

# 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"

...
```

# centos6 安装 iscsi 服务端

## 环境

### 1. 安装依赖

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

### 2. 配置 tgt 服务

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

### 1. 创建 target

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

```
#iqn.test.storage 是 iqn 的格式，格式为 iqn.yyyy.mm:targetid:servername:port
```

### 2. 查看 target 信息

```
$ 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:  
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` `target` `target` `target` ( `target` `target` )

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

11. `target` `target` `target` `target`

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

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

12. `target` `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. 启动 iscsi 服务

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

3. 编辑 iscsi 配置文件

```
$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 16 字节 的 16 字节
```

4. iscsid 重启

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

5. 配置 iscsiadm

```
$ iscsiadm --mode discovery --type sendtargets --portal 192.168.10.10 (target ip)
#192.168.10.10:3260,1 iqn.test.storage (16 字节, 16 字节, 16 字节, 16 字节)
"iscsiadm: No portals found" 16 字节 .
```

6. 配置 iscsiadm

```
$ 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 分区格式化为 ext3 文件系统，/dev/sdb1 分区挂载到 /data 目录。

## 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
```