

Voms & Voms-admin report

Vincenzo Ciaschini & Andrea Ceccanti

- **Voms core 1.8.12 has been certified and is currently in preproduction**
- **Voms core 1.9.8 has passed pre-certification and is awaiting certification**
 - Highlight: Dropped dependency on globus from clients and APIs
 - Highlight: Clients and APIs are IPv6 ready

- **Voms admin 2.0.15 is currently in production**
- **Voms admin 2.0.18 is awaiting certification**
 - Highlight: Integration of the SAML endpoint
 - Minor bugfixes

- **For credentials:**
 - Usual socket interface (voms-proxy-init) with APIs for C, C++ and Java
 - SAML Credential interface – through dedicate webservice
- **Under development:**
 - Web Service interface (SOAP and REST) implemented and undergoing internal testing
- **For Administrators**
 - Web service interface
 - Web application

- **For voms core:**
 - IPv6 support in the server
 - This will be fixed with VOMS 2.0 (see)
 - Simplify usage of the Java APIs
 - Most other open issues are requests for clarifications on documentation and error messages

- **For voms admin:**
 - 2.5 release that introduces many requested features
 - Multiple certificates support
 - AUP management
 - Compliant with JSPG rules for VO registration services
 - Improve documentation!

- **Voms core**

- July 2009

- VOMS 1.9.x.

- *Highlight: fixing all bugs opened before 1/5/2009, except the IPv6 issues.*

- September

- VOMS 1.9.y

- *Highlight: expansion of the testsuite to obtain a better coverage of the APIs*

- X, Y may change if EMT requires urgent fixes

- December

- VOMS 2.0

- *Highlight: step 3 of the globus independence plan, i.e. removal of globus dependencies from the server*
 - *Highlight: complete IPv6 support.*

- **Other fixes for voms 2.0:**
 - Rewrite of the signing_policy handling code.
 - Reason: current code is globus legacy and difficult to understand
 - *Bugs are infrequent, but they kill whole CAs.*
 - *Rewrite it using bison for parsing*
 - Adding WS interfaces (before if tests go well)

- **Voms admin:**

- June 2009:

- Version 2.5.0:

- *Multiple certificates support*
 - *AUP support*
 - *JSPG compliance*

- November 2009:

- Version 2.6.0:

- *Sortable and selectable info in the web interface*
 - *Ability to execute operations on groups of users (e.g., suspend all the users belonging to group g)*
 - *Dynamic list of collected personal information per user*

- February 2010:
 - Version 2.7.0:
 - *Framework for interfacing with external membership databases*
 - *Event subscription*
 - *Other VOMRS convergence missing features*

- Besides these, there will be VOMS Admin 2.0.x bugfix releases

Tools and Procedures

- 1. Understand what, exactly is required**
- 2. Design**
- 3. Implement what is designed**
- 4. Write a test for the new feature**
- 5. Test only the new feature**
- 6. Does it work?**
 - No. Go to step 1 of the bugfix procedure
 - Yes. Continue
- **Go to step 4 of the bugfix procedure**

- 1. Understand the bug**
- 2. Write a test for the bug**
- 3. Update the bug in savannah if appropriate**
- 4. Run the bug specific test**
- 5. Success?**
 - No. Go to step 1
 - Yes. Continue
- 6. Run the entire testsuite (more on this in other slides)**
- 7. Success?**
 - No. Go to step 1
 - Yes. Continue
- 8. Run the non-automated tests**
- 9. Success?**
 - No. Go to step 1
 - Yes. Go to step 1 of the patch procedure

- 1. Create the new configurations**
- 2. Create the patch/Update if from a pre-certification failure.**
- 3. Give the patch to pre-certification**
- 4. Success?**
 - No. Go to step 1 of the bugfix procedure
 - Yes. Continue
- 5. Give the patch to Certification**
- 6. Success?**
 - 1.** No. Go to step 1 of the bugfix procedure.
 - 2.** Yes. Done

- **For VCS:**
 - SVN
 - Voms core uses subversion since 2006
 - Voms admin started using it for voms admin 2.5
 - Can be used for building from ETICS without problems
 - Even though we dump the sources on the official CVS for the moment
 - Much better support for branches than CVS
 - Easily created
 - Merges do not have a tenth of the bogus conflicts you get with CVS
 - Much better than CVS
 - But still it could be better

- **Git or Mercurial?**

- Heard that the project wants to switch to one of these two, so I made some experiments

- Git:

- *Very complete command set*
 - *Available for unix-like and windows (mingw port by google)*
 - *Easy and simple migration from SVN.*

- Mercurial

- *Clearer command set*
 - *Available for unix-like and windows (native)*
 - *Migration from SVN does not work!*

- **The official pages offer four different miration procedures from SVN.**
 - Procedure 1 fails during the conversion
 - Procedure 2 only migrated the head of trunk, losing all history
 - Procedure 3 seems to work, but in reality collapses several different versions of the same file in one, losing history
 - Procedure 4 fails during the conversion
- **This is not acceptable**
- **To contrast, SVN -> Git worked like a charm**

- **Quite tedious to use**
 - Repetitive tasks can not be easily automated
 - No internal Patch/Bug cloning
 - Bugs/Patches can not be grouped
 - Search features do not work well
 - *e.g., when linking bugs to patches*
- **We should evaluate alternatives**
 - Atlassian JIRA?
 - TRAC?
 - ??

- **No big deal with etics**

- Actually quite neat for some things (see testsuite presentation)#
- Still think it needs more developers 😊
- It's still very sloooooow (long checkout times)#

Future Developments

- **Decouple VOMS from X509**
 - Support for alternative authentication mechanism
 - SAML
 - Kerberos tickets
 - OpenID
 - Username/passwords
- **CRL for attribute certificates**
 - No need for these if we finally move to short lived proxies!
- **VO federations**
- **VOMS Admin**
 - Standalone packaging and deployment (migration to embedded Jetty)