# ODL - Our Recent Testing with Container Deployment and Observations

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What to look forward?

- Recently we were automating some manual configurations using some tools

- Having been associated with Opendaylight, we tried to use ODL in some of the scenarios, using ODL deployed in containers

- We are presenting the observations and results.

Deployment

Netconf Service

Netconf Client Pod

Bgp-ls Service
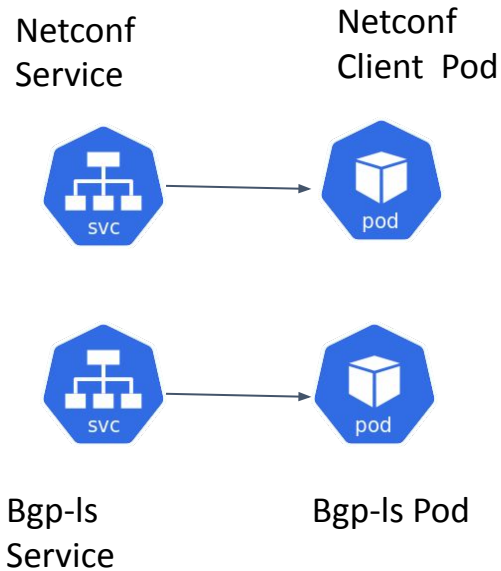
Bgp-ls Pod

Netconf Service	Exposed API to mount devices/other config
Netconf Client Pod	Static distro with netconf-client feature
BGP-LS service	API to peer and network-topo.
BGP-LS POD	Static distro with bgp-topology feature.

Sequence - Netconf Client as Service
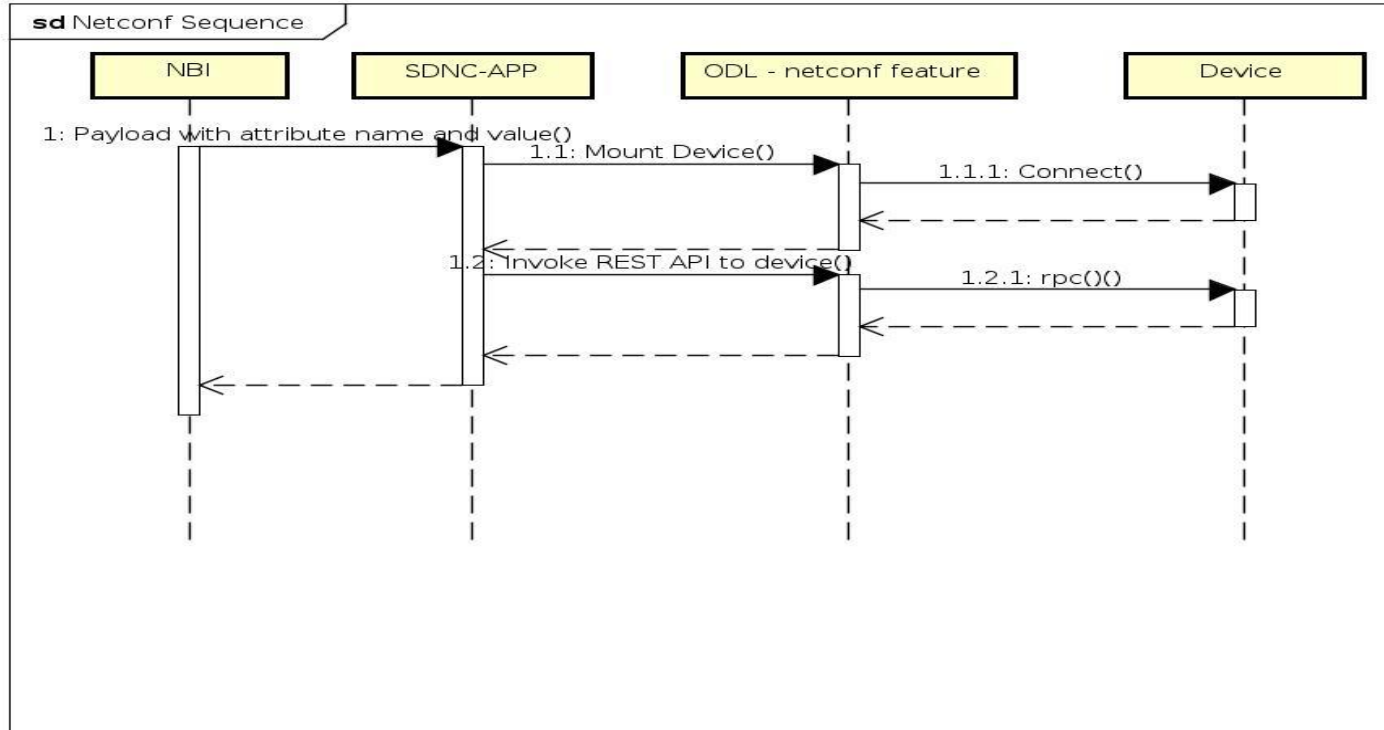
Solution

- Used ODLMicro with netconf

- Used workflow app like camunda for the sequence to mount, invoked rpc and disconnect

- Used candidate to update and validate for rollback.

- App was written in Python as an external APP that uses ODL REST API

Observations

- Some devices were only supporting Netconf:1.0, there is no documentation to use ODL with Netconf:1.0.

- The image size with odlmicro as well as static distribution was greater than expected.

- Could not execute the container as replicaSet. It would require some project like alt-datastores for data replication. Clustering configuration was not attempted.

Other Features

- We were asked if the availabilities can be queried for some attribute and identify the rpc to be used.

- We are in progress of building a script to parse the yang, also analyzing if there is some feature in yangtools that can be used.

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Path Computation
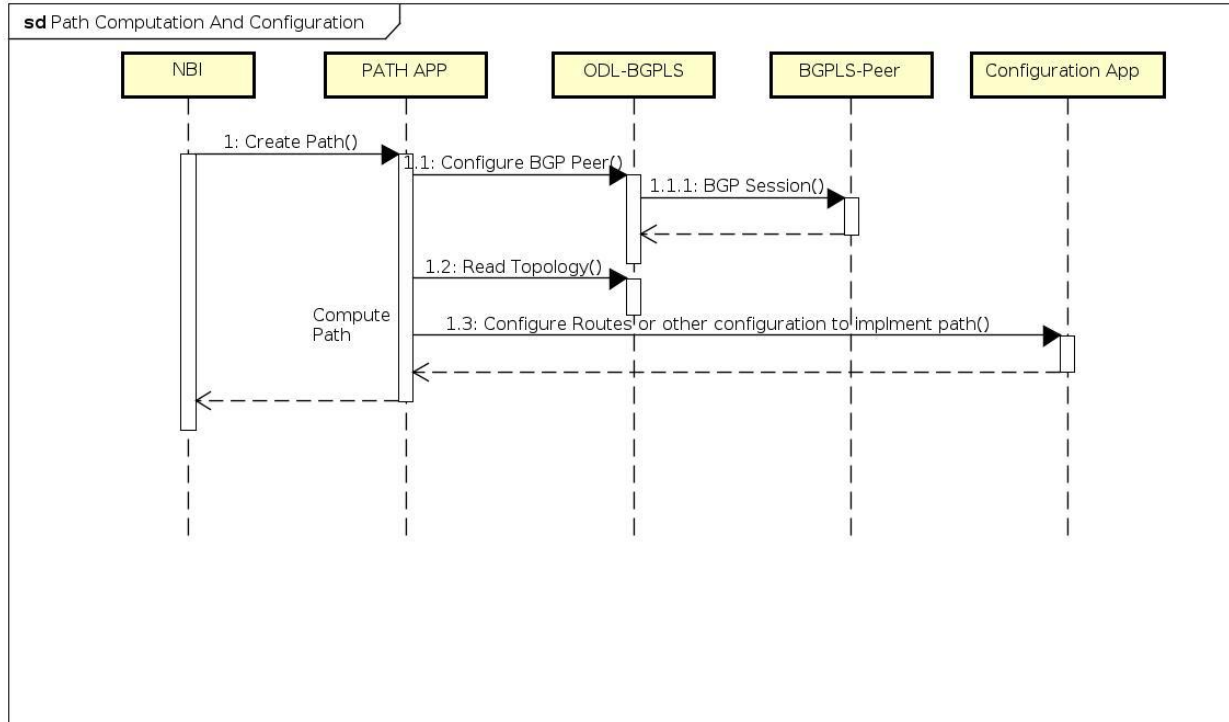
Solution (In Progress)

- Used BGP-LS as static karaf distro with bgp-topology feature

- Path Computation is being built, We are also testing the path computation and graph feature that is currently available

Observations

- Srv6 support will be required for IPv6 SR Testing

- Support for RFC's related to SR seem to be missing.

- ODL needs to list some ways to deploy in containerized environments

- Single feature ODL images (like netconf client, bgpls topology) will be very useful for such POC's

- Projects like alt-datastores should help deployment as replicaSet. (Note: Might need some implementation also)

- Basically, there should be ways to use the protocol implementation.