The home filesystems on all NAS compute systems are HPE/SGI NEXIS 9000 filesystems that are NFS-mounted on all of the NAS compute system front-end nodes and compute nodes. Each NAS user is provided a home directory on the home filesystems for NAS compute resources. After you are granted an account, your home directory is set up automatically during your first login.

Your home directory has a quota of 8-10 GB of storage. For temporary storage of larger files, use the Lustre /nobackup filesystems. For long-term storage, use the Lou mass storage system.

Quota Limits and Policy

Disk space quota limits are enforced on the home filesystems for NAS compute resources. By default, the soft limit is 8 GB and the hard limit is 10 GB. There are no inode limits on the home filesystem.

To check your quota and usage on your home filesystem, run the `quota -v` command as follows:

```
%quota -v
Disk quotas for user username (uid xxxx):
     Filesystem  blocks   quota   limit   grace   files   quota   limit   grace
plnfshome4:/mnt/home4
             7380152  8000000 10000000          190950       0       0
```

The NAS quota policy states that if you exceed the soft quota (the number listed under `quota` in the above sample output), an email will be sent to inform you of your current usage and how much of the grace period remains. It is expected that you will occasionally exceed your soft limit; however, after 14 days, any attempts to write to the filesystem will result in error. Any attempt to exceed the hard limit (the number listed under `limit` in the above sample output) will result in error.

Once you exceed your hard limit, PBS will return the following error and prevent you from submitting new jobs:

```
qsub: Filesystem quota exceeded! Please reduce your usage or request an increase before submitting.
```

If you believe that you have a long-term need for higher quota limits on the home filesystem for the NAS compute resources, send an email justification to support@nas.nasa.gov. Your request will be reviewed by NAS management for approval.

Note: For temporary storage of larger files, or a large number of files, use your Lustre /nobackupp*X* directory. For normal long-term file storage, transfer your files to the Lou mass storage systems.

See also: Quota Policy on Disk Space and Files.

TIP: If you receive the following error message when logging in, you won't be able to run X applications. This error is usually due to exceeding your home filesystem quota. To avoid the error, decrease your disk usage.

```
/usr/X11R6/bin/xauth: error in locking authority file /u/username/.Xauthority
```

Backup Schedule

Files on the home filesystem are backed up daily.