ESGF Installation Working Team

Co-Leaders : Nicolas Carenton
              Prashanth Dwarakanath

Members : Katharina Berger
           Luca Cinquini
           Sébastien Denvil
           Matthew Harris
           Alan Iwi
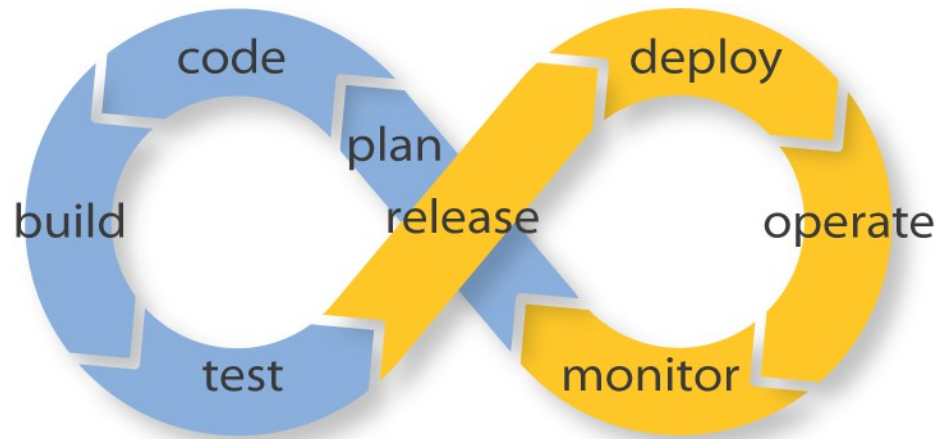   Stephan Kindermann
           Georgi Kostov
           Stephen Pascoe
           Zed Pobre

1. IWT Missions and Challenges

2. ESGF Releases in 2014

3. Achievements in 2014

4. Proposed roadmap for 2015

1. IWT Missions and Challenges

code
plan
deploy
build
release
operate
test
monitor

Missions

- ✓ Release management
- ✓ Build, test and validate
- ✓ Provide installation tools
- ✓ Secure deployments
- ✓ Administrators training and support

Challenges

- ➢ Automated builds and tests
- ➢ Easier installation

- ➢ **Node set up in less than one hour**

1. IWT Missions and Challenges

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1. ESGF Releases in 2014

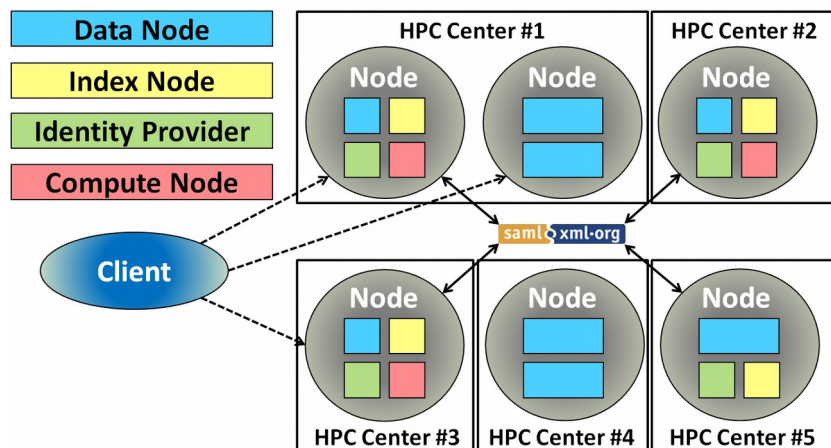|	
1.8.0 by Prashanth	- Apache in front of Tomcat - Git and Curl RPMization
1.7.2 by Prashanth	- Targeted search query substitution to prevent unauthorized credentials retrieval - IP ranges authentication feature
1.7.1 by Nicolas	- ESGF distribution mirrors implementation - get_fastest_mirror function implementation
1.7.0 by Nicolas	- First release by IWT - ESGF build process fixed - New artifacts publication ant targets

1. **IWT Missions and Challenges**

2. **ESGF Releases in 2014**

3. Achievements in 2014

4. **Proposed roadmap for 2015**

3. Achievements in 2014

ESGF Test Federation

- Data Node
- Index Node
- Identity Provider
- Compute Node

Client

HPC Center #1 — Node, Node
HPC Center #2 — Node
HPC Center #3 — Node
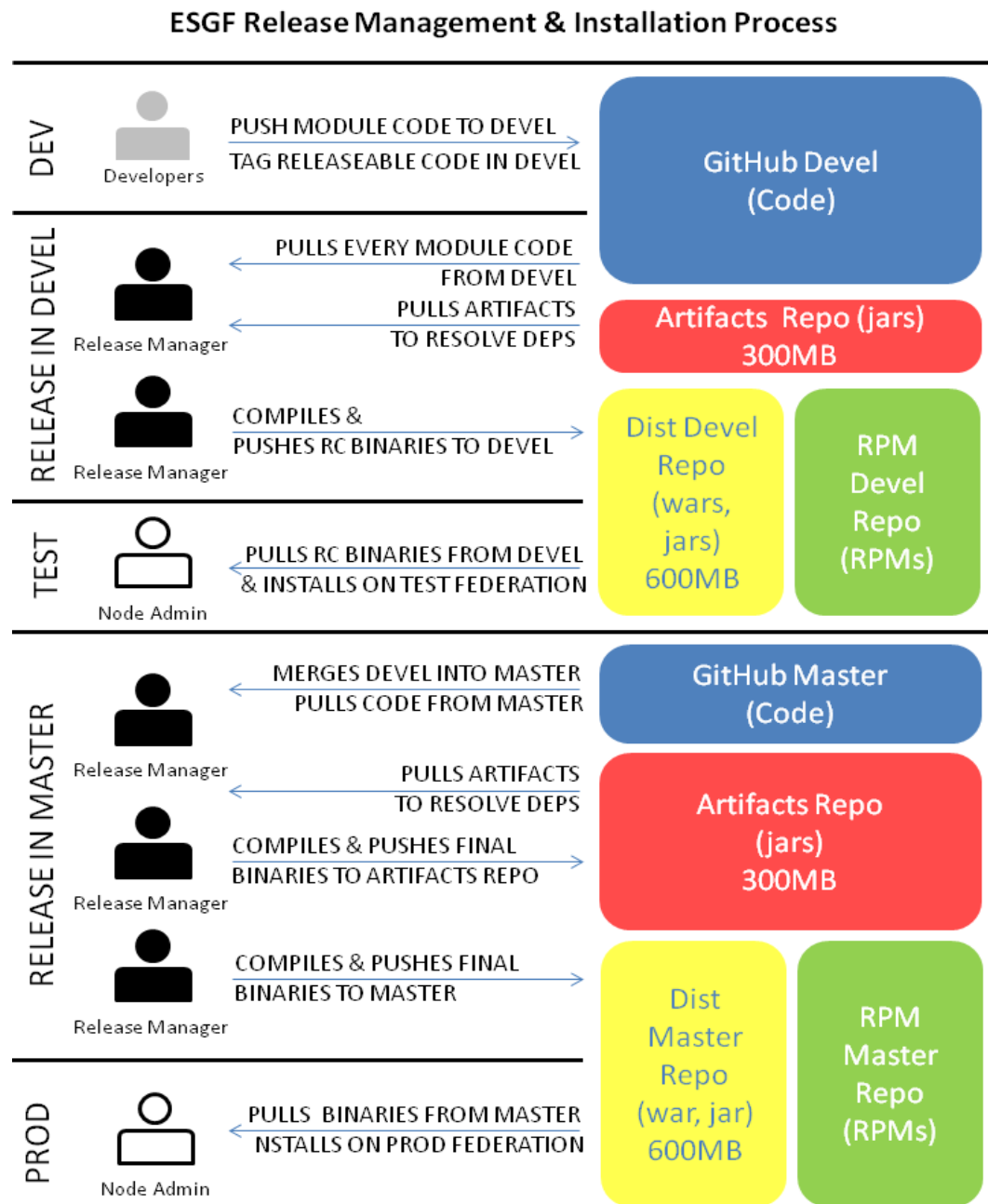HPC Center #4 — Node
HPC Center #5 — Node

saml▷xml·org

ESGF Test Suite

- ✓ Integration tests
- ✓ Non-regression tests
- ✓ Post-installation tests

- ➢ Python Nose - Test framework
- ➢ Python Requests - HTTP support
- ➢ Python Subprocess - System exection
- ➢ Python Selenium - Browser simulation
- ➢ Python Multiprocessing - Parallelisation

vmware

python

3. Achievements in 2014

ESGF Release Management & Installation Process
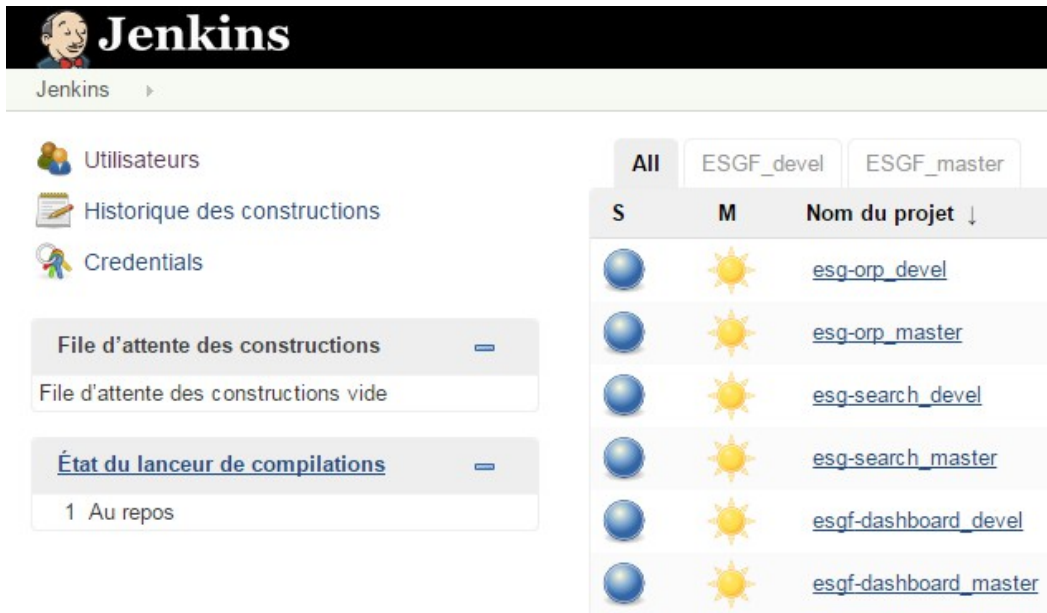
3. Achievements in 2014

ESGF Distribution Mirrors

- 3 Mirors (FR, UK, USA)

- Rsync replication

- get_fastest_mirror implementation in the installer

3. Achievements in 2014

ESGF Continuous Integration

- http://esgf-build.ipsl.upmc.fr
- Dedicated build environment
- Devel and Master pipelines

- Daily build
- Github Webhooks

3. Achievements in 2014

| UC, Spain | IITM, India | PNL, USA | INPE, Brazil |

1. **IWT Missions and Challenges**

2. **ESGF Releases in 2014**

3. **Achievements in 2014**

4. **Proposed roadmap for 2015**

1. Proposed roadmap for 2015

ESGF 1.9.0	- Globus RPMization - CoG integration
esgf-build v2	- Continuous deployment - Continuous testing
esgf-test-suite v2	- Federated search tests - Publication tests
esgf-installer v2	- Better security components setup integration - From bash to python

Thank You

ESGF Installation Working Team

esgf_iwt@lists.llnl.gov
https://www.github.com/ESGF/esgf-installer/wiki