一、采用DevStack安装

DevStack是一个自动安装OpenStack的工具，使用OpenStack的源码进行安装。采用DevStack部署OpenStack的顺序如下：

1.安装Git、pip

```
yum -y install git
###安装yum扩展源
yum -y install epel-release
yum -y install python-pip
```

可以使用浙大的epel源

```
# 所有节点安装浙大、交大的epel源
rpm -Uvh http://ftp.sjtu.edu.cn/fedora/epel/epel-release-latest-7.noarch.r
rpm -Uvh http://mirrors.zju.edu.cn/epel/epel-release-latest-7.noarch.rpm
```

配置pip：
在指定用户（root和随后创建的stack）的家目录下创建.pip/pip.conf文件配置国内的python源信息

```
[global]
timeout = 6000
index-url = http://pypi.douban.com/simple/
trusted-host = pypi.douban.com
```

2.下载安装DevStack

进入home目录clone源代码

```
####主干代码：
```

```
    git clone http://git.trystack.cn/openstack-dev/devstack.git -b master
####指定分支
    git clone http://git.trystack.cn/openstack-dev/devstack.git -b stable/
```

3.为OpenStack创建Stack用户

由于DevStack提供了创建该用户的脚本，我们无需手工创建（第一次运行脚本会安装： redhat-lsb-core.x86_64 0:4.1-27.el7.centos.1 ）

```
cd /home/devstack/tools
./create-stack-user.sh
chmod 777 /dev/pts/0
chown -R stack:stack /home/devstack
passwd stack
```

可以考虑个stack用户添加sudo权限

3.配置devstack的安装信息

```
/home/devstack/local.conf
```

由于devstack通过源代码安装，因此我们在local.conf中需要配置一个git的国内镜像

```
# use TryStack git mirror
GIT_BASE=http://git.trystack.cn
NOVNC_REPO=http://git.trystack.cn/kanaka/noVNC.git
SPICE_REPO=http://git.trystack.cn/git/spice/spice-html5.git
LOG_COLOR=False
```

配置文件local.conf的安装说明：
http://www.chenshake.com/local-conf-devstack-profile-parameter-description/

```
修改stackrc中的GIT_BASE为：
```

```
GIT_BASE=${GIT_BASE:-git://git.trystack.cn}
```

4.执行安装

```
/home/devstack/stack.sh
```

5.安装完成后

要关闭防火墙，否者dashboard无法访问。执行命令
service iptables stop
安装完成后修改stackrc，防止每次执行stack.sh都进行依赖下载。

```
#OFFLINE=$(trueorfalse False OFFLINE)
OFFLINE=True
```

6.重启方案

```
screen -c stack-screenrc
systemctl restart httpd
```

二、通过dashboard创建VM

dashboard是OpenStack自带的管理UI，通过他可以在浏览器上管理OpenStack集群。

创建VM步骤

1.登录dashboard，其中${ip}为在local.conf中配置的HOST_IP

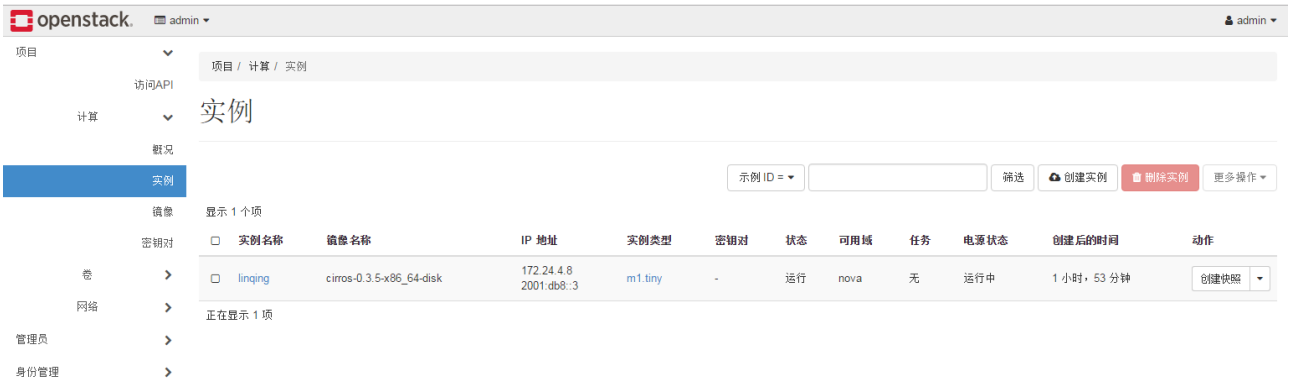
```
http://${ip}/dashboard
```

devstack为我们默认创建了两个用户（admin、demo），密码均为nomoresecret
登录后，可以看到页面中包含项目、管理员、身份管理三个tab页签。Octave的界面的具体功能可以查询官方的说明文档（https://docs.openstack.org/admin-

guide/dashboard.html ）。

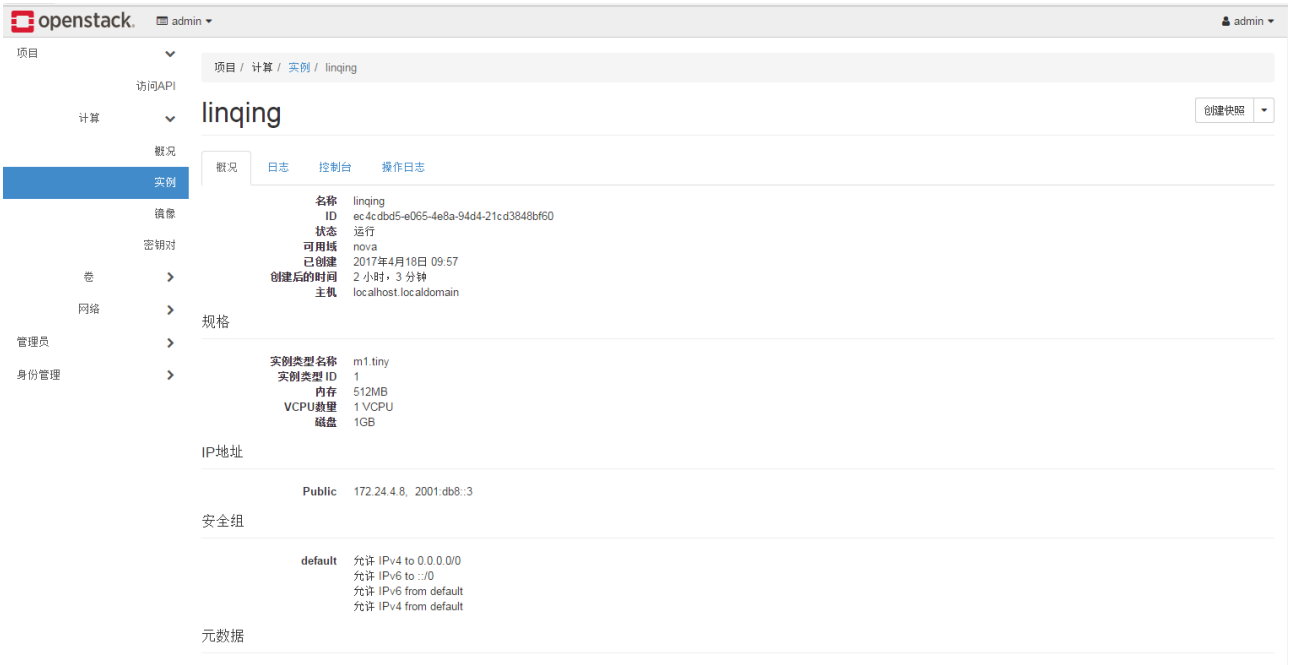
2.单击项目->计算->实例->创建实例，依次填写以下信息

3.按照上面步骤配置之后可以看到VM信息



三、VM启动失败时日志信息

1.单击实例名称可以在前台获得日志信息



2.查看后台Scheduler日志

日志位置：/opt/stack/logs/n-sch.log

3.日志的查看方式

OpenStack基于python，典型的python错误trace如下：

```
2017-04-18 17:29:42.868 ERROR oslo_messaging.rpc.server [req-b26530da-4e06-4e7c-aef9-a706c6a0d916 None None] Exception during message handling
2017-04-18 17:29:42.868 TRACE oslo_messaging.rpc.server Traceback (most recent call last):
2017-04-18 17:29:42.868 TRACE oslo_messaging.rpc.server   File "/usr/lib/python2.7/site-packages/oslo_messaging/rpc/server.py", line 157, in _process_incoming
2017-04-18 17:29:42.868 TRACE oslo_messaging.rpc.server     res = self.dispatcher.dispatch(message)
2017-04-18 17:29:42.868 TRACE oslo_messaging.rpc.server   File "/usr/lib/python2.7/site-packages/oslo_messaging/rpc/dispatcher.py", line 213, in dispatch
2017-04-18 17:29:42.868 TRACE oslo_messaging.rpc.server     return self._do_dispatch(endpoint, method, ctxt, args)
2017-04-18 17:29:42.868 TRACE oslo_messaging.rpc.server   File "/usr/lib/python2.7/site-packages/oslo_messaging/rpc/dispatcher.py", line 183, in _do_dispatch
2017-04-18 17:29:42.868 TRACE oslo_messaging.rpc.server     result = func(ctxt, **new_args)
2017-04-18 17:29:42.868 TRACE oslo_messaging.rpc.server   File "/opt/stack/nova/nova/scheduler/manager.py", line 139, in sync_instance_info
2017-04-18 17:29:42.868 TRACE oslo_messaging.rpc.server     instance_uuids)
2017-04-18 17:29:42.868 TRACE oslo_messaging.rpc.server   File "/usr/lib/python2.7/site-packages/oslo_concurrency/lockutils.py", line 271, in inner
2017-04-18 17:29:42.868 TRACE oslo_messaging.rpc.server     return f(*args, **kwargs)
2017-04-18 17:29:42.868 TRACE oslo_messaging.rpc.server   File "/opt/stack/nova/nova/scheduler/host_manager.py", line 811, in sync_instance_info
2017-04-18 17:29:42.868 TRACE oslo_messaging.rpc.server     self._recreate_instance_info(context, host_name)
2017-04-18 17:29:42.868 TRACE oslo_messaging.rpc.server   File "/opt/stack/nova/nova/scheduler/host_manager.py", line 738, in _recreate_instance_info
2017-04-18 17:29:42.868 TRACE oslo_messaging.rpc.server     inst_dict = self._get_instances_by_host(context, host_name)
2017-04-18 17:29:42.868 TRACE oslo_messaging.rpc.server   File "/opt/stack/nova/nova/scheduler/host_manager.py", line 710, in _get_instances_by_host
2017-04-18 17:29:42.868 TRACE oslo_messaging.rpc.server     hm = objects.HostMapping.get_by_host(context, host_name)
2017-04-18 17:29:42.868 TRACE oslo_messaging.rpc.server   File "/usr/lib/python2.7/site-packages/oslo_versionedobjects/base.py", line 184, in wrapper
2017-04-18 17:29:42.868 TRACE oslo_messaging.rpc.server     result = fn(cls, context, *args, **kwargs)
2017-04-18 17:29:42.868 TRACE oslo_messaging.rpc.server   File "/opt/stack/nova/nova/objects/host_mapping.py", line 100, in get_by_host
2017-04-18 17:29:42.868 TRACE oslo_messaging.rpc.server     db_mapping = cls._get_by_host_from_db(context, host)
2017-04-18 17:29:42.868 TRACE oslo_messaging.rpc.server   File "/usr/lib/python2.7/site-packages/oslo_db/sqlalchemy/enginefacade.py", line 963, in wrapper
2017-04-18 17:29:42.868 TRACE oslo_messaging.rpc.server     return fn(*args, **kwargs)
2017-04-18 17:29:42.868 TRACE oslo_messaging.rpc.server   File "/opt/stack/nova/nova/objects/host_mapping.py", line 95, in _get_by_host_from_db
2017-04-18 17:29:42.868 TRACE oslo_messaging.rpc.server     raise exception.HostMappingNotFound(name=host)
2017-04-18 17:29:42.868 TRACE oslo_messaging.rpc.server HostMappingNotFound: Host 'localhost.localdomain' is not mapped to any cell
2017-04-18 17:29:42.868 TRACE oslo_messaging.rpc.server
```