

MDSplus Status after Data Corruption Event

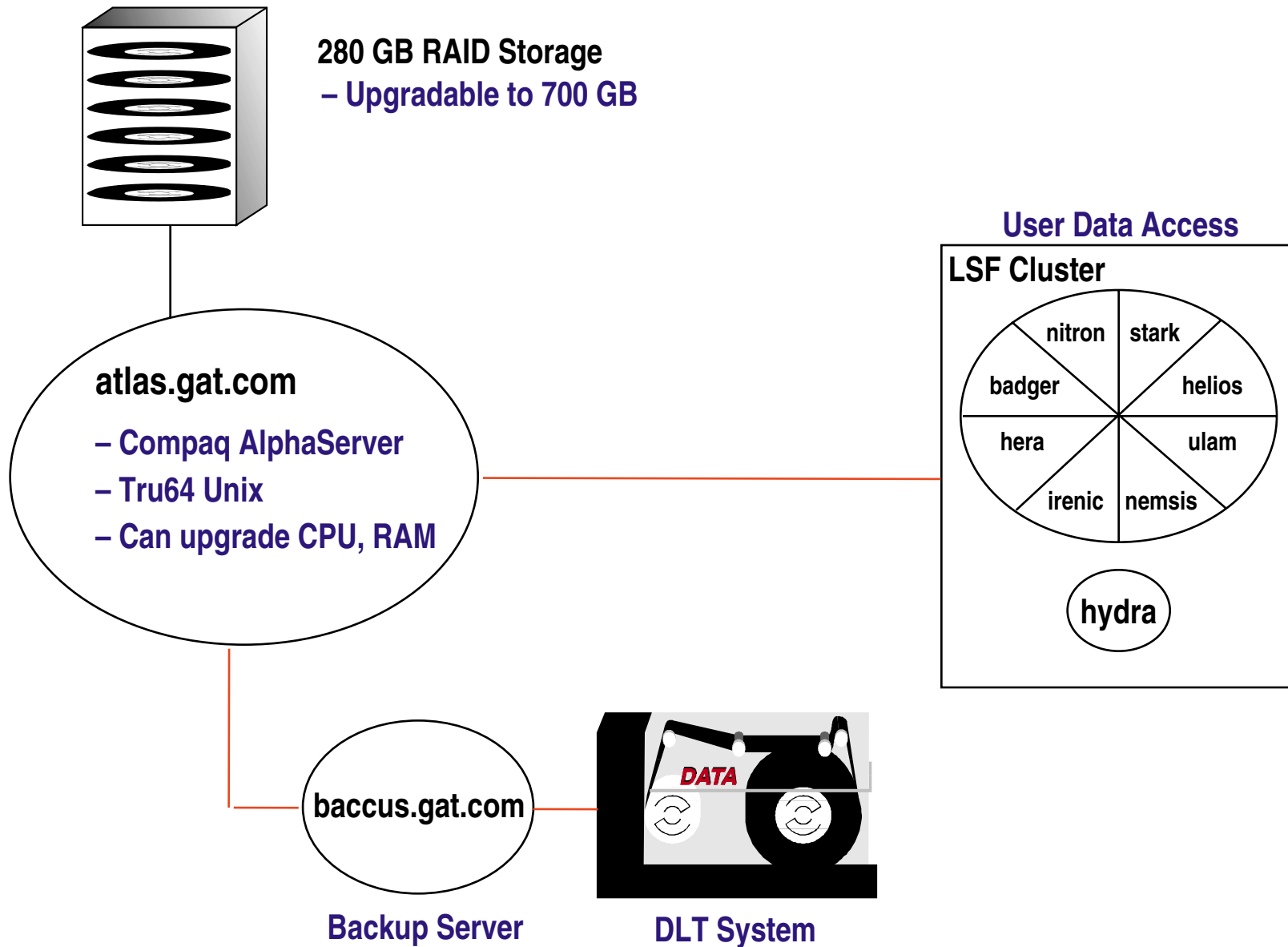
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DIII-D MDSplus DATA SUPPLIED BY CLIENT/SERVER SYSTEM



WE ARE INVESTIGATING THE CAUSE OF THE PROBLEM

- **The MDSplus server (Atlas) became hung sometime late 5/24/00**
 - Even root could not gain access to the computer
 - Only recourse was to perform a hard restart on 5/25/00
- **After the hard restart users noticed that files were corrupted**
 - The exact reason behind this is not yet known
 - Our suspicion is that the hard restart was responsible
- **Resolution was to install new disks and restore backup to them**
 - Restore took 24 hours for 65 GB
 - As our 280 GB repository fills up this time will increase
 - We need a more intelligent backup and restore strategy



STRATEGY: RESTORE MORE IMPORTANT DATA FIRST

- **First determine what data is most important**
 - Use the relational database to monitor data access patterns
 - Time since last access & number of users determines importance
- **Strategy will be formed once data access patterns are understood**
 - Use analysis patterns for IAEA and APS meetings
- **Potential strategies**
 - Separate disk for backup of most important data
 - Tape drive connected directly to host
- **We are already protected against hardware failure**
 - RAID disks for a disk failure
 - Backup host for a server hardware failure (by June)