OSG Software: The Year in Review

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Who Are We?

We maintain and provide the OSG Software Stack for OSG sites and virtual organizations

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Software Releases

- OSG 3.3 support ended in May 2018
  - GUMS and edg-mkgridmap → LCMAPS VOMS plugin
  - VOMS Admin → directly signing VOMS attributes
  - BeStMan → Load-balanced GridFTP
- 28 software and data releases, updating 177 packages
- Added a rolling release for quicker access to fully tested software
  ([https://opensciencegrid.org/docs/common/yum/#repositories](https://opensciencegrid.org/docs/common/yum/#repositories)):
  `yum install --enablerepo=osg-rolling condor`
- Formalized our community testing model
- Worked with the Grid Community Forum to release Grid Community Toolkit packages into EPEL
- OSG 3.5 coming soon: HTCondor 8.8/8.9, XRootD 5, Singularity 3, GlideinWMS 3.5, Hadoop 3.0
In spring 2018, we helped transition some central OSG services and support from the Grid Operations Center to other OSG institutions.
MyOSG and OIM to Topology

- OSG Topology (https://topology.opensciencegrid.org) replaced OIM and MyOSG
  - Project, resource, resource downtime, and virtual organization registration
  - Provides a REST interfaces for the above data
  - Self-service for resource downtime registrations
- Added support for data federation namespaces and authorization
- Downtimes in iCal: https://topology.opensciencegrid.org/rgdowntime/ical
- Lots of data validation and cleanup, documentation updates
- Next steps:
  - VO and contact cleanup
  - Improving data validation
  - Exploring contact management solutions, e.g. COManage
  - Improve downtime registration UX
OSG CA Retirement

- We retired the OSG CA service
  - The CA itself has not yet expired
  - Many of the certificates are still valid but are all set to expire soon!

- Now, you should request host certificates through InCommon or Let’s Encrypt
  - IGTF-style service certificates can no longer be issued due to CA/Browser Forum Baseline Requirements
  - Update your HTCondor-CEs to ≥ 3.2.0 to support host certificate based pilot submission

- User certificates are generally no longer required
  - OSG web services no longer use them for authentication except OASIS, viewing contact details, and some internal tools
  - These use cases are satisfied by CILogon Basic certs: [https://opensciencegrid.org/docs/security/user-certs/](https://opensciencegrid.org/docs/security/user-certs/)
  - If you need IGTF-accredited user certificates but don't have access to the CERN CA, please let us know!
Other Migrations and Retirements

- Retired the central RSV service
- Assisted Virtual Organizations with retiring their VOMS Admin Servers
- Freshdesk and GGUS replaced the GOC ticketing system
  - GGUS for LHC support requests, Freshdesk for everything else
  - We’re still working on improving collaboration between multiple parties
- Self-hosted JIRA transitioned to cloud-hosted JIRA
- More details for the overall migration can be found here:
Coming Soon: Containers

- Service deployments via containers are increasingly popular for a tighter DevOps cycle
- Container images will be based off of newly built RPM packages
- Two different streams to distinguish between levels of production-readiness (names pending)
  - A ‘fast’ stream for container images that pass automated testing
  - A ‘slow’ stream for container images that pass acceptance testing
- First candidates: StashCache/XCache, Frontier Squid, Hosted CE
- Written policy open to feedback!

HOW Site Administrator Training

● This Thursday morning (3/21) in the Technical Engineering Division Building!

● Joining the OSG Consortium today:
  ○ OSG Site Install Overview
  ○ HTCondor-CE Overview

● Joining the OSG Consortium in the future:
  ○ Container training
  ○ OSG Software Containers