UNIC◯RE

Distributed development

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SourceForge „Develop" page

source*forge*

Code

Programming Languages: Java, Perl

License: other

Repositories

SVN browse code, statistics, last commit on 2009-08-24

```
svn co https://unicore.svn.sourceforge.net/svnroot/unicore unicore
```

CVS browse code, statistics

```
cvs -d:pserver:anonymous@unicore.cvs.sourceforge.net:/cvsroot/unicore
login

cvs -z3 -d:pserver:anonymous@unicore.cvs.sourceforge.net:/cvsroot
/unicore co -P modulename
```

What's happening?

Show: Everything ▾

✓ UNICORE

bschuller committed revision 5282 to the UNICORE SVN repository, changing 1 files.

2009-08-24 14:45:39 UTC by bschuller

✓ UNICORE

bschuller committed revision 5281 to the UNICORE SVN repository, changing 1 files.

2009-08-24 14:09:20 UTC by bschuller

Links You May Need

Download UNICORE
Get Support for UNICORE
Send a request to join this project

Project Admins

bjoernh
bschuller
dmallmann

Our Numbers

Bugs (14 open / 240 total)
Support Requests (0 open / 3 total)
Patches (2 open / 17 total)
Feature Requests (44 open / 146 total)
Public Forums (0 messages in 0 forums)
Mailing Lists (5 total)
CVS Repository (40 commits, 3,971 reads)
Browse CVS
SVN Repository (5,113 commits, 16,700 reads)
Browse SVN

Newest Members

nlamla
wnoor

Version control

- SVN
- Mailing list is notified of each commit
  - Including detailed diff

Build automation

- Apache Maven
  - Project descriptor file
    - Dependencies
    - Build details
  - Dependencies available for download from public repositories (UNICORE specific dependencies maintained in a repository at Jülich)
  - No libs in source control!

- Apache Ant
  - For building the server packages
  - Building the (Eclipse based) UNICORE Rich client

Example dependency tree (excerpt, generated by Maven)

```
[INFO] eu.unicore:uas-core:jar:1.2.2
[INFO] +- eu.unicore:uas-types:jar:1.2.2:compile
[INFO] | +- de.fzj.unicore:jsdl-xmlbeans:jar:1.3:compile
[INFO] | \- de.fzj.unicore.wsrflite:wsrftypes:jar:1.8.15:compile
[INFO] +- de.fzj.unicore.wsrflite:wsrflite:jar:1.8.15:compile
[INFO] | +- log4j:log4j:jar:1.2.14:compile
[INFO] | +- xmlbeans:xbean:jar:2.2.0:compile
[INFO] | +- xmlbeans:xbean_xpath:jar:2.2.0:compile
[INFO] | +- org.codehaus.xfire:xfire-xmlbeans:jar:1.2.6:compile
[INFO] | | \- org.codehaus.xfire:xfire-aegis:jar:1.2.6:compile
[INFO] | |    \- net.java.dev.stax-utils:stax-utils:jar:20040917:compile
[INFO] | +- xfire:xfire-jsr181-api:jar:1.0-M1:compile
[INFO] | +- org.mortbay.jetty:jetty:jar:6.1.19:compile
[INFO] | +- org.mortbay.jetty:jetty-sslengine:jar:6.1.19:compile
[INFO] | +- hsqldb:hsqldb:jar:1.8.0.10:compile
[INFO] | +- net.sf.ehcache:ehcache:jar:1.2.4:compile
[INFO] | \- eu.unicore.security:xfire-secutils:jar:1.3.3:compile
[INFO] |    +- org.codehaus.xfire:xfire-core:jar:1.2.6:compile
[INFO] |    \- eu.unicore.security:securityLibrary:jar:1.5.1:compile
[INFO] |       \- pl.edu.icm.saml:samly2:jar:1.2.1:compile
[INFO] |          +- org.apache.santuario:xmlsec-java6:jar:1.4.2:compile
[INFO] |          +- pl.edu.icm.unicore.security:SAMLtypes:jar:1.1:compile
[INFO] |          \- eu.unicore.security:crl-checking:jar:1.0-rc1:compile
[INFO] |             \- bouncycastle:bcprov-jdk15:jar:140:compile
[INFO] +- de.fzj.unicore:xnjs-module-core:jar:1.2.2:compile
[INFO] | \- de.fzj.unicore:persistence:jar:0.5:compile
[INFO] +- de.fzj.unicore.xuudb:xuudb-common:jar:1.2.1:compile
[INFO] +- net.sourceforge.sunxacml:sunxacml:jar:1.2:compile
[INFO] \- eu.unicore.security:xfire-secutilsWithDSig:jar:1.3.3:compile
[INFO]    +- org.apache.ws.security:wss4j:jar:1.5.8-pre-20090717:compile
```

Integration with ETICS – build and test on multiple OS

Continuous integration

- Atlassian Bamboo
  - Builds components when code in the repository changes
  - Runs unit tests (which developers sometimes do not :-))
  - Success/failure notifications to mailing list (and individual developer)
  - Web frontend

UNICORE 6 release schedules

- Core servers, workflow servers, major clients
  - „point releases" e.g. 6.2.2
    - Approximately every 2-3 months
    - Bug fixes, minor new features
  - Major releases
    - Approximately once a year
    - Major changes and new features

- Other components as appropriate
  - UVOS VO Service
  - CIS information service

UNICORE 6 component release procedure

- The component is built and tested thoroughly by the developers and any additional "in-house" testers

- **Release candidate** of a component is made available for download

- **Announced** on development mailing list (and to other stakeholders, e.g. projects)

- 10 working days "**voting period**"

- If no objections or critical bugs have been raised, the software is released.

Experiences and lessons learnt

- Learn from big open-source projects (e.g. at Apache, at SourceForge)
- Inter- and intra-team communication and transparency is crucial for distributed development to succeed
- Notifications of code changes (SVN check-ins)
- Clear, automated dependency management is a life-saver
- Continuous integration is very beneficial. Most useful if various deployment platforms can be used for testing (ETICS)
- More work needed:
  - More „real" integration tests (full stack)
  - Multiple platforms (both client and server)