

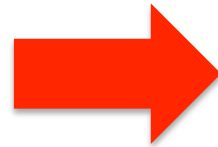
# IETF 94 SFC Hackathon Kick-off

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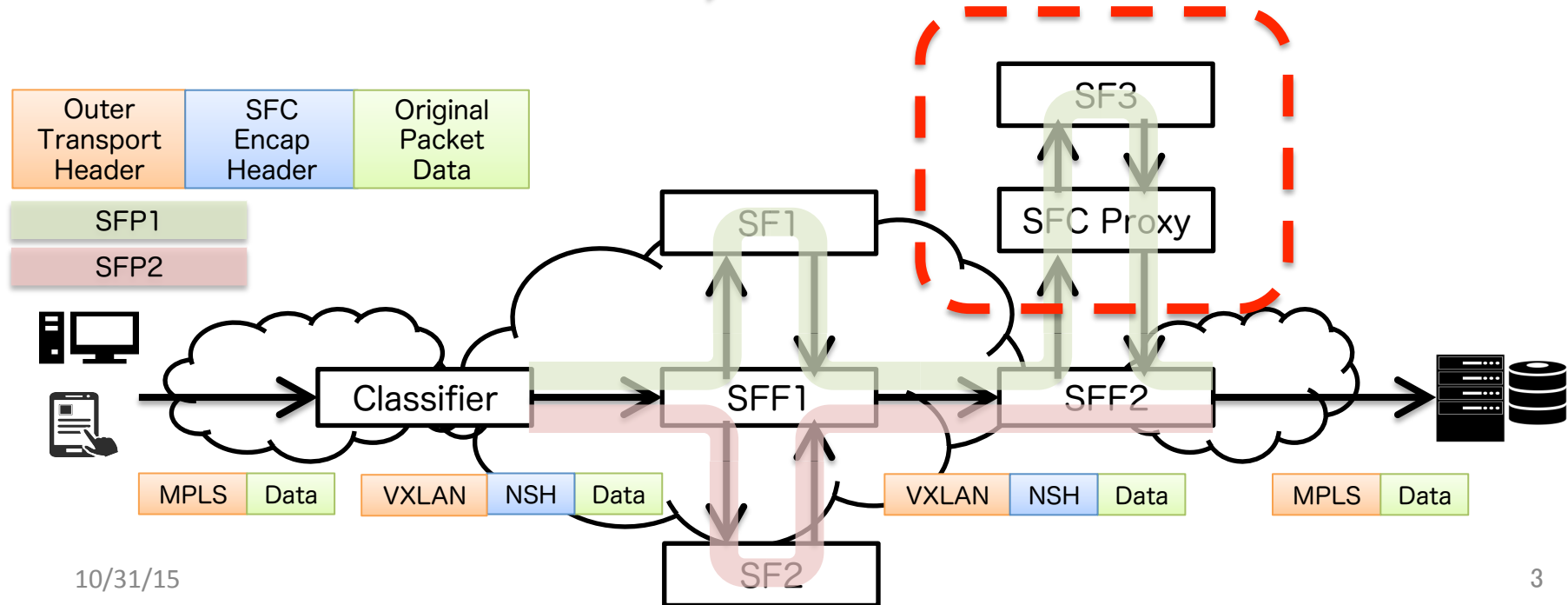
# Motivation

- NSH[1] aware SF is not available right now.
- To provide the SFC mechanism for Legacy SF, SFC Proxy is defined in SFC Architecture[2].
- The behavior of SFC Proxy is defined in SFC Header Mapping for Legacy SF[3].
- Now we need an implementation of SFC Proxy.
  - [1] draft-ietf-sfc-nsh-01
  - [2] RFC 7665
  - [3] draft-song-sfc-legacy-sf-mapping-06

# SFC Architecture(RFC 7665)



SFC Header Mapping for Legacy SF  
draft-song-sfc-legacy-sf-mapping-06



# In this Hackason

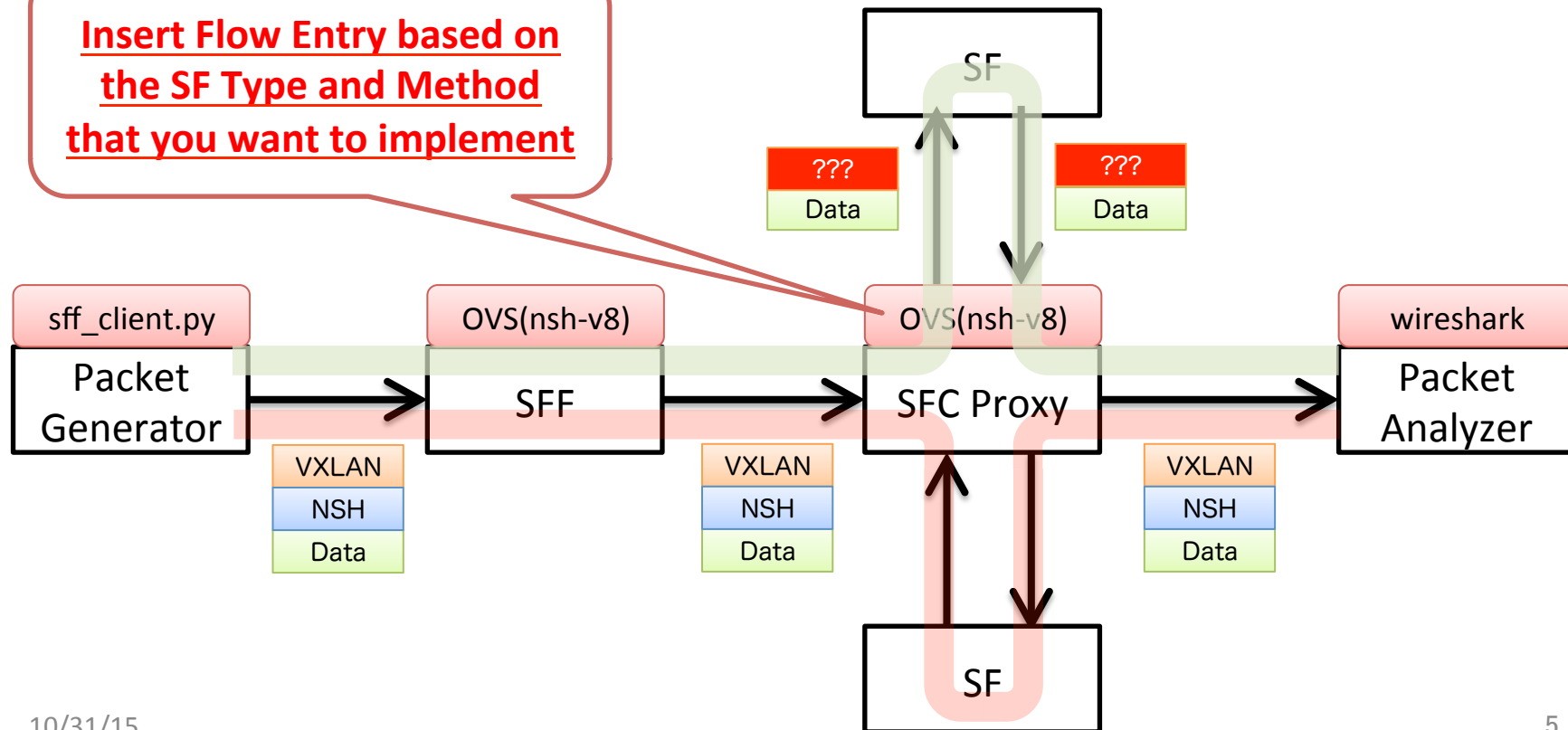
1. Discuss the most realistic situation from list
2. Pick up your project
3. Implement in OVS
4. Verify
5. Publish the result

SF Type	Methods
Transparent	MAC
	VLAN
	Q-in-Q
	VXLAN
	5-Tuple
Non Transparent	TBD

SF Type classification by  
draft-song-sfc-legacy-sf-mapping-06

# Logical Topology

Insert Flow Entry based on  
the SF Type and Method  
that you want to implement



# Developing Environment

- We prepared github repository
  - <https://github.com/toshirin/sfcpxy>
  - You can download vagrant image(around 3GByte).
  - In venue, we'll provide this image via USB Memory.
- Champions help you
  - Katsuhiko Horiba [qoo@sfc.wide.ad.jp](mailto:qoo@sfc.wide.ad.jp)
  - Toshiyuki Kubo [toshiyuki.kudo@alaxala.net](mailto:toshiyuki.kudo@alaxala.net)
  - Kengo Naito [k.naito@nttv6.jp](mailto:k.naito@nttv6.jp)

# Important Links

- Github to upload your work
  - <https://github.com/toshirin/sfcpxy>
- Documents
  - [https://github.com/toshirin/sfcpxy/blob/master/sfc\\_proxy.pdf](https://github.com/toshirin/sfcpxy/blob/master/sfc_proxy.pdf)
- RFC and Internet-Draft
  - <https://tools.ietf.org/html/draft-song-sfc-legacy-sf-mapping-06>
  - <https://tools.ietf.org/html/rfc7665>
  - <https://tools.ietf.org/html/draft-ietf-sfc-nsh-01>

# Extra Theme

- OpenDayLight SFC Module Plugin
  - Deploy SFC Proxy when you deploy NSH unaware SF from ODL SFC.

The screenshot displays the OpenDayLight SFC Module Plugin web interface. The top navigation bar includes links for Service Nodes, Service Function Forwarders, Service Functions (highlighted), Service Function Chains, Service Function Paths, Access Lists/Classifiers, NSH Metadata, IPFIX APPID, System Info, and Config. The main content area is divided into two panels: 'Service Function' and 'Data plane locator'. The 'Service Function' panel has a 'Data template' dropdown set to 'Type in to creat...' and fields for 'Service Function name', 'Service Function type', 'IP Management Address', 'URI of REST based management', and 'NSH aware'. The 'Data plane locator' panel has a 'Remove this data plane locator' button, fields for 'Data plane locator name', 'Data plane locator type', 'Transport type', and 'Service Function Forwarder name', and an 'Add data plane locator' button. A yellow dashed box highlights the 'NSH aware' section, which includes a 'Select awareness' dropdown menu with 'True' and 'False' options. The bottom right corner shows a page number '8'.



# Other Extra Themes

- NSH Metadata Support
- Performance Improvement
- IBN Support
  - draft-dolson-sfc-hierarchical