Package Information

- Location from which the packages are used
  - Unknown- lost to time, probably Gluster web site
- Package Info - version of glusterfs package installed

  gluster_3.7]# gluster --version

  glusterfs 3.7.11 built on Apr 27 2016 14:09:22

  Repository revision: git://git.gluster.com/glusterfs.git

Copyright (c) 2006-2011 Gluster Inc. <http://www.gluster.com>**Cluster Information**

- Number of nodes in the cluster - 100
- Hostnames and IPs of the gluster Node [if it is not a security issue]
  - Hostname / IP will help developers in understanding & correlating with the logs
  - 10.1.1.0 network
  - eth1 Link encap:Ethernet HWaddr 2C:60:0C:8B:F0:59
  - inet addr:10.1.1.4 Bcast:10.255.255.255 Mask:255.0.0.0
  - inet6 addr: fe80::2e60:cff:fe8b:f059/64 Scope:Link
  - UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
  - RX packets:272515531346 errors:2 dropped:0 overruns:0 frame:1
  - TX packets:310738116338 errors:0 dropped:0 overruns:0 carrier:0
  - collisions:0 txqueuelen:1000
  - RX bytes:220224023147580 (200.2 TiB) TX bytes:386703576878881 (351.7 TiB)
  - Memory:c7700000-c771ffff
- Output of `gluster peer status`
  - gluster peer status
  - Number of Peers: 0
- Node IP, from which the "x" operation is done
  - "x" here means any operation that causes the issue all

Volume Information

- Number of volumes - 2
- Volume Names data-volume & test-volume
- Volume on which the particular issue is seen [if applicable] data-volume
- Type of volumes
- Volume options if available
- Output of `gluster volume info`
  - [root@mseas-data2 ~]# gluster volume info
  -
  - Volume Name: data-volume
  - Type: Distribute

    - Volume ID: c162161e-2a2d-4dac-b015-f31fd89ceb18
    - Status: Started
    - Number of Bricks: 2
    - Transport-type: tcp
    - Bricks:
    - Brick1: mseas-data2:/mnt/brick1
    - Brick2: mseas-data2:/mnt/brick2
    - Options Reconfigured:
    - nfs.exports-auth-enable: on
    - diagnostics.brick-sys-log-level: WARNING
    - performance.readdir-ahead: on
    - nfs.disable: on
    - nfs.export-volumes: off
    -
    - Volume Name: test-volume
    - Type: Distribute
    - Volume ID: 5134d72e-90c0-4f61-b14a-dedb53af8c1f
    - Status: Started
    - Number of Bricks: 2
    - Transport-type: tcp
    - Bricks:
    - Brick1: mseas-data2:/home/gbrick_test_1
    - Brick2: mseas-data2:/home/gbrick_test_2
    - Options Reconfigured:
    - nfs.export-volumes: off
    - server.event-threads: 4
    - client.event-threads: 4
    - performance.stat-prefetch: on
    - performance.write-behind: on
    - performance.io-thread-count: 64
    - performance.write-behind-window-size: 1MB
    - performance.cache-size: 256MB
    - performance.cache-refresh-timeout: 4
    - performance.cache-max-file-size: 2MB
    - performance.readdir-ahead: on
- Output of `gluster volume status`
    - gluster volume status
    - Status of volume: data-volume
    - Gluster process TCP Port RDMA Port Online Pid
    - ---
    - Brick mseas-data2:/mnt/brick1 49154 0 Y 5021
    - Brick mseas-data2:/mnt/brick2 49155 0 Y 5026
    -
    - Task Status of Volume data-volume
    - ---
    - Task : Rebalance

- ID : 892d9e3a-b38c-4971-b96a-8e4a496685ba
- Status : completed
-
- Status of volume: test-volume
- Gluster process TCP Port RDMA Port Online Pid
- ------
- Brick mseas-data2:/home/gbrick_test_1 49156 0 Y 26594
- Brick mseas-data2:/home/gbrick_test_2 49157 0 Y 26613
- NFS Server on localhost N/A N/A N N/A
-
- Task Status of Volume test-volume
- ------
- There are no active volume tasks
-

- Get the statedump of the volume with the problem

```
$ gluster volume statedump <vol-name>
```

This dumps statedump per brick process in `/var/run/gluster`

```
File names:
```

mit_gluster_statedump.zip

NOTE: Collect statedumps from one gluster Node in a directory.

Repeat it in all Nodes containing the bricks of the volume. All the so collected directories could be archived,compressed and attached to bug

Brick Information

- xfs options when brick partition was done
  - This could be obtained with this command :

```
$ xfs_info /dev/mapper/vg1-brick
```

[root@mseas-data2 mapper]# xfs_info /mnt/brick1

meta-data=/dev/sda isize=256 agcount=164, agsize=268435455 blks

= sectsz=4096 attr=2, projid32bit=0

data = bsize=4096 blocks=43949752320, imaxpct=1

= sunit=0 swidth=0 blks

naming =version 2 bsize=4096 ascii-ci=0

```
log      =internal              bsize=4096   blocks=521728, version=2
         =                      sectsz=4096  sunit=1 blks, lazy-count=1
realtime =none                  extsz=4096   blocks=0, rtextents=0
```

```
[root@mseas-data2 mapper]# xfs_info /mnt/brick2
meta-data=/dev/sdb               isize=256    agcount=164, agsize=268435455 blks
         =                       sectsz=4096  attr=2, projid32bit=0
data     =                       bsize=4096   blocks=43949752320, imaxpct=1
         =                       sunit=0      swidth=0 blks
naming   =version 2              bsize=4096   ascii-ci=0
log      =internal              bsize=4096   blocks=521728, version=2
         =                      sectsz=4096  sunit=1 blks, lazy-count=1
realtime =none                  extsz=4096   blocks=0, rtextents=0
```

- Extended attributes on the bricks
  - This could be obtained with this command:

```
$ getfattr -d -m. -ehex /rhs/brick1/b1
```

```
No output
```

Client Information

- OS Type (Windows, RHEL)
- OS Version : In case of Linux distro get the following :

```
$ uname -r $ cat /etc/issue
```

uname -r

2.6.32-642.1.1.el6.x86_64

[root@mseas-data2 brick1]# cat /etc/issue

CentOS release 6.8 (Final)

Kernel \r on an \m

- Fuse or NFS Mount point on the client with output of mount commands
-
- Output of `df -Th` command

Tool Information

- If any tools are used for testing, provide the info/version about it
- if any IO is simulated using a script, provide the script

Logs Information

- You can check logs for check for issues/warnings/errors.
    - Self-heal logs
    - Rebalance logs
    - Glusterd logs
    - Brick logs
    - NFS logs (if applicable)
    - Samba logs (if applicable)
    - Client mount log
- Add the entire logs as attachment, if its very large to paste as a comment

SOS report for CentOS/Fedora

- Get the sosreport from the involved gluster Node and Client [in case of CentOS /Fedora]
    - In /tmp/sos.jVfQOM
- Add a meaningful name/IP to the sosreport, by renaming/adding hostname/ip to the sosreport name

The only problem with using gluster mounted via NFS is that it does not
>> respect the group write permissions which we need.

One example, we have a common working directory dri_fleat in the gluster volume

drwxrwsr-x 22 root dri_fleat 4.0K May 1 15:14 dri_fleat

my user (phaley) does not own that directory but is a member of the group dri_fleat and should have write permissions. When I go to the nfs-mounted version and try to use the touch command I get the following

ibfdr-compute-0-4(dri_fleat)% touch dum
touch: cannot touch `dum': Permission denied

One of the sub-directories under dri_fleat is "test" which phaley owns

drwxrwsr-x 2 phaley dri_fleat 4.0K May 1 15:16 test

Under this directory (mounted via nfs) user phaley can write

ibfdr-compute-0-4(test)% touch dum
ibfdr-compute-0-4(test)%

I have put the packet captures in

http://mseas.mit.edu/download/phaley/GlusterUsers/TestNFSmount/