



# 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>):  
`yum install --enablerepo=osg-rolling condor`
- Formalized our community testing model  
<https://opensciencegrid.org/technology/policy/community-testing/>
- 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



# Service Migrations

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  $\geq 3.2.0$  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/>
  - 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:  
<https://opensciencegrid.org/technology/policy/service-migrations-spring-2018/>



# 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!

<https://github.com/opensciencegrid/technology/blob/master/docs/policy/container-release.md>





# 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