

OpenStack Installation Guide

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+ Install OpenStack on AlmaLinux using Packstack +
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#Common Setup

cat /etc/redhat-release

grep -E 'svm | vmx' /proc/cpuinfo

lsmod | grep kvm

lscpu

free -h

lsblk

hostnamectl set-hostname cloud

ip a

yum install nano -y

#Need to Configure Static IP

cp /etc/sysconfig/network-scripts/ifcfg-enol /etc/sysconfig/network-scripts/ifcfg-enol.bak

nano /etc/sysconfig/network-scripts/ifcfg-enol

HWADDR=00:23:24:8e:e5:8d

NM_CONTROLLED=no

BOOTPROTO=static

ONBOOT=yes

IPADDR=192.168.101.230

PREFIX=24

GATEWAY=192.168.100.1

DNS1=202.74.244.5

DNS2=202.74.240.3

DEVICE=enp0s3

nmcli connection up enp0s3

ip a s enp0s3

systemctl restart NetworkManager

```
ping google.com
```

```
#Edit Hosts file:
echo "192.168.106.120 cloud.paulco.xyz cloud" >> /etc/hosts
```

```
#Disable SELinux:
getenforce
#setenforce 0
sed -i 's/^SELINUX=.*SELINUX=disabled/g' /etc/selinux/config
```

```
# Disable Firewallld
systemctl disable firewalld
systemctl stop firewalld
```

```
# Install network-scripts package
yum install network-scripts -y
```

```
# Enable/Start Network Service
systemctl status network
systemctl enable network
systemctl start network
```

```
systemctl restart network
```

```
# Disable/Stop NetworkManager
systemctl status NetworkManager
systemctl disable NetworkManager
systemctl stop NetworkManager
```

```
#systemctl restart NetworkManager
```

```
+++++++
##If you face Networking error when you stop NetworkManage, Then you need
to troubleshooting on network.
##Actually, By default you system access internet or networking using
NetworkManager service, But when you stop/disable
NetworkManager service then you need to enable/start network service. Then
need setup network ip manually with MAC Address, Device Name,
NM_Controlled=no, IPADDR, Prefix, Gateway, DNS. Then using ifup [interface
name], then restart network service. Then check internet or networking. its
may be solved.
```

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+++++++
##Solve Networking After Disable/Stop NetworkManager
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```

```
nano /etc/sysconfig/network-scripts/ifcfg-enol
```

```
HWADDR=00:23:24:8e:e5:8d
NM_CONTROLLED=no
BOOTPROTO=static
ONBOOT=yes
```

```

IPADDR=192.168.101.230
PREFIX=24
GATEWAY=192.168.100.1
DNS1=202.74.244.5
DNS2=202.74.240.3
DEVICE=enp0s3

ifup enp0s3
#ifdown enp0s3

#systemctl mask NetworkManager.service
#systemctl stop NetworkManager.service
#systemctl disable NetworkManager.service
#systemctl list-unit-files | grep NetworkManager

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yum autoremove epel-release

yum autoremove openstack-packstack

yum clean all

yum repolist

yum update -y && yum upgrade -y

reboot
+++++
##Download or Configure OpenStack YUM Repository +
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#yum -y install https://repos.fedorapeople.org/repos/openstack/openstack-
yoga/rdo-release-yoga-1.el8.noarch.rpm

#dnf install centos-release-openstack-train -y

#install epel repository
#dnf install epel-release

#Working On AlmaLinux8
dnf install centos-release-openstack-victoria -y

#install openstack-packstack

#dnf install -y openstack-packstack

yum install -y openstack-packstack

yum config-manager --enable powertools

yum repolist

yum update -y

```

```
packstack --version
```

```
packstack --help
```

```
+++++ Generate Answers +++++
```

```
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```

```
##Pre-Installation with Generate Answers file##
```

```
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```

```
packstack --os-neutron-ml2-tenant-network-types=vxlan \  
--os-neutron-ovs-bridge-interfaces=br-ex:enp0s3 \  
--os-neutron-ml2-mechanism-drivers=openvswitch \  
--os-neutron-ml2-type-drivers=vxlan,flat \  
--os-neutron-l2-agent=openvswitch \  
--keystone-admin-passwd=openstack \  
--provision-demo=n \  
--os-heat-install=y \  
--gen-answer-file /root/answers.txt
```

```
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```

```
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```

```
##Custom Installation After Generate Answers file##
```

```
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```

```
packstack --gen-answer-file /root/answers.txt
```

```
#Take Copy the answers file
```

```
cp answers.txt copy.answers.txt
```

```
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```

```
##Important: Edit the file what we install
```

```
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```

```
nano answers.txt
```

```
>>Change to y/n
```

```
CONFIG_NTP_SERVERS=0.asia.pool.ntp.org,1.asia.pool.ntp.org,2.asia.pool.ntp  
.org,3.asia.pool.ntp.org
```

```
CONFIG_CONTROLLER_HOST=192.168.10.10
```

```
CONFIG_COMPUTE_HOSTS=192.168.10.10
```

```
CONFIG_NETWORK_HOSTS=192.168.10.10
```

```
CONFIG_STORAGE_HOST=192.168.10.10
```

```
CONFIG_KEYSTONE_ADMIN_PW=openstack
```

```
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```

```
+++++ Networking +++++
```

```
#search and change Bridge
```

```
CONFIG_NEUTRON_OVS_BRIDGE_IFACES=br-ex:enp0s3
```

```
CONFIG_NEUTRON_ML2_MECHANISM_DRIVERS=openvswitch
```

```

CONFIG_NEUTRON_L2_AGENT=openvswitch

# Disable Nagios
CONFIG_NAGIOS_INSTALL=n

##Disable the demo provisioning
CONFIG_PROVISION_DEMO=n

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##Installation OpenStack##
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packstack --answer-file #/root/answers.txt | tee Openstack-Installation-
log.txt

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## View Installation Log ##

# The installation log file is available at:

tail -f /var/tmp/packstack/latest/openstack-setup.log

# The generated manifests are available at:

tail -f /var/tmp/packstack/20230119-111007-GkD8Cn/manifests

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#Install OpenStack WithOut Demo
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#packstack --allinone --provision-demo=n

+++++
#Install OpenStack With Demo
+++++
#packstack --allinone

**** Installation Completed Successfully ****

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#After Installation Complete      +
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#Access OpenStack from CLI / Horizon Dashboard
-----
source ~/keystonerc_admin

openstack service list

#To access Horizon Dashboard use the URL:
#http://ServerIPAddress/dashboard.

```

```

http://192.168.106.120/dashboard

#Login Credentials in Here:

cat ~/keystonerc_admin

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Configuration OpenStack
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.....
##Now Download Cirros image
.....

wget http://download.cirros-cloud.net/0.5.1/cirros-0.5.1-x86_64-disk.img

.....
Upload>Create Image on OpenStack
.....

openstack image create --disk-format qcow2 --container-format bare --
public --file cirros-0.5.1-x86_64-disk.img cirros

openstack image list

openstack image delete cirros

+++++
Remove or Uninstall OpenStack +
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#If you need to uninstall openstack
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#yum -y remove openstack-*

+++++ Finish +++++

```