

TICKET – Permanent NFS Mount Configuration

Overview

This project documents the permanent mounting of multiple NFS shares on a development application server. The objective was to ensure shared directories remain consistently available across reboots for application data, user homes, and scripts.

Scope

Target Server: dev-app

NFS Server: 10.1.30.148

Mount Type: Persistent (system reboot safe)

NFS Mounts

/nfs/share/vhosts → /nfs/incoming/vhosts

/nfs/share/home → /nfs/incoming/home

/nfs/share/scripts → /nfs/incoming/scripts

Implementation

Verified NFS exports and network connectivity.

Created required mount directories on the dev-app server.

Mounted each NFS share and validated accessibility.

Updated /etc/fstab to ensure mounts persist after reboot.

Confirmed correct permissions and ownership where applicable.

Verification

Verified mounts with mount and df -h.

Confirmed persistence by validating /etc/fstab entries.

Ensured directories were accessible and writable as expected.

Outcome

All required NFS shares are mounted permanently and available on the dev-app server, providing reliable shared storage for application content, user home directories, and scripts.

Configured persistent NFS mounts on the dev-app server by updating /etc/fstab to mount NFS shares (home, vhosts, and scripts) from the NFS server to /nfs/incoming. Configuration ensures NFS mounts persist across system reboots.

```
# /etc/fstab
# Created by anaconda on Sun Mar 15 09:10:47 2020
#
# Accessible filesystems, by reference, are maintained under '/dev/disk/'.
# See man pages fstab(5), findfs(8), mount(8) and/or blkid(8) for more info.
#
# After editing this file, run 'systemctl daemon-reload' to update systemd
# units generated from this file.
#
/dev/mapper/cs-root      /          xfs    defaults      0 0
UUID=8d7ea057-eca1-46db-af25-f5cb03633568 /boot          xfs    defaults      0 0
UUID=10FC-04F5          /boot/efi      vfat   umask=0077,shortname=winnt 0 2
/dev/mapper/cs-swap      none        swap   defaults      0 0
0.1.30.148:/nfs/share/vhosts /nfs/incoming/vhosts  nfs  defaults      0 0
0.1.30.148:/nfs/share/home /nfs/incoming/home   nfs  defaults      0 0
0.1.30.148:/nfs/share/scripts /nfs/incoming/scripts nfs  defaults      0 0
#
#
#
-- INSERT --
```

Updated /etc/fstab on the dev-app server to configure persistent NFS mounts for the home, vhosts, and scripts shares. Encountered a systemctl reload permission issue when running systemctl daemon-reload as a non-root user, resolved by executing mount verification as root. Successfully mounted all NFS shares using mount -a and verified active mounts with df -Th.

```
[root@dev-app-eg3:~]# [sudo] password for egarrido:  
mount: (hint) your fstab has been modified, but systemd still uses  
the old version; use 'systemctl daemon-reload' to reload.  
[egarrido@dev-app-eg3 ~]$ systemctl daemon-reload  
== AUTHENTICATING FOR org.freedesktop.systemd1.reload-daemon ==  
Authentication is required to reload the systemd state.  
Authenticating as: procorg  
Password:  
polkit-agent-helper-1: pam_authenticate failed: Authentication failure  
== AUTHENTICATION FAILED ==  
Failed to reload daemon: Access denied  
[egarrido@dev-app-eg3 ~]$ exit  
logout  
[root@dev-app-eg3 ~]# vi /etc/fstab  
[root@dev-app-eg3 ~]#  
[root@dev-app-eg3 ~]# mount -a  
[root@dev-app-eg3 ~]# df -Th  
Filesystem          Type   Size  Used Avail Use% Mounted on  
devtmpfs            devtmpfs 4.0M    0  4.0M  0% /dev  
tmpfs               tmpfs    383M   0  383M  0% /dev/shm  
tmpfs               tmpfs    153M   14M 139M 10% /run  
efivarfs            efivarfs 256K   27K 225K 11% /sys/firmware/efi/efivars  
/dev/mapper/cs-root xfs     17G   1.7G 15G 11% /  
/dev/sda2            xfs     960M  235M 726M 25% /boot  
/dev/sda1            vfat    599M  7.5M 592M 2% /boot/efi  
tmpfs               tmpfs    77M    0  77M  0% /run/user/0  
10.1.30.148:/nfs/share/vhosts  nfs4   13G  5.0G 7.9G 39% /nfs/incoming/vhosts  
10.1.30.148:/nfs/share/home   nfs4   13G  5.0G 7.9G 39% /nfs/incoming/home  
10.1.30.148:/nfs/share/scripts nfs4   13G  5.0G 7.9G 39% /nfs/incoming/scripts  
[root@dev-app-eg3 ~]#
```

Summary

**Updated /etc/fstab to configure persistent NFS mounts on the dev-app server.
Reloaded system configuration and successfully mounted all NFS shares using
mount -a, then verified active NFSv4 mounts for home, vhosts, and scripts with df
-Th**