

# Rel C Planning

## C Release Planning

According to our [roadmap](#), we have successfully accomplished our **Phase 1** Work in **Brahmaputra Release** covering the design and implementation of IPv6 vRouter using service VM in native OpenStack environment and ODL-integrated environment.

In **Phase 2**, we are planning the following features for **C Release**:

- IPv6-only infrastructure deployment by installers
  - JIRA [IPVSIX-37](#) (Epic) and [GENESIS-80](#) / [GENESIS-85](#) (Story), [GENESIS-36](#) and [GENESIS-37](#).
  - Additional JIRA issues will be added in each installer (Task) as needed
    - [APEX-130](#) and [APEX-131](#) (features)
    - [COMPASS-360](#) (Feature) (No resources)
    - [FUEL-115](#) (Task) (After Mid 2017)
    - [JOID-70](#) (Epic) and stories [JOID-71](#) and [JOID-72](#) (Overlay supported already)
  - Testing: [IPVSIX-44](#) and [FUNCTEST-180](#) (Funcstest Sprint 8, Funcstest Sprint 9, Funcstest Sprint 10)
- IPv6 Gap Analysis with Official Components of OpenStack and ODL in C Release
  - JIRA [IPVSIX-40](#) (Epic), which includes:
    - JIRA [IPVSIX-41](#) (Story): OpenStack Mitaka Release (targeted on April 7, 2016)
    - JIRA [IPVSIX-42](#) (Story): ODL Beryllium SR(???) (Boron Release target date Sept 08, 2016)
- Documentation / Install Guide / User Guide
  - JIRA [IPVSIX-43](#) (Epic)
    - JIRA [DOCS-111](#) Install Guide / Config Guide (Sub-Task)
    - JIRA [DOCS-80](#) User Guide (Sub-Task)

The following Features are postponed to **D Release or later**

## Multisite IPv6

- Multisite IPv6
  - JIRA [IPVSIX-38](#) (Epic) which depends on [IPVSIX-37](#), [PHAROS-170](#), [PHAROS-181](#), [PHAROS-124](#) and [PHAROS-135](#)
  - Areas of interest:
    1. At underlay level, multiple instances of OpenStack can be deployed at multisites, one at each site, and use IPv6 for normal Neutron Router
      - **Note:** this depends on JIRA [IPVSIX-37](#) (Epic) and [GENESIS-80](#) / [GENESIS-85](#), [GENESIS-36](#) and [GENESIS-37](#)
    2. Extend IPv6 vRouter Connectivity to External IPv6 Networks (North-South connectivity) and Deployed on Multisite Pharos Labs
      - At overlay level, the simplest case is that vRouter is deployed at multisites, each vRouter at each site, and connects to ext-net that has physical IPv6 router. Then vRouters at multisites can communicate with each other (North-South). Thus VM on each subnet can communicate with IPv6 packets via North-South connectivity.
      - **Note:** achievable if we have appropriate lab infrastructure. It depends on [PHAROS-170](#), [PHAROS-181](#), [PHAROS-124](#) and [PHAROS-135](#)
  - Testing: [YARDSTICK-249](#)
    - **Note: Infrastructure unavailable.** postpone to **D Release or later**
  - At overlay level, what is role of L3VPN plays to connect those vRouters that connect to ext-net?
    - **Note:** It may need **Tricircle**. L2 networking across OpenStack instances (East-West) will not be available until **Newton** as the earliest, and L3 networking will be even later. This scenario needs to postpone to **D Release or later**
  - At overlay level, since those VMs in different subnets can communicate with IPv6 traffic, how does it affect SFC if L3VPN is used to construct SFC?
    - **Note:** postpone to **D Release or later**
  - Then there are HA related issues, including both multisite and standalone deployment.
    - **Note:** postpone to **D Release or later**

## Service VM as IPv6 vRouter in ONOS-integrated environment

- JIRA [IPVSIX-39](#) (Epic)
- **Note:** postpone to **D Release or later**

## Service VM as IPv6 vRouter in OpenContrail-integrated environment

No resource available. Postponed to **D Release or later**