

ESGF Installation Working Team (IWT)

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Members

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Recap of activities planned for 2015, from F2F 2014

- Globus RPMization
- Apache Frontend
- CoG integration
- Automated installation
- Sub 1hr installation time

RPMization and elimination of unnecessary builds

- Source installs of several components were replaced by RPM based installations.
- Key components include Globus and UVCDAT.
- Custom builds replaced by packages from distribution-supported repositories.
- Components include openssl, git, curl, postgresql.

Certificate and truststore overhaul

- Custom built openssl 0.9.8 replaced with distribution provided openssl.
- Redundant CAs, duplicate hashes removed, CA certificates updated.
- CA setup on machines completely revamped; all new temporary CA for testing.
- The globus setup is integrated with the locally created temporary CA.
- wget scripts now offer capability of certificate-less usage, using cookies.

Apache Frontend and CoG integration

- The Apache Frontend was setup, performing url based proxying.
- Uses httpd provided by distribution, with custom configuration file.
- Provides flask for lightweight python server-side deployment.
- CoG fully integrated into the installer, instead of the standalone deployment that was done earlier.

Automated installs

- setup-autoinstall: offers installations which are completely automated
- Once a simplified questionnaire is answered, no further manual inputs needed.
- Reduces chances of human error due to stray keystrokes.
- Faster installs as no time is wasted waiting for human input.
- Answers to the questionnaire can be saved and reused, or edited and used on other machines.
- Supports 'all', 'data only', and 'data and compute' roles when performed as a clean install.
- With good network connectivity, an automated 'all' role installation completes in under 15 minutes.

Upgrades and security improvements

- Migrated from java 7 to java 8.
- Migrated from tomcat 6 to tomcat 8.
- Latest available versions of LAS and TDS used.
- A CVE checker utility has been bundled with the ESGF release.

Releases during 2015

Due to the security incident, we switched to an agile release model, with as many as three releases on a day, on several occasions. We'll only review the milestone releases.

- Version 1.8.0: Released on February 27, 2015. Routine upgrade.
- Version 1.8.1: Released on March 11, 2015. Changes in wget scripts to allow certificate-less downloads, fix for sslv3 errors with ORP.
- Version 2.0.1: Released on October 2, 2015; This was the version which was subject to the first round of security scans.
- Version 2.1.0 was released as a devel release, on 2nd November, incorporating security fixes recommended by the security scans.
- Version 2.1.x stable is set to be released during the F2F week.

Roadmap for 2016

- Replace bash installer with a modular python installer.
- Components will have their own modules/recipes for easier maintenance.
- Integration of the new node-manager with the ESGF installer.