OpenDaylight SFC Update

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LINUX FOUNDATION
COLLABORATIVE PROJECTS

Agenda

1. Intro to Opendaylight
2. Opendaylight SFC Introduction
3. SFC Architecture
4. Feedback to WG

What is OpenDaylight

- An OpenSource Project to build an ecosystem of OpenSource SDN software
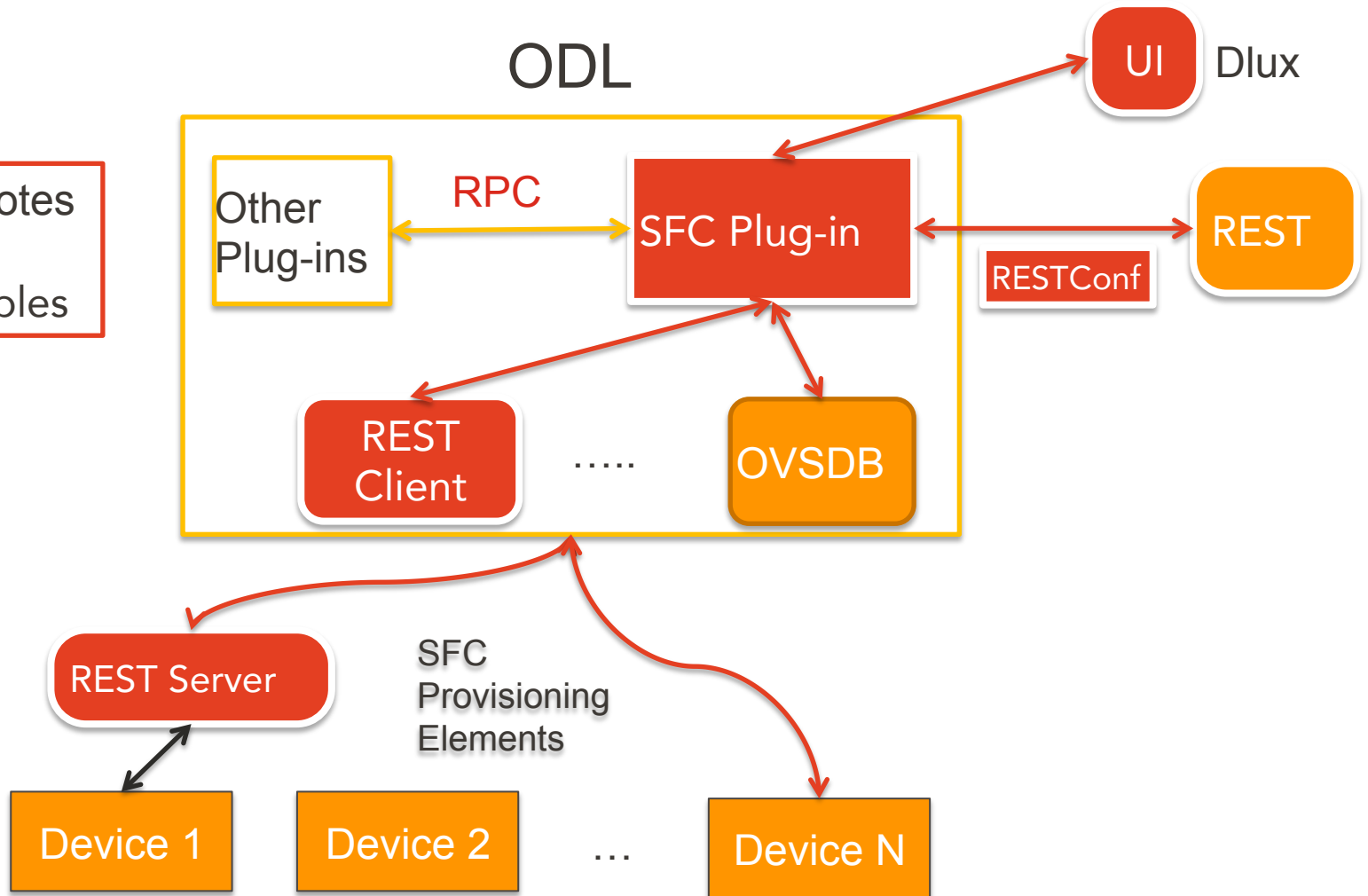
    - Multi-project

    - Multi-vendor

OpenDaylight SFC Introduction

- Project Accept for Helium Release (September Q4)
  - https://wiki.opendaylight.org/view/Helium_Release_Plan
- Companies Involved : Cisco, Contextream, Brocade, IBM, Ericsson, Citrix, Redhat
- Project Goals
  - ODL service chaining service
  - North-bound APIs
  - South-bound interface to plugins
  - Plugin changes needed to provision chains
  - User focused service chaining application
  - Classifier capability

Architecture

ODL

Red denotes Project Deliverables

Other Plug-ins

RPC

SFC Plug-in

UI — Dlux

REST

RESTConf

REST Client

.....

OVSDB

REST Server

SFC Provisioning Elements

Device 1

Device 2

…

Device N

Architecture Overall Approach

- The user and the operator of the system can be in two different domains.

- Keep it simple. In order to create Service Function Paths minimum input is required from user, the system crunches data and adds what is necessary.

- All components modeled in Yang. Boilerplate code and REST interface generation derived from Yang.

- Provide feature set for concrete use-cases, everything else augmentable.

Feedback to WG

- ✓ **Current architecture document is good. No headaches.**
- ✓ In a nutshell: **Loose coupling, small number of components**
- ✓ Keep the number of S**, N** as low as possible.
- ✓ Clear separation of SFC and SFP was key.
- ✓ SFF is hub where everything else attaches.
- ✓ SF is basic SFP building block.
- ✓ SN is used as container for SFF, good construct from user stand-point
- ✓ SFC Provisioning Element
- ✓ **"keep it real"**
- ✓ Now the demo…

Resources

- More information:
  - https://wiki.opendaylight.org/view/Service_Function_Chaining:Main

OPENDAYLIGHT

www.opendaylight.org

Thank you