Technology Investigations Update

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Goals from Last Time

- StashCache fully deployed and tested by 2 VOs. **DONE** - All components are minimally there and NoVA&OSG have been testing it.

  - Issues and work remain before this is a "production service."

- With OSG Security, plan for certificate-less glexec. **PARTIAL** - Requirements document written, but implementation has not been set in stone.

- OASIS2 to production. **DONE** - Did a "normal GOC service," RPM-based release.

  - Starting to get into a more consistent test / accept|reject / release cycle.

- Finish GRAM turn-down (USCMS T2s in gWMS factory). PARTIAL - less GRAM endpoints, but still 3/7 sites have both GRAM & HTCondor-CE.

HTCondor-CE & Info Service

- BDII dependency is removed for USCMS!

  - Outage on the WLCG side finally tipped this work item over the edge.

- 31 HTCondor-CEs currently reporting to central collector.

  - Still working on new version that allows StashCache caches to advertise.

- Recently, most updates have been minor. Still the LSF / SGE overhang.

OASIS

- OASIS 2.x series now has a release cadence.

  - This means that twice a month we have a list of proposed updates before ITB release, attempt deploy on ITB, and - if successful - deploy to production.

  - Current success rate is about 1 deployment / month.

- Additional users coming online - including LIGO (was stuck as of previous report).

- Upcoming goals:

  - Deploy improved monitoring for CVMFS software and OASIS service.

  - Finish various maintenance tasks (improve logging).

  - Overhaul client packaging approach (improve automation of configuration updates).

  - Want to do a survey with OSG User Support.

StashCache

- All components are deployed at the ~alpha level.

  - Starting to get second revisions, bugfixes, etc. We're trying to tie all the individual components together, although not everything is working yet.

  - Robert Illingworth is doing a lot of "eating the dogfood". We have a NoVA workflow that we can repeatedly run until everything works.

  - Enough activity / usage to start thinking about stabilizing service.

- Working on an overhaul of the WBS as we've completed most items. Next reporting period likely will focus on:

  - Bringing a VO to production. NoVA has a well-timed production run in 2 months I want to target.

  - New investigation: Using StashCache to distribute CVMFS files. Combines 'high-powered' cache of StashCache with CVMFS namespace / data integrity.

    - Keeps the crucial goal of "no site CVMFS changes" that was missing from prior AlienCache work.

Other Items

- Certificate-less glexec: Still hashing out plans with Dave Dykstra.

- Review of OSG-Flock HTCondor setup.

- Derek Weitzel to graduate and start full-time as Software Engineer (Aug 1).

- OSG-CE-HPC and OSG-CE-BOSCO: Likely will get started after Derek starts.

Goals for Next Time

- 40 services in the OSG Collector.

- NoVA uses StashCache for September production run.

- (Carry-over) With OSG Security, plan for certificate-less glexec.

- (Second carry-over) Complete USCMS T2 GRAM turn-down.

gfactory Appendix

- I refined the mechanism used for querying the factory about GRAM / HTCondor endpoints (remove some duplicates). This is why total numbers were less than what was reported last time.

- comm <(condor_status -any -pool gfactory-1.t2.ucsd.edu -wide -const 'MyType=?="glidefactory" && GLIDEIN_GridType=?="condor"' -af GLIDEIN_ResourceName | sort | uniq) <(condor_status -any -pool gfactory-1.t2.ucsd.edu -wide -const 'MyType=?="glidefactory" && regexp("gt[25]", GLIDEIN_GridType)' -af GLIDEIN_ResourceName | sort | uniq)