EMCO on ROSA Clusters

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ROSA or Red Hat Openshift on AWS

- ROSA provides cli tool for creation and deletion of clusters.
- Connects with AWS and allocates resources to create OpenShift clusters.
- All the security and resilience benefits of OpenShift Cluster are available.
- Multi-AZ implementation will make use of three Availability Zones, with a public and private subnet in each AZ.
- Application workloads will be running in all three AZs for resilience, this will translate to a minimum of nine EC2 instances running within the customer account. Three Master nodes, three infrastructure nodes, and assuming at least one Worker in each AZ, three Workers.
EMCO Deployment

- EMCO (as part of Aarna’s AMCOP distribution) deployed using operator on the ROSA Cluster
- We use the Multiple Availability Zones on ROSA for resilience
- A target cluster on AWS is created for deploying Free5G
- Using AMCOP GUI we deploy Free5GC pods on target cluster.
Free5G Core

- Deployed on the K8 Cluster using EMCO
- Testing done using UE simulator for Free5G
ROSA Management Console
Demo Video