NetVirt

Welcome to NetVirt

Introduction

NetVirt is a network virtualization solution that includes the following components as well as others: Open vSwitch based virtualization for software switches, Hardware VTEP for hardware switches, Service Function Chaining support within a virtualized environment, support for OVS and DPDK-accelerated OVS data paths, L3VPN (BGPVPN), EVPN, ELAN, distributed L2 and L3, NAT and Floating IPs, IPv6, Security Groups, MAC and IP learning.

Netvirt would provide the following modules --

- **NeutronVPN:**

  Creates and maintains the VPN information like VpnInstances, VpnInterfaces, VpnMaps, etc.

- **ElanManager:**

  Creates the L2 forwarding rules based on the ELAN-Instance and ELAN-Interface details.

- **VpnManager:**

  Creates and maintains the Vpn Operational Information like VpnFootPrint, VpnInstanceOpData, VpnInterfaceOpData, etc.

- **FibManager:**

  Creates the L3 Forwarding Information Base (FIB) rules which is understandable by OFPlugin module and write all the populated data into FRM data store (Config-Inventory-DS)

- **BgpManager:**

  It is used for communicating between ODL Application to Quagga(Routing Engine) via Thrift Protocol. Also it provides the support for Quagga Advertised routes from DC-GW to ODL FIB Engine.

- **DHCPService:**

  It is used for providing DHCPv4 Server functionality as same as Openstack QDHCP Agent service.

- **ACLService:**

  It provides the ACL (Access Control List) in both INGRESS and EGRESS mode to VM booted neutron port.

- **NATService:**

  It provides the NATing service to openstack tenant VMs in the flavor of SNAT/Floating-IP (DNAT) for Internet Connectivity purpose.

Documentation

Getting Started for Users

Netvirt Overview

Netvirt User Guide

App co-existence with Netvirt

Project Facts

Project Creation Date: April 7,2016

Lifecycle State: Incubation

Type: App

Primary Contact: karthikeyan Krishnan <karthikeyangceb007@gmail.com> (#karthikeyan)

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Committers:

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Getting Started for Developers

- Netvirt Design doc
- NetVirt Pipeline
- IPv6 Design

Committers typically do not review changes with build failures; it is the Gerrit Owner's responsibility to get them to build. If you're facing build issues you don't know how to solve, email the app-dev list asking for help (don't just wait and expect committers to notice your proposed change and help you fix its build).

Feel free to email the app-dev list after 1 week of no movement on a (green ticked build passing) Gerrit.

Getting Started for Committers

We do not "self merge" our own changes, but add other committers as reviewers. The first reviewing committer will +1, the second reviewing committer will +2. Any other committers can merge proposed changes with at least x2 +1 from contributors.

The one exception to the rule is that we allow self merging critical changes required to unblock broken builds.

If you've been added as a Reviewer to a change you don't feel comfortable reviewing, or don't anticipate to have the time to review within say 1 week, then you may want to remove yourself from the review, ideally with a short comment, to signal that to the owner, so that he can find others willing to review (or make changes to significantly simplify or further extensively document and re-add), instead of "doing nothing" and letting reviews "linger" for too long with no action.

We aim to review all pending Gerrits which have passed Verify and have no merge conflicts and no -1/-2 (and only those) in the weekly meeting. We ignore pending Gerrits which are not Verify. (Here are those with -1/-2 reviews.)

We occasionally review the list of all pending very old Gerrits which may be should and can be abandoned (or need to poke people).

Requirements

Openstack with ODL

Release Planning and Release Notes

Release	Planning	Release Plan	Release Notes	Release Review
Hydrogen		Release Plan		Release Review
Helium	Planning	Release Plan	Release Notes	Release Review
Lithium	Planning	Release Plan	Release Notes	Release Review
Beryllium	Planning	Release Plan	Release Notes	Release Review
Boron	Planning	Release Plan	Release Notes	Release Review
Carbon	Planning	Release Plan	Release Notes	Release Review
Nitrogen	Planning	Release Plan	Release Notes	Release Review
Oxygen	Planning	Release Plan	Release Notes	Release Review
Fluorine	TBD	TBD	TBD	Release Review
Neon	TBD	TBD	TBD	Release Review
Sodium	TBD	TBD	Release Notes	Release Review
Magnesium	TBD	TBD	Release Notes	Release Review
Aluminium	TBD	TBD	TBD	TBD (Current Development Release)

Miscellaneous

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IRC: freenode.net #opendaylight-netvirt

Mailing List: app-dev@lists.opendaylight.org

Archives: mailing list archives

Meetings: See Community Meetings

Repository:

git clone https://git.opendaylight.org/gerrit/netvirt

Jenkins: netvirt Jenkins Silo

Trello Board: Genius Trello Board

Open Bugs:

- **Open Bugs**
- **Report Bugs**

- NetVirt-Related Presentations
- Using the VPN Service NetVirt with OpenStack