

parted

磁盘分区和分区大小调整工具

补充说明

parted命令是由GNU组织开发的一款功能强大的磁盘分区和分区大小调整工具，与fdisk不同，它支持调整分区的大小。作为一种设计用于Linux的工具，它没有构建成处理与fdisk关联的多种分区类型，但是，它可以处理最常见的分区格式，包括ext2ext3fat16fat32NTFSReiserFSJFSXFSUFSHFS以及Linux交换分区。

语法

```
parted(选项)(参数)
```

选项

```
-h 显示帮助信息；  
-i 交互式模式；  
-s 脚本模式，不提示用户；  
-v 显示版本号。
```

参数

- 设备：指定要分区的硬盘所对应的设备文件；
- 命令：要执行的parted命令。

实例

从串行技术出现以来，越来越多用户选择使用大容量的SATA硬盘创建磁盘阵列；特别是MD1000/MD3000很轻易就突破2T的LUN故在此给大家一些指引。

红帽企业 Linux 4 Update 4供对大于 2 terabytesTB的磁盘设备的支持。

请参考以下操作步骤：

注：

- 绿色代表你需要使用的命令。
- 红色代表你需要注意到的输出信息，在后续需要使用。

```
[root@localhost ~]# fdisk -l  
Disk /dev/sda: 35.8 GB, 35862976512 bytes  
255 heads, 63 sectors/track, 4360 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          144       1052257+   82   Linux swap  
/dev/sda3          145          4360       33865020    83   Linux  
Disk /dev/sdb: 2147 MB, 2147483648 bytes  
255 heads, 63 sectors/track, 261 cylinders  
Units = cylinders of 16065 * 512 = 8225280 bytes
```

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

```
[root@localhost ~]# parted /dev/sdb
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This program is free software, covered by the GNU General Public License.
This program is distributed in the hope that it will be useful, but WITHOUT
ANY
WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS
FOR A
PARTICULAR PURPOSE. See the GNU General Public License for more details.
使用/dev/sdb
(parted)mklabel gpt
(parted)print
/dev/sdb的磁盘几何结构: 0.000-2048.000兆字节
磁盘标签类型gpt
Minor    起始点    终止点 文件系统 名称      标志
(parted)mkpart primary 0 2048 <-----上面print显示的数字
(parted)print
/dev/sdb的磁盘几何结构: 0.000-2048.000兆字节
磁盘标签类型gpt
Minor    起始点    终止点 文件系统 名称      标志
1         0.017     2047.983
(parted)quit
```

如果必要, 不要忘记更新/etc/fstab

```
[root@localhost ~]# fdisk -l
Disk /dev/sda: 35.8 GB, 35862976512 bytes
255 heads, 63 sectors/track, 4360 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           144      1052257+   82   Linux swap
/dev/sda3          145          4360      33865020   83   Linux
WARNING: GPT (GUID Partition Table) detected on '/dev/sdb'! The util fdisk
doesn't support GPT. Use GNU Parted.
```

```
Disk /dev/sdb: 2147 MB, 2147483648 bytes
255 heads, 63 sectors/track, 261 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes
   Device Boot      Start         End      Blocks   Id  System
/dev/sdb1             1           262      2097151+   ee   EFI GPT
Partition 1 has different physical/logical beginnings (non-Linux?):
phys=(0, 0, 1) logical=(0,0, 2)
Partition 1 has different physical/logical endings:
phys=(1023, 254, 63) logical=(261, 21, 16)
```

```
[root@localhost ~]# mkfs.ext3 /dev/sdb1
mke2fs 1.35 (28-Feb-2004)
Filesystem label=
OS type: Linux
```

```
Block size=4096 (log=2)
Fragment size=4096 (log=2)
262144 inodes, 524279 blocks
26213 blocks (5.00%) reserved for the super user
First data block=0
Maximum filesystem blocks=536870912
16 block groups
32768 blocks per group, 32768 fragments per group
16384 inodes per group
Superblock backups stored on blocks:
    32768, 98304, 163840, 229376, 294912
Writing inode tables: done
Creating journal (8192 blocks): done
Writing superblocks and filesystem accounting information: done
This filesystem will be automatically checked every 28 mounts or
180 days, whichever comes first.  Use tune2fs -c or -i to override.
```

```
[root@localhost ~]# mount /dev/sdb1 /mnt
[root@localhost ~]# df -h
```

Filesystem	容量	已用	可用	已用%	挂载点
/dev/sda3	<?xml:namespace prefix = st1 />32G	2.6G	28G	9%	/
/dev/sda1	99M	12M	82M	13%	/boot
none	252M	0	252M	0%	/dev/shm
/dev/sdb1	2.0G	36M	1.9G	2%	/mnt

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