HPSS Users' Forum (HUF) 2014

Sandia National Laboratories
Site Presentation*

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Agenda

- **End-User Access to HPSS**

- **Clusters**

- **Current Hardware**

- **Health Monitor of HPSS**

- **Metrics**

- **Future Plans**

- **Questions**

End-User Access to HPSS

Software

- **HSI/HTAR**

- **PFTP**

- **Transfer Agent (TA)**

Hardware

- **Tri-labs use data transfer clusters**

Compute Clusters

- **Supercomputers**
  - **Cielo (up to two TB/run)**
- **Institutional Computing**
  - **SNL in-house clusters**
- **Visualization Clusters**
  - **Jpg, movies, etc.**

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Dedicated transfer cluster

- Joint project with cluster admins
- Shared site global filesystems
- Tuned HPSS/LAN/WAN performance
- Data Transfer tools in one location

Current HPSS Hardware

- 2 Red Hat Linux Core servers(64bit)
  - Dell R720s, dual 8-core, 2.4 GHz, 32GB memory
- 12 Movers
  - Dell R620s, dual 8-core, 2.4 GHz, 24GB memory
  - Qlogic 2672, 16 Gb/sec
  - 10 Gb copper ethernet

Hardware Continued

- 2 Oracle SL8500 Tape Libraries

   4 Expansions each

- 8 Titanium 10K A Tape drives
- 20 Titanium 10K C Tape drives

Health Monitors

- **Alarms and Events monitored hourly**

- **Storage Tek Tape Analytics software**

- **DB2 Database backups completion email daily**

- **File System usage for logs, archive logs, mirror logs, DB2 tablespace warnings,**

- **DB2 backup filesystem, all HPSS filesystems**

- **WAN performance testing inter-lab (LANL,SNL,LLNL)**

Metrics used to Measure System

- **Monthly accounting of user usage**
- **DB2 filesystem usage**
- **StorageTek tape analytics**
- **SL8500 capacity monitored**

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Future

- RAIT
- SAN3p

Questions