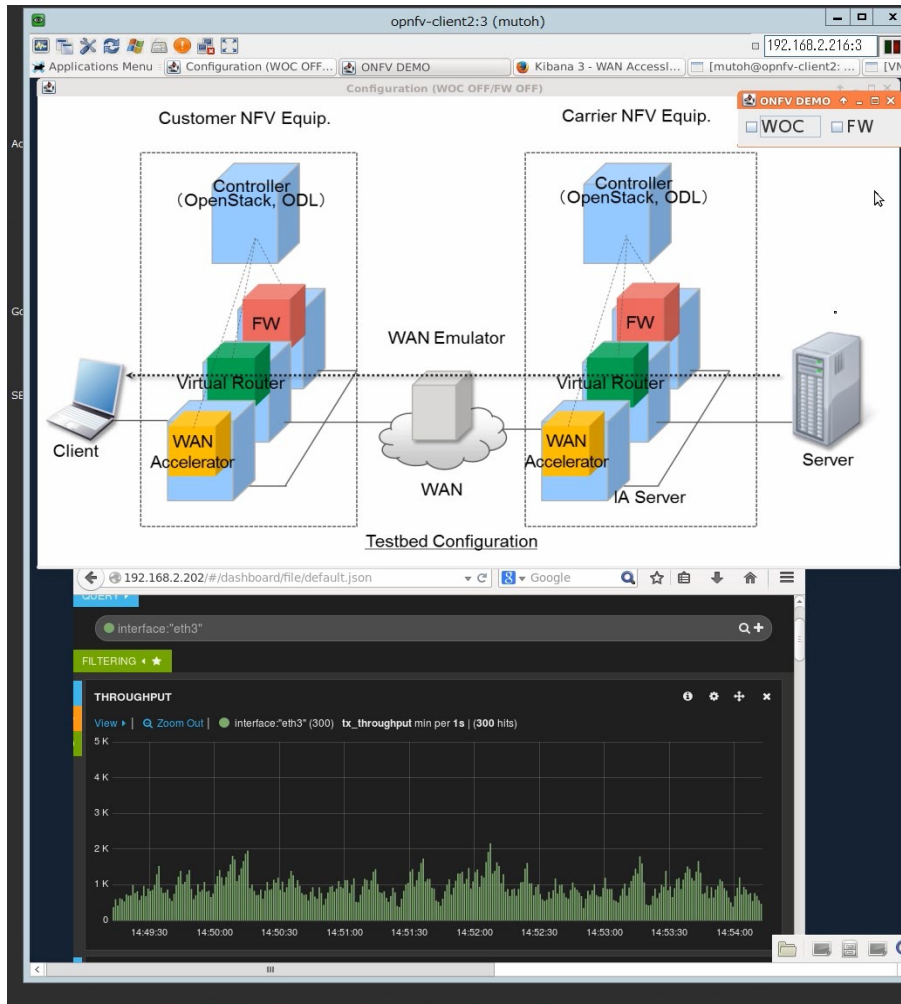- We use OVS for SFC and SFC proxy to configure service chaining of SFC-unaware service functions.

We will show a demonstration of the service chaining using Network Service Header (NSH) for WAN acceleration.

Demo Configuration

- Pre-configure service chaining using OpenDaylight
- On demand, change service tag (NSH) to turn on/off WAN acceleration
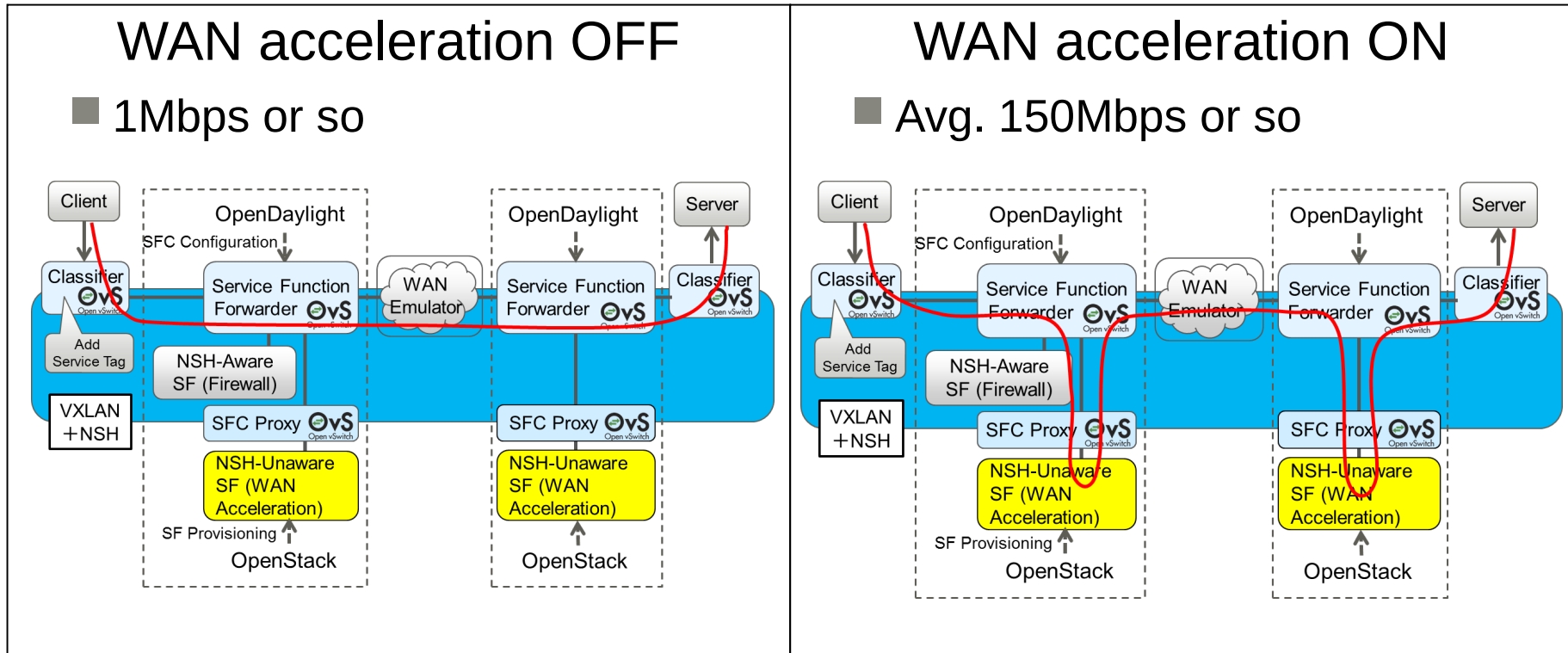
Demonstration

Communication Performance

FUJITSU

- **Measured iperf communication performance using WAN acceleration on/off:**
  - WAN Emulator （netem） configuration: RTT=200ms, Loss 0.5%
- **The network performance can be improved on demand.**

We will be using this testbed for the evaluation of end-to-end QoS in WAN which is important for NFV infrastructure.

Thank you.

FUJITSU

shaping tomorrow with you