

Overview: Storage Extensions

Current Initiatives

- Reference model for grid storage infrastructure.
 - Description of available space in tape libraries is problematic; may punt.
 - Expect to put it out for review by mid-February.
- SE discovery tool
 - Integration of search tool with Information Services
 - Server and browser interface
 - Work with Engagement group for application
- Storage/Job matching software
 - Plan to use Resource Selection Service
- Storage Operations Toolkit
 - Next release, early Feb: Perl and Python APIs.
- Outreach to CDF
 - Their foreseeable uses for opportunistic storage are limited to stage-out of MC results.

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Accomplishments Since Last Report

- SE discovery tool: Xpath code for LDAP search 80 % complete.
- Space Reservation used in production, for D0 and CDF.
- gPlazma: Persistence mechanism added
- gPlazma: XACML Interoperability added

Issues / Concerns

- Information Services framework
- Effort for space reservation authorization

OSG Storage Extensions

2.3 Storage		
2.3.1	Enable increased Use of Opportunistic Storage	9/30/09
2.3.1.1	Develop software to match available storage attributes of a job to capabilities of a SE	9/30/09
	Job attribute and SE capability description software	7/10/09
	Production matching software or integration into existing capability.	9/30/09
2.3.1.2	Command line tools for SE discovery and authorization check	4/15/09
	Production release for SE discovery	1/2/09
	Production release for authorization check	4/3/09
2.3.2	Improve Ease-of-Use of Storage Extensions	9/30/09
	Web interface for SE discovery and authorization check	7/10/09
	Web interface for space reservation management on a Storage Element	9/30/09
2.3.3	Decrease cost of operations of BeStMan, xRootd and dCache	9/30/09
2.3.3.1	Faster turnaround time for bugfixes in ops tool releases.	ongoing
2.3.3.2	Include a wider range of ops tools available at sites	7/15/09
	Plan for new ops tool content	10/31/08
	Expanded ops tools	1/2/09
	Plan for new ops tool content	5/1/09
	Expanded ops tools	7/10/09
2.3.3.3	Consolidate the large number of monitoring functionalities for storage systems into one coherent interface.	9/30/09
2.3.3.4	Provide sites with electronic means to announce maintenance periods (on, drainoff, off states, etc) that can be used by job submission tools to avoid job failure during SE maintenance.	9/30/09
	Production release of tool to manually announce state.	4/30/09
	Production release of tools to automatically report state for dCache, Bestman, and xrootd.	9/30/09
	Production release of job submission software capability to detect Storage Element state.	7/10/08
2.3.3.5	Develop strategy for addressing the problems with filesystem and metadata catalog being out of sync in dCache. Document recommendations for solving catalog/filesystem synchronization problem.	9/30/09