What’s going on next door?

The 2017 HPSS User Forum!

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http://www.hpss-collaboration.org
HPSS User Forum

- A gathering of existing HPSS customers, future customers, developers, system engineers, support personnel, project managers, and HPSS leaders.
- Discussing software roadmaps, advanced technologies, burning issues, admin tips, lessons learned, techniques, and successes stories.
HPSS Collaboration

• The HPSS Collaboration is a development partnership between five Department of Energy labs and IBM

• Established in 1992 and going strong today

• Original goal was to develop high performance storage system software

• Today’s top priorities of the HPSS collaboration include ...
  o Actively solving exascale storage requirements
  o Success of the HPSS customers around the globe

• There are over 50 people in the HPSS development collaboration
What is HPSS?

• HPSS is an IBM Software-as-a-Service offering that maximizes the value of tape within large-scale storage deployments

• The IBM services are focused on the success of big data storage deployments with demanding requirements such as ...
  o Managing tens of petabytes to exabytes of data within a single name space which may span billions to trillions of files
  o Supporting highly redundant solutions and fast failure recovery
  o Managing high data transfer rates with hundreds of tape drives
  o Minimizing the impact of silent data corruption
  o Delivering less hardware while meeting ingest and recall requirements
  o Supporting bulk data ingest of legacy data
HPSS is considered “best of breed for tape”

• No other storage software uses tape as efficiently as HPSS

• Hardware efficiency translates to lower total cost of ownership (TCO) of data

• HPSS can move more data with less hardware by organizing I/O, minimizing waste and delays, and maximizing transfer performance

• HPSS is sold as an IBM service offering
  o Proven delivery of complex storage solutions
  o Annual support service price NOT based on capacity
  o Proactive and personalized support

• An active HPSS community
HPSS is considered “best of breed for tape”

- Striping to move big files faster
- Striping with parity (RAIT) to reduce cost of redundant tape
- Small file aggregation to move small files faster
- Recommended Access Order (RAO) for faster tape recall
- HPSS end-to-end data integrity to identify silent data corruption
- Extreme scale tape mount/dismount logic to maximize the number of tape mounts per hour from each tape library

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Thank you!

Questions?

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