GlusterFS

Instal.ació

El sistema compartit de fitxers pel proxmox que farem anar és glusterfs

Muntem dos servers amb centOS 7.x

store1: 172.20.16.218

store2: 172.20.16.219

A les dues maquines:

|  |
| --- |
| wget -P /etc/yum.repos.d http://download.gluster.org/pub/gluster/glusterfs/3.7/3.7.5/CentOS/glusterfs-epel.repo  yum -y install glusterfs glusterfs-fuse glusterfs-server --nogpgcheck  yum install glusterfs-server samba -y  systemctl start glusterd.service  systemctl enable glusterd.service |

Obrim el firewall per tota la classe C (si volem ser mes restrictius caldra obrir nomes els ports que faci anar el gluster)

|  |
| --- |
| firewall-cmd --add-rich-rule='rule family="ipv4" source  address="172.20.16.0/24" accept' |

Comprovem que es veuen:

|  |
| --- |
| [root@store1 ~]# gluster peer probe store2  peer probe: success.  [root@store1 ~]#  [root@store2 ~]# gluster peer probe store1  peer probe: success. Host store1 port 24007 already in peer list  [root@store2 ~]#  [root@store1 ~]# gluster peer status  Number of Peers: 1  Hostname: store2  Uuid: 8dfdeeae-0577-4ed9-a0a7-0996b4e74b4d  State: Peer in Cluster (Connected)  [root@store1 ~]# |

Una altra manera de mirar-ho

|  |
| --- |
| [root@store1 ~]# gluster pool list  UUID Hostname State  8dfdeeae-0577-4ed9-a0a7-0996b4e74b4d store2 Connected  e026cf0c-4ff5-43b4-91d2-7b94da9d5f4b localhost Connected  [root@store1 ~]# |

Ara crearem bricks a cada maquina, totes dues tenen un /dev/sdb (de diferents tamanys)

A totes dues màquines, farem els bricks amb LVM i xfs:

|  |
| --- |
| ]# pvcreate /dev/sdb1  Physical volume "/dev/sdb1" successfully created.  #  # vgcreate vg\_cluster /dev/sdb1  Volume group "vg\_cluster" successfully created  #  # lvcreate -L 10G -n brick1 vg\_cluster  # lvcreate -L 50G -n brick2 vg\_cluster  # lvcreate -L 50G -n brick3 vg\_cluster  # mkfs.xfs /dev/vg\_cluster/brick1  # mkfs.xfs /dev/vg\_cluster/brick2  # mkfs.xfs /dev/vg\_cluster/brick3 |

Creem els mountpoints:

|  |
| --- |
| # mkdir -p /bricks/brick{1,2,3}  # mount /dev/vg\_cluster/brick1 /bricks/brick1  # mount /dev/vg\_cluster/brick2 /bricks/brick2  # mount /dev/vg\_cluster/brick3 /bricks/brick3 |

Els afegirem al /etc/fstab i ja podem fer servir els bricks per crear volums.

Creació de volums glusterfs

1.- Volum replicat (50Gb = 50Gb + 50Gb)

|  |
| --- |
| [root@store1 ~]# gluster volume create vol1 replica 2 transport tcp store1:/bricks/brick2/brick store2:/bricks/brick2/brick  volume create: vol1: success: please start the volume to access data  [root@store1 ~]#  [root@store1 ~]# gluster volume start vol1  volume start: vol1: success  [root@store1 ~]# |

Comprovem-ho:

|  |
| --- |
| [root@store1 ~]# gluster volume info all  Volume Name: vol1  Type: Replicate  Volume ID: a4500dd0-9dfc-408a-b99d-0de25d5b8410  Status: Started  Number of Bricks: 1 x 2 = 2  Transport-type: tcp  Bricks:  Brick1: store1:/bricks/brick2/brick  Brick2: store2:/bricks/brick2/brick  Options Reconfigured:  performance.readdir-ahead: on  [root@store1 ~]# |

2.- volum distribuït (100Gb = 50Gb + 50Gb)

|  |
| --- |
| [root@store1 ~]# gluster volume create vol2 store1:/bricks/brick3/brick store2:/bricks/brick3/brick  volume create: vol2: success: please start the volume to access data  [root@store1 ~]# gluster volume start vol2 |

Comprovem:

|  |
| --- |
| [root@store1 ~]# gluster volume info all  Volume Name: vol1  Type: Replicate  Volume ID: a4500dd0-9dfc-408a-b99d-0de25d5b8410  Status: Started  Number of Bricks: 1 x 2 = 2  Transport-type: tcp  Bricks:  Brick1: store1:/bricks/brick2/brick  Brick2: store2:/bricks/brick2/brick  Options Reconfigured:  performance.readdir-ahead: on  Volume Name: vol2  Type: Distribute  Volume ID: 21301522-88ed-4cd1-94b5-7158b6748747  Status: Started  Number of Bricks: 2  Transport-type: tcp  Bricks:  Brick1: store1:/bricks/brick3/brick  Brick2: store2:/bricks/brick3/brick  Options Reconfigured:  performance.readdir-ahead: on  [root@store1 ~]# |

I ara desde proxmox (web interface) podem afegir storage tipus glusterfs indicant la ip dels servers, el nom del volum i quin tipus de dades hi emmagatzemarem (disk image, isos, backup, containers..)

Atenció: al /etc/hosts dels nodes de proxmox cal afegir els nodes que serveixen glusterfs, sinó dona un error.