



# OPNFV

## Introduction to the 'Pharos' project

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# Topics

- Pharos Project overview
- Pharos Goals and Project/Community needs
- Current Pharos Labs
- Pharos LAB specification
- How to contribute ...
  - A Pharos compliant lab
- Communication and process

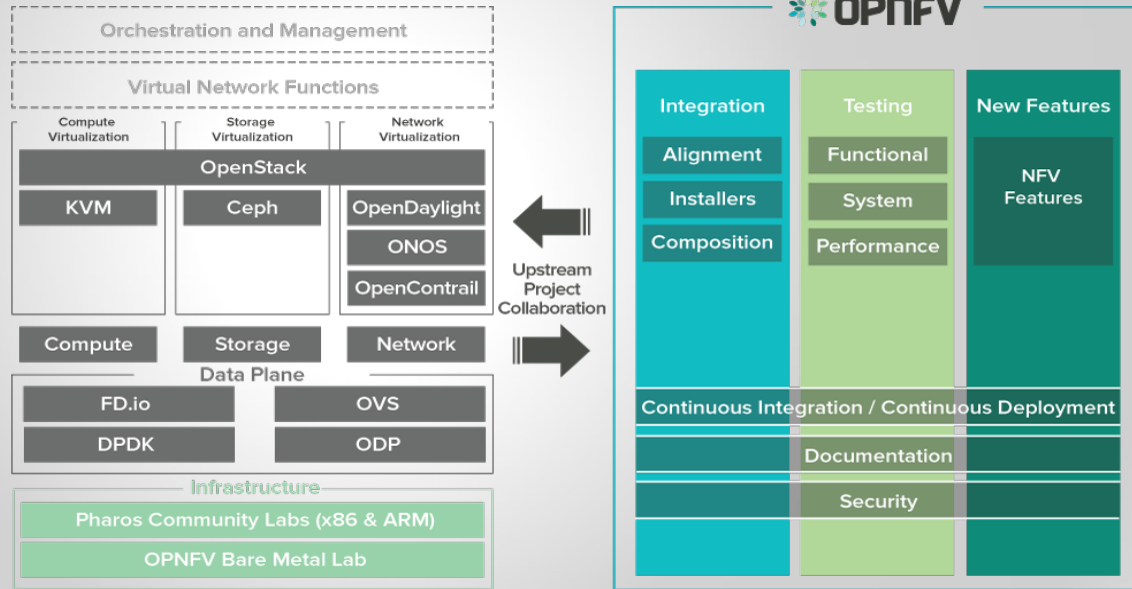




# Pharos Project overview

# OPNFV – The Project and its goals

- Integration and Testing is an integral part of OPNFV



# The Pharos Project

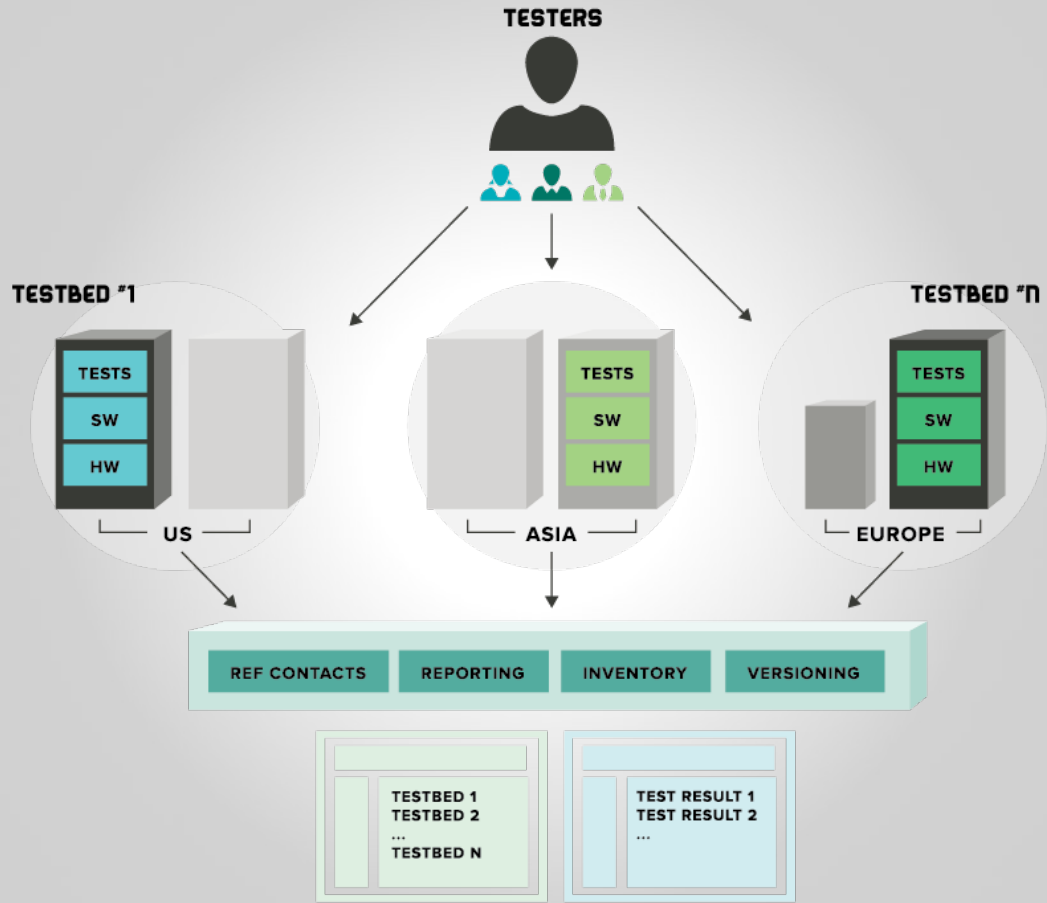
- The OPNFV test bed project "Pharos" is a federated NFV testing infrastructure of community labs around the world designed for hosting continuous integration, deployment, and testing of the OPNFV platform.
- The diversity of perspectives across developers, users and vendors participating in these labs make the project critical to the success of the OPNFV platform.

## The Pharos Project:

- is developing the OPNFV lab infrastructure
- is geographically and technically diverse
- assists in developing a robust and stable OPNFV platform
- combines community labs (hosted by member organizations) and an OPNFV lab hosted by the Linux Foundation
- provides development/testing resources to developers

# Pharos Project Goals

- Facilitate collaborative testing across scenarios that conform to a baseline OPNFV specification (compute, network and storage)
- Provide developers with substantial resources for early testing within realistic NFV environments via an open, consistent, repeatable test domain
- Help ensure OPNFV applicability across architectures, environments and vendors through a collection of diverse labs and a broad range of hardware
- Help create more robust, interoperable releases







# Current Pharos Labs

## Current Pharos Labs

- The Pharos Project includes a large number of member company labs spanning North America, Europe and Asia
- The Linux Foundation hosts an OPNFV infrastructure lab used primarily for continuous integration (CI), build and release deployment/testing
- <https://wiki.opnfv.org/display/INF/Hardware+Infrastructure>

## Current Pharos Labs cont.

- The current infrastructure is already heavily used for development, CI and release purposes.
- The labs provide a wide range of scenarios ranging from the installer (TripleO, Fuel, Juju, Compass) over the SDN controller (ODL, ONOS, OpenContrail) to network protocols (nofeature, bgpvpn, sfc)
- A comprehensive WIP list is here:  
<https://wiki.opnfv.org/display/INF/Scenario+Infrastructure>



# Pharos LAB specification

# Pharos LAB specification



- The Pharos specification defines the OPNFV hardware environment
- A secure, scalable, standard and HA environment
- Supports the full OPNFV deployment lifecycle  
(this requires a bare metal environment)
- Supports functional and performance testing of the OPNFV releases
- Provides mechanisms and procedures for secure remote access to the test environment



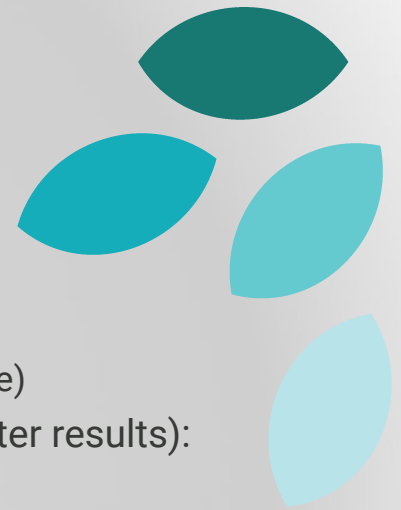
How to contribute ...

## A Pharos compliant lab

- One jump server on which the virtualized Openstack/OPNFV installer runs
- 5 compute / controller nodes
- A configured network topology allowing for LOM, Admin, Public, Private, and Storage Networks
- Remote access as defined by the slave configuration guide



# Pharos Lab Hardware Requirements



- CPU:
  - Intel Xeon E5-2600v2 Series or newer (BIOS/EFI)
  - AArch64 (64bit ARM architecture) compatible (ARMv8 or newer, EFI compatible)
- Local Storage Configuration (minimum, faster disk nice and may produce better results):
  - Disks: 2 x 1TB + 1 x 100GB SSD
    - The first 1TB HDD should be used for OS & additional software/tool installation
    - The second 1TB HDD configured for CEPH object storage
    - Finally, the 100GB SSD should be used as the CEPH journal
- Boot: Virtual ISO boot capabilities or a separate PXE boot server (DHCP/tftp or Cobbler)
- Memory: 32G RAM Minimum
- Power Supply
  - Single power supply acceptable (redundant power not required/nice to have)



# Pharos Specification and Documentation



- <https://wiki.opnfv.org/display/pharos/Pharos+Specification>
- <http://artifacts.opnfv.org/pharos/docs/index.html>

End



16-12-02