

Linux

Controller

```
[root@controller yum.repos.d]# cd
[root@controller ~]# hostname
controller
[root@controller ~]# ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP group default
qlen 1000
    link/ether 00:0c:29:19:93:f5 brd ff:ff:ff:ff:ff:ff
    inet 192.168.95.10/24 brd 192.168.95.255 scope global noprefixroute eth0
        valid_lft forever preferred_lft forever
    inet6 fe80::e466:52d3:76eb:e374/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
3: eth1: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP group default
qlen 1000
    link/ether 00:0c:29:19:93:ff brd ff:ff:ff:ff:ff:ff
[root@controller ~]#
```

Compute

```
[root@compute ~]# hostname
compute
[root@compute ~]# ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP group default
qlen 1000
    link/ether 00:0c:29:4a:ae:5e brd ff:ff:ff:ff:ff:ff
    inet 192.168.95.20/24 brd 192.168.95.255 scope global noprefixroute eth0
        valid_lft forever preferred_lft forever
    inet6 fe80::53c9:3c99:9d3c:849c/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
3: eth1: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP group default
qlen 1000
    link/ether 00:0c:29:4a:ae:68 brd ff:ff:ff:ff:ff:ff
[root@compute ~]# █
```

Controller 用户配置与用户组

```
[root@controller home]# ls
21cloud
[root@controller home]#
```

给 21cloud 添加 sudo 权限

```

Defaults    env_keep += "LC_TIME LC_ALL LANGUAGE LINGUAS _XKB_CHARSET XAUTHORITATIVE"

#
# Adding HOME to env_keep may enable a user to run unrestricted
# commands via sudo.
#
Defaults    env_keep += "HOME"

Defaults    secure_path = /sbin:/bin:/usr/sbin:/usr/bin

## Next comes the main part: which users can run what software on
## which machines (the sudoers file can be shared between multiple
## systems).
## Syntax:
##
##     user    MACHINE=COMMANDS
##
## The COMMANDS section may have other options added to it.
##
## Allow root to run any commands anywhere
root    ALL=(ALL)    ALL
21cloud ALL=(ALL)    ALL
## Allows members of the sys group to run networking, software,
## service management apps and more.
# %sys ALL = NETWORKING, SOFTWARE, SERVICES, STORAGE, DELEGATING, PROCESSES,
##
## Allows people in group wheel to run all commands
%wheel  ALL=(ALL)    ALL

## Same thing without a password
# %wheel    ALL=(ALL)    NOPASSWD: ALL

## Allows members of the users group to mount and unmount the
## cdrom as root
# %users    ALL=/sbin/mount /mnt/cdrom, /sbin/umount /mnt/cdrom

```

修改/mnt/目录下的 21cloud 用户及用户组

```

[root@controller mnt]# ls
21cloud
[root@controller mnt]# ll
total 0
drwxr-xr-x. 2 root root 6 May  5 17:38 21cloud
[root@controller mnt]#

```

设置/etc/hosts 文件并测试 controller 与 compute 的连通性


```
base | 3.6
extras | 2.9
updates | 2.9
(1/4): extras/7/x86_64/primary_db | 246
(2/4): base/7/x86_64/group_gz | 153
(3/4): base/7/x86_64/primary_db | 6.1
(4/4): updates/7/x86_64/primary_db | 15
Resolving Dependencies
--> Running transaction check
--> Package wget.x86_64 0:1.14-18.el7_6.1 will be installed
--> Finished Dependency Resolution

Dependencies Resolved

=====
Package Arch Version Repository
=====
Installing:
wget x86_64 1.14-18.el7_6.1 base

Transaction Summary
=====
Install 1 Package

Total download size: 547 k
Installed size: 2.0 M
Downloading packages:
warning: /var/cache/yum/x86_64/7/base/packages/wget-1.14-18.el7_6.1.x86_64.rpm: Header U3 RSA/SHA256 Signature, key ID f4a00eb5: NOKEY
Public key for wget-1.14-18.el7_6.1.x86_64.rpm is not installed
wget-1.14-18.el7_6.1.x86_64.rpm | 547
Retrieving key from file:///etc/pki/rpm-gpg/RPM-GPG-KEY-CentOS-7
Importing GPG key 0xF4A00EB5:
Userid : "CentOS-7 Key (CentOS 7 Official Signing Key) <security@centos.org>"
Fingerprint: 6341 ab27 53d7 8a78 a7c2 7bb1 24c6 ada7 f4a8 0eb5
Package : centos-release-7-9.2009.0.el7.centos.x86_64 (@anaconda)
From : /etc/pki/rpm-gpg/RPM-GPG-KEY-CentOS-7
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
Installing : wget-1.14-18.el7_6.1.x86_64
Verifying : wget-1.14-18.el7_6.1.x86_64

Installed:
wget.x86_64 0:1.14-18.el7_6.1

Complete!
[root@controller ~]# a
```

将 controller 中的 yum 源更换为阿里云 yum 源并在 controller 中载入 centos-7.repo

```
[root@controller yum.repos.d]# ll
total 44
-rw-r--r--. 1 root root 2523 May 5 11:08 Centos-7.repo
-rw-r--r--. 1 root root 0 May 5 11:07 CentOS-Base.repo
-rw-r--r--. 1 root root 1664 Oct 23 2020 CentOS-Base.repo.backup
-rw-r--r--. 1 root root 1309 Oct 23 2020 CentOS-CR.repo
-rw-r--r--. 1 root root 649 Oct 23 2020 CentOS-Debuginfo.repo
-rw-r--r--. 1 root root 314 Oct 23 2020 CentOS-fasttrack.repo
-rw-r--r--. 1 root root 630 Oct 23 2020 CentOS-Media.repo
-rw-r--r--. 1 root root 1331 Oct 23 2020 CentOS-Sources.repo
-rw-r--r--. 1 root root 8515 Oct 23 2020 CentOS-Vault.repo
-rw-r--r--. 1 root root 616 Oct 23 2020 CentOS-x86_64-kernel.repo
[root@controller yum.repos.d]# █
```

安装 wget

```
[root@controller ~]# yum -y install wget
Loaded plugins: fastestmirror
Determining fastest mirrors
 * base: mirrors.neusoft.edu.cn
 * extras: mirrors.neusoft.edu.cn
 * updates: mirrors.neusoft.edu.cn
http://mirrors.neusoft.edu.cn/centos/7.9.2009/os/x86_64/repodata/repomd.xml: [Errno 14] curl#52 - "Empty reply fr
om server"
Trying other mirror.
base | 3.6 kB | 00:00
extras | 2.9 kB | 00:00
updates | 2.9 kB | 00:00
(1/4): extras/7/x86_64/primary_db | 246 kB | 00:00
(2/4): base/7/x86_64/primary_db | 6.1 MB | 00:00
(3/4): base/7/x86_64/group_gz | 153 kB | 00:01
(4/4): updates/7/x86_64/primary_db | 15 MB | 00:08
Resolving Dependencies
--> Running transaction check
--> Package wget.x86_64 0:1.14-18.e17_6.1 will be installed
--> Finished Dependency Resolution

Dependencies Resolved

=====
Package Arch Version Repository Size
=====
Installing:
wget x86_64 1.14-18.e17_6.1 base 547 k

Transaction Summary
=====
Install 1 Package

Total download size: 547 k
Installed size: 2.0 M
Downloading packages:
warning: /var/cache/yum/x86_64/7/base/packages/wget-1.14-18.e17_6.1.x86_64.rpm: Header V3 RSA/SHA256 Signature, k
ey ID f4a80eb5: NOKEY
Public key for wget-1.14-18.e17_6.1.x86_64.rpm is not installed
wget-1.14-18.e17_6.1.x86_64.rpm | 547 kB | 00:00
Retrieving key from file:///etc/pki/rpm-gpg/RPM-GPG-KEY-CentOS-7
Importing GPG key 0xF4A80EB5:
 Userid : "CentOS-7 Key (CentOS 7 Official Signing Key) <security@centos.org>"
 Fingerprint: 6341 ab27 53d7 8a78 a7c2 7bb1 24c6 a8a7 f4a8 0eb5
 Package : centos-release-7-9.2009.0.el7.centos.x86_64 (@anaconda)
 From : /etc/pki/rpm-gpg/RPM-GPG-KEY-CentOS-7
Running transaction check
Running transaction test
```

```
Downloading packages:
warning: /var/cache/yum/x86_64/7/base/packages/wget-1.14-18.e17_6.1.x86_64.rpm: Header V3 RSA/SHA256 Signature, k
ey ID f4a80eb5: NOKEY
Public key for wget-1.14-18.e17_6.1.x86_64.rpm is not installed
wget-1.14-18.e17_6.1.x86_64.rpm | 547 kB | 00:00
Retrieving key from file:///etc/pki/rpm-gpg/RPM-GPG-KEY-CentOS-7
Importing GPG key 0xF4A80EB5:
 Userid : "CentOS-7 Key (CentOS 7 Official Signing Key) <security@centos.org>"
 Fingerprint: 6341 ab27 53d7 8a78 a7c2 7bb1 24c6 a8a7 f4a8 0eb5
 Package : centos-release-7-9.2009.0.el7.centos.x86_64 (@anaconda)
 From : /etc/pki/rpm-gpg/RPM-GPG-KEY-CentOS-7
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
Installing : wget-1.14-18.e17_6.1.x86_64 1/1
Verifying : wget-1.14-18.e17_6.1.x86_64 1/1

Installed:
wget.x86_64 0:1.14-18.e17_6.1

Complete!
[root@controller ~]# cd /etc/yum.repos.d
[root@controller yum.repos.d]# mv CentOS-Base.repo CentOS-Base.repo.bak_20210527
[root@controller yum.repos.d]# pwd
/etc/yum.repos.d
[root@controller yum.repos.d]# ll
total 40
-rw-r--r--. 1 root root 1664 Oct 23 2020 CentOS-Base.repo.bak_20210527
-rw-r--r--. 1 root root 1309 Oct 23 2020 CentOS-CR.repo
-rw-r--r--. 1 root root 649 Oct 23 2020 CentOS-Debuginfo.repo
-rw-r--r--. 1 root root 314 Oct 23 2020 CentOS-fasttrack.repo
-rw-r--r--. 1 root root 630 Oct 23 2020 CentOS-Media.repo
-rw-r--r--. 1 root root 1331 Oct 23 2020 CentOS-Sources.repo
-rw-r--r--. 1 root root 8515 Oct 23 2020 CentOS-Vault.repo
-rw-r--r--. 1 root root 616 Oct 23 2020 CentOS-x86_64-kernel.repo
[root@controller yum.repos.d]# cp CentOS-Base.repo.bak_20210527 CentOS-Base.repo
[root@controller yum.repos.d]# ll
total 44
-rw-r--r--. 1 root root 1664 May 5 11:47 CentOS-Base.repo
-rw-r--r--. 1 root root 1664 Oct 23 2020 CentOS-Base.repo.bak_20210527
-rw-r--r--. 1 root root 1309 Oct 23 2020 CentOS-CR.repo
-rw-r--r--. 1 root root 649 Oct 23 2020 CentOS-Debuginfo.repo
-rw-r--r--. 1 root root 314 Oct 23 2020 CentOS-fasttrack.repo
-rw-r--r--. 1 root root 630 Oct 23 2020 CentOS-Media.repo
-rw-r--r--. 1 root root 1331 Oct 23 2020 CentOS-Sources.repo
-rw-r--r--. 1 root root 8515 Oct 23 2020 CentOS-Vault.repo
-rw-r--r--. 1 root root 616 Oct 23 2020 CentOS-x86_64-kernel.repo
[root@controller yum.repos.d]# wget -O CentOS-Base.repo http://mirrors.aliyun.com/repo/Centos-7.repo
```

```
[root@controller yum.repos.d]# yum repolist
Loaded plugins: fastestmirror
Loading mirror speeds from cached hostfile
* base: mirrors.aliyun.com
* extras: mirrors.aliyun.com
* updates: mirrors.aliyun.com
repo id                                repo name                                status
base/7/x86_64                          CentOS-7 - Base - mirrors.aliyun.com    10,072
extras/7/x86_64                         CentOS-7 - Extras - mirrors.aliyun.com  509
updates/7/x86_64                        CentOS-7 - Updates - mirrors.aliyun.com 3,728
repolist: 14,309
[root@controller yum.repos.d]#
```

yum 源成功更换为阿里云 yum 源

```
[root@controller yum.repos.d]# yum search apache |wc -l
143
[root@controller yum.repos.d]# █
```

验证是否成功 143 说明更换 yum 成功

将镜像挂载到 compute

名称	大小	类型	修改时间	属性	所有者
..					
TRANS.TBL	3KB	TBL 文件	2020/11/4, 19:36	-r--r--r--	root
RPM-GPG-KEY-Cent...	2KB	文件	2015/12/10, 6:35	-rw-rw-r--	root
RPM-GPG-KEY-Cent...	2KB	文件	2015/12/10, 6:35	-rw-rw-r--	root
GPL	18KB	文件	2015/12/10, 6:35	-rw-rw-r--	root
EULA	227 Bytes	文件	2017/8/30, 22:33	-rw-rw-r--	root
CentOS_BuildTag	14 Bytes	文件	2020/10/30, 5:14	-rw-r--r--	root
repodata		文件夹	2020/11/4, 19:35	drwxr-xr-x	root
Packages		文件夹	2020/11/4, 19:30	drwxr-xr-x	root
LiveOS		文件夹	2020/10/27, 0:25	drwxr-xr-x	root
isolinux		文件夹	2020/11/3, 0:17	drwxr-xr-x	root
images		文件夹	2020/10/27, 0:26	drwxr-xr-x	root
EFI		文件夹	2020/10/27, 0:25	drwxr-xr-x	root

Compute 修改 local.repo


```

Verifying : 1:perl-Pod-Simple-3.28-4.e17.noarch 14/35
Verifying : perl-Time-Local-1.2300-2.e17.noarch 15/35
Verifying : 1:perl-Pod-Escapes-1.04-299.e17_9.noarch 16/35
Verifying : 2:vim-X11-7.4.629-8.e17_9.x86_64 17/35
Verifying : perl-Carp-1.26-244.e17.noarch 18/35
Verifying : 2:vim-common-7.4.629-8.e17_9.x86_64 19/35
Verifying : perl-Scalar-List-Utils-1.27-248.e17.x86_64 20/35
Verifying : perl-File-Temp-0.23.01-3.e17.noarch 21/35
Verifying : perl-Pod-Usage-1.63-3.e17.noarch 22/35
Verifying : perl-Encode-2.51-7.e17.x86_64 23/35
Verifying : perl-Pod-Perldoc-3.20-4.e17.noarch 24/35
Verifying : perl-podlators-2.5.1-3.e17.noarch 25/35
Verifying : 2:vim-minimal-7.4.629-8.e17_9.x86_64 26/35
Verifying : perl-File-Path-2.09-2.e17.noarch 27/35
Verifying : perl-threads-1.87-4.e17.x86_64 28/35
Verifying : 4:perl-Time-Hires-1.9725-3.e17.x86_64 29/35
Verifying : gpm-libs-1.20.7-6.e17.x86_64 30/35
Verifying : perl-Filter-1.49-3.e17.x86_64 31/35
Verifying : perl-Getopt-Long-2.40-3.e17.noarch 32/35
Verifying : perl-Text-ParseWords-3.29-4.e17.noarch 33/35
Verifying : 4:perl-libs-5.16.3-299.e17_9.x86_64 34/35
Verifying : 2:vim-minimal-7.4.629-7.e17.x86_64 35/35

Installed:
vim-X11.x86_64 2:7.4.629-8.e17_9
vim-enhanced.x86_64 2:7.4.629-8.e17_9
vim-common.x86_64 2:7.4.629-8.e17_9
vim-filesystem.x86_64 2:7.4.629-8.e17_9

Dependency Installed:
gpm-libs.x86_64 0:1.20.7-6.e17
perl.x86_64 4:5.16.3-299.e17_9
perl-Encode.x86_64 0:2.51-7.e17
perl-File-Path.noarch 0:2.09-2.e17
perl-Filter.x86_64 0:1.49-3.e17
perl-HTTP-Tiny.noarch 0:0.033-3.e17
perl-Pod-Escapes.noarch 1:1.04-299.e17_9
perl-Pod-Simple.noarch 1:3.28-4.e17
perl-Scalar-List-Utils.x86_64 0:1.27-248.e17
perl-Storable.x86_64 0:2.45-3.e17
perl-Time-Hires.x86_64 4:1.9725-3.e17
perl-constant.noarch 0:1.27-2.e17
perl-macros.x86_64 4:5.16.3-299.e17_9
perl-podlators.noarch 0:2.5.1-3.e17
perl-threads-shared.x86_64 0:1.43-6.e17
libxt.x86_64 0:1.1.5-3.e17
perl-Carp.noarch 0:1.26-244.e17
perl-Exporter.noarch 0:5.68-3.e17
perl-File-Temp.noarch 0:0.23.01-3.e17
perl-Getopt-Long.noarch 0:2.40-3.e17
perl-PathTools.x86_64 0:3.40-5.e17
perl-Pod-Perldoc.noarch 0:3.20-4.e17
perl-Pod-Usage.noarch 0:1.63-3.e17
perl-Socket.x86_64 0:2.010-5.e17
perl-Text-ParseWords.noarch 0:3.29-4.e17
perl-Time-Local.noarch 0:1.2300-2.e17
perl-libs.x86_64 4:5.16.3-299.e17_9
perl-parent.noarch 1:0.225-244.e17
perl-threads.x86_64 0:1.87-4.e17

Updated:
vim-minimal.x86_64 2:7.4.629-8.e17_9

complete!
[root@controller ~]#

```

做 compute 的硬盘挂载

未挂载前

```

[root@compute ~]# vi /mnt/local.repo
[root@compute ~]# vi /mnt/local.repo
[root@compute ~]# lsblk
NAME                MAJ:MIN RM  SIZE RO TYPE MOUNTPOINT
sda                  8:0      0   20G  0 disk
├─sda1               8:1      0    1G  0 part /boot
└─sda2               8:2      0   19G  0 part
   ├─centos-root     253:0    0   17G  0 lvm /
   └─centos-swap     253:1    0    2G  0 lvm [SWAP]
sdb                  8:16     0   40G  0 disk
sr0                  11:0     1 1024M  0 rom
loop0                7:0      0   4.4G  0 loop /mnt/centos
[root@compute ~]# █

```

```

[root@compute ~]# lsblk
NAME                MAJ:MIN RM  SIZE RO TYPE MOUNTPOINT
sda                  8:0      0   20G  0 disk
├─sda1               8:1      0    1G  0 part /boot
└─sda2               8:2      0   19G  0 part
   ├─centos-root     253:0    0   17G  0 lvm /
   └─centos-swap     253:1    0    2G  0 lvm [SWAP]
sdb                  8:16     0   40G  0 disk
├─sdb1               8:17     0   40G  0 part
sr0                  11:0     1 1024M  0 rom
loop0                7:0      0   4.4G  0 loop /mnt/centos
[root@compute ~]# █

```

分区完成

```
[root@compute ~]# lsblk
NAME                MAJ:MIN RM  SIZE RO TYPE MOUNTPOINT
sda                  8:0    0   20G  0 disk
├─sda1                8:1    0    1G  0 part /boot
└─sda2                8:2    0   19G  0 part
   ├─centos-root      253:0   0   17G  0 lvm  /
   └─centos-swap      253:1   0    2G  0 lvm  [SWAP]
sdb                  8:16   0   40G  0 disk
└─sdb1                8:17   0   40G  0 part /mnt/10GB-1
sr0                  11:0    1 1024M  0 rom
loop0                7:0    0   4.4G  0 loop /mnt/centos
[root@compute ~]#
```

挂载成功