OpenStack控制节点

迁移方案

迁移目的：

把10.10.128.11迁移到10.10.128.14，迁移需要注意：数据库和镜像文件，公网映射。

# 停止服务

首先停止2台计算节点服务

|  |
| --- |
| sudo stop nova-compute; sudo stop nova-network; sudo stop libvirt-bin; |

然后停止控制节点

|  |
| --- |
| sudo stop nova-api;sudo stop nova-cert;sudo stop nova-objectstore;sudo stop nova-scheduler; sudo stop nova-consoleauth |

# 导出数据库(10.10.128.11)

导出keystone数据库

|  |
| --- |
| mysqldump -h 10.10.128.11 -u keystonedbadmin -p keystone > keystone.sql  密码：keystonesecret |

导出glance数据库

|  |
| --- |
| mysqldump -h 10.10.128.11 -u glancedbadmin -p glance > glance.sql  密码：glancesecret |

导出nova数据库

|  |
| --- |
| mysqldump -h 10.10.128.11 -u novadbadmin -p nova > nova.sql  密码：novasecret |

# 备份数据到10.10.128.14

## 下载\*.sql数据库数据

|  |
| --- |
| root@ ubuntu-14:/etc/apt# sftp 10.10.128.11  get /root/mysql/\* /root/ |

## 同步/var/lib/glance/images/镜像文件

|  |
| --- |
| root@ubuntu:~# sftp 10.10.128.11  root@10.10.128.11's password:  get /var/lib/glance/images/\* /root/images/ |

## 备份nova.conf

|  |
| --- |
| root@ubuntu:~# sftp 10.10.128.11  root@10.10.128.11's password:  get /etc/nova/nova.conf /root/ |

# 修改网络

## 把原10.10.128.11的IP改为10.10.128.16

|  |
| --- |
| #修改IP地址  vi /etc/network/interfaces  address 10.10.128.16 |
| #修改主机名  vi /etc/hostname  ubuntu-16  vi /etc/hosts  10.10.128.16 ubuntu-16 |
| poweroff |

**最好把原10.10.128.11改完IP后关机.**

## 把新的控制节点10.10.128.14的IP改为10.10.128.11

修改hostname主机名

|  |
| --- |
| vi /etc/hostname  ubuntu-11  vi /etc/hosts  10.10.128.11 ubuntu-11 |

网卡设置

|  |
| --- |
| # and how to activate them. For more information, see interfaces(5).  # The loopback network interface  auto lo  iface lo inet loopback  # The primary network interface  auto eth0  iface eth0 inet static  address 10.10.128.11  netmask 255.255.128.0  network 10.10.128.0  broadcast 10.10.255.255  gateway 10.10.128.254  # dns-\* options are implemented by the resolvconf package, if installed  dns-nameservers 10.10.128.254  auto eth2  iface eth2 inet static  address 10.10.64.11  netmask 255.255.255.0  network 10.10.64.0 |

重启网络：

|  |
| --- |
| reboot |

**最好重启机器**

# 安装控制节点(10.10.128.14)

## 开启root权限

|  |
| --- |
| sudo passwd root  设置新密码 |

## Install Base OS & bridge-utils

|  |
| --- |
| sudo apt-get update  sudo apt-get upgrade  sudo apt-get install bridge-utils |

## 设置NTP Server

|  |
| --- |
| sudo apt-get install ntp |

以下内容添加到/etc/ntp.conf

|  |
| --- |
| server ntp.ubuntu.com  server 127.127.1.0  fudge 127.127.1.0 stratum 10 |

重启NTP服务

|  |
| --- |
| sudo service ntp restart |

## Install mysql-server and python-mysqldb package

|  |
| --- |
| sudo apt-get install mysql-server python-mysqldb  密码为: mygreatsecret |

修改/etc/mysql/my.cnf

|  |
| --- |
| bind-address = 0.0.0.0 |

重启mysql

|  |
| --- |
| sudo restart mysql |

Create MySQL databases to be used with nova, glance and keystone.

以下脚本粘贴到doMysql.sh,修改权限chmod +x doMsql.sh后执行，按提示输入主机名字。

|  |
| --- |
| #!/bin/bash  read -p "Enter HostName(For example: computer-node1):" HOSTNAME  echo "hostname is :$HOSTNAME"  sudo mysql -uroot -pmygreatsecret -e 'CREATE DATABASE nova;'  sudo mysql -uroot -pmygreatsecret -e 'CREATE USER novadbadmin;'  sudo mysql -uroot -pmygreatsecret -e "GRANT ALL PRIVILEGES ON nova.\* TO 'novadbadmin'@'%';"  sudo mysql -uroot -pmygreatsecret -e "SET PASSWORD FOR 'novadbadmin'@'%' = PASSWORD('novasecret');"  sudo mysql -uroot -pmygreatsecret -e 'CREATE DATABASE glance;'  sudo mysql -uroot -pmygreatsecret -e 'CREATE USER glancedbadmin;'  sudo mysql -uroot -pmygreatsecret -e "GRANT ALL PRIVILEGES ON glance.\* TO 'glancedbadmin'@'%';"  sudo mysql -uroot -pmygreatsecret -e "SET PASSWORD FOR 'glancedbadmin'@'%' = PASSWORD('glancesecret');"  sudo mysql -uroot -pmygreatsecret -e 'CREATE DATABASE keystone;'  sudo mysql -uroot -pmygreatsecret -e 'CREATE USER keystonedbadmin;'  sudo mysql -uroot -pmygreatsecret -e "GRANT ALL PRIVILEGES ON keystone.\* TO 'keystonedbadmin'@'%';"  sudo mysql -uroot -pmygreatsecret -e "SET PASSWORD FOR 'keystonedbadmin'@'%' = PASSWORD('keystonesecret');"  sudo mysql -uroot -pmygreatsecret -e "GRANT ALL PRIVILEGES ON nova.\* TO 'novadbadmin'@'localhost';"  sudo mysql -uroot -pmygreatsecret -e "SET PASSWORD FOR 'novadbadmin'@'localhost' = PASSWORD('novasecret');"  sudo mysql -uroot -pmygreatsecret -e "GRANT ALL PRIVILEGES ON glance.\* TO 'glancedbadmin'@'localhost';"  sudo mysql -uroot -pmygreatsecret -e "SET PASSWORD FOR 'glancedbadmin'@'localhost' = PASSWORD('glancesecret');"  sudo mysql -uroot -pmygreatsecret -e "GRANT ALL PRIVILEGES ON keystone.\* TO 'keystonedbadmin'@'localhost';"  sudo mysql -uroot -pmygreatsecret -e "SET PASSWORD FOR 'keystonedbadmin'@'localhost' = PASSWORD('keystonesecret');"  sudo mysql -uroot -pmygreatsecret -e "GRANT ALL PRIVILEGES ON nova.\* TO 'novadbadmin'@'$HOSTNAME';"  sudo mysql -uroot -pmygreatsecret -e "SET PASSWORD FOR 'novadbadmin'@'$HOSTNAME' = PASSWORD('novasecret');"  sudo mysql -uroot -pmygreatsecret -e "GRANT ALL PRIVILEGES ON glance.\* TO 'glancedbadmin'@'$HOSTNAME';"  sudo mysql -uroot -pmygreatsecret -e "SET PASSWORD FOR 'glancedbadmin'@'$HOSTNAME' = PASSWORD('glancesecret');"  sudo mysql -uroot -pmygreatsecret -e "GRANT ALL PRIVILEGES ON keystone.\* TO 'keystonedbadmin'@'$HOSTNAME';"  sudo mysql -uroot -pmygreatsecret -e "SET PASSWORD FOR 'keystonedbadmin'@'$HOSTNAME' = PASSWORD('keystonesecret');" |

## Install Keystone

|  |
| --- |
| sudo apt-get install keystone python-keystone python-keystoneclient |

修改文件/etc/keystone/keystone.conf

|  |
| --- |
| admin\_token = admin |

修改/etc/keystone/keystone.conf

|  |
| --- |
| connection = sqlite:////var/lib/keystone/keystone.db  改为  connection = mysql://keystonedbadmin:keystonesecret@10.10.64.11/keystone |

重启keystone

|  |
| --- |
| sudo service keystone restart |

同步数据库

|  |
| --- |
| sudo keystone-manage db\_sync |

添加环境变量到/root/.bashrc

|  |
| --- |
| export SERVICE\_ENDPOINT="http://localhost:35357/v2.0"  export SERVICE\_TOKEN=admin |

使环境变量生效

|  |
| --- |
| source /root/.bashrc |

导入keystone数据，把keystone.sql上传到新控制节点，然后执行导入到数据库中

|  |
| --- |
| root@ubuntu:~/mysql# **mysql -u keystonedbadmin -p**  Enter password: **keystonesecret**  Welcome to the MySQL monitor. Commands end with ; or \g.  Your MySQL connection id is 536  Server version: 5.5.28-0ubuntu0.12.04.2 (Ubuntu)  Copyright (c) 2000, 2012, Oracle and/or its affiliates. All rights reserved.  Oracle is a registered trademark of Oracle Corporation and/or its  affiliates. Other names may be trademarks of their respective  owners.  Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.  mysql> **use keystone**  Reading table information for completion of table and column names  You can turn off this feature to get a quicker startup with -A  Database changed  mysql> **source /root/mysql/keystone.sql;** |

## Install glance

|  |
| --- |
| sudo apt-get install glance glance-api glance-client glance-common glance-registry python-glance |

修改/etc/glance/glance-api-paste.ini 和 /etc/glance/glance-registry-paste.ini

|  |
| --- |
| admin\_tenant\_name = %SERVICE\_TENANT\_NAME%  admin\_user = %SERVICE\_USER%  admin\_password = %SERVICE\_PASSWORD%  改为  admin\_tenant\_name = service  admin\_user = glance  admin\_password = glance |

修改/etc/glance/glance-registry.conf

|  |
| --- |
| sql\_connection = mysql://glancedbadmin:glancesecret@10.10.64.11/glance  #末尾追加  [paste\_deploy]  flavor = keystone |

末尾追加以下内容到/etc/glance/glance-api.conf

|  |
| --- |
| [paste\_deploy]  flavor = keystone |

Create glance schema in the MySQL database.:

|  |
| --- |
| sudo glance-manage version\_control 0  sudo glance-manage db\_sync |

导入glance数据，把glance.sql上传到新控制节点，然后执行导入到数据库中

|  |
| --- |
| root@ubuntu:~/mysql# **mysql -u glancedbadmin -p**  Enter password: **glancesecret**  Welcome to the MySQL monitor. Commands end with ; or \g.  Your MySQL connection id is 536  Server version: 5.5.28-0ubuntu0.12.04.2 (Ubuntu)  Copyright (c) 2000, 2012, Oracle and/or its affiliates. All rights reserved.  Oracle is a registered trademark of Oracle Corporation and/or its  affiliates. Other names may be trademarks of their respective  owners.  Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.  mysql> **use glance**  Reading table information for completion of table and column names  You can turn off this feature to get a quicker startup with -A  Database changed  mysql> **source /root/mysql/glance.sql;** |

把镜像文件移到/var/lib/glance/images/

|  |
| --- |
| mv /root/images/\* /var/lib/glance/images/ |

修改权限

|  |
| --- |
| cd /var/lib/glance/images/  chown -R glance:glance \* |

重启glance-api 和glance-registry

|  |
| --- |
| sudo restart glance-api  sudo restart glance-registry |

添加环境变量到/root/.bashrc

|  |
| --- |
| export OS\_TENANT\_NAME=admin  export OS\_USERNAME=admin  export OS\_PASSWORD=admin  export OS\_AUTH\_URL="http://localhost:5000/v2.0/" |

使环境变量生效

|  |
| --- |
| source /root/.bashrc |

打印镜像列表

|  |
| --- |
| glance index |

## Install nova 除了nova-compute和nova-network

|  |
| --- |
| sudo apt-get install nova-api nova-cert nova-doc nova-objectstore nova-scheduler rabbitmq-server novnc nova-consoleauth |

同步/etc/nova/nova.conf

|  |
| --- |
| mv /root/nova.conf /etc/nova/ |

修改权限

|  |
| --- |
| sudo chown -R nova:nova /etc/nova  sudo chmod 644 /etc/nova/nova.conf |

修改/etc/nova/api-paste.ini

|  |
| --- |
| admin\_tenant\_name = %SERVICE\_TENANT\_NAME%  admin\_user = %SERVICE\_USER%  admin\_password = %SERVICE\_PASSWORD%  改为  admin\_tenant\_name = service  admin\_user = nova  admin\_password = nova |

数据同步

|  |
| --- |
| sudo nova-manage db sync |

导入nova数据，把nova.sql上传到新控制节点，然后执行导入到数据库中

|  |
| --- |
| root@ubuntu:~/mysql# **mysql -u novadbadmin -p**  Enter password:**novasecret**  Welcome to the MySQL monitor. Commands end with ; or \g.  Your MySQL connection id is 536  Server version: 5.5.28-0ubuntu0.12.04.2 (Ubuntu)  Copyright (c) 2000, 2012, Oracle and/or its affiliates. All rights reserved.  Oracle is a registered trademark of Oracle Corporation and/or its  affiliates. Other names may be trademarks of their respective  owners.  Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.  mysql> **use nova**  Reading table information for completion of table and column names  You can turn off this feature to get a quicker startup with -A  Database changed  mysql> **source /root/mysql/nova.sql;** |

重启nova服务

|  |
| --- |
| sudo restart nova-api; sudo restart nova-objectstore; sudo restart nova-scheduler; sudo restart nova-consoleauth;sudo restart nova-cert |

查看服务

|  |
| --- |
| root@ubuntu-50:~# sudo nova-manage service list  Binary Host Zone Status State Updated\_At  nova-scheduler ubuntu-50 nova enabled :-) 2012-10-28 04:46:52  nova-consoleauth ubuntu-50 nova enabled :-) 2012-10-28 04:46:52 |

## Install OpenStack Dashboard

|  |
| --- |
| sudo apt-get install openstack-dashboard |

遇到

Could not reliably determine the server's fully qualified domain name, using 127.0.1.1 for ServerName

添加内容到/etc/apache2/httpd.conf

|  |
| --- |
| ServerName 127.0.1.1 |

#重启apache

|  |
| --- |
| sudo service apache2 restart |

打开浏览器，输入http://10.10.128.11,输入帐号密码登录。

## 重启控制节点

|  |
| --- |
| reboot |

# 汉化语言包

安装软件包

|  |
| --- |
| apt-get install gettext |

把<openstack_dashboard简体中文汉化.rar>解压

把../openstack\_dashboard/django.po上传到

/usr/share/openstack-dashboard/openstack\_dashboard/locale/zh\_CN/LC\_MESSAGES

把../horizon/django.po上传到

/usr/share/pyshared/horizon/locale/zh\_CN/LC\_MESSAGES

编译2个语言包

|  |
| --- |
| cd /usr/share/openstack-dashboard/openstack\_dashboard/locale/zh\_CN/LC\_MESSAGES  msgfmt --statistics --verbose -o django.mo django.po    cd /usr/share/pyshared/horizon/locale/zh\_CN/LC\_MESSAGES  msgfmt --statistics --verbose -o django.mo django.po |

链接语言包

|  |
| --- |
| cd /usr/lib/python2.7/dist-packages/horizon/locale/zh\_CN/LC\_MESSAGES  ln -s /usr/share/pyshared/horizon/locale/zh\_CN/LC\_MESSAGES/django.mo django.mo |

重启服务

|  |
| --- |
| sudo service apache2 restart |

# 启动计算节点服务

1. 启动计算节点

|  |
| --- |
| sudo start nova-compute; sudo start nova-network; sudo start libvirt-bin; |