

云平台 CentOS 公共镜像部署 Supernova 测试仪操作手册

1. 部署云关键操作步骤(阿里云, 腾讯云, 华为云, 移动云此操作相同)

1.1 镜像选择为公共镜像-CentOS-7.7 64 位

The screenshot shows the instance configuration interface. At the top, there is a table of instance specifications. The selected instance is 'ecs.s6-c1m2.large' with 4 vCPU, 8 GiB memory, and 30万 PPS network performance. Below the table, the '镜像' (Image) section is highlighted with a red box, showing 'CentOS' selected in the dropdown and '7.7 64位' selected in the version dropdown. The '安全加固' (Security Hardening) checkbox is checked. The '存储' (Storage) section shows 'ESSD云盘' (ESSD Cloud Disk) selected with a size of 40 GiB and '性能级别: PL0 (单盘IOPS性能上限1万)' (Performance Level: PL0 (Single Disk IOPS Performance Limit 10,000)).

规格族	实例规格	vCPU	内存	平均基准CPU计算性能	处理器主频/睿频	内网带宽	内网收发包	存储IOPS基准/峰值	IPv6	参考价格
共享标准型 s6	ecs.s6-c1m1.small	1 vCPU	1 GiB	-	2.5 GHz/3.2 GHz	最高 1.5 Gbps	15万 PPS	-	是	¥ 0.115/时
共享标准型 s6	ecs.s6-c1m2.small	1 vCPU	2 GiB	-	2.5 GHz/3.2 GHz	最高 1.5 Gbps	15万 PPS	-	是	¥ 0.208/时
共享标准型 s6	ecs.s6-c1m4.small	1 vCPU	4 GiB	-	2.5 GHz/3.2 GHz	最高 1.5 Gbps	15万 PPS	-	是	¥ 0.312/时
共享标准型 s6	ecs.s6-c1m2.large	2 vCPU	4 GiB	-	2.5 GHz/3.2 GHz	最高 2 Gbps	20万 PPS	-	是	¥ 0.417/时
共享标准型 s6	ecs.s6-c1m4.large	2 vCPU	8 GiB	-	2.5 GHz/3.2 GHz	最高 2 Gbps	20万 PPS	-	是	¥ 0.625/时
共享标准型 s6	ecs.s6-c1m2.xlarge	4 vCPU	8 GiB	-	2.5 GHz/3.2 GHz	最高 3 Gbps	30万 PPS	-	是	¥ 0.833/时
共享标准型 s6	ecs.s6-c1m4.xlarge	4 vCPU	16 GiB	-	2.5 GHz/3.2 GHz	最高 3 Gbps	30万 PPS	-	是	¥ 1.25/时

1.2 登陆凭证选择自定义密码, 登陆 CentOS 系统输入此登录名密码

The screenshot shows the '登录凭证' (Login Credential) configuration page. The '自定义密码' (Custom Password) tab is selected. The '登录名' (Login Name) is set to 'root'. The '登录密码' (Login Password) field is filled with a password, and the '确认密码' (Confirm Password) field is also filled. The '实例名称' (Instance Name) is 'launch-advisor-20220324'. The '描述' (Description) field is empty. The '主机名' (Hostname) is 'Linux 等其他操作系统: 长度为 2~64 个字符, 允许使用点号 (.) 分隔字符成多段, 每段允许使用大小写字母、数字或连字符 (-), 但不能连续使用点号 (.) 或连字符 (-), 不能以点号 (.) 或连字符 (-) 开头'. The '有序后缀' (Ordered Suffix) checkbox is unchecked. The '实例释放保护' (Instance Release Protection) checkbox is unchecked.

1.3 部署完成后添加网卡正常启动，CentOS 安装完成，正常连接 vnc

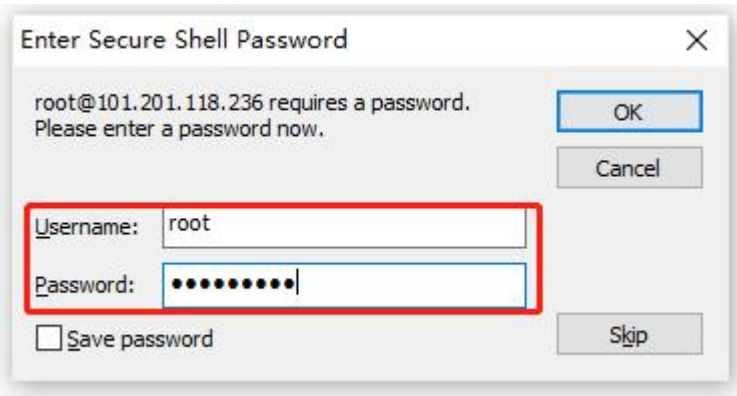


2. 上传 COS 镜像

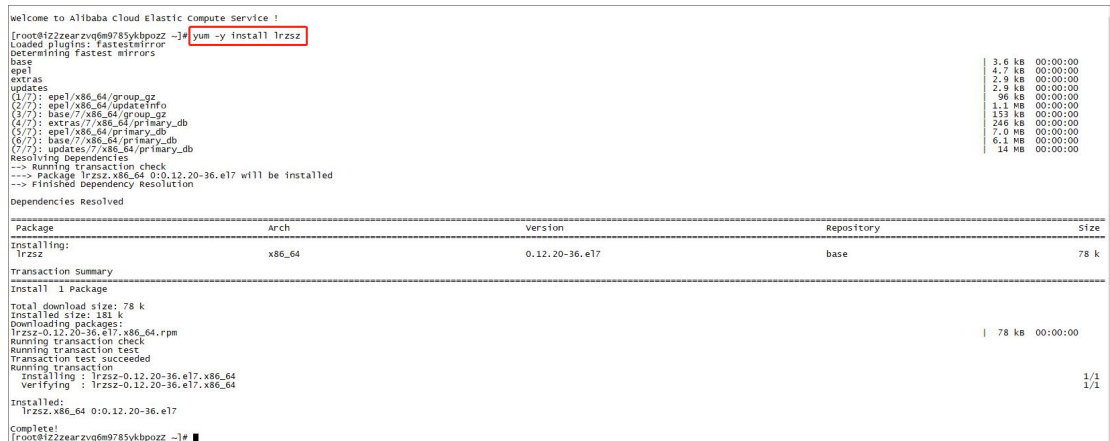
2.1 解压镜像包，解压出三个文件

名称	修改日期	类型	大小
今天 (1)			
NOVA_VM_COS-HW01-v22.03.05-build2299-20220323.deb.centos7.7	2022/3/24 10:21	WinRAR 压缩文件	536,473 KB
昨天 (3)			
README	2022/3/23 20:52	文件	1 KB
NOVA_VM_COS-HW01-v22.03.05-build2299-20220323.deb	2022/3/23 20:52	DEB 文件	536,345 KB
nova_install	2022/3/23 20:52	文件	94 KB

2.2 登陆 CRT，输入部署时设定的登录名和密码



2.3 输入命令：yum -y install lrzsz，安装下载上传文件的工具



2.4 rz 上传 tgz 压缩文件

```
updates
(1/7): epel/x86_64/group_gz
(2/7): epel/x86_64/updateinfo
(3/7): base7/x86_64/group_gz
(4/7): extras7/x86_64/primary_db
(5/7): epel/x86_64/primary_db
(6/7): base7/x86_64/primary_db
(7/7): updates7/x86_64/primary_db
Resolving Dependencies
--> Running transaction check
--> Package lrzsz.x86_64 0:0.12.20-36.el7 will be installed
--> Finished Dependency Resolution

Dependencies Resolved

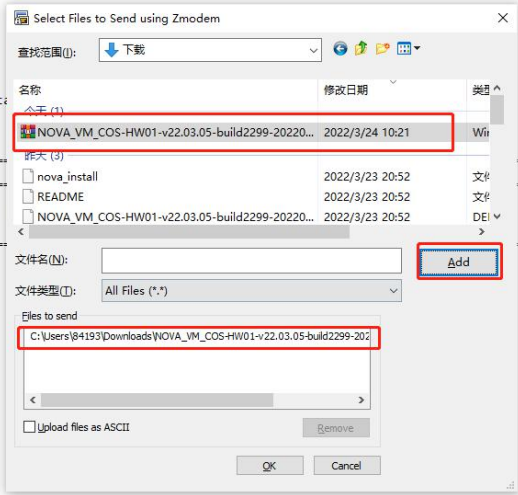
-----
Package Arch
-----
Installing:
lrzsz x86_64

Transaction Summary
-----
Install 1 Package

Total download size: 78 k
Installed size: 181 k
Downloading packages:
lrzsz-0.12.20-36.el7.x86_64.rpm
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
Installing : lrzsz-0.12.20-36.el7.x86_64
verifying : lrzsz-0.12.20-36.el7.x86_64

Installed:
lrzsz.x86_64 0:0.12.20-36.el7

Complete!
[root@iz2zearzvg6m9785ykbpoz ~]# rz
rz waiting to receive.
Starting zmodem transfer. Press Ctrl+C to cancel.
Transferring NOVA_VM_COS-HW01-v22.03.05-build2299-20220323.deb.centos7.7.tgz...
100% 536472 KB 3973 KB/sec 00:02:15 0 Errors
[root@iz2zearzvg6m9785ykbpoz ~]#
```

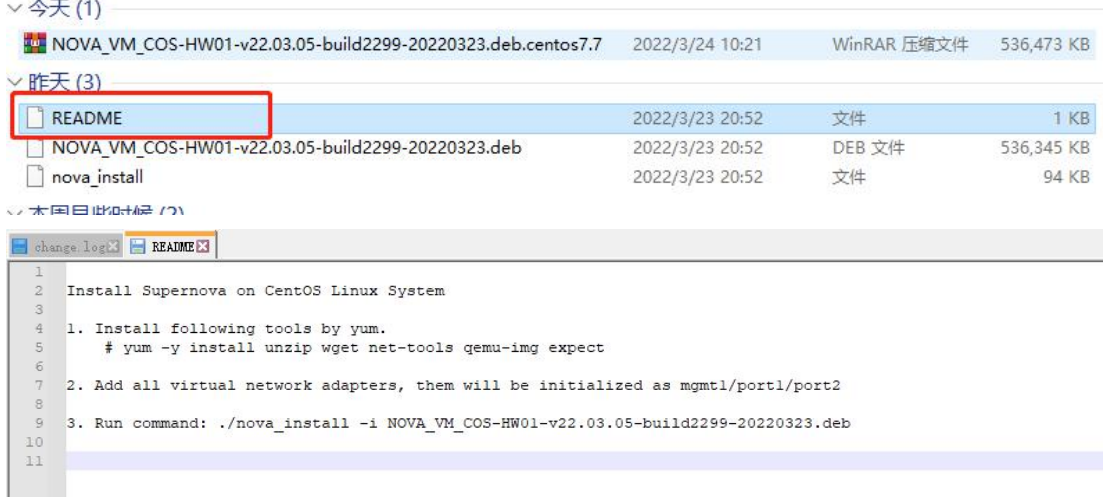


```
[root@iz2zearzvg6m9785ykbpoz ~]# rz
rz waiting to receive.
Starting zmodem transfer. Press Ctrl+C to cancel.
Transferring NOVA_VM_COS-HW01-v22.03.05-build2299-20220323.deb.centos7.7.tgz...
100% 536472 KB 3973 KB/sec 00:02:15 0 Errors
[root@iz2zearzvg6m9785ykbpoz ~]#
```

2.5 输入命令: tar -xzvf NOVA_VM_COS-HW01-v22.03.05-build2299-20220323.deb.centos7.7.tgz 解压 tgz 镜像文件

```
[root@iz2zearzvg6m9785ykbpoz ~]# tar -xzvf NOVA_VM_COS-HW01-v22.03.05-build2299-20220323.deb.centos7.7.tgz
NOVA_VM_COS-HW01-v22.03.05-build2299-20220323.deb
nova_install
README
[root@iz2zearzvg6m9785ykbpoz ~]#
```

2.6 用记事本或其他工具打开 README 文件



名称	修改日期	类型	大小
NOVA_VM_COS-HW01-v22.03.05-build2299-20220323.deb.centos7.7	2022/3/24 10:21	WinRAR 压缩文件	536,473 KB
README	2022/3/23 20:52	文件	1 KB
NOVA_VM_COS-HW01-v22.03.05-build2299-20220323.deb	2022/3/23 20:52	DEB 文件	536,345 KB
nova_install	2022/3/23 20:52	文件	94 KB

```
1
2 Install Supernova on CentOS Linux System
3
4 1. Install following tools by yum.
5 # yum -y install unzip wget net-tools qemu-img expect
6
7 2. Add all virtual network adapters, them will be initialized as mgmt1/port1/port2
8
9 3. Run command: ./nova_install -i NOVA_VM_COS-HW01-v22.03.05-build2299-20220323.deb
10
11
```

2.7 输入 README 文件中命令: yum -y install unzip wget net-tools qemu-img expect, 下载安装镜像所需的相关组件

```

downloading packages:
(1/17): boost-iostreams-1.53.0-28.el7.x86_64.rpm 61 kB 00:00:00
(2/17): boost-system-1.53.0-28.el7.x86_64.rpm 40 kB 00:00:00
(3/17): boost-thread-1.53.0-28.el7.x86_64.rpm 38 kB 00:00:00
(4/17): glusterfs-api-6.0-49.1.el7.x86_64.rpm 88 kB 00:00:00
(5/17): boost-random-1.53.0-28.el7.x86_64.rpm 39 kB 00:00:00
(6/17): glusterfs-6.0-49.1.el7.x86_64.rpm 622 kB 00:00:00
(7/17): expect-5.45-14.el7_1.x86_64.rpm 262 kB 00:00:00
(8/17): libato-0.3.109-13.el7.x86_64.rpm 24 kB 00:00:00
(9/17): glusterfs-client-xlators-6.0-49.1.el7.x86_64.rpm 839 kB 00:00:00
(10/17): libiscsi-1.9.0-7.el7.x86_64.rpm 60 kB 00:00:00
(11/17): gperftools-libs-2.6.1-1.el7.x86_64.rpm 272 kB 00:00:00
(12/17): glusterfs-libs-6.0-49.1.el7.x86_64.rpm 398 kB 00:00:00
(13/17): librados2-10.2.5-4.el7.x86_64.rpm 1.8 MB 00:00:00
(14/17): tccl-8.5.13-8.el7.x86_64.rpm 1.9 MB 00:00:00
(15/17): unzip-6.0-24.el7_9.x86_64.rpm 172 kB 00:00:00
(16/17): librd1-10.2.5-4.el7.x86_64.rpm 2.4 MB 00:00:00
(17/17): qemu-img-1.5.3-175.el7_9.5.x86_64.rpm 705 kB 00:00:00
-----
Total 24 MB/s | 9.7 MB 00:00:00
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
Installing : glusterfs-libs-6.0-49.1.el7.x86_64 1/17
Installing : boost-system-1.53.0-28.el7.x86_64 2/17
Installing : boost-thread-1.53.0-28.el7.x86_64 3/17
Installing : boost-iostreams-1.53.0-28.el7.x86_64 4/17
Installing : boost-random-1.53.0-28.el7.x86_64 5/17
Installing : librados2-10.2.5-4.el7.x86_64 6/17
Installing : librd1-10.2.5-4.el7.x86_64 7/17
Installing : glusterfs-client-xlators-6.0-49.1.el7.x86_64 8/17
Installing : glusterfs-6.0-49.1.el7.x86_64 9/17
Installing : glusterfs-api-6.0-49.1.el7.x86_64 10/17
Installing : libato-0.3.109-13.el7.x86_64 11/17
Installing : gperftools-libs-2.6.1-1.el7.x86_64 12/17
Installing : libiscsi-1.9.0-7.el7.x86_64 13/17
Installing : tccl-8.5.13-8.el7.x86_64 14/17
Installing : expect-5.45-14.el7_1.x86_64 15/17
Installing : 10-qemu-imp-1.5.3-175.el7_9.5.x86_64 16/17
Installing : unzip-6.0-24.el7_9.x86_64 17/17
Verifying : librd1-10.2.5-4.el7.x86_64 1/17
Verifying : boost-system-1.53.0-28.el7.x86_64 2/17
Verifying : tccl-8.5.13-8.el7.x86_64 3/17
Verifying : glusterfs-client-xlators-6.0-49.1.el7.x86_64 4/17
Verifying : libiscsi-1.9.0-7.el7.x86_64 5/17
Verifying : boost-random-1.53.0-28.el7.x86_64 6/17
Verifying : glusterfs-6.0-49.1.el7.x86_64 7/17
Verifying : gperftools-libs-2.6.1-1.el7.x86_64 8/17
Verifying : expect-5.45-14.el7_1.x86_64 9/17
Verifying : librados2-10.2.5-4.el7.x86_64 10/17
Verifying : boost-thread-1.53.0-28.el7.x86_64 11/17
Verifying : 10-qemu-imp-1.5.3-175.el7_9.5.x86_64 12/17
Verifying : glusterfs-libs-6.0-49.1.el7.x86_64 13/17
Verifying : libato-0.3.109-13.el7.x86_64 14/17
Verifying : glusterfs-api-6.0-49.1.el7.x86_64 15/17
Verifying : Boost-iostreams-1.53.0-28.el7.x86_64 16/17
Verifying : Boost-iostreams-1.53.0-28.el7.x86_64 17/17
Installed:
expect.x86_64 0:5.45-14.el7_1          qemu-img.x86_64 10:1.5.3-175.el7_9.5          unzip.x86_64 0:6.0-24.el7_9

Dependency Installed:
boost-iostreams.x86_64 0:1.53.0-28.el7          boost-random.x86_64 0:1.53.0-28.el7          boost-system.x86_64 0:1.53.0-28.el7          boost-thread.x86_64 0:1.53.0-28.el7          glusterfs.x86_64 0:6.0-49.1.el7
glusterfs-api.x86_64 0:6.0-49.1.el7          glusterfs-client-xlators.x86_64 0:6.0-49.1.el7          glusterfs-libs.x86_64 0:6.0-49.1.el7          gperftools-libs.x86_64 0:2.6.1-1.el7          libato.x86_64 0:0.3.109-13.el7
libiscsi.x86_64 0:1.9.0-7.el7          librados2.x86_64 1:10.2.5-4.el7          librd1.x86_64 1:10.2.5-4.el7          tccl.x86_64 1:8.5.13-8.el7

Complete!
[root@iZ2zeazvq6m9785ykbpoz ~]#

```

2.8 输入命令：./nova_install -i NOVA_VM_COS-HW01-v22.03.05-build2299-20220323.deb

安装镜像到系统中

2.8.1 安装前先选择管理口，输入 eth0 作为管理口，eth1 和 eth2 默认作为 port1 和 port2

```

[root@iZ2zeazvq6m9785ykbpoz ~]# ./nova_install -i NOVA_VM_COS-HW01-v22.03.05-build2299-20220323.deb
CentOS Linux release 7.7.1908 (Core)

```

Install Supernova image NOVA_VM_COS-HW01-v22.03.05-build2299-20220323.deb on Centos7.7 System ...

Found following network interfaces from this system, which interface will you select to manage system?

eth0(172.31.130.245/20),eth1,eth2

Please input interface name: eth0

Interface eth0, MAC address 00:16:3e:37:23:37 will be rename as mgmt1

Next we will rename traffic port by following map:

Interface eth1, MAC address 00:16:3e:08:79:5a will be rename as port1

Interface eth2, MAC address 00:16:3e:0c:a3:fd will be rename as port2

```

%20, Decrypt image ... Done
%40, Install ramdisk ... Done
%60, Install dtparam ... Done
%70, Install novacode ... Done
%80, Install toolkit ... Done
%100, Install booter ... Done

```

system will be rebooted in 5 seconds

安装完成后会自动重启虚拟机

2.8.2 重启后镜像安装完成，可以公网登陆了

