SDNC Clustering

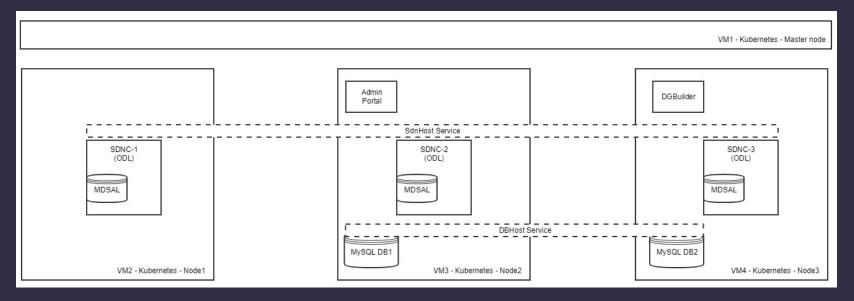
SDNC Clustering Highlights

- 1st ONAP component in ONAP achieving Site Resiliency
 - presented at the ONAP's F2F in Santa Clara Dec-2017
 - now used as a template by other ONAP components
- ONAP Collaboration
 - Built on top ONAP OOM
 - Worked closely with AT&T ONAP SDNC team.

Solution Summary

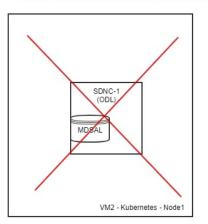
- Clustering Summary
 - 2 DB pods
 - 3 sdnc (ODL) pods
 - 1 admin (portal) pod
 - 1 dgbuilder pod
- Services requests even when one of the pods in the cluster is down
- Automatic restart of pods
- Scaling/Descaling MySQL pods dynamically
- Data Replication
 - Clustering 2 persistent stores MDSAL (inside OpenDayLight) and MySQL.
 - Replicating stateless and stateful processes
- Single click installing SDNC Cluster in an Openstack environment

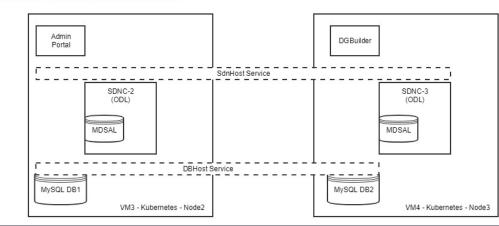
SDNC Clustering Architecture



VM1 - Kubernetes - Master node

SDNC Pod down. However, the SDNC service is still available using the other 2 Pods in the cluster





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What demos are available? (Recipe)

- SDN-C Application Clustering
- SDN-C Database Clustering
 - Scaling/Descaling MySQL pods dynamically.
- Demo page:
 - https://wiki.onap.org/display/~rahuliitr/Demo%3A+SDN-C+high+availability+environment+-+Kubernetes

ONAP Wiki Documentation

- <u>https://wiki.onap.org/display/DW/SDN-C+Clustering+on+Kubernetes</u>
- https://wiki.onap.org/display/DW/Deployment+with+Kubernetes+Cluster+Configured+by+Ranc her
- <u>https://wiki.onap.org/display/DW/Deploying+Kubernetes+Cluster+with+kubeadm</u>