



Common Authentication Library - Java Status

Krzysztof Benedyczak
ICM Warsaw University

Status

- Implementation status:
 - Support for namespaces & signing policy missing
 - Everything else: finished.
- Testing:
 - unit test code coverage: 54%
 - target: 75%
 - most of packages fully tested
 - some not at all
 - few "integration" tests missing
- Plans: ready around 7th XI,
 - My vacation: 16th XI - 14th XII

Implementation

- Certificate path validation *is not written from scratch*.
 - Bouncy Castle implementation is wrapped and reused.
 - Extensions for more flexible CRL handling added.
 - Proxy chain part is has a set of additional checks (mostly RFC based) + drops CA ext restrictions from the BC implementation.
 - Most of errors is translated to be more human friendly.
- All implementations of validators reuse the one low level code.

API Changes

- Removed possibility to get not handled non-critical extensions.
 - Might be added, requires quite a lot of additional work. Currently the only drawback of using BC implementation.
- A lot of minor changes (exceptions, additional methods).
- Changed semantics of the DN compare methods operating on the string representation
 - Bug found in JDK implementation.
- Added more constants to FormatMode for one line printing.

API Changes (2)

- Added a new validator type: *FlexibleCertChainValidator*
 - As OpenSSL one, but doesn't require hashed names. OpenSSL V. is its specialization.
- Method *setCrl* in validators now accepts *Set<String>* instead of *Set<URL>* as wildcards may be used.
- Added a *dispose()* method for all validators to stop the updating process.
- Added a new listener to validators: get notification when an update error occurs.
 - Optional possibility to add *updateError* observers in constructor of validators.

To be discussed

- Namespaces and signing policy
 - preferences (or configurable?)
 - VOMS and util-java use them in a different way.
 - Parsing is bit incorrect.
- Testing
 - gLite util-java testsuite was ported.
 - NIST testsuite will be used, currently the foundation framework and two testcases are implemented.
 - Any other ideas? Testsuites?

To be discussed

- Verification of copyright and license statements.
 - for Joni?
- Planned packages:
 - Maven artifact deployed in UNIOCRE repo.
 - rpm/deb library (noarch)
 - rpm/deb -javadocs (noarch)
- Questions?