Using the PackStack Install of OpenStack

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Objectives

- OpenStack CLI Authentication
- Creating a Virtual Machine from the CLI
- Creating a Virtual Machine from the Dashboard
- OpenStack Logs

Understanding OpenStack Credentials Files

OS_AUTH_URL	URL of Keystone API
OS_AUTH_VERSION	Identity API Version for authentication
OS_IDENTITY_API_VERSION	Identity API used for identity operations
OS_PROJECT_DOMAIN_NAME	The project's domain name
OS_USER_DOMAIN_NAME	The user's domain name
OS_PROJECT_NAME	The user's project
OS_USERNAME	The user name
OS_PASSWORD	The user's password

Creating a Custom File

```
#!/bin/bash
…

echo "Enter the OpenStack password for ${OS_USERNAME}“
read -sr OS_PASSWORD_INPUT
export OS_PASSWORD=${OS_PASSWORD_INPUT}

if openstack token issue &> /dev/null
 then
  echo "Authentication Successful“
  export PS1="\u@\h: [${OS_USERNAME}]\w> “
  else

echo "Authentication Failed“
  export PS1="\u@\h:\w>“

fi
```

```
# openstack \
    --os-username demo \
    --os-tenant-name demo \
    --os-password Password1 \
    --os-auth-url http://192.168.56.5:5000/v2.0/ \
    token issue
```

CLI Authentication

Other than the KeystoneRC which set variables we can authenticate from the command line. This may be useful when we want to quickly check something as another account

Working with Credentials

```
# source demorc
# openstack server list
# openstack server delete <server name>
# openstack image list
# openstack network list
# openstack flavor list
```

Create an Instance (Virtual Machine) from CLI

Ultimately, OpenStack is about creating Virtual Machines. As the demo account we will first research the current environment deleting any Virtual Machine we may already have

```
# openstack help create server

# openstack create server \
    --image cirros \
    --flavor m1.tiny \
    --nic net-id=private \
    myvm
```

Create Instance

Create Virtual Machine Instance

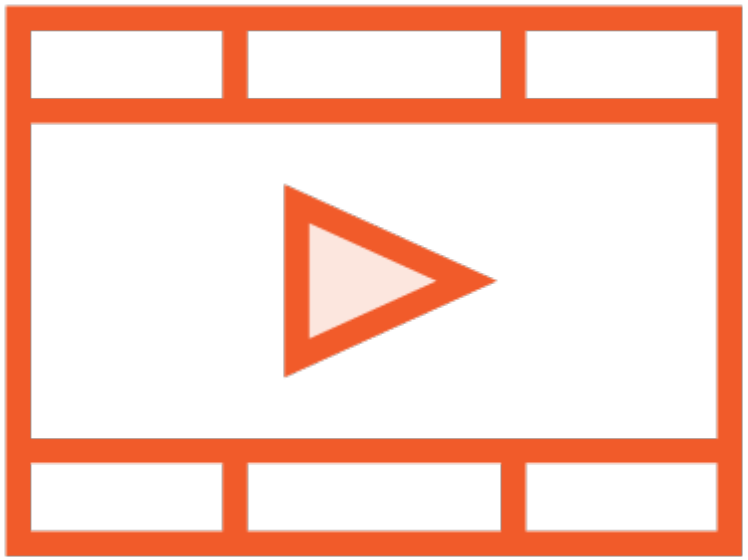
Create Virtual Machine from Dashboard

```
tail -fn0 /var/log/nova/nova-compute.log
```

Log Files

Log files can be located in the project sub-directory below /var/log. Often the setting verbose=True is in place but you have to decide if this is required

Working with Logs



Authentication: Customizing RC files and adding in options such as **--os-username**

Create Instance from CLI: Using the openstack command we could research the current resources and create a new VM

Create Instance from Dashboard: We used the Dashboard to create a virtual machine replicating the work at the command line

Logs: We looked at the **tail -fn0** option and discussed the **verbose=True** logging option

Next up: Understanding Backend Services