RHCS6: Create a new Logical Volume / Global Filesystem 2 (GFS2)

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RHCS: Create a new Logical Volume / Global Filesystem 2 (GFS2)

Tested on RHEL 6

I included this recipe as part of Red Hat Cluster Suite but, in fact, gfs2 is part of an # optional package and not part of Red Hat Cluster Suite.

In any case, to configure gfs2 subsystem we need to install Red Hat Cluster layer first

Once Red Hat Cluster configured we'll follow following procedure
(run commands on all
nodes making up our cluster except when indicated):

Required package installation:

yum install lvm2-cluster gfs2-utils

Change LVM locking type to use built-in cluster locking on all cluster nodes. This # can be done by either changing "locking-type" to '3' in /etc/lvm/lvm.conf configuration

```
file or by running:
lvmconf --enable-cluster
# Let's activate and start necessary services
chkconfig gfs2 on
chkconfig clvmd on
service clvmd start
service gfs2 start
# GFS2 construction...
# We'll run following commands only on one of the nodes in the
cluster -----
DISK=/dev/sdc1
VG=gfsvg
LV=lv_gfs_test
MNTPT=/sharedfs
SIZE=5GB
JOURNALS=4
                             # The number of journals for gfs2_mkfs.
I recommend to
                             # use 2 journals per machine that will
mount the fs.
CLUSTERNAME=mycluster
                          # We will user "clustername" for the
lock table field (-t)
                             # that should have the form
clustername:fsname. Clustername must
                             # match that in cluster.conf; only
members of the cluster are
                             # permitted to use this filesystem.
Fsname (1 to 16 characters)
                             # must be unique so I recommend to use
```

```
clustername:lv_name
pvcreate $DISK
vgcreate $VG $DISK
vgchange -cy $VG
lvcreate -n $LV -L $SIZE $VG
mkfs.gfs2 -j$JOURNALS -p lock_dlm -t $CLUSTERNAME:$LV /dev/$VG/$LV
# -----
# Update /etc/fstab and mount F.S. on every server forming the
cluster
echo "/dev/$VG/$LV $MNTPT gfs2 defaults 0 0" >>
/etc/fstab
mkdir $MNTPT
mount $MNTPT
```

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