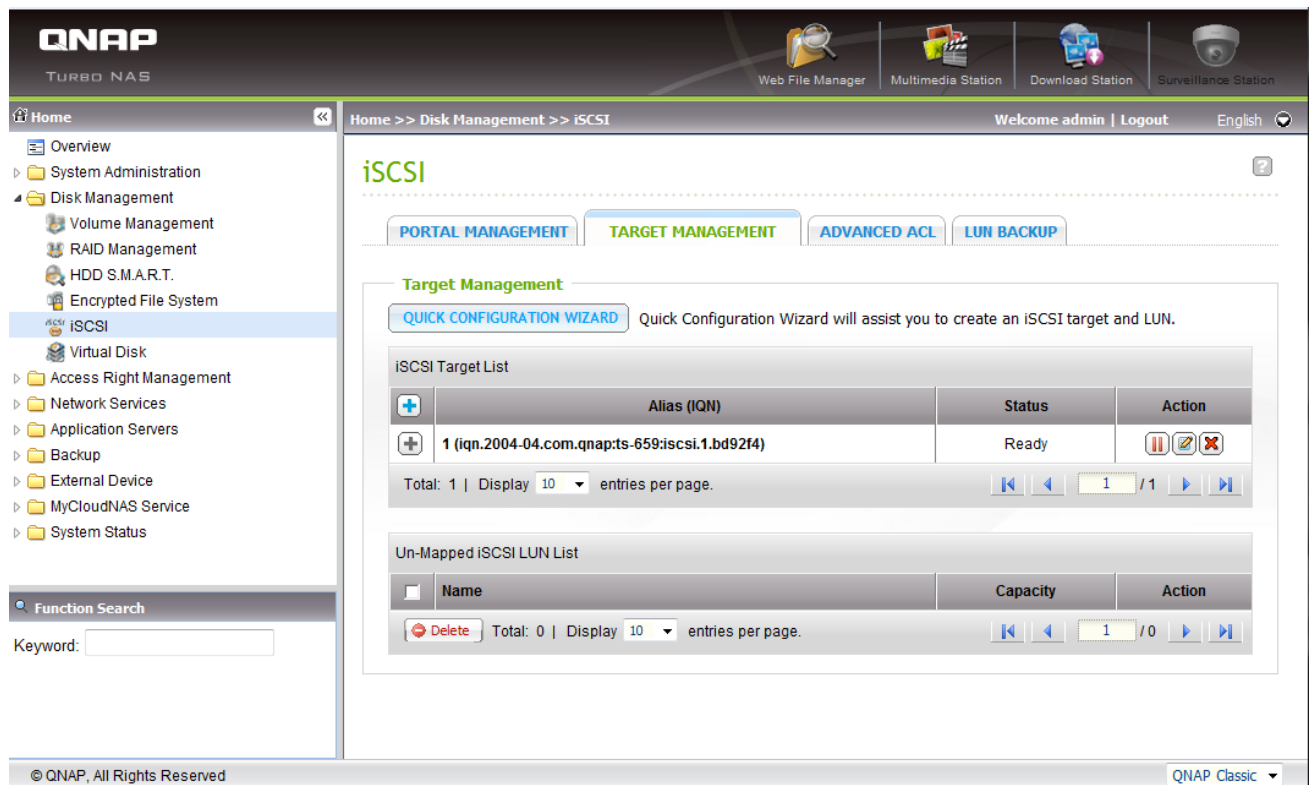
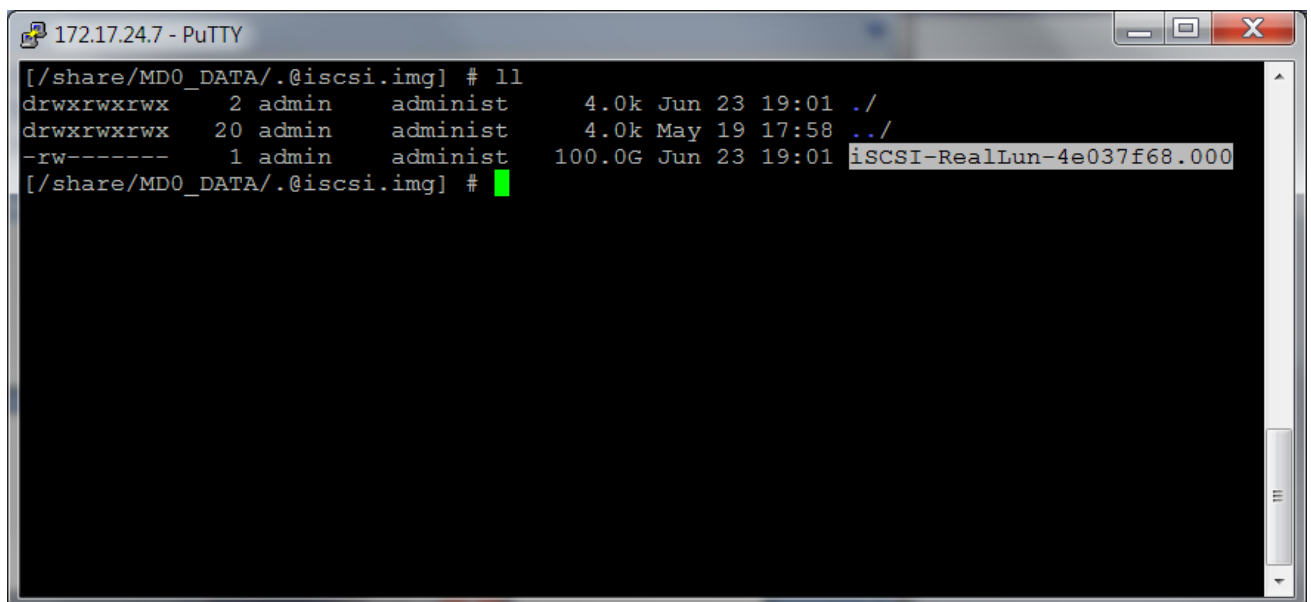


Assume the iSCSI LUN information is lost due to some unknown issue as show below. Please use the following steps to try to recover it.



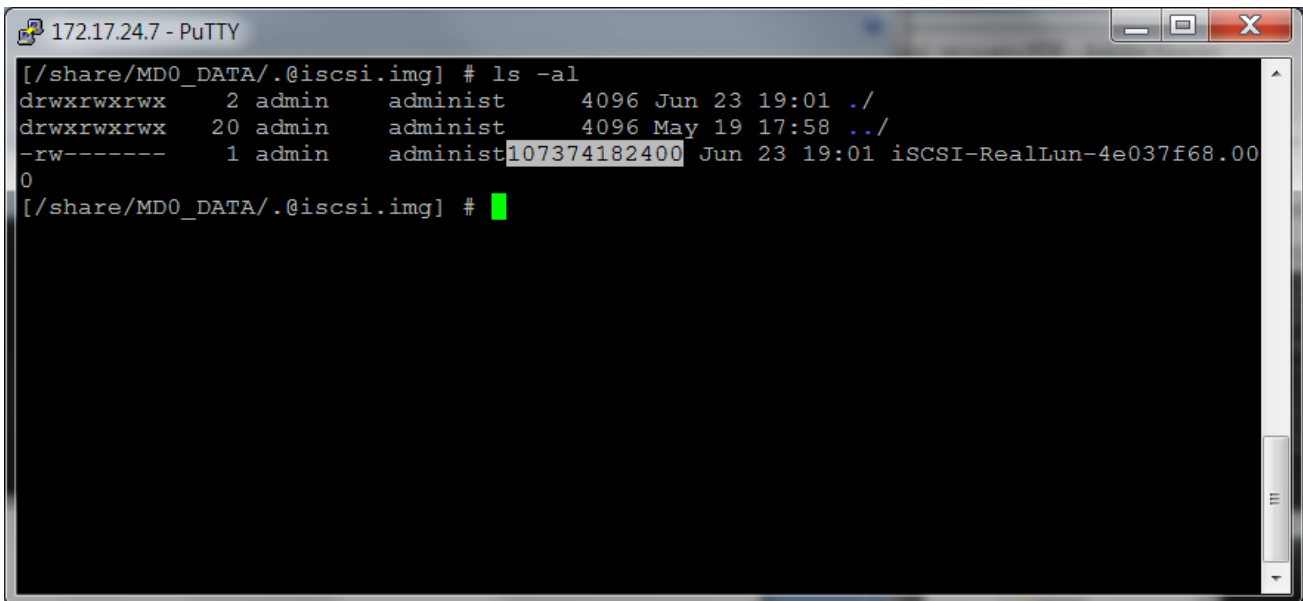
1. Move to the volume path to check the file(s) of the LUN is still existed or not:

In this example, the volume path is `/share/MD0_DATA/.@iscsi.img`, and the file name of the LUN is `iSCSI-RealLun-4e037f68.000`.



2. Check the file count(s) of the LUN and the capacity of the LUN:

Use the command “**ls -al**” to check the detail capacity of the LUN. It should be multiple times of GB. In this case,  $107374182400 = 100 * 1024 * 1024 * 1024 = 100 \text{ GB}$ .

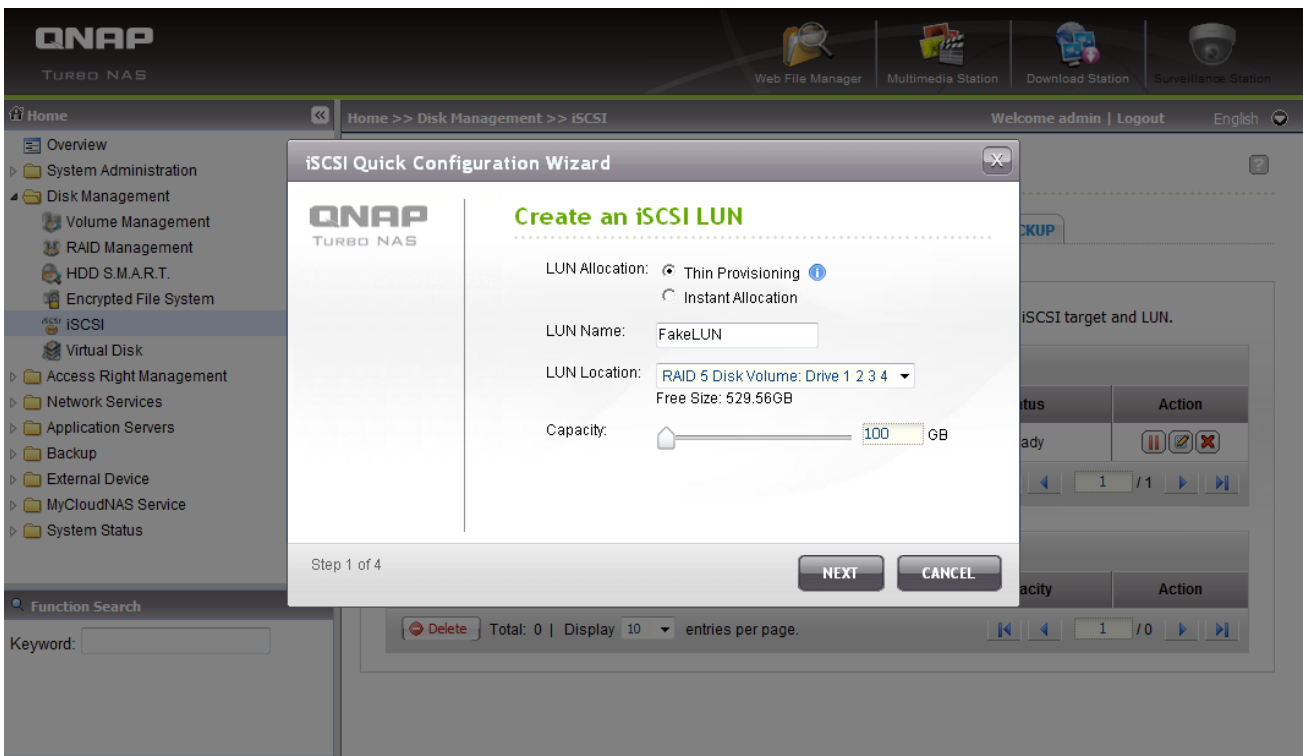


```
172.17.24.7 - PuTTY
[/share/MD0_DATA/./iscsi.img] # ls -al
drwxrwxrwx   2 admin   administ   4096 Jun 23 19:01 ./
drwxrwxrwx  20 admin   administ   4096 May 19 17:58 ../
-rw-----   1 admin   administ 107374182400 Jun 23 19:01 iSCSI-RealLun-4e037f68.00
0
[/share/MD0_DATA/./iscsi.img] #
```

3. Use the iSCSI UI to make a fake LUN to create an iSCSI LUN with the same size:

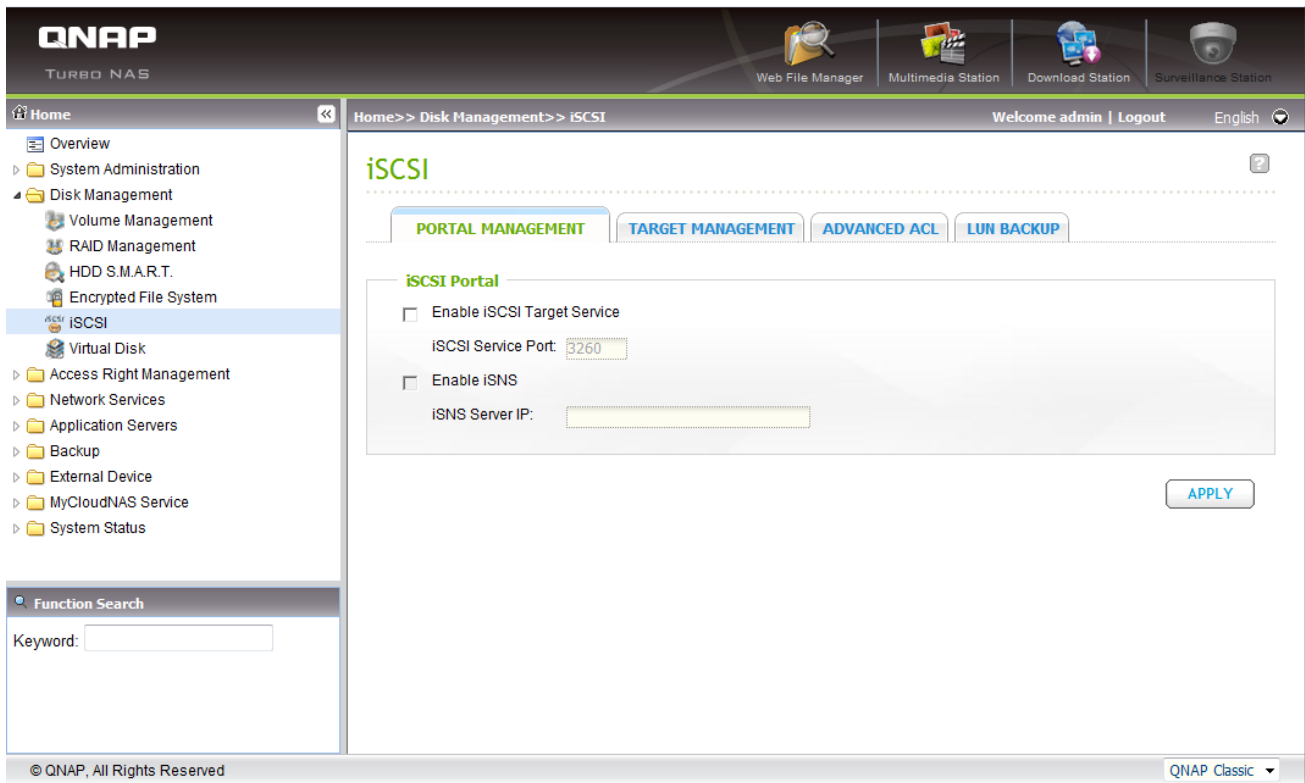
Remember to make the fake LUN with **thin provisioning**. Since the disk volume may not have enough space to make a fake LUN with the same size if you choose instant allocation!

Besides, this key value is for record only.



#### 4. Disable the iSCSI service:

(1) Disable the iSCSI service by the UI.



(2) Disable the iSCSI service by the command line:

Use the following command: “/etc/init.d/iscsitrgt.sh stop”. Note that this step is very important, otherwise you cannot re-start the iSCSI service with the correct LUN file(s)!

```
172.17.24.7 - PuTTY
[/share/MD0_DATA/.@iscsi.img] # ls -al
drwxrwxrwx   2 admin   administ   4096 Jun 23 19:01 ./
drwxrwxrwx  20 admin   administ   4096 May 19 17:58 ../
-rw-----   1 admin   administ107374182400 Jun 23 19:01 iSCSI-RealLun-4e037f68.00
0
[/share/MD0_DATA/.@iscsi.img] # df
Filesystem      Size      Used Available Use% Mounted on
/dev/ram         139.5M    121.3M    18.2M   87% /
tmpfs           32.0M     120.0k    31.9M    0% /tmp
/dev/sda4       310.0M    171.5M    138.4M   55% /mnt/ext
/dev/md9        509.5M     79.7M    429.8M   16% /mnt/HDA_ROOT
/dev/md0       590.6G     30.0G    530.6G    5% /share/MD0_DATA
tmpfs           32.0M      0         32.0M    0% /.eaccelerator.tmp
[/share/MD0_DATA/.@iscsi.img] # /etc/init.d/iscsitrgt.sh stop
rmmod: iscsi_target_mod: No such file or directory
[/share/MD0_DATA/.@iscsi.img] #
```

5. Modify the LUNName, LUNMetaPath, and LUNPath in the [LUNxInfo] section and the LUN\_LUNName of the [LUNKey] section of the configuration file, /etc/config/iscsi\_trgt.conf, according to the real file name of the LUN:

In this example,

[LUNKey]

LUN\_FakeLUN = 0 → LUN\_RealLUN = 0

[LUN0Info]

LUNName = FakeLUN → LUNName = RealLUN

LUNMetaPath = /share/MD0\_DATA/.@iscsi.img/iSCSI-FakeLUN-4e0388f0:001 →

LUNMetaPath = /share/MD0\_DATA/.@iscsi.img/iSCSI-RealLun-4e037f68:001

The LUN0Info Section before modified:

```
172.17.24.7 - PuTTY
mutualCHAPPasswd =
[LUN0Info]
LUNIndex = 0
LUNName = FakeLUN
LUNPath = /share/MD0_DATA
LUNMetaPath = /share/MD0_DATA/.@iscsi.img/iscsi-FakeLUN-4e0388f0:001
LUNCapacity = 102400
LUNFileCount = 1
LUNThinAllocate = TRUE
LUNStatus = 1
LUNBackupStatus = 0
LUNBackupPid = -1
LUNBackupJob = -1
LUNInitBitmap00 = 00000001
FBNumber = 0
[LUN0Init0Info]
LUNIndex = 0
iscsi_trgt.conf [74%] 46,01
```

The LUNKey Section before modified:

```
172.17.24.7 - PuTTY
initiatorAlias = Default Policy
initiatorLUNBitmap00 = 00000001
initiatorTargetBitmap00 = 00000001
[InitiatorKey]
iqn.2004-04.com.qnap:all:iscsi.default.ffffff = 0
[LUNKey]
LUN FakeLUN = 0
[target0Info]
targetIndex = 0
targetName = 1
targetIQN = iqn.2004-04.com.qnap:ts-659:iscsi.1.bd92f4
targetAlias = 1
bTargetDataDigest = FALSE
bTargetHeaderDigest = FALSE
targetStatus = 0
targetInitBitmap00 = 00000001
targetLUNNumBitmap00 = 00000000
iscsi_trgt.conf [32%] 20,01
```

The LUN0Info Section after modified:

```
172.17.24.7 - PuTTY
[target0Init0Info]
targetIndex = 0
initiatorIndex = 0
bCHAPEnable = FALSE
bMutualCHAPEnable = FALSE
CHAPUserName =
CHAPPasswd =
mutualCHAPUserName =
mutualCHAPPasswd =
[LUN0Info]
LUNIndex = 0
LUNName = ReallUN
LUNPath = /share/MD0_DATA
LUNMetaPath = /share/MD0_DATA/.@iscsi.img/iscsi-RealLun-4e037f68:001
LUNCapacity = 102400
LUNFileCount = 1
LUNThinAllocate = TRUE
iscsi trgt.conf [+] [72%] 45,12
```

The LUNKey Section after modified:

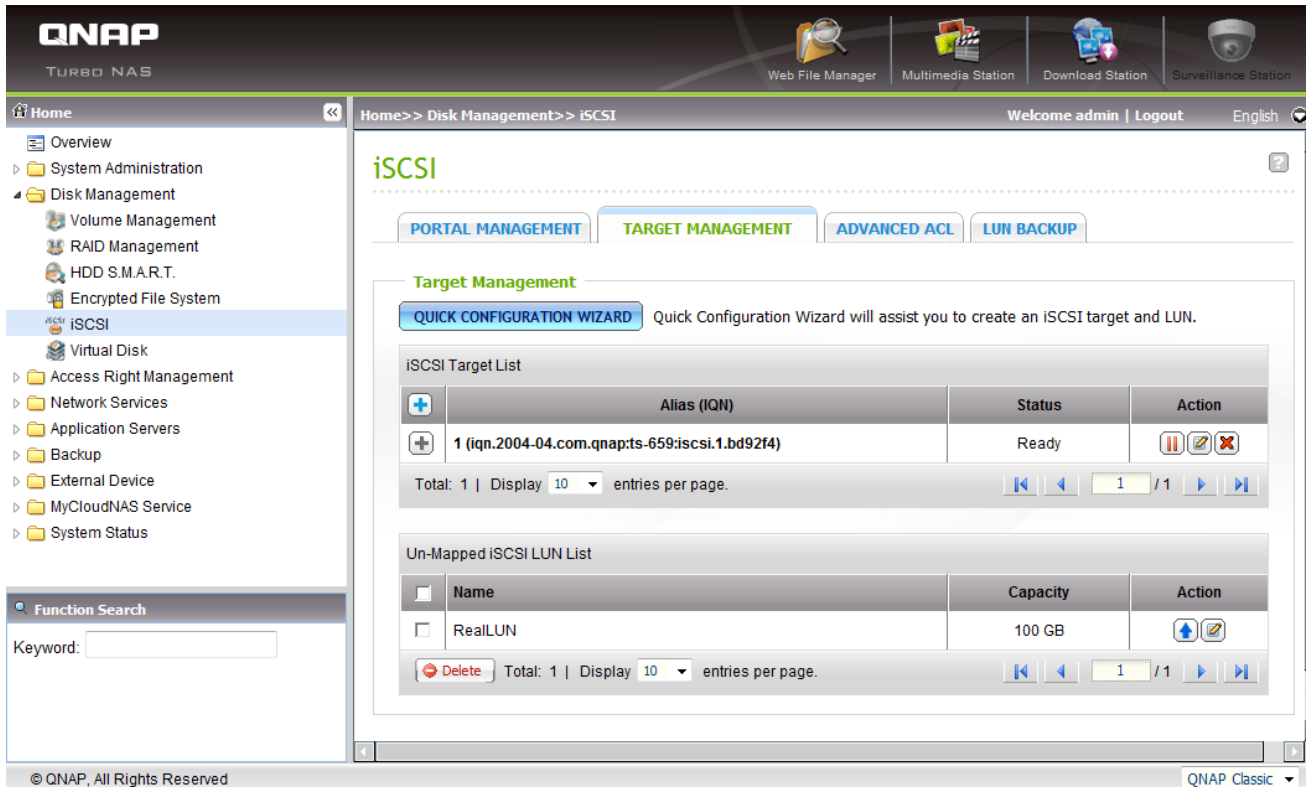
```
172.17.24.7 - PuTTY
initiatorAlias = Default Policy
initiatorLUNBitmap00 = 00000001
initiatorTargetBitmap00 = 00000001
[InitiatorKey]
iqn.2004-04.com.qnap:all:iscsi.default.ffffff = 0
[LUNKey]
LUN ReallUN = 0
[target0Info]
targetIndex = 0
targetName = 1
targetIQN = iqn.2004-04.com.qnap:ts-659:iscsi.1.bd92f4
targetAlias = 1
bTargetDataDigest = FALSE
bTargetHeaderDigest = FALSE
targetStatus = 0
targetInitBitmap00 = 00000001
targetLUNNumBitmap00 = 00000000
iscsi trgt.conf [+] [33%] 21,08
```

6. Re-start the iSCSI service:

Use the command “/etc/init.d/iscsitrgt.sh start” and enable the iSCSI service in the UI:

Now you can see the correct LUN name in the UI, and try to connect it to check the content!

It should be ok now.



Note:

- (1) If there are several LUN files in the same LUN, and the size of the LUN file is not 1TB except the last LUN file, then you should use LUN expansion to create the fake one.  
For example, if there are iSCSI-RealLun-4e037f68.000 and iSCSI-RealLun-4e037f68.001, and if iSCSI-RealLun-4e037f68.000(not the last one) is just 100GB and iSCSI-RealLun-4e037f68.001 is 300GB, you should create a fake LUN with 100GB first, and then expand it to 400GB.
- (2) The LUNMetaPath in the [LUNxInfo] section has two meanings: the LUN path and the file counts of the LUN.  
For example, if in iscsi\_trgt.conf you find the MetaPath is iSCSI-RealLun-4e037f68:003, which means there are 3 LUN files, and the names are iSCSI-RealLun-4e037f68.000, iSCSI-RealLun-4e037f68.001, and iSCSI-RealLun-4e037f68.002
- (3) If you are not familiar with the linux operation, especially vi, please reference:  
[http://linux.vbird.org/linux\\_basic/0310vi.php](http://linux.vbird.org/linux_basic/0310vi.php)