TripleO (OOO)

TripleO is a project aimed at installing, upgrading and operating OpenStack clouds using OpenStack's own cloud facilities as the foundation.

Useful links

- tripleo.org
- bit.do/tripleo
- freenode.net #tripleo

Deploying TripleO

The goal of this upstream cheatsheet is to show how can be deployed a virtual TripleO environment for development and testing purposes.

From the hypervisor, run the following commands:

01 - Create the toor user.

```
$ sudo useradd toor
$ echo "toor:toor" | chpasswd
$ echo "toor ALL=(root) NOPASSWD:ALL" \
  | sudo tee -a /etc/sudoers.d/toor
$ sudo chmod 0440 /etc/sudoers.d/toor
$ su - toor
```

02 - Prepare the hypervisor node.

```
$ cd
$ mkdir .ssh
$ ssh-keygen -t rsa -N "" -f .ssh/id_rsa
$ cat .ssh/id_rsa.pub >> .ssh/authorized_keys
$ sudo bash -c "cat .ssh/id_rsa.pub \
  >> /root/.ssh/authorized_keys"
$ sudo bash -c "echo '127.0.0.1 127.0.0.2' \
  >> /etc/hosts"
$ export VIRTHOST=127.0.0.2
$ sudo yum groupinstall "Virtualization Host" -y
$ sudo yum install git lvm2 lvm2-devel -y
$ ssh root@$VIRTHOST uname -a
```

03 - Clone repos and install deps.

```
$ git clone \
  https://github.com/openstack/tripleo-quickstart
$ chmod u+x ./tripleo-quickstart/quickstart.sh
$ bash ./tripleo-quickstart/quickstart.sh \
  --install-deps
$ sudo setenforce 0
```

```
DEVELOPER NOTES:

- We will use TripleO Quickstart to deploy
  our development environment.
- Minimum requirements: 32GB RAM box.
- This recipe will deploy a 2-nodes
  environment with an Overcloud deployed
  with containers and high availability.
- Use latest CentOS 7 available.
```

04 - Configure the TripleO deployment with Docker HA

```
$ export CONFIG=~/deploy-config.yaml
$ cat > $CONFIG << EOF
overcloud_nodes:
  - name: control_0
    flavor: control
    virtualbmc_port: 6230
  - name: compute_0
    flavor: compute
    virtualbmc_port: 6231
node_count: 2
containerized_overcloud: true
delete_docker_cache: true
enable_pacemaker: true
run_tempest: false
extra_args: >-
  --libvirt-type qemu
  --ntp-server pool.ntp.org
  -e /usr/share/openstack-tripleo-heat-templates/environments/docker.yaml
  -e /usr/share/openstack-tripleo-heat-templates/environments/docker-ha.yaml
EOF
```

05 - Deploy TripleO.

```
$ export VIRTHOST=127.0.0.2
$ bash ./tripleo-quickstart/quickstart.sh \
      --clean            \
      --release master \
      --teardown all    \
      --tags all         \
      -e @$CONFIG        \
      $VIRTHOST
```

```
DEVELOPER NOTES:

- Customize your architecture deployment based on
  the deploy-config.yaml file.
- Use the quickstart option '--tags' to customize
  the steps to execute.
- Use the quickstart option '--release' to choose
  the TripleO version you want to deploy.
```

OpenStack on OpenStack

TRIPLEO