OSG-LHC Updates

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Pictured: Tomatoes being thrown at a knight (D&D Saturday Morning Cartoon)
IRIS-HEP Strategic Plan

Areas of opportunity

- Support for heterogeneous architectures (e.g., ARM)
- Advancing container best practices (e.g., rootless images)
- HPC integration
- Hosting institute images (partnership with SOTERIA)
OSG 23

- OSG release series will be tightly aligned with HTCSS major versions moving forward
- Aiming for an August 2023 release
  - And Q3 releases each subsequent year
  - Two release series/HTCSS major versions supported at a time
- Expected major packages for the initial release
  - HTCSS 23.0.0 in main; HTCSS 23.1.0 in upcoming
  - XRootD 5.6 in main
- OSG 23 will support Enterprise Linux 8 and 9
- OSG 3.6 will be supported until at least June 2024
EL9 Future

RedHat stopped uploading RHEL RPMs publicly in June 2023, directing users to CentOS Stream for package sources

- Alma is still exploring options, will continue to provide updates as quickly as possible [https://almalinux.org/blog/our-value-is-our-values/](https://almalinux.org/blog/our-value-is-our-values/)
EL9 Future

A Path Forward for CERN IT and WLCG

➔ Still in the “neutral zone”, closely following the evolution
  ➔ SUSE just announced to fork publicly available RHEL and fund it w/ 10M$
  ➔ Will there be timely updates and releases?
  ➔ What is the model how these are provided?
  ➔ CERN IT Linux team is in touch with AlmaLinux upstream

➔ Too early to revise our RHEL / AlmaLinux offering
  ➔ Clearly, we need clarity at some point … and likely a Plan B
  ➔ Next minor release of RHEL (autumn)?

➔ CERN IT committed to work with the WLCG community

CA Certificates

- InCommon IGTF CA V3 released last month
  - InCommon IGTF CA V1 and all issued certs expires at the end of the year
  - InCommon IGTF CA V2 is NOT in the IGTF distribution but we have seen some institutions issue certs from this CA!
- CILogon X.509 plans to retire IGTF CAs (CILogon Basic, Silver) after May 2025 ([https://ca.cilogon.org/retirement](https://ca.cilogon.org/retirement))
- Known issues with certs issued by SHA1-signed IGTF CAs and the default EL9 crypto policy ([https://opensciencegrid.atlassian.net/browse/SOFTWARE-5365](https://opensciencegrid.atlassian.net/browse/SOFTWARE-5365))
  - osg-ca-certs-experimental2 RPM with potential workaround available in osg-testing for EL9
CA Certificates: dCache and EL9

Workaround does not appear to work for dCache/java-based software. Sample error:

Jul 11 10:28:47 atn12 dcache@webdav-atn12-Domain[106041]:
javax.net.ssl.SSLHandshakeException: Certificates do not conform to
algorithm constraints

...  

Jul 11 10:28:47 atn12 dcache@webdav-atn12-Domain[106041]: Caused by:
java.security.cert.CertPathValidatorException: Algorithm constraints check
failed on signature algorithm: SHA1withRSA
CA Certificates: XRootD and EL9

Workaround still needs to be tested for XRootD, looking for volunteers!

Sample error:

```
```

```
```
Token Transition

• Remaining OSG Software work in areas of training, documenting troubleshooting strategies, and work with upstream to improve tooling and logging
• See Brian’s HTCSS token/security debugging talk later today!
• Run through our token documentation!
  • Token overview: https://osg-htc.org/docs/security/tokens/overview/
  • How to get tokens from IAM using oidc-agent (similar to ssh-agent), how to inspect your token, etc.
    https://osg-htc.org/docs/security/tokens/using-tokens/
Token Transition

Playing with tokens (hint this probably won’t work)

1. Retrieve your personal access token with oidc-agent
   a. Store it in a standard location:

2. Determine your token issuer + subject
   a. STOP! Do you have compute scopes?

3. On your CE, map your issuer + subject to your local user

4. Run condor_ce_reconfig

5. Run condor_ce_trace as yourself
Questions?

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