The three most important things every OSG Council member should know about the state of storage in OSG today

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We support a wide variety of storage systems (I)

- 48 OSG sites provide SEs
- 54 SRMs
  - 15 dCache SRM
  - 39 BeStMan(1 & 2)
- Variety of DFS as a backend
  - dCache
  - NFS
  - HDFS
  - Lustre
  - Xrootd

We support a wide variety of storage systems (II)

- Tier-2 sites: problem debugging
- Tier-3 sites: installation and configuration
- VO:
  - Troubleshooting
  - Tuning

We are working hard to make storage easier to use (I)

- RSV storage probes – used by sys admins and GOC to monitor status of SEs
- Gratia storage and transfer probes – provide accounting for all file transfers and storage area usage.
  - Next step: Improve and popularize gratia storage probes in order to produce an accurate free space estimate
- Discovery tools – allow VO members to discover storage availability and SURL

We are working hard to make storage easier to use (II)

- Pigeon tools
  - Allow to identify relevant SEs and verify that a SE is configured as advertised and accessible for a particular VO
  - Help a VO to identify problems with sites
  - Is installed on LIGO and GLUE-X submission nodes
- Software tunning
  - Worked with BeStMan developers to improve performance of srm-copy command for concurrent file transfers
    - Achieved four times improvement for LIGO Binary Inspiral data pre-staging
- Search for tools
  - Next step: Evaluate globus.online used for bulk data migration and pre-staging

Storage solutions are evolving

- Adding new tasks:
  - Xrootd rpm packaging
    - Finalized ATLAS Tier-3 requirements
    - Built rpms from the rpms source provided by developers, rpms are in vdt development repo
    - Testing, writing documentation
- Deprecating support for:
  - BeStMan1, srm-lbnl client (replaced by BeStMan2)
  - Vdt-dCache packaging for dCache > 1.9.5x