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Support Kubernetes as VIM in VNFM/NFVO Tacker

Background

- ❖ Tacker is an Openstack project building a generic VNF Manager and NFV Orchestrator to deploy Network Services and Virtual Network Functions.
- ❖ Container technology is an alternate approach to virtualization which reduces lightweight footprint, resource overhead and deployment time, etc.
- ❖ Kubernetes is an open source container manager and orchestrator.

Features

- ❖ Register Kubernetes VIM using information about username, password, bearer token.
- ❖ Support encrypt secret data using ssl_ca_cert file.
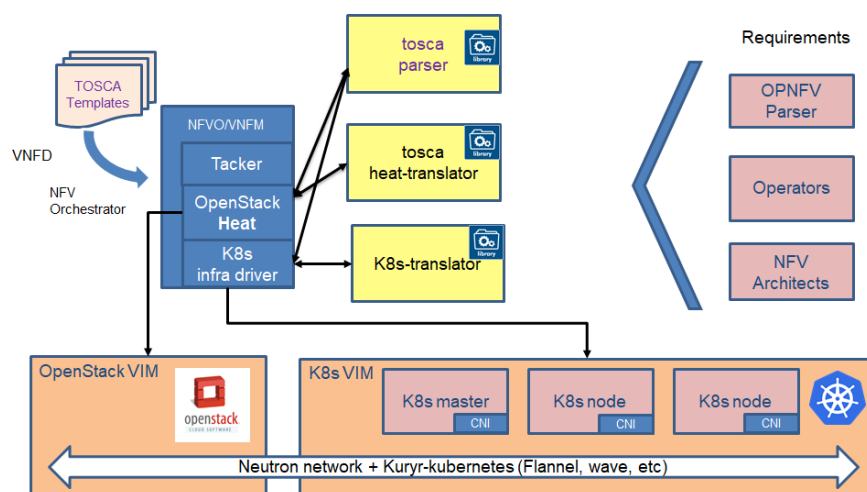- ❖ Theses information will be used to create containerized VNF in the future.

Future works

- ❖ Define "TOSCA to Kubernetes" translator that translate TOSCA VNF template to Kubernetes templates.
- ❖ Support deploying containerized VNF on Kubernetes VIM.

Acknowledgement

Architecture

Demo Scenarios

- ➢ Show how to get secret information about Kubernetes cluster. There are 2 ways to authenticate to Kubernetes, basic authentication (username and password) or bearer token. Ssl ca cert file is used to secure request connection to Kubernetes VIM.
- ➢ **Register Kubernetes VIM:** use bearer_token and ssl_ca_cert for registering VIM.
- ➢ **Update Kubernetes VIM:** update authentication with basic authentication (username and password).