

Deployment in kubernetes

SMO deployment for C-Release (Cherry) based on ONAP-Guilin-Release

Reference Documentation

- <https://docs.onap.org/en/guilin/index.html>

This procedure provides:

- ONAP-AAF
- ONAP-DCAE
- ONAP-DMaaP
- ONAP-SDNC (single node, SMO functionality)

Released images:

Relevant images for released use cases:

component	Image	Tag	Remark
SDNC	onap/sdnc-image	2.0.4	
SDNRDB	bitnami/elasticsearch	7.6.1	
DCAE	onap/org.onap.dcaegen2.deployments.k8s-bootstrap-container	2.1.8	VES collector
DMaaP	onap/dmaap/dmaap-mr	1.1.18	message router

Please note: helm deployment contains more images which are not listed here.

Limitations (wip):

- none

Prerequisites:

- Software requirements: https://docs.onap.org/projects/onap-oom/en/guilin/oom_cloud_setup_guide.html#oom-cloud-setup-guide
- kubernetes cluster (1.15.11)
- helm installation (2.16.10)
- More details: setup cloud environment(openstack/kubernetes) <https://docs.onap.org/en/guilin/guides/onap-operator/settingup/index.html>

Setup

- clone oom repo from gerrit.onap.org

```
mkdir ~/workspace
cd ~/workspace
git clone -b guilin http://gerrit.onap.org/r/oom --recurse-submodules oom_smo
cd oom_smo
sudo cp -R ~/workspace/oom_smo/kubernetes/helm/plugins/ ~/.helm
```

- verify if local helm repo is available, otherwise follow intructions in onap setup

```
helm repo list
#NAME      URL
#stable    https://kubernetes-charts.storage.googleapis.com
#local     http://127.0.0.1:8879
```

- build local onap helm repo

```
sudo apt install -y build-essential
cd ~/workspace/oom_smo/kubernetes
make repo; make SKIP_LINT=TRUE all ; make SKIP_LINT=TRUE onap
# take a coffee
helm search onap
```

- create an overwrite yaml file, e.g. deploy_smo_cherry.yaml

```
# Copyright © 2019 Amdocs, Bell Canada
# Copyright (c) 2020 Nordix Foundation, Modifications
# Modifications Copyright © 2020 Nokia
#
# Licensed under the Apache License, Version 2.0 (the "License");
# you may not use this file except in compliance with the License.
# You may obtain a copy of the License at
#
#     http://www.apache.org/licenses/LICENSE-2.0
#
# Unless required by applicable law or agreed to in writing, software
# distributed under the License is distributed on an "AS IS" BASIS,
# WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
# See the License for the specific language governing permissions and
# limitations under the License.

#####
# This override file enables helm charts for all ONAP applications.
#####
global:
  addTestingComponents: &testing true
  centralizedLoggingEnabled: &ralizedLogging false
cassandra:
  enabled: false
mariadb-galera:
  enabled: true
aaf:
  enabled: true
aai:
  enabled: false
appc:
  enabled: false
cds:
  enabled: false
clamp:
  enabled: false
cli:
  enabled: false
# Today, "contrib" chart that hosting these components must also be enabled
# in order to make it work. So `contrib.enabled` must have the same value than
# addTestingComponents
contrib:
  enabled: *testing
consul:
  enabled: true
dcaegen2:
  enabled: true
dcaemod:
  enabled: true
dmaap:
  enabled: true
esr:
  enabled: false
oof:
  enabled: false
msb:
  enabled: true
multicloud:
  enabled: false
nbi:
  enabled: false
policy:
  enabled: false
portal:
  enabled: false
robot:
  enabled: true
sdc:
```

```
  enabled: false
sdnc:
  enabled: true
  config:
    enableClustering: false
    sdnr:
      mountpointRegistrarEnabled: true
so:
  enabled: false
uui:
  enabled: false
vfc:
  enabled: false
vid:
  enabled: false
vnfsdk:
  enabled: false
modeling:
  enabled: false
platform:
  enabled: true
alpolicymanagement:
  enabled: false
```

- deploy smo

```
helm install -n smo local/onap --set global.masterPassword=myAwesomePasswordThatINeedToChange -f ~/workspace/smo/
deploy_smo_cherry.yaml --namespace onap --timeout 900
```

- verify deployment

```
helm ls
```

- verify pnf-registration, fault notification use case, please find examples for sending VES message in [gerrit](#).