

## REQ-627 – CNFO – Istanbul Extensions

Lukasz Rajewski (Orange)

Seshu Kumar M (Huawei)

# CNFO - Summary for the requirement subcommittee

Executive Summary - Provide CNF orchestration support through integration of K8s adapter in ONAP SO

- Support for provisioning CNFs using an external K8s Manager
- Support the Helm based orchestration
- leverage the existing functionality of Multi cloud in SO
- Bring in the advantages of the K8s orchestrator
- Set stage for the Cloud Native scenarios

Owners: Lukasz Rajewski (Orange), Seshu Kumar M (Huawei)

Business Impact - Enables operators and service providers to orchestrate CNFs based services along with the VNFs and PNFs

Business Markets - All operators and service providers that are intended to use the CNFs along with PNFs / VNFs

Funding/Financial Impacts - Reduction in the footprint of the ONAP for CNF support.

**Organization Mgmt, Sales Strategies** - There is no additional organizational management or sales strategies for this requirement outside of a service providers "normal" ONAP deployment and its attendant organizational resources from a service provider.

REQ-341 Guilin

REQ-458
Honolulu

REQ-627 Istanbul+





#### **CNFO** Evolution





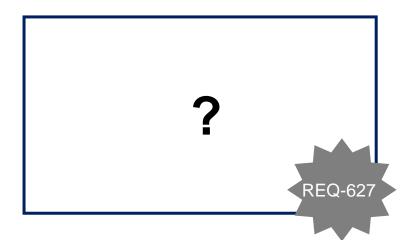










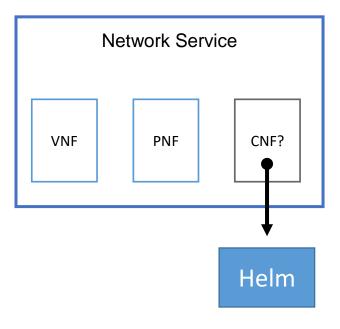




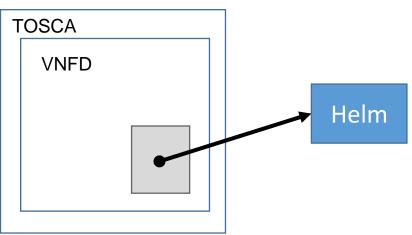


### ONAP - ETSI CNF model Alignment











Integration of Native (CNF Adapter) with ETSi (SOL003 Adapter) paths in SO



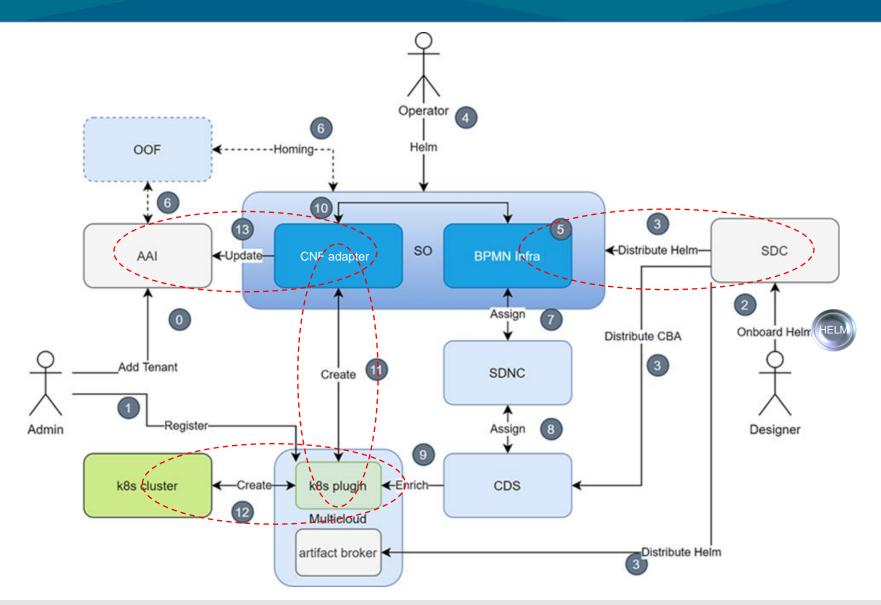
Design/AAI CNF Model

How the ETSI CNF AAI model will look?





### Honolulu - CNF Adapter Flow Day 0/1



#### **Deployment Maturation and Day2**

- Improvement of Helm Distribution (SDC/SO)
- Helm Deployment Maturity
  - Helm package validation
  - Helm 3.5
  - Helm pre-/postinstallation hooks
- Simple CNF Healthcheck
- AAI Basic CNF Changes

### Scope for REQ-627 – Istanbul

- SDC Enhancements
  - Validation of Helm 3 package
  - Improvements in Helm distribution
- AAI model changes (stretch)
  - K8s resource (name, version, kind) -> similar role to vserver object
  - Snapshot of Status API result in AAI
  - AAI API Exposure of Status API result with conversion to JSON
- K8sPlugin Helm Deployment Improvements
  - Query API for cluster resources
  - Helm 3 support
  - Query API notifications (stretch)
  - Pre-/Post-Installation Hooks (stretch)

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#### Scope for REQ-627 – Istanbul

- SO CNFO Enhancements
  - Status API Integration
  - HealthCheck API Integration
  - Dedicated CNF Health Check Workflow in SO
    - Status Check
    - Test Jobs Execution
  - AAI synchronization after changes -> Query based (stretch)
  - CNF Tenant recognition (stretch)
  - Distribution of Helm package to k8splugin by CNF Adapter (stretch)

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