

iSCSI 网络磁盘

环境调整

```
[root@server0 ~]# firewall-cmd --set-default-zone=trusted  
success
```

```
[root@desktop0 ~]# firewall-cmd --set-default-zone=trusted  
success
```

服务端创建新的分区

```
[root@server0 ~]# lsblk  
NAME      MAJ:MIN RM  SIZE RO TYPE MOUNTPOINT  
vda        253:0    0   10G  0 disk  
└─vda1     253:1    0   10G  0 part /  
vdb        253:16   0   10G  0 disk  
[root@server0 ~]# fdisk /dev/vdb  
欢迎使用 fdisk (util-linux 2.23.2)。
```

```
命令(输入 m 获取帮助) : n  
Partition type:  
   p   primary (0 primary, 0 extended, 4 free)  
   e   extended  
Select (default p):  
Using default response p  
分区号 (1-4, 默认 1):  
起始 扇区 (2048-20971519, 默认为 2048):  
将使用默认值 2048  
Last 扇区, +扇区 or +size{K,M,G} (2048-20971519, 默认为 20971519) : +3G  
分区 1 已设置为 Linux 类型, 大小设为 3 GiB  
命令(输入 m 获取帮助) : w
```

搭建 iSCSI 网络磁盘 (服务端)

安装 targetcli 包

```
[root@server0 ~]# yum -y install targetcli  
已加载插件：langpacks  
rhel_dvd
```

运行 targetcli

```
[root@server0 ~]# targetcli  
Warning: Could not load preferences file /root/.targetcli/prefs.bin.  
targetcli shell version 2.1.fb34  
Copyright 2011-2013 by Datera, Inc and others.  
For help on commands, type 'help'.  
/> █
```

创建后端存储

```
/> backstores/block create nsd /dev/vdb1  
Created block storage object nsd using /dev/vdb1.
```

```

/> ls
o- / ..... [ ... ]
o- backstores ..... [ ... ]
o- block ..... [Storage Objects: 1]
o- nsd ..... [/dev/vdb1 (3.0GiB) write-thru deactivated]
o- fileio ..... [Storage Objects: 0]
o- pscsi ..... [Storage Objects: 0]
o- ramdisk ..... [Storage Objects: 0]
o- iscsi ..... [Targets: 0]
o- loopback ..... [Targets: 0]

```

创建磁盘组的名字 iqn

```

/> iscsi/ create iqn.2017-12.com.example:server0
Created target iqn.2017-12.com.example:server0.
Created TPG 1.

```

```

/> ls
o- / ..... [ ... ]
o- backstores ..... [ ... ]
o- block ..... [Storage Objects: 1]
o- nsd ..... [/dev/vdb1 (3.0GiB) write-thru deactivated]
o- fileio ..... [Storage Objects: 0]
o- pscsi ..... [Storage Objects: 0]
o- ramdisk ..... [Storage Objects: 0]
o- iscsi ..... [Targets: 1]
o- iqn.2017-12.com.example:server0 ..... [TPGs: 1]
o- tpg1 ..... [no-gen-acls, no-auth]
o- acls ..... [ACLs: 0]
o- luns ..... [LUNs: 0]
o- portals ..... [Portals: 0]
o- loopback ..... [Targets: 0]

```

关联磁盘组的名字 iqn 与后端存储

```

/> iscsi/iqn.2017-12.com.example:server0/tpg1/luns create /backstores/block/nsd
Created LUN 0.
/> ls
o- / ..... [ ... ]
o- backstores ..... [ ... ]
o- block ..... [Storage Objects: 1]
o- nsd ..... [/dev/vdb1 (3.0GiB) write-thru activated]
o- fileio ..... [Storage Objects: 0]
o- pscsi ..... [Storage Objects: 0]
o- ramdisk ..... [Storage Objects: 0]
o- iscsi ..... [Targets: 1]
o- iqn.2017-12.com.example:server0 ..... [TPGs: 1]
o- tpg1 ..... [no-gen-acls, no-auth]
o- acls ..... [ACLs: 0]
o- luns ..... [LUNs: 1]
o- lun0 ..... [block/nsd (/dev/vdb1)]
o- portals ..... [Portals: 0]
o- loopback ..... [Targets: 0]

```

设置访问控制，客户端声称的名字

```

/> iscsi/iqn.2017-12.com.example:server0/tpg1/acls create iqn.2017-12.com.example:desktop0
Created Node ACL for iqn.2017-12.com.example:desktop0
Created mapped LUN 0.

```

启用端口 3260 与 IP 监听

```

/> iscsi/iqn.2017-12.com.example:server0/tpg1/portals create 172.25.0.11
Using default IP port 3260
Created network portal 172.25.0.11:3260.
/> exit
Global pref auto_save_on_exit=true
Last 10 configs saved in /etc/target/backup.
Configuration saved to /etc/target/saveconfig.json

```

最后重启 target 服务即可

```

[root@server0 ~]# systemctl restart target
[root@server0 ~]# systemctl enable target
ln -s '/usr/lib/systemd/system/target.service' '/etc/systemd/system/multi-user.target.wants/target.service'

```

客户端

安装客户端程序软件包

产生 yum 缓存

```

[root@desktop0 ~]# yum repolist
已加载插件：langpacks
rhel_dvd
(1/2): rhel_dvd/group_gz
(2/2): rhel_dvd/primary_db
源标识 源名称 状态
rhel_dvd Remote classroom copy of dvd 4,305
repolist: 4,305

```

```
[root@desktop0 ~]# yum -y install iscsi-initiator-utils.i686
已加载插件：langpacks
正在解决依赖关系
```

修改配置文件，指明客户端声称的名字（服务端运行 `targetcli`，然后 `ls` 查看，复制 `acls` 下的名字）

```
[root@desktop0 ~]# vim /etc/iscsi/initiatorname.iscsi
InitiatorName=iqn.2017-12.com.example:desktop0
```

#vim 命令补充：在命令模式下输入大写的 **C**，作用是删除该行光标后的内容并且进入输入模式

发现服务端共享磁盘(打开一个终端，`man iscsiadm`，命令模式下大写的 **G** 进入到最后，从 `example` 复制第一条命令，修改 ip 地址)

```
[root@desktop0 ~]# iscsiadm iscsiadm --mode discoverydb --type sendtargets --portal 172.25.0.11 --discover
172.25.0.11:3260,1 iqn.2017-12.com.example:server0
```

```
EXAMPLES
Discover targets at a given IP address:
///// iscsiadm --mode discoverydb --type sendtargets --portal 192.168.1.10 --discover
```

重启客户端服务

```
[root@desktop0 ~]# lsblk
NAME MAJ:MIN RM SIZE RO TYPE MOUNTPOINT
vda   253:0    0 10G 0 disk
└─vda1 253:1    0 10G 0 part /
vdb   253:16    0 10G 0 disk
[root@desktop0 ~]# systemctl restart iscsi
Warning: Unit file of iscsi.service changed on disk, 'systemctl daemon-reload' recommended.
[root@desktop0 ~]# systemctl daemon-reload
[root@desktop0 ~]# systemctl restart iscsi
[root@desktop0 ~]# lsblk
NAME MAJ:MIN RM SIZE RO TYPE MOUNTPOINT
sda   8:0      0 3G  0 disk
vda   253:0    0 10G 0 disk
└─vda1 253:1    0 10G 0 part /
vdb   253:16    0 10G 0 disk
```