

OSG Token Transition Status

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Five Years in the Making

June 2017

Globus ends support for the open source Toolkit

August 2019

Beginning of OSG 3.5 (last release series depending on GridFTP/GSI)

January 2021

OSG series 3.6 released without GridFTP/GSI dependencies

January 2020

GSI-free site demonstration

October 2017

OSG helps form the Grid Community Toolkit

October 2019

OSG no longer carries OSG-specific patches for GridFTP/GSI

July 2020

All GridFTP/GSI free components available in OSG repositories

January 2022

End of support for OSG 3.5 and GridFTP/GSI dependencies

Or Sixteen Years?

2006

OSG is formed with
Globus Toolkit at the core
of its Software Stack

May 2022

End of support for
OSG 3.5 and
GridFTP/GSI
dependencies

OSG Software Stack

- OSG 3.5 reached its end-of-life on May 1, 2022
- OSG 3.6 does not contain any Grid Community Toolkit dependencies
- 41 → 21 supported RPM packages
- Documentation cleanup
 - Removed 12 documents for EOL'ed software
 - Net -3600 lines of documentation so far

OSG Central Services

- UCSD GlideinWMS factory updated to OSG 3.6
- Some VOs still need to submit to non-OSG CEs using X.509 proxy based pilots or using the non-REST ARC interface
 - CERN GlideinWMS factory running HTCondor with GSI support from the upstream HTCondor.org team.
 - Affected GlideinWMS VO frontends moved over to the CERN factory
 - This ‘buys us time’ —until end of HTCondor GSI support in **Feb 2023**—to ensure all ARC-CEs cut over to REST APIs.
- **Long tail:** GlideinWMS frontend bug required vestigial X.509 pilot proxy; fixed by impending release
- 40 of 48 Hosted CEs updated to OSG 3.6.
 - **Long tail:** 3.5 CEs of note are necessary to support the FNAL HEPCloud Factory

Compute Entrypoints

- 115 out of 120 OSG CEs have been updated to support token-based pilot job submissions
- Saw a 9% increase in total hours from March → June
- **Long tail:** we identified a CE accounting dependency on X.509 that required VOs to continue sending a pilot proxy
 - A fix to HTCondor-CE was released in June
 - Continuing to work with sites to update to the latest HTCondor-CE version
 - The OSPool X.509 pilot certificate will expire in November, making it the first OSG resource pool fully without X.509 pilot certificates!

Storage

- Assisting collaborations with moving from gsiftp:// to WebDAV/HTTP-TPC.
- LHC was immensely helpful in doing pathfinding activities.
 - Most sites we engage either already have an HTTP-TPC endpoint or are familiar with the concept.
- OSG supports HTTP-TPC via the XRootD software packages.

Storage - Onward and Upward!

- Recall the OSG 3.5 EOL is not the “token transition”.
 - The EOL *is* an important, mandatory milestone during the much longer token transition.
- The EOL frees up resources in OSG to redouble efforts on easing the use of tokens for storage.
 - Example: IRIS-HEP recently contributed improvements to XRootD to help debug token-based authentication.
 - Example: Similarly, IRIS-HEP is working to improve XRootD’s compliance with the WLCG JWT Common Profile.



Mission Accomplished!



After a modest delay from the original February 2022 deadline proposed years ago, OSG has successfully retired the OSG 3.5 release series and no longer supports former Globus Toolkit software.

- After almost 6 months, we are approaching the end of the long tail
- After significant participation from the community through the years, the transition for the LHC experiments was pleasantly quiet.
- However, if you see something, say something. We are interested in hearing about unplanned fallout and interested in solving your issues!

Questions?

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