

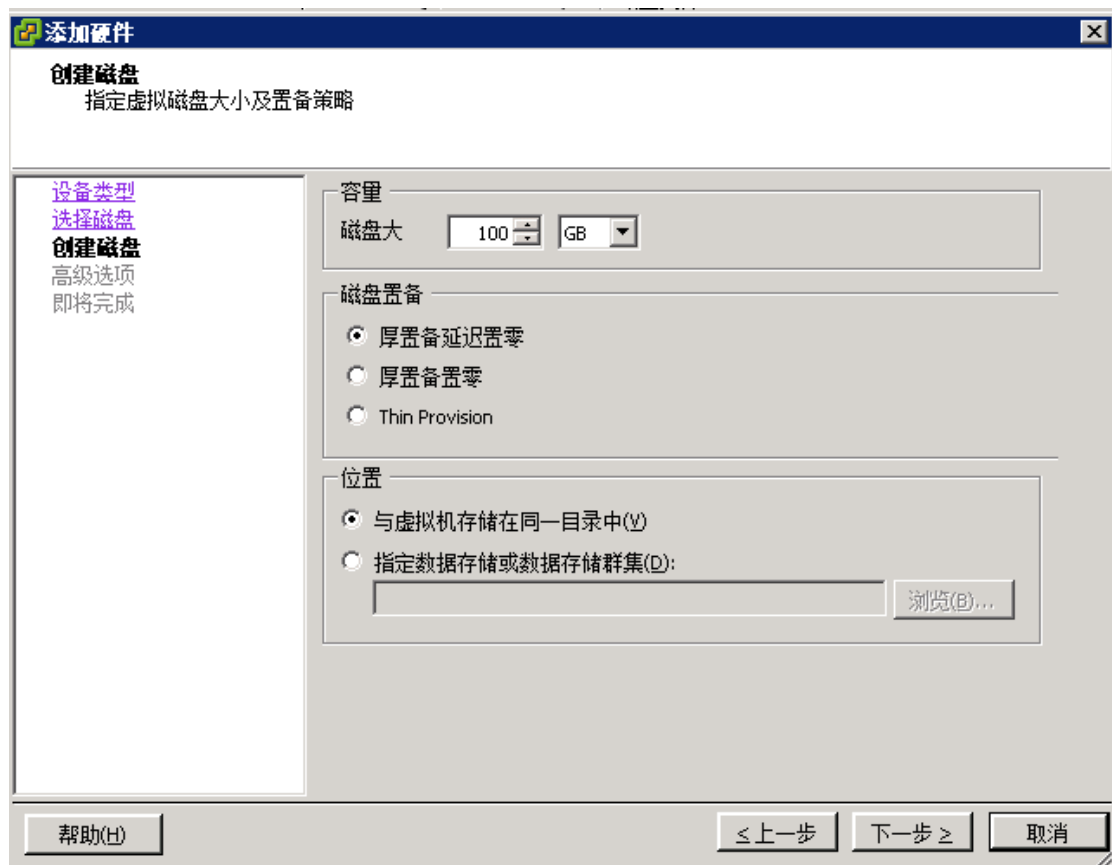
Linux 磁盘挂载

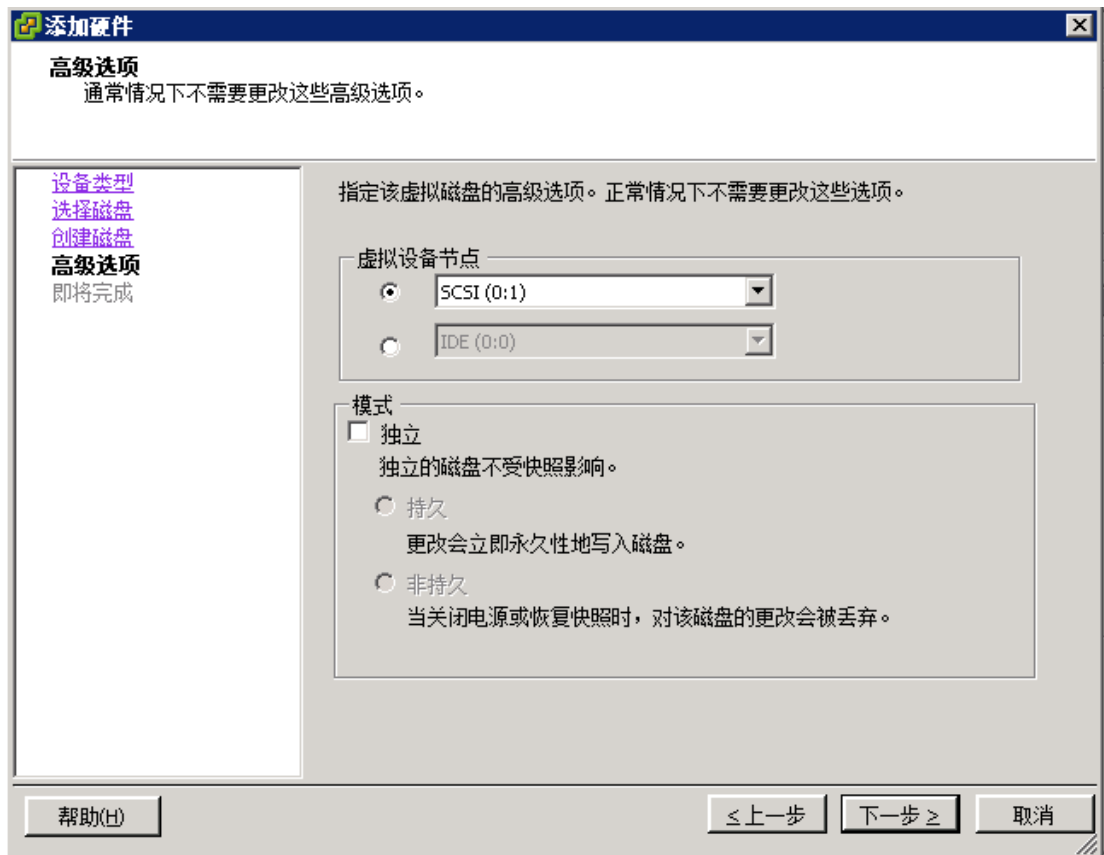
1 当前的情况

```
CentOS Linux 7 (Core)
Kernel 3.10.0-327.el7.x86_64 on an x86_64

localhost login: root
Password:
Last login: Sun Sep  6 21:41:39 on tty1
[root@localhost ~]# df -h
Filesystem                Size      Used Avail Use% Mounted on
/dev/mapper/centos-root    50G       1.2G   49G   3% /
devtmpfs                   498G       0    498G   0% /dev
tmpfs                      498G       0    498G   0% /dev/shm
tmpfs                      498G     8.5M   498G   1% /run
tmpfs                      498G       0    498G   0% /sys/fs/cgroup
/dev/mapper/centos-home    146G     276M   146G   1% /home
/dev/sda1                  497M     123M   374M  25% /boot
tmpfs                      100G       0    100G   0% /run/user/0
[root@localhost ~]# _
```

2 关机，增加硬盘(VM)





3 重启虚拟机，显示磁盘

```
last login: Sun Sep  8 20:50:10 2020
[root@localhost ~]# fdisk -l

Disk /dev/sda: 214.7 GB, 214748364800 bytes, 419430400 sectors
Units = sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disk label type: dos
Disk identifier: 0x000bdbc3

   Device Boot      Start         End      Blocks   Id  System
/dev/sda1  *        2048     1026047       512000   83   Linux
/dev/sda2             1026048   419430399   209202176   0e   Linux LVM

Disk /dev/sdb: 107.4 GB, 107374182400 bytes, 209715200 sectors
Units = sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes

Disk /dev/mapper/centos-root: 53.7 GB, 53687091200 bytes, 104857600 sectors
Units = sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes

Disk /dev/mapper/centos-swap: 4294 MB, 4294967296 bytes, 8388608 sectors
Units = sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes

Disk /dev/mapper/centos-home: 156.2 GB, 156174909440 bytes, 305029120 sectors
Units = sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
```

4 格式化分区 :将/dev/sdb 格式化为 ext4 类型

```

[root@localhost ~]# mkfs.ext4 /dev/sdb
mke2fs 1.42.9 (28-Dec-2013)
/dev/sdb is entire device, not just one partition!
Proceed anyway? (y,n) y
Filesystem label=
OS type: Linux
Block size=4096 (log=2)
Fragment size=4096 (log=2)
Stride=0 blocks, Stripe width=0 blocks
6553600 inodes, 26214400 blocks
1310720 blocks (5.00%) reserved for the super user
First data block=0
Maximum filesystem blocks=2174746624
800 block groups
32768 blocks per group, 32768 fragments per group
8192 inodes per group
Superblock backups stored on blocks:
    32768, 98304, 163840, 229376, 294912, 819200, 884736, 1605632, 2654208,
    4096000, 7962624, 11239424, 20480000, 23887872

Allocating group tables: done
Writing inode tables: done
Creating journal (32768 blocks): done
Writing superblocks and filesystem accounting information: done

[root@localhost ~]#

```

5 为这个硬盘创建分区 (/dev/sdb)

依次输入 n , p , 1 , w , 其中 n 分别表示创建一个新分区 , p 表示分区类型为主分区 , 1 表示分区编号是 1 , w 表示保存

```

[root@localhost home]# fdisk /dev/sdb
Welcome to fdisk (util-linux 2.23.2).

Changes will remain in memory only, until you decide to write them.
Be careful before using the write command.

Device does not contain a recognized partition table
Building a new DOS disklabel with disk identifier 0x85c85c71.

Command (m for help): n
Partition type:
   p   primary (0 primary, 0 extended, 4 free)
   e   extended
Select (default p): p
Partition number (1-4, default 1): 1
First sector (2048-209715199, default 2048):
Using default value 2048
Last sector, +sectors or +size{K,M,G} (2048-209715199, default 209715199):
Using default value 209715199
Partition 1 of type Linux and of size 100 GiB is set

Command (m for help): w
The partition table has been altered!

Calling ioctl() to re-read partition table.
Syncing disks.
[root@localhost home]#

```

6 输入 mkdir /data , 在根目录创建/data 作为此分区的挂载点 , 输 mount /dev/sdb /data , 将分区挂载到目录下 , 通过 df - h,可以看到挂载成功。

```

[root@localhost ~]# cd /
[root@localhost /]# mkdir /data
[root@localhost /]# mount /dev/sdb /data
[root@localhost /]# df -h | grep sdb
/dev/sdb          99G   61M   94G    1% /data
[root@localhost /]#

```

7 但是挂载是临时的，系统重启后需要重新挂载，我们希望下次启动时，自动挂载，
输 vi /etc/fstab，增加下图红框的配置，/dev/sdb 是分区，/data 是挂载此分区的目录，
ext4 是磁盘格式，后面的照抄上面一个行的信息。

```
[root@localhost ~]# vi /etc/fstab
[root@localhost ~]# cat /etc/fstab

#
# /etc/fstab
# Created by anaconda on Thu Sep  3 23:50:39 2020
#
# Accessible filesystems, by reference, are maintained under '/dev/disk'
# See man pages fstab(5), findfs(8), mount(8) and/or blkid(8) for more info
#
/dev/mapper/centos-root / xfs defaults 0 0
UUID=44768b9b-178b-4ad1-a629-0db3878d672d /boot xfs defaults 0 0
/dev/mapper/centos-home /home xfs defaults 0 0
/dev/mapper/centos-swap swap swap defaults 0 0
/dev/sdb /data ext4 defaults 0 0
[root@localhost ~]#
```

8 重启电脑

```
CentOS Linux 7 (Core)
Kernel 3.10.0-327.el7.x86_64 on an x86_64

localhost login: root
Password:
Last login: Sun Sep  6 20:59:18 from 192.168.10.62
[root@localhost ~]# df -h
Filesystem                Size      Used Avail Use% Mounted on
/dev/mapper/centos-root    50G       1.2G   49G   3% /
devtmpfs                   498G       0    498G   0% /dev
tmpfs                      498G       0    498G   0% /dev/shm
tmpfs                      498G   8.5M   498G   1% /run
tmpfs                      498G       0    498G   0% /sys/fs/cgroup
/dev/sdb                   99G       61M    94G   1% /data
/dev/sda1                  497M    124M   373M  25% /boot
/dev/mapper/centos-home    146G    276M   146G   1% /home
tmpfs                      100G       0    100G   0% /run/user/0
[root@localhost ~]# _
```