

Armada

Project Name:

- Proposed name for the project: Armada
- Proposed name for the repository: armada

Project description:

- Armada is a new OPNFV installer project focused around two toolsets:
 - Armada: The Armada project (<https://github.com/att-comdev/armada>) is a Python orchestrator for installing, upgrading, and managing a collection of Helm charts, dependencies, and values overrides. In OPNFV, the Armada project will provide the installer framework for OpenStack-Helm and additional NFVI control plane components such as SDNCs and other OPNFV scenario components as needed.
 - OpenStack-Helm: **Openstack-Helm** (Repo, Launchpad, Gerrit, IRC #openstack-helm) leverages Helm, a Kubernetes package manager, for the deployment of OpenStack on Kubernetes. This project provides a Cloud-Native approach to deploying OpenStack. It provides loosely coupled, yet highly customizable Helm charts for users to deploy and maintain life-cycle management of OpenStack services on top of Kubernetes. OpenStack-Helm heavily borrows concepts from Stackanetes and other complex Helm application deployments to bring OpenStack applications into a Cloud-Native model. It will provide baremetal provisioning, persistent storage, full-stack resiliency, full-stack scalability, performance monitoring and tracing, and a development pipeline using Jenkins. The goal for Openstack-Helm is to provide an incredibly customizable framework for operators and developers alike, enabling them to deploy, maintain, and upgrade a fully functioning OpenStack environment for both simple and complex environments, including all or individual OpenStack components along with their required dependencies.
 - Armada/OpenStack-Helm is not duplication of OPNFV Daisy4NFV, OpenStack Kolla or Kolla-Kubernetes. Kolla provides production-ready Docker containers and has two sub-projects to help deploy Kolla: kolla-ansible and kolla-kubernetes. Kolla-kubernetes relies on configuration files generated by kolla-ansible, as well as relying on Docker images generated by Kolla. OpenStack-Helm, however, is image agnostic. A long-term goal of OpenStack-Helm, besides being image agnostic, is to also be able to support any of the container runtimes that Kubernetes supports, even those that might not use Docker's own packaging format. This will allow the project to continue to offer maximum flexibility with regard to operator choice.
 - OpenStack-Helm follows an [OpenStack independent release model](#), so Armada will focus development efforts on trunk at all times and on generic upstream environments that are not impacted by the installer integration schedule.

Scope:

- The project will deploy OpenStack and additional NFVI control plane components such as SDNCs and other OPNFV scenario components as needed.
- Armada deployment scenarios will be supported in OPNFV CI/CD, and include OPNFV functional testing.
- Single-node, non-HA, and HA configurations will be supported.

Testability:

- Armada will support all OPNFV testing programs.

Documentation:

- <https://github.com/att-comdev/armada>
- <https://github.com/att-comdev/openstack-helm>

Dependencies:

- None

Committers and Contributors:

- Bryan Sullivan, AT&T
- Aimee Ukasick, AT&T

Planned deliverables:

- The project will package upstream installer code, OPNFV hardware/utilities/config for CI/CD, and additional component install code (e.g. SDNCs and other scenario components)

Proposed Release Schedule:

- First release in Euphrates

Use the above information to create a key project facts section on your project page

Key Project Facts

Project Name: Armada

Repo name: armada

Lifecycle State: Incubation

Primary Contact: Bryan Sullivan, AT&T

Project Lead: Bryan Sullivan, AT&T

Jira Project Name: Same as Project name

Jira Project Prefix: armada

mailing list tag [Should match Jira Project Prefix]

Committers:

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*Link to TSC approval:

Link to approval of additional submitters: