



## Update on Version Control and Issue Tracking services at CERN

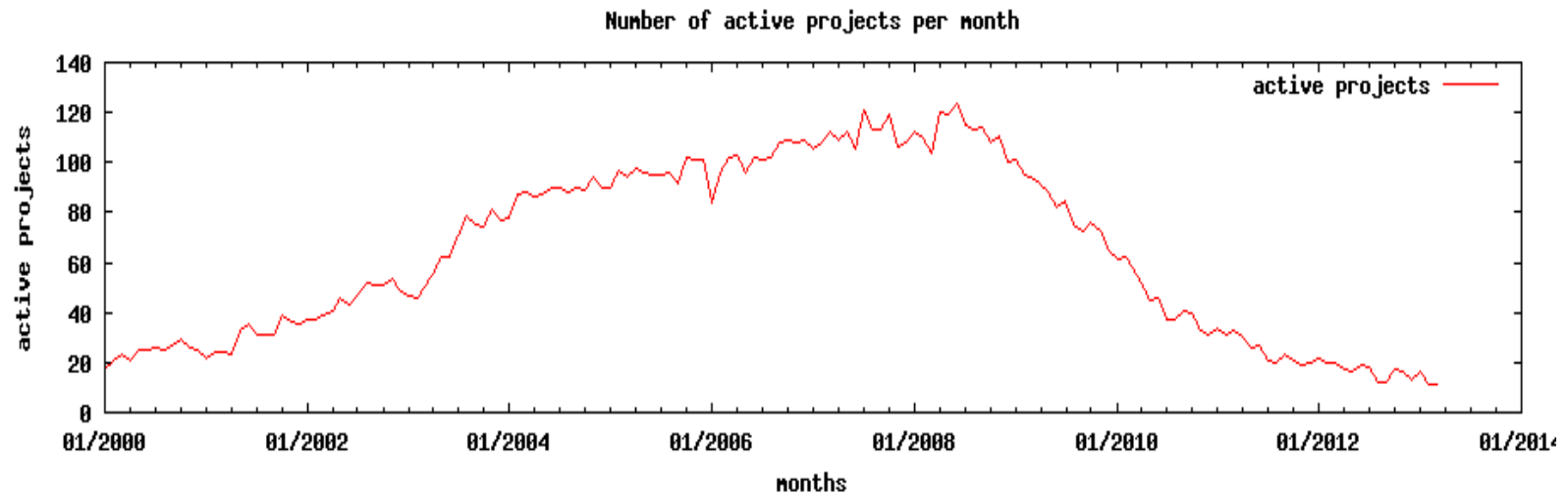
HEPiX Bologna, April 2013

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on behalf of IT/PES/IS

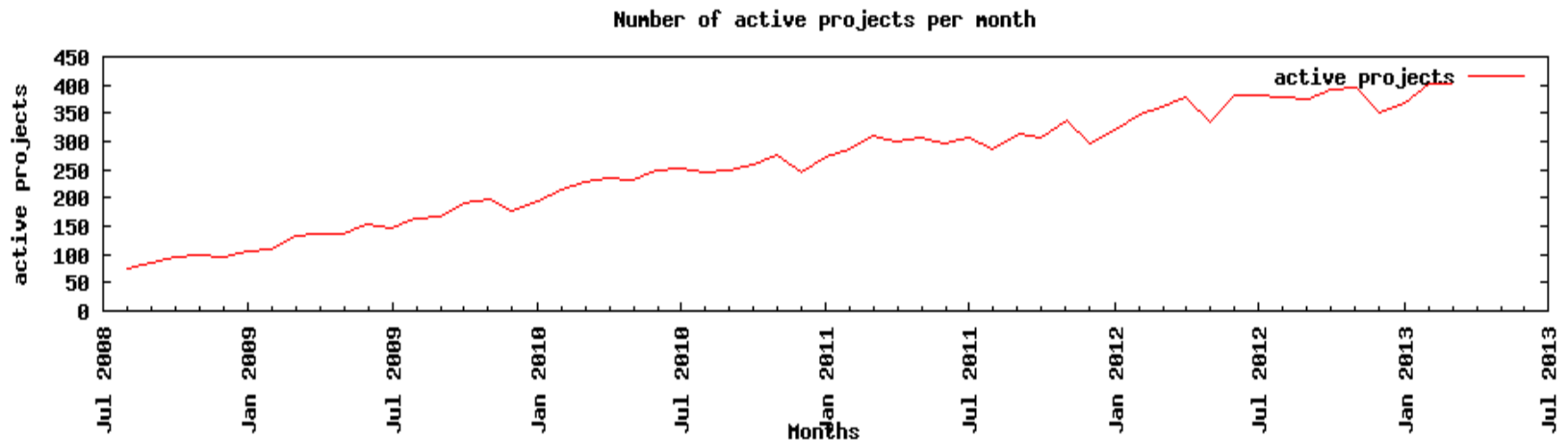
- Version control Service
  - CVS *closing this summer*
  - SVN *business as usual*
  - Git **NEW!**
    - Authentication interfaces
    - Web interfaces
- Jira
- Integrations
- Bamboo pilot



- Closing this summer
  - Most projects migrated
    - 11 active projects from a maximum of 350
  - Read only web will be available as legacy



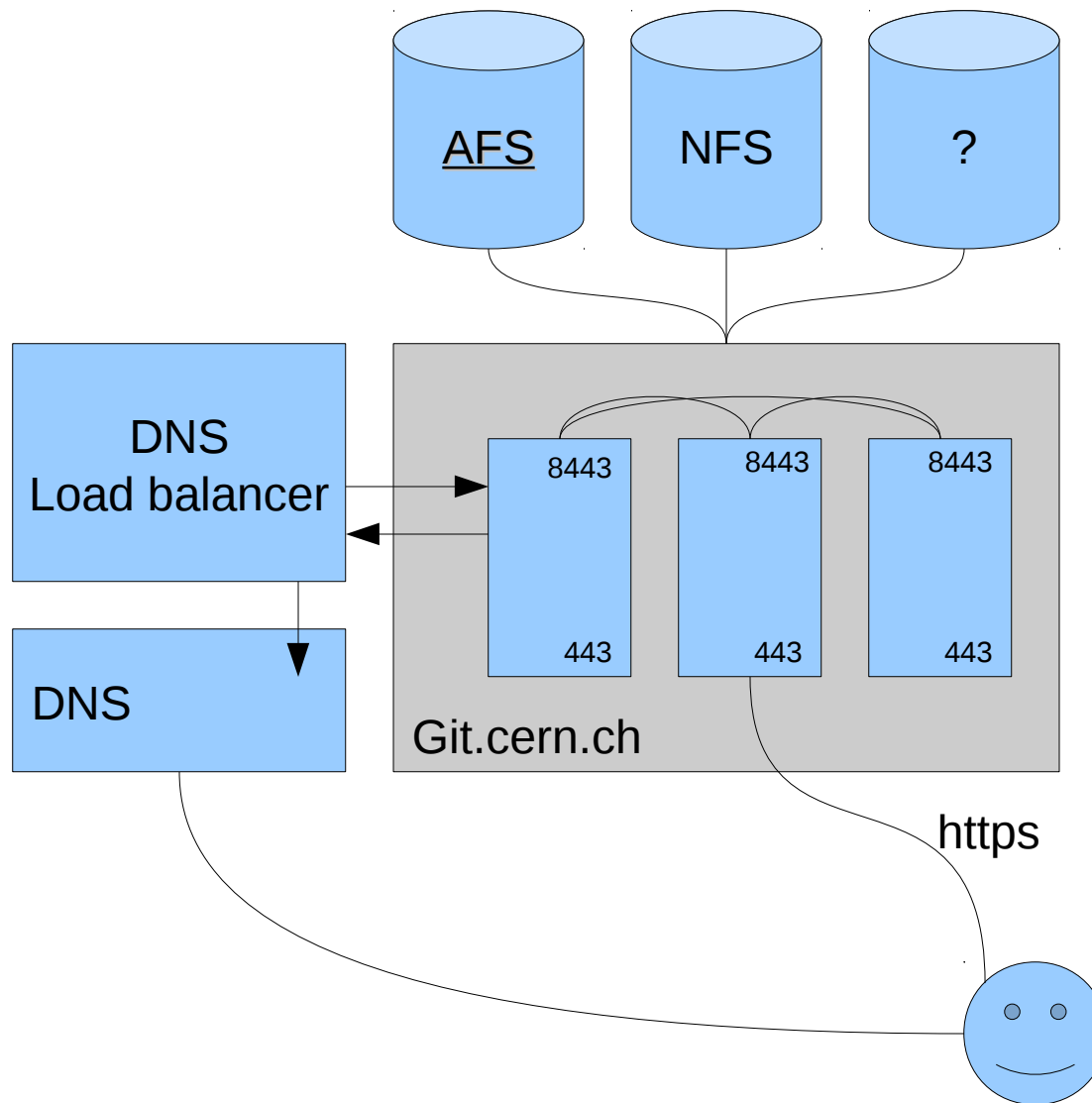
- Main VCS for CERN
  - Consolidating the service
  - 1367 projects ~380 active
  - <http://cern.ch/svn>



- GiT is a distributed version control system.
- It is *mainly* used to track changes of *source code* for an individual or a group of people.
- In contrast to subversion, it does not need a central point to share the code.
- In production since:  
Feb 2013
- <http://cern.ch/git>



# git



- VMs
- Puppet
- DNS LB
- Apache LB
- HTTP
- Gitolite3
- FS agnostic

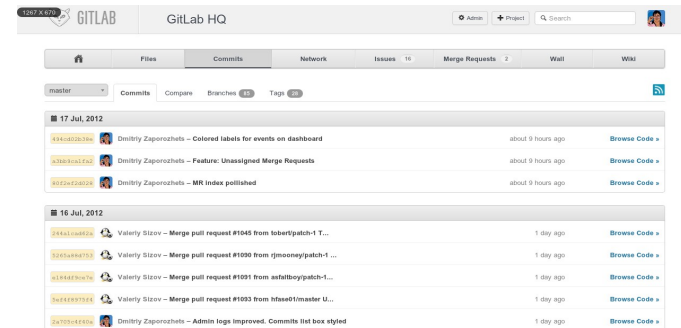
- Http
  - Only for public repositories, read only. Client and web (gitweb).
- Https
  - Gitolite3 permissions
  - Caged user hook scripts (chroot)
  - Client authentication methods:
    - Ldap
    - Kerberos
  - Web:
    - Gitweb (SSO integration)
    - Fisheye (proprietary), with code review (optional add-on)
    - Gitlab(?) (optional add-on)
    - Gerrit(?) requested by CMS off-line (optional add-on)

- Why not ...<insert\_other\_solution>?
  - Gitis. deprecated
  - Gitorious. Non really free
- Free software
- Used widely
- Easy to adapt to our needs (egroups integration)
- Easy to manage permissions, supports delegation and version control





- Gitlab “github lookalike” web application
  - Pull requests



- Gerrit code review web application
  - Widely used
  - Review and verify role



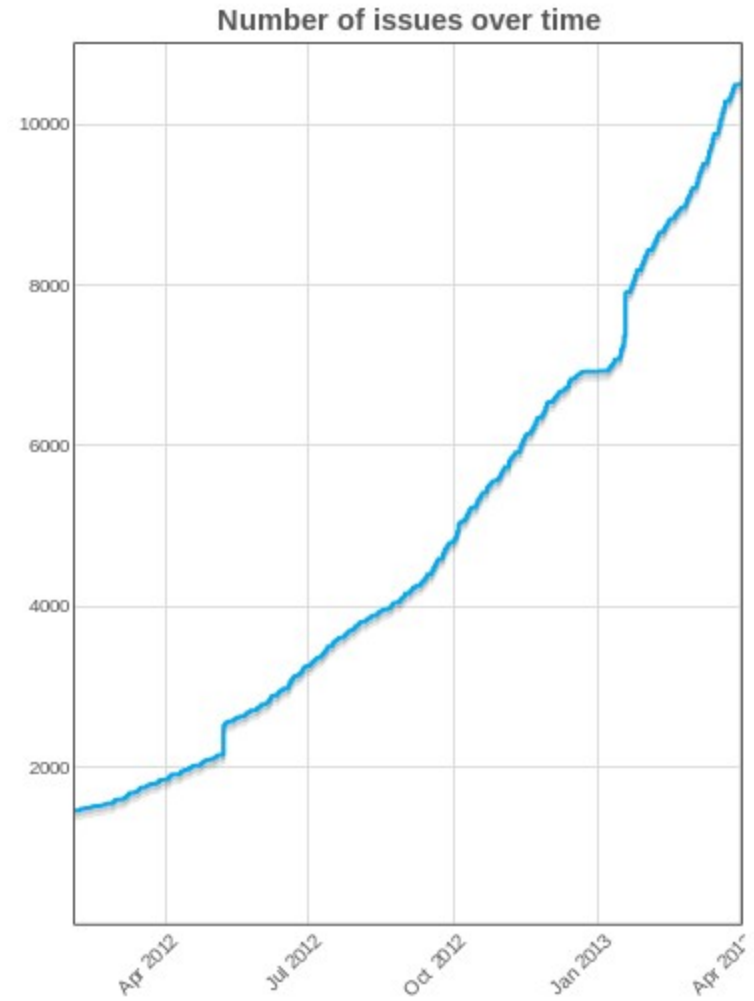
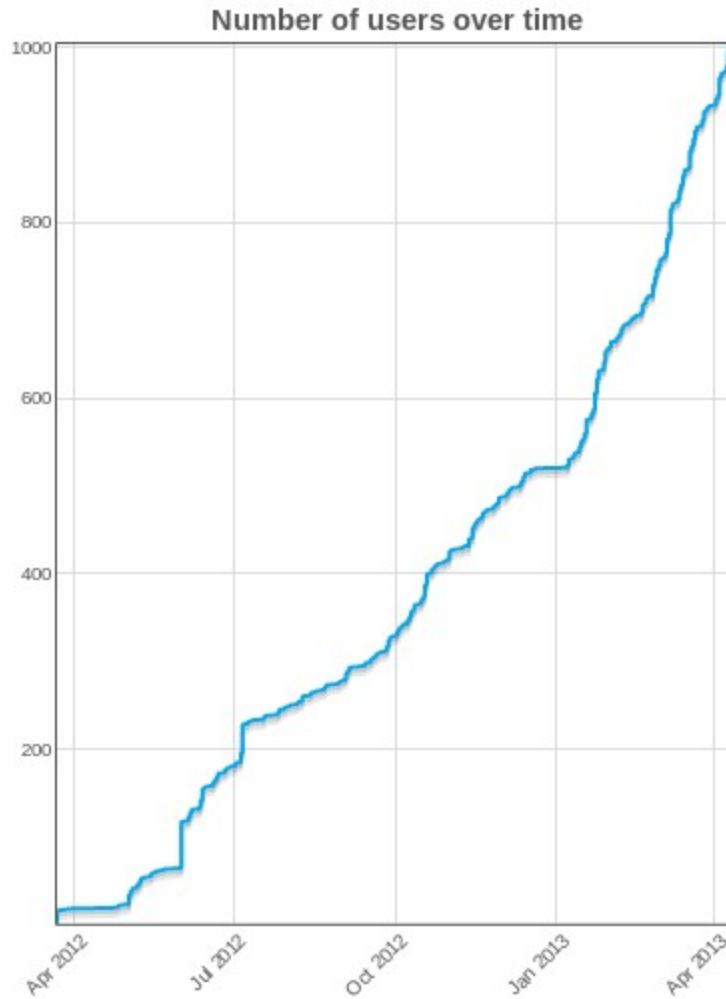
## Issue Tracking Service <http://cern.ch/its>



- Commercial product from Atlassian. Web application to track issues, focused in code bugs, but used for all sort of tasks.
- One Central instance for most needs
  - <https://its.cern.ch/>
- 4 production private instances, for people with special needs (and money to pay for them).
  - Savannah (ROOT, GEANT4, ...) is being migrated to Jira in collaboration with CERN PH-SFT.



# PES Central Jira Statistics



- CERN SSO integration login. Use egroups as Jira groups transparently.
  - Using Crowd SSO so other Atlassian products can be integrated transparently.
- GIT and SVN, reference Jira tickets from commits, see them in Jira
- Fisheye+Crucible integration, code review and create issues in Jira.
- Bamboo (?)

- Continuous integration web application.
  - Commercial product from Atlassian
  - Multiple build agents
  - Elastic capacity
  - Version control integration
  - Jira Integration
- Internal CERN IT evaluation in collaboration with CERN IT-GT



- In development.
- Will provide a common self-service platform for managing version control, issue tracking, twiki, ...

COMING SOON

# PES Questions?

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