ESGF Installation Working Team (IWT)

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IWT: Who we are

Team Leads: Nicolas Carenton & Prashanth Dwarakanath

Members

- Alan Iwi
- Georgi Kostov
- Katharina Berger
- Luca Cinquini
- Lukasz Lacinski
- Matthew Harris
- Paola Nassisi
- Sandro Fiore
- Sasha Ames
- Sebastien Denvil
- Stephan Kindermann
- Zed Pobre
Recap of activities planned for 2015, from F2F 2014

- Globus RPMization
- Apache Frontend
- CoG integration
- Automated installation
- Sub 1hr installation time
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 installations and the sub 1hr installation

Automated installs

- setup-autostall: 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.
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.