

Centos/RHEL6



- centos6 ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐
- centos6 ☐ iscsi ☐ ☐ ☐

centos6

Centos eth0 eth1

```
$> vi /etc/udev/rules.d/70-persistent-net.rules

...
# PCI device 0x8086:0x1076 (e1000)
SUBSYSTEM=="net", ACTION=="add", DRIVERS=="*", ATTR{address}=="00:00:00:00:00:00",
ATTR{type}=="1", KERNEL=="eth*", NAME="eth0"

...
# PCI device 0x8086:0x1076 (e1000)
SUBSYSTEM=="net", ACTION=="add", DRIVERS=="*", ATTR{address}=="00:00:00:00:00:01",
ATTR{type}=="1", KERNEL=="eth*", NAME="eth1"

...
```

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- ```
$ yum install -y scsi-target-utils libibverbs libibverbs-devel librdmacm librdmacm-devel
```

- ```
$ chkconfig tgtd on; /etc/init.d/tgtd start
$ chkconfig --list | grep tgtd
tgtd          0:off 1:off 2:on 3:on 4:on 5:on 6:off
```

- ```
$ tgtadm --lld iscsi -o new -m target --tid 1 -T iqn.test.storage
```

```
#iqn.test.storage 00 00 00 0000 , 0000 0000 00 0000 000 00
```

- ```
$ tgtadm --lld iscsi -o show -m target
```

Target 1: ign.test.storage

System information:

Driver: iscsi

State: ready

I_T nexus information:

LUN information:

LUN: 0

Type: controller

SCSI ID: IET 00010000

SCSI SN: beaf10

Size: 0 MB, Block size: 1

Online: Yes
Removable media: No
Readonly: No
Backing store type: null
Backing store path: None
Backing store flags:
Account information:
ACL information:

3. `target`

```
$ tgtadm --lld iscsi -o new -m logicalunit --tid 1 --lun 1 -b /dev/sda5
```

4. `target`

```
$ tgtadm --lld iscsi -o show -m target
```

Target 1: iqn.test.storage

System information:

Driver: iscsi

State: ready

I_T nexus information:

LUN information:

LUN: 0

Type: controller

SCSI ID: IET 00010000

SCSI SN: beaf10

Size: 0 MB, Block size: 1

Online: Yes

Removable media: No

Readonly: No

Backing store type: null

Backing store path: None

Backing store flags:

LUN: 1

Type: disk

SCSI ID: IET 00010001

SCSI SN: beaf11

Size: 10619 MB, Block size: 512

Online: Yes

Removable media: No

```
Readonly: No
Backing store type: rdwr
Backing store path: /dev/sda5
Backing store flags:
Account information:
ACL information:
```

5. target ☐ ☐ ☐

```
$ tgtadm --lld iscsi --op bind --mode target --tid 1 --initiator-address 192.168.100.10
```

6. target ☐ ☐☐☐

```
$ tgtadm --lld iscsi --op new --mode account --user test --password iscsitest
```

7. ☐☐☐ ☐☐☐☐ ☐☐☐

```
$ tgtadm --lld iscsi --op show --mode account
Account list:
test
```

8. ☐☐☐ ☐☐ ☐ ☐☐☐☐

```
$ tgtadm --lld iscsi --op bind --mode account --tid 1 --user test
```

9. ☐☐☐ ☐☐☐☐ ☐☐

```
$ tgtadm --lld iscsi --op show --mode target
Target 1: iqn.test.storage
System information:
  Driver: iscsi
  State: ready
I_T nexus information:
LUN information:
  LUN: 0
    Type: controller
    SCSI ID: IET    00010000
    SCSI SN: beaf10
    Size: 0 MB, Block size: 1
    Online: Yes
    Removable media: No
    Readonly: No
```

```
Backing store type: null
Backing store path: None
Backing store flags:
LUN: 1
Type: disk
SCSI ID: IET 00010001
SCSI SN: beaf11
Size: 10619 MB, Block size: 512
Online: Yes
Removable media: No
Readonly: No
Backing store type: rdwr
Backing store path: /dev/sda5
Backing store flags:
Account information:
test
ACL information:
192.168.100.10
```

10. `target` ()

```
$ mv /etc/tgt/targets.conf /etc/tgt/targets.conf_ori
$ tgt-admin --dump > /etc/tgt/targets.conf
```

11. `target`

```
$ cat /etc/tgt/targets.conf

default-driver iscsi
<target iqn.test.storage>
    backing-store /dev/sda5
    incominguser test iscsitest
    # , 12 ~16
    initiator-address 192.168.100.10
</target>
```

12. `target`

```
$ /etc/init.d/tgtd restart
Stopping SCSI target daemon: Stopping target framework daemon
```

[OK]

Starting SCSI target daemon: Starting target framework daemon



1. 安装 工具

```
$ yum install -y iscsi-initiator-utils
```

2. 配置 服务 并 启动

```
$ /etc/init.d/iscsi start
$ /etc/init.d/iscsid start
$ chkconfig iscsi on; chkconfig iscsid on;
```

3. target 配置 文件 内容

```
$vi /etc/iscsi/iscsid.conf
#node.session.auth.username = username
#node.session.auth.password = password
#discovery.sendtargets.auth.username = username
#discovery.sendtargets.auth.password = password
# 4 个 配置 项
```

4. iscsid 重启 服务

```
$ /etc/init.d/iscsid restart
Stopping iSCSI daemon: [ OK ]
Starting iSCSI daemon: [ OK ]
```

5. target 配置 文件

```
$ iscsiadm --mode discovery --type sendtargets --portal 192.168.10.10 (target ip)
#192.168.10.10:3260,1 iqn.test.storage (target ip, port, target name, target type, target status)
"iscsiadm: No portals found" (target ip) .
```

6. target 配置 文件

```
$ iscsiadm --mode node --targetname iqn.test.storage --portal 192.168.10.10 -l -n node.startup -v
automatic
```

7. 查看磁盘分区情况

```
$ fdisk -l
Disk /dev/sda: 21.4 GB, 21474836480 bytes
255 heads, 63 sectors/track, 2610 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes

   Device Boot      Start         End      Blocks   Id  System
/dev/sda1  *           1           13     104391   83  Linux
/dev/sda2                14        1057     8385930   83  Linux
/dev/sda3            1058        1452     3172837+   82  Linux swap / Solaris
/dev/sda4            1453        2610     9301635    5  Extended
/dev/sda5            1453        2610     9301603+   83  Linux

Disk /dev/sdb: 10.6 GB, 10618804224 bytes
64 heads, 32 sectors/track, 10126 cylinders
Units = cylinders of 2048 * 512 = 1048576 bytes

Disk /dev/sdb doesn't contain a valid partition table
```

将 /dev/sdb 分区挂载到 /data，并设置开机自动挂载。

8. 配置 fstab 文件

```
$ vi /etc/fstab
...
/dev/sdb1      /data         ext3    _netdev      0 0
```



1. iscsi 配置

```
$ iscsiadm -m node -T iqn.test.storage -p 192.168.10.10 -u
Logging out of session [sid: 1, target: iqn.test.storage, portal: 192.168.10.10,3260]

Logout of [sid: 1, target: iqn.test.storage, portal: 192.168.10.10,3260] successful.
```

2. `root` `root` `root`

```
$ iscsiadm -m node -T iqn.test.storage -p 192.168.10.10 -o delete
```

3. `target` `root` `root`

```
$ tgtadm --lld iscsi --op show --mode session --tid 1 --sid 1
```