GPFS

What is GPFS

IBM General Parallel File System (GPFS) is a high performance parallel filesystem featuring storage virtualization, high availability and is designed to manage large amounts of file data, You can find out more about GPFS in this introduction.

- **Checking your GPFS quotas on the Atlas cluster**

  By default all users of the atlas gpfs space get 100 GB in the u directory and 2 TB in the g dir.

  On hosts running native gpfs like the rhel6-64 cluster you can issue the following 2 commands to see your quota and space used:

  df -h /gpfs/slac/atlas/fs1/d/$USER
  df -h /gpfs/slac/atlas/fs1/u/$USER

  On other hosts that dont run the gpfs code, but do have nfs access, you can issue:

  df -h /nfs/slac/atlas/fs1/d/$USER
  df -h /nfs/slac/atlas/fs1/u/$USER

- **GPFS building block**

  Below is a schematic of a typical SCS GPFS storage building block. It includes two file servers, two storage servers and two storage arrays.   The two sets of servers operate as ACTIVE/ACTIVE, but also provide failover capability if needed. This example would provide 320 TB of space. Local iozone tests show max write ~4GB/sec, max read ~6GB/sec, using large block sequential I/O.