

# RHCS6: Extend an existing Logical Volume / GFS2 filesystem

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## RHCS: Extend an existing Logical Volume / GFS2 filesystem

```
# Tested on RHEL 6
```

```
# We are extending a given GFS2 filesystem like following one by adding 1GB:
```

```
df -h /sharedfs
```

| Filesystem               | Size | Used | Avail | Use% | Mounted on |
|--------------------------|------|------|-------|------|------------|
| /dev/mapper/gfsvg-lv_gfs | 4.0G | 259M | 3.8G  | 7%   | /sharedfs  |

```
lvs | grep lv_gfs
```

|        |       |           |       |
|--------|-------|-----------|-------|
| lv_gfs | gfsvg | -wi-ao--- | 4.00g |
|--------|-------|-----------|-------|

```
# Variable definition
```

```
VG=gfsvg
```

```
LV=lv_gfs
```

```

MNTPT=/sharedfs
SIZETOADD=1GB
FINALSIZE=5GB          # Final Size

# First of all check if there is available space on the volume group
the F.S. belongs to

vgs $VG
    VG      #PV #LV #SN Attr   VSize VFree
    gfsvg   1   1   0 wz--nc 8.00g 4.00g
                ^
                ^

# Let's extend the logical volume by specifying the size to be added:

lvextend -L +$SIZETOADD $VG/$LV
    Extending logical volume lv_gfs to 5.00 GiB
    Logical volume lv_gfs successfully resized

# or by specifying the final size:
#
# lvextend -L $FINALSIZE $VG/$LV
#     Extending logical volume lv_gfs to 5.00 GiB
#     Logical volume lv_gfs successfully resized

# Test what the tool will do

gfs2_grow -T /dev/$VG/$LV

# ...and then actually resize the GFS2

gfs2_grow /dev/$VG/$LV
    FS: Mount Point: /sharedfs

```

```
FS: Device:      /dev/dm-8
FS: Size:        1048575 (0xfffff)
FS: RG size:     65533 (0xffffd)
DEV: Size:       1310720 (0x140000)
The file system grew by 1024MB.
gfs2_grow complete.
```

```
# or 'gfs2_grow $MNTPT'
```

```
df -h $MNTPT
```

| Filesystem               | Size | Used | Avail | Use% | Mounted on |
|--------------------------|------|------|-------|------|------------|
| /dev/mapper/gfsvg-lv_gfs | 5.0G | 259M | 4.8G  | 6%   | /sharedfs  |

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