



RDO is a Red Hat community service

Get started

- 0) Install RHEL, CentOS, Scientific Linux or Fedora
- 1) `sudo yum install -y http://rdo.fedorapeople.org/rdo-release.rpm`
- 2) `sudo yum install -y openstack-packstack`
- 3) `sudo packstack --allinone`

And you're done!

Useful URLs

RDO: openstack.redhat.com
RDO blog: openstack.redhat.com/blog
Twitter: [@rdocommunity](https://twitter.com/rdocommunity)
OpenStack: www.openstack.org
Ask OpenStack: ask.openstack.org
Red Hat OpenStack: redhat.com/openstack
Try RDO online: trystack.org

Project codenames

Codename	Service
Nova	Compute services
Glance	Image storage
Swift	Object storage
Cinder	Block storage
Keystone	Identity service
Horizon	Dashboard
Neutron	Network service
Heat	Service orchestration
Ceilometer	Data collection and Metering

Command line cheat sheet

Managing images

List available images:

```
glance image-list
```

```
glance details
```

Uploading a new image:

```
glance image-create --name <name> \
--is-public True --disk-format qcow2 \
--container-format ovf \
--file <qcow2 image file> \
--property os_distro=[fedora|ubuntu|...]
```

Creating a new QCOW2 image:

```
qemu-img create -f qcow2 <image> <size>
```

Installing an image from an ISO:

```
qemu -m 1024 -hda <image> -cdrom <iso> \
-kernel-kqemu -boot d -net nic -net user
```



Command line cheat sheet (cont.)

Managing SSH keys

Creating a new key pair:

```
nova keypair-add mykey > mykey.pem
```

Uploading a pre-existing key:

```
nova keypair-add --pub-key mykey.pub mykey
```

List available SSH keys:

```
nova keypair-list
```

Managing users and tenants

List tenants/users/roles:

```
keystone tenant-list / user-list / role-list
```

Add new user:

```
keystone user-create --name <user> \
  --tenant-id <tenant ID> --pass <passwd>
```

Grant role to user:

```
keystone user-role-add --user-id <user ID> \
  --role-id <role ID> --tenant-id <tenant ID>
```

Managing instances

Show available services:

```
nova-manage service list
```

Show running instances:

```
nova list
```

Start a new instance:

```
nova boot <instance name> \
  --flavor <flavor type> \
  --image <image name/ID> \
  --key-name <ssh key>
```

List flavours:

```
nova flavor-list
```

Migrate an instance to a different host:

```
nova live-migration <instance id> <dest>
```

Reboot instance:

```
nova reboot <instance name/ID>
```

Destroy instance:

```
nova delete <instance name/ID>
```

Managing volumes

Create bootable volume from an image:

```
cinder create --image-id <image ID> \
  --display-name <volume name> <size in GB>
```

Create a snapshot:

```
cinder snapshot-create <volume ID>
```

List available volumes:

```
nova volume-list / cinder list
```

Bootting an instance from a volume:

```
nova boot <instance name> \
  --flavor <flavor_type> --key-name <ssh key> \
  --block_device_mapping \
    <dev_name>=<volume ID>:[snap]::0 <name>
```

Creating a new volume:

```
cinder create --display-name <name> <size in GB>
```

Attach a volume to an instance:

```
nova volume-attach <instance ID> \
  <volume ID> <dev_name>
```