OpenDaylight Magnesium DDF

Sept 26-27 Antwerp, Belgium

OpenDaylight Magnesium Developer Forum - September 26-27 Antwerp, Belgium 2019

If you are a developer within the OpenDaylight Project or would like to become one soon, please join us at our next OpenDaylight Developer Forum. This event is by developers for developers. Topics for this event are collected and decided in two different ways.

Please see the section below and add any topics that you would like to lead and/or attend. List the topic, and your name. If there is a topic that you would like discuss, but you do not feel that you can lead it, please list the topic below and indicate that you are "Interested in Attending", then indicate TBD as the "Topic Leader".
Remember If you haven't yet registered for the DDF you need to do so at this URL: TBA
Post your name below in the Attendees block

Logistics

Registration

Radisson Blu Astrid Hotel
Koningin Astridplein 7B
Antwerpen 2018
Belgium

2nd Floor, Diamond Meeting Room

Schedule

DDF Schedule

Topics

<Sample Topic>

- **Short Description**: One line description of topic
- **Detailed Description**: Detailed description of topic
- **Topic Leader**: name 1, name 2, ...
- **Estimated Audience Size (1-15 / 15-30 / 30-50 / >50):**
- **Interested In Attending**: If you are interested in this discussion and would like to participate in it, please add your name and email here (one name/email per line please). We'll use this information when building the schedule so that we minimize overbooking people where possible.

Automated Test Infrastructure

- **Short Description**: Scaling the Test Infrastructure using Docker Containers
- **Detailed Description**: Currently, most of the sanity/regression in the community is done at limited scale. This would not catch performance/scale penalties introduced as part of the bug fix, as the system would not be sufficiently stressed in this environment. The goal of the presentation is to provide a method to scale the regression setups to test at 60-100DPN scale, without incurring significant hardware costs.
- **Topic Leader**: Ashvin Lakshmikantha
- **Estimated Audience Size (1-15 / 15-30 / 30-50 / >50):**
- **Interested In Attending**: If you are interested in this discussion and would like to participate in it, please add your name and email here (one name/email per line please). We'll use this information when building the schedule so that we minimize overbooking people where possible.
  - Ashvin Lakshmikantha, Dayavanti Kamath
  - Luis Gomez

Path Computation in BGPCEP

- **Short Description**: Path Computation implementation in BGPCEP
- **Detailed Description**: The presentation will show how we add Path Computation behaviour to BGPCEP project in order to add conformity to RFC 5440. With this new function, the PCE server is able to reply to a PCE Request message with a PCE Response message conveying a computed path that respect the requested constraints. We will present the algorithm we have implemented for the Path Computation as well as how the Traffic Engineering Database (TED) needed by the algorithm is automatically computed by learning network topology through BGP-LS.

We will present how we have modelled the TED in yang and the difficulties encountered to modelled a connected and oriented graph. This graph, which represent the network topology is used by the algorithm to compute path. Bandwidth, Delay, Loss and other parameters could be used as constraints for Path Computation. The presentation will ended with a demo.

- **Topic Leader**: Olivier Dugeon (Orange Labs)
- **Estimated Audience Size (1-15 / 15-30 / 30-50 / >50):**
- **Interested In Attending**: If you are interested in this discussion and would like to participate in it, please add your name and email here (one name/email per line please). We'll use this information when building the schedule so that we minimize overbooking people where possible.
    - Guillaume Lambert
    - Luis Gomez
    - Daniel De La Rosa(remote)

Inter-domain Path Computation in BGPCEP

- **Short Description**: Inter-domain Path Computation between different ODL
- **Detailed Description**: In complement to the Path Computation presentation, we will show how we add support to RFC 5441 (Backward Reverse Path Computation) to BGPCEP in order for ODL to co-operate for inter-domain Path Computation. Each ODL control its own network and establish a PCE peering with its neighbour ODL. We also present how we implemented new draft to co-ordinate configuration of end-to-end path in the different domain. This inter-domain behaviour is not only helpful for inter-carrier connectivity but it is also usable in a typical Data Centre interconnection use case. The presentation will ended with a demo showing different ODL in actions.
- **Topic Leader**: Olivier Dugeon (Orange Labs)
- **Estimated Audience Size (1-15 / 15-30 / 30-50 / >50):**
- **Interested In Attending**: If you are interested in this discussion and would like to participate in it, please add your name and email here (one name/email per line please). We'll use this information when building the schedule so that we minimize overbooking people where possible.
    - Guillaume Lambert
    - Luis Gomez
    - Daniel De La Rosa (remote)

OpenDaylight Roadmap and Future planning

- **Short Description**: Community discussion on where ODL is heading and what we need to do to get there.
- **Detailed Description**: Discussion and planning session for ODL Roadmap, features and challenges. Bonus goal should be to create a wiki page that highlights the areas that we need more development resources and quick onboarding for those features/projects.
- **Topic Leader**: Abhijit Kumbhare Casey Cain
- **Estimated Audience Size (1-15 / 15-30 / 30-50 / >50): 20**
- **Interested In Attending**: If you are interested in this discussion and would like to participate in it, please add your name and email here (one name/email per line please). We'll use this information when building the schedule so that we minimize overbooking people where possible.
    - Guillaume Lambert
    - Anil Belur (remote)
    - Luis Gomez
    - Olivier Dugeon
    - Daniel De La Rosa (remote)
    - Thanh Ha (zxiiro) (remote)

JSON-RPC improvements

- **Short Description**: Discuss recent improvements and gather new requirements for future releases
- **Detailed Description**: JSON-RPC Ext has recently made some improvements like HTTP/WS bus protocols and AAA. We want to add writing
- **Topic Leader**: Shaleen Saxena (shaleen.external@gmail.com)
- **Estimated Audience Size (1-15 / 15-30 / 30-50 / >50): 1-15**
- **Interested In Attending**: Attend remotely.
    - Luis Gomez
    - Daniel De La Rosa (remote)

Model-to-model translation with **ODL/plastic**

- **Short Description**: Discuss revealing a new open source tool to facilitate model-to-model translations
- **Detailed Description**: This is a public reveal of a proposed ODL tool library that helps facilitate model-to-model translations. We will cover why you might want to use this, what it can and cannot do, and example mappings. This tool follows a "translation by intent" philosophy that emphasizes declarative specifications but allows clients to wade into the translation pipeline from writing no code, to writing schema independent logic, to having full control over every detail of the output.
- **Topic Leader**: Allan Clarke
- **Estimated Audience Size (1-15 / 15-30 / 30-50 / >50): 1-15**
- **Interested In Attending**: If you are interested in this discussion and would like to participate in it, please add your name and email here (one name/email per line please). We'll use this information when building the schedule so that we minimize overbooking people where possible.
    - Luis Gomez
    - Olivier Dugeon
    - Daniel De La Rosa (remote)
    - Thanh Ha (zxiiro) (remote)

Micro-services friendly nimble distribution and extensions

- **Short Description**: Build static feature distribution not dependent on OSGi, thereby extending ODL to be consumable in a wider community of non-karaf/osgi environments.
- **Detailed Description**: In most customer use cases, the hot-deployability of karaf is not needed. Nor is the flexibility provided by osgi/karaf in start /stop features. More so as we move to the microservice world, you no longer need (or want to) to change the definition of what the microservice is running. If something new is needed, spawn a new microservice and stop the old. This project involves changing ODL to run without karaf/OSGi so that it is deployable in such a microservices model. This will involve the module wiring to work without karaf/blueprint/osgi. Thereafter, create pre-defined deployment templates for key use cases that are statically defined at build time. This project will also make ODL accessible to the wider non-OSGi developer community.
- **Topic Leader**: Tejas Nevrekar (tejas.nevrekar@gmail.com)
- **Estimated Audience Size (1-15 / 15-30 / 30-50 / >50): 1-15**
- **Interested In Attending**: If you are interested in this discussion and would like to participate in it, please add your name and email here (one name/email per line please). We'll use this information when building the schedule so that we minimize overbooking people where possible.
    - Luis Gomez
    - Tejas Nevrekar
    - Guillaume Lambert
    - Anil B (remote)
    - Olivier Dugeon
    - Daniel De La Rosa (remote)
    - Stefan Kobza (remote)
    - Robert Varga (remote)

Controller High-Availability (HA) using Active-Standby model

- **Short Description**: Controller HA using Active-Standby model
- **Detailed Description**: In any production deployment, single point of failure is not an option and so High Availability (HA) is a must. Being a critical component of solutions it is used in, this applies to SDN Controller as well. OpenDaylight provides features like clustering and EOS towards this. But the current solutions may not be suitable for certain use-cases and options are required for users to choose from. This talk will share our experience of building OpenDaylight based HA aware application using Active-Standby model.
- **Topic Leader**: Ajay Lele (ajayslele@gmail.com)
- **Estimated Audience Size (1-15 / 15-30 / 30-50 / >50):**
- **Interested In Attending**: If you are interested in this discussion and would like to participate in it, please add your name and email here (one name/email per line please). We'll use this information when building the schedule so that we minimize overbooking people where possible.
    - Ajay Lele
    - Tejas Nevrekar
    - Luis Gomez
    - Olivier Dugeon
    - Daniel De La Rosa (remote)

Southbound Proxy for openflow plugin

- **Short Description**: An abstraction to openflow south bound plugin that is responsible for flow and group push and device synchronisation.
- **Detailed Description**: This feature provides an abstraction to openflow plugin interaction for the other ODL apps. The following are features supported:
    - Flow and group push to the device using corresponding rpc services of openflow plugin.
    - Device synchronisation with flows and groups based on device config and operational.
    - Notification service, that provides device , flow and group add/deleted notifications to the registered consumers.
    - A state machine that supports application and device reconciliation.
- **Topic Leader**: Venkata Satya Jonnadula (rsankar@luminanetworks.com)
- **Estimated Audience Size (1-15 / 15-30 / 30-50 / >50): 1-15**
- **Interested In Attending**: If you are interested in this discussion and would like to participate in it, please add your name and email here (one name/email per line please). We'll use this information when building the schedule so that we minimize overbooking people where possible.
    - VenkataSatya Jonnadula (Ravi) (Remote)
    - Tejas Nevrekar
    - Luis Gomez

High Scalability solution using ODL

- **Short Description:** A modern horizontally scaleable solution architecture using ODL deployed as a micro-service.
- **Detailed Description**: The scale/agility requirements for operations at service providers need a modern cloud native architecture which can adapt gracefully to the demands of modern day applications. This presentation will highlight an example of such architecture which uses ODL as a primary component to be managed by an external orchestrator like Kubernetes which is becoming a standard in orchestration. It will explore various aspects of deployment which are essential in managing such a scaleable system.
- **Topic Leader**: Atul Gosain
- **Estimated Audience Size**: 1-15
- **Interested In Attending**: Tejas Nevrekar
    - Luis Gomez
    - Shaleen Saxena
    - Guillaume Lambert
    - Olivier Dugeon
    - Daniel De La Rosa (remote)

Using Opendaylight in Hybrid Cloud: issues/challenges

- **Short Description**: Issues or Challenges on Using Opendaylight in Hybrid Cloud
- **Detailed Description**: In hybrid cloud environment, VMs, bare metals and containers will coexist in general, that means we have Openstack and Kubernetes in one infrasturtue, it is a huge challenge to unify networking for VMs, bare metals and conatiners, Opendaylight is a not-bad option for this, in this talk, I'll elaborate the opportunities and challenges, for example, containerizing Opendaylight people all care, I also will call the community for immediate action.
- **Topic Leader**: Yi Yang <yangyi01@inspur.com>, ...
- **Estimated Audience Size (15-30):**
- **Interested In Attending**: Yi Yang
    - Tejas Nevrekar
    - Luis Gomez
    - Olivier Dugeon
    - Daniel De La Rosa (remote)

ODL and ONAP synch meeting

- **Short Description:** Meeting goal is to cover security, licensing and ODL packaging.
- **Detailed Description**: Review of known vulnerabilities inherited from ODL to ONAP and identification of action plan to solve them. Discussion on linensing APL vs. EPL. Addressing ODL packing for ONAP.
- **Topic Leader**: Casey Cain Pawel Pawlak
- **Estimated Audience Size**: 1-15
- **Interested In Attending**:
    - Pawel Pawlak
    - Guillaume Lambert
    - Anil Belur(remote)
    - Luis Gomez
    - Olivier Dugeon
    - Thanh Ha (zxiiro) (remote)

Magnesium MRI lookahead

- **Short Description**: An overview of Magnesium MRI window
- **Detailed Description**: Magnesium is landing several important changes, detailed in https://wiki.opendaylight.org/view/Magnesium_platform_upgrade , this topic will discuss them is some depth and also provide an update on where we are and what the next steps are.
- **Topic Leader**: Robert Varga (remote)
- **Estimated Audience Size (15-30):**
- **Interested In Attending**: