OSG Planning Retreat 2016 **Software**

Tim Cartwright

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Staffing

| UW-Madison | Tim Cartwright | 0.75 | + 0.15 OSG User School |
|------------|----------------|------|------------------------|
| | Mat Selmeci | 1.00 | |
| | Carl Edquist | 1.00 | |
| | Brian Lin | 0.50 | + 0.5 Release |
| UCSD | Edgar Fajardo | 0.50 | + 0.5 Investigations |
| | Jeff Dost | 0.50 | 0.9 total OSG |
| | Marty Kandes | 0.25 | 1.0 total OSG |
| UNL | Derek Weitzel | 0.25 | + 0.75 Investigations |
| | TOTAL | 4.75 | + UCSD |

Reviewing Year 4

Year 4 Planned Work I

OSG 3.3

- Shipped OSG 3.3.0 in August
- Added EL 7
- Dropped many stale packages
- No other huge differences

Enterprise Linux (EL) 7

- Added support for most packages in 3.3.0
- Java changes are painful
- HDFS and BeStMan are done (just)
- Still working on GUMS, not on VOMS Admin

Year 4 Planned Work II

HTCondor-CE

- Steady but low effort (~0.25 FTE?)
 - Better LSF, PBS, and SGE support
 - Bug fixes (incl. related software like LCMAPS)
 - Integrated CE-View and HTCondor-CE-Bosco
- Consolidated usage info to track OSG CE hosts
- StashCache Finished our small role long ago
- AutoPyFactory Shipped
- PanDA No activity from ATLAS

Year 4 Planned Work III

Routine updates

- Plenty, but seemed slower than past years
- Tracking upstream changes well

Documentation

- Removed some old, useless documents (~10%)
- Updated some commonly used documents
- Support as usual, plus ~5 CE contacts per week
- Tests Better reports, baby steps on capabilities
- Internal Moved sources (but not RPMs) to GitHub

Year 4 Bonus Work

- Mostly small-scale tasks, e.g.:
 - GUMS security update in admin web interface
 - VOMS Admin restored AUP signing feature
 - APEL reporting updates
 - RSV JSON consumer
- Tightened software processes a bit, which seemed to reduce little mistakes in the release process

Planning Year 5

Routine Work

- Routine updates to software packages
- Bug fixes to software and packaging
- Routine documentation updates
- Support, especially new CE support
- Scalability testing
- Important part of what we do
- No major obstacles
- Expect roughly equal effort in all years

GRAM Sunset

- Today! OSG-CE installs do not include GRAM
- Nov 2016 End OSG support for GRAM CEs
- Milestones to schedule
 - 1. OSG factories stop sending pilots to GRAM sites
 - 2. Drop GRAM packages from OSG software stack
 - 3. Remove GRAM code from OSG software

HTCondor-CE

- Continue with long tail of improvements and fixes
- Monitoring changes as discussed yesterday (refactor CE-View, new metrics, forward by default)
- Blahp (CE-batch glue) unification, OSG/HTCondor
- Site support, especially for new or migrating sites
- Documentation tweaks

SELinux

- Security-enhanced Linux limits access to system resources (mostly files and the network) by requiring explicit access control policies
- Until now, OSG policy has been to disable SELinux
- But in EL 7, SELinux is enabled by default, and sites are asking for built-in support
- In Year 5, we plan to support SELinux for OSG SW
- Will get help from community (e.g., Oklahoma)
- May need help from upstream developers

OSG 3.4

- Probably in first half of 2017
- Changes:
 - Drop Globus GRAM packages
 - Update to HDFS 3.x (for ECC, yet to be shipped)
 - Drop GIP and OSG Info Services
 - Drop BeStMan ... but how do we get there?
 - Drop other stale packages

Miscellaneous Plans

- OSG 3.2 / EL 5 Support ends in August
- GRĂCC Support as needed

Documentation

- Continue updating content and aligning tests
- Deal with fallout from doc project (Rob Q.)

Testing

- Continue working on expressiveness aiming for multiple configure-test-cleanup cycles
- Investigate multi-host tests on CHTC

Concerns

Top Concerns

Ongoing planning within Technology area

- Hard to schedule quarterly reviews of plans
- But it helps to get bigger projects done on time

Big software lifecycle transitions

- Prototype-to-production getting better!
- Prod.-to-EOL how to make vision a reality

Java software

- Modernizing dependencies helps, but is slow
- Removing unsupported Java SW is best!