

OSG 3.5 EOL Update

(Also, Token Transition Updates)



FEARLESS SCIENCE

Reminder / Setting the Scene

We are in the process of retiring (end-of-life; EOL) the OSG 3.5 release series.




- The biggest notable change OSG 3.5 => 3.6 is the removal of the Grid Community Toolkit.
 - That's not the only change! We also are ending direct OSG support for HDFS (ending a ~13-year run!).
- The OSG 3.5 EOL is a major step on the token transition path.
 - The token transition provides us with a different philosophy around authorization for grid services (capability-based instead of identity-based).
 - In its totality, the token transition is likely to last through 2025.

Updates since we last discussed

The original EOL date was **1 March**. As sent to the OSG Council mail list, we extended this to **1 May**. Two driving concerns:

1. Provide CERN with additional time to improve reliability of its token issuers.
 - **Update:** Temporarily extending the lifetime of the tokens to allow survival of “3 day weekend” outages.
 - IAM improvements are on a longer timescale. ~May, the service will go “8 / 7”, meaning someone will be able to handle emergencies during the CERN day on weekends. **Goal:** 12 hour tokens in May.
 - Later 2022, will get closer to 24/7, allowing us to reduce token lifetimes to prior goal (<6 hours).
 - It’s a security tradeoff that no one is particularly happy about. It’s a pragmatic consideration to minimize changes during LHC Run3.

Updates since we last discussed

2. Deploy a new version of XRootD with new features restoring functionality provided by Globus (LCMAPS).
 -  New features are merged in the XRootD codebase.
 -  Unfortunately, the first release candidate of XRootD 5.5.0 is now not expected until May. Historically, XRootD releases can take 1-3 months from first RC.
 - We have backported the patches to XRootD 5.4.2 and are testing at Nebraska. All seems well so far...
 -  We strongly dislike carrying complex patches but are willing to do this in order to keep with the May deadline.
 - Looking for input from stakeholders. Goal is to resolve this one-way-or-the-other by 1 April (or sooner!).

Process Improvements

We have instituted a weekly internal meeting to discuss progress against the OSG 3.5 EOL goals.

- Involves the ED, Deputy ED and the Software, Collaborations, and Operations area coordinators.
- This has provided a cross-cutting opportunity for area coordinators to bring up potential blockers.
- Tried to provide a ‘checklist’ / ‘burndown’ of the remaining items so the ET can better digest progress.

Examples

OSG token transition punch list

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SUMMARY

OUTLINE

OSG 3.6 & Token Transition Pun...

Action Items

To Think about Next Time

OSG Operated Services to Tran...

Non-OSG Operated Services to...

Uncategorized Services to Tran...

Other Known Tasks

Questions, Concerns, Unaddres...

OSG 3.6 & Token Transition Punch List

Action Items

- [Jeff] List known OSDF origins and caches that need to support tokens
 - Pascal identified:
 - PIC (Spain)
 - NIKHEF/SURFSARA (NL)
 - CNAF (IT)
 - KISTI cache (KR)
 - Ozstar cache (AUS)
 - Touch base with Lincoln on OSG Connect origins
 - Talk to Fabio about updating caches to OSG 3.6
 - See below: Start with CHTC one
 - Make sure SDSC issue is understood
- [Pascal] Move entries below into categories below
 - Check if gfal-copy invocations are affected. Check if XENON and LIGO in the US. Check if European sites are Both under Rucio.
 - Currently working with 4 sites in Europe to enable gfal tools and accept traffic for FTS transfers. Sites are CNAF and NIKHEF).
 - Need to follow up with Icecube on a non-gridf...

gFactory Requests Spreadsheet

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1	CE	CMSG-v1_0	CMS_T0-Fronte	GluexVO-1	IGWN-OSG-GWMSFronte	JLabVO-1_0	JLabVO-1_0-itb
2	249cc.yeg.rac.sh						
3	amnh-ares-ce1.svc.opensciencegrid.org						
4	amnh-hel-ce1.svc.opensciencegrid.org						
5	amnh-mendel-ce1.svc.opensciencegrid.org						
6	bell-osg.rcac.purdue.edu	OK					
7	brown-osg.rcac.purdue.edu	OK					
8	canary2.osg.chtc.io						
9	cc-condor.hpc.siue.edu						
10	cccondorce01.in2p3.fr	FAIL			FAIL		
11	cccondorce02.in2p3.fr	FAIL			FAIL		
12	ce-02.recas.ba.infn.it	FAIL					
13	ce-04.recas.ba.infn.it	FAIL					
14	ce-05.recas.ba.infn.it	FAIL					
15	ce-1.grid.vbc.ac.at	OK					
16	ce01.brazos.tamu.edu	FAIL					
17	ce01.cat.cbpf.br						
18	ce01.cmsaf.mit.edu	UNK					
19	ce01.knu.ac.kr	FAIL					
20	ce02-htc.cr.cnaf.infn.it	OK			FAIL	UNK	FAIL
21	ce02-htc.cbpf.br						

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Raw Data

Summary

FE Token Ready

CE Needs Ticket

Explore

Recent Achievements

- Almost all active organizations have provided a token issuer (notable missing items next slide).
- ATLAS has given USATLAS sites the greenlight to upgrade to OSG 3.6.
 - ATLAS previously gave the greenlight to sites that they could retire GridFTP endpoints if desired.
- CMS has started filing tickets against any US site whose CE isn't accepting tokens. Issues are being quickly resolved.
 - No greenlight for GridFTP retirement. Still a few sites (Vanderbilt, CERN EOSBOX, FNAL LPC) without HTTP-TPC.
 - Greenlight for OSG 3.6 on CEs is expected in a week or two.
- ~70% of OSPool CEs now accept tokens.
- All glideinWMS frontends operated by PATh have a token issuer defined; all but one are testing with tokens.

Areas of Concern

Things to worry about:

- XRootD functionality items mentioned before.
- Belle2 has had little / no engagement with the OSG teams, even after the deadline extension.
- Can CMS finish its GridFTP migration in time?
 - Sites may try to run OSG 3.5 until the first major support / security issue then need to cut off GridFTP very quickly.
- Heard very little from the FNAL experiments on their progress.
 - Would like to see more production pilots submitted with tokens!

Will we make it?

- The two major reasons for the extension in January now have a path forward to solution.
- We have two strong external reasons for avoiding further extensions:
 - As LHC Run3 is starting, the USLHC community wants to avoid mid-year disruptions.
 - Parochially, this is a major milestone for the IRIS-HEP / OSG-LHC team and I'd love to have this “checked off” before our May review.
- Based on current pace of improvement, feel confident the current date will stick.



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