Deploying a Multi-Node Devstack Environment

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Deploying a multi-node devstack environment with 2 VMs

1. Get two VMs (can use OSIC1 for this https://cloud1.osic.org/). The VMs should be preferably >= Medium flavor.

2. Clone devstack in each one:
   `git clone https://git.openstack.org/openstack-dev/devstack`

3. Go into the cloned directory:
   `cd devstack`

4. Create a local.conf in the devstack directory on each VM, these config files will stablish what services each node will run and how they will interoperate with each other. I will explain with a little more detail here about what is to be accomplished in a section below.

5. Once the devstack/local.conf file has been created and populated with the correct node configuration just run the stack.sh script to deploy the openstack into the VM/node:
   `./stack.sh`

Node 1

This node will be our controller, so we want this to look pretty much like any normal one-node devstack environment, so it should include all the basic services: Neutron, Nova, Glance, Cinder, Keystone, etc. and we also want it to include Swift which is not included by default in Devstack, and finally we want to have Tempest also configured in this node.

So the list of things to include should look like this:

- Keystone

- Nova
- Neutron
- Glance
- Cinder
- RabbitMQ
- MySQL
- Swift (not default)
- Tempest (not default)

Based on our requirements for this node, the local.conf file could look like this:

```
[[local|localrc]]

MULTI_HOST=1

# Minimal Contents
# ----------------

ADMIN_PASSWORD=admin
DATABASE_PASSWORD=$ADMIN_PASSWORD
RABBIT_PASSWORD=$ADMIN_PASSWORD
SERVICE_PASSWORD=$ADMIN_PASSWORD

HOST_IP=10.0.0.223


# Logging
# -------

LOGFILE=$DEST/logs/stack.sh.log
LOGDAYS=2


# Services
# --------

# None specified so use all the defaults


# Swift
# -----

SWIFT_HASH=66a3d6b56c1f479c8b4e70ab5c2000f5
SWIFT_REPLICAS=1
SWIFT_DATA_DIR=$DEST/data
```

```
SWIFT_DATA_DIR=$DEST/data
enable_service s-proxy s-object s-container s-account


# Tempest
#--------

enable_service tempest
```

Node 2 (N)

This node will only be used as a compute node, so it only needs the OpenStack worker services. The config file of this node could look like this:

```
[[local|localrc]]

MULTI_HOST=1

# Minimal Contents
# ----------------

ADMIN_PASSWORD=admin
DATABASE_PASSWORD=$ADMIN_PASSWORD
RABBIT_PASSWORD=$ADMIN_PASSWORD
SERVICE_PASSWORD=$ADMIN_PASSWORD

HOST_IP=10.0.0.224
SERVICE_HOST=10.0.0.223

DATABASE_TYPE=mysql
MYSQL_HOST=$SERVICE_HOST
RABBIT_HOST=$SERVICE_HOST
GLANCE_HOSTPORT=$SERVICE_HOST:9292


# Logging
# -------

LOGFILE=$DEST/logs/stack.sh.log
LOGDAYS=2


# Services
# --------
```

```
# Enable only the compute services
ENABLED_SERVICES=n-cpu,n-api-meta,q-agt

NOVA_VNC_ENABLED=True
NOVNCPROXY_URL="http://$SERVICE_HOST:6080/vnc_auto.html"
VNCSERVER_LISTEN=$HOST_IP
VNCSERVER_PROXYCLIENT_ADDRESS=$VNCSERVER_LISTEN
```