

OIO Service Oriented Infrastructure

RASP Library for Java

Version 2.1.0

Release Notes

Contents

1	Introduction	3
2	Release Content	4
3	What is changed?	5
3.1	RASP version 2.1.0	5
3.1.1	New features	5
3.1.2	Fixes	5
3.1.3	Changes	5
3.1.4	Removals	5
3.2	RASP version 2.0.1	7
3.2.1	New features	7
3.2.2	Removals	7
3.2.3	Changes	7
3.2.4	Fixes	7
3.3	RASP version 2.0.0	8
3.3.1	New features	8
3.3.2	Removals	8
3.3.3	Changes	8
3.3.4	Fixes	8
3.4	RASP version 1.3.0	8
3.4.1	New features	9
3.4.2	Removals	10
3.4.3	Changes	10
3.4.4	Fixes	10
3.5	RASP version 1.2.3 hotfix 1	11
3.6	RASP version 1.2.3	11
3.7	RASP version 1.2.1	11
4	System Requirements	11
5	Installation	11
6	Compatibility	12
7	Known issues	12
8	Licenses	12

1 Introduction

The OIOSI RASP Library for Java is a java based toolkit for implementation of OIORASP business applications.

This distribution is Version 2.1.0

The distribution is part of the OIOSI work for exchanging business documents in a secure and reliable way using the internet. See <http://www.digst.dk/It-loesninger/NemHandel/Til-it-udviklere> for more information.

The framework can be downloaded from <http://digitaliser.dk/group/405442/resources>

2 Release Content

This release comprises the following artifacts:

Documentation:

- OIOSI RASP Library for Java Release Notes.pdf (this document)
- OIOSI RASP Library for Java Source - Installation Guide.pdf
- OIOSI RASP Library for Java Tutorials.pdf
- release-notes-2.1.0_HowToUpgrade.txt
- A number of detailed release-notes related to specific issues – named release-notes-<version>_<issue summary>.txt

Samples in SVN project

<https://svn.softwareborsen.dk/openebusiness/dk.gov.oiosi/library/java/trunk/dk.gov.oiosi.examples.client>:

- dk.firma.klient.webservice.TestCertificate – Test certificates using RASP functionality
- dk.firma.klient.webservice.OiosiRaspClient – Send a test document
- dk.firma.klient.webservice.TestUddiLookup – Test UDDI lookup

Source code and binary release (jar file).

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3 What is changed?

In the following part of the document, some issue numbers are mentioned – these numbers are internal numbers used by the Danish Agency for Digitisation, so please ignore these as external developer.

3.1 RASP version 2.1.0

Main purposes of this release have been:

- Update code to enable PEPPOL BIS documents in Danish NemHandel.

3.1.1 New features

- Support multiple schematron validations per document type.
- It is now possible to send a document, having a Sender part with other KeyType than the valid Danish receiver KeyTypes (to support PEPPOL received documents, having eg. a SE:ORGNO as sender keytype).
- ConfigurationHandler#initEnvironment now check for presence of JCE.
- xpath parsing of values in RaspConfiguration has been updated, so it's possible to set a fixed value instead of an xpath – eg. string('EAN').
- RaspConfiguration: It now possible to set an empty string as value for <SchemaPath> to disable Schema validation for a single document type.
- saxon9he.jar must be added to project to be able to schematron validate PEPPOL files (because it uses XSLT 2).

3.1.2 Fixes

- SchematronValidatorSAXHandlerConfig has been updated to allow dash (-) as part of an xpath (needed for DespatchAdvice xpath).
- An active UddiLookupResponse from NHR, having an expireTime later same date, was interpreted as expired [1530].
- Minor fixes to logging and internal calls.

3.1.3 Changes

- Misc. renaming of internal calls.
- In constructors for LookupParameters the acceptedTransportProtocols part can now be Null.
- In RaspConfiguration.xml it was previous the value in `//DocumentTypeConfig/EndpointType/ProfileIdXPath` that was used in RASP Java. This has been streamlined with .NET, so from now, the value must be located in `//DocumentTypeConfig/ProfileIdXPath`

3.1.4 Removals

- Classes removed: ITimedCache, CertificateChecker, QuantityCache (deprecated since 1.3.0).
- Other deprecated methods removed.
- Removal of unused Exception classes.
- Useless EndpointAddressTypeCode removed (https, email, other) [1348].
- Unused property UddiLookupResponse.termsOfUseUrl removed.

- Identifier subclasses removed, and main Identifier class refactored.
- Removed code internally for configuring mail/SMTP as transport.

3.2 RASP version 2.0.1

Main purposes of this release have been:

- Fix problems found in the 2.0.0 version.

3.2.1 New features

None

3.2.2 Removals

- Classes `EmployeeOcesX509Certificate`, `NoSubjectCvrNumberException`, `AmbiguousSubjectCvrNumberException`, `InvalidOcesEmployeeCertificateException` and `ConfigurationRuntimeException` removed (deprecated since 1.3.0)

3.2.3 Changes

- `LogFactory` (`org.apache.commons.logging`) and `Logger` (`org.apache.log4j`) was used in a big mix. `LogFactory` is now the preferred logger in RASP, and should have been standardized [1279].
- Misc. logging texts have been improved + some log levels.
- A few internal caches have been implemented to gain better performance.
- `dk.gov.oiosi.Version` moved to `dk.gov.oiosi.configuration.Version`

3.2.4 Fixes

- Having multiple `RootCertificateLocation` sections inside `RootCertificateLocationCollection` (in `RaspConfiguration.xml`), then only the last one was loaded [1277].
- When using CRL as certificate validation, all certificates were considered invalid while no CRL data was present (e.g. during startup) [1202].

3.3 RASP version 2.0.0

Main purposes of this release have been:

- Full support for Foces2 certificates. Foces1 is still supported in this version, BUT after June 2013 DanID will no longer issue Foces1 certificates. Renewal of Foces1 certificates will also not be possible after this date.

The version number is changed to 2.0.0 to clearly indicate, that this version of RASP will not be able to communicate with any RASP 1.x software where one of the parties communicating has updated to Foces2.

3.3.1 New features

None

3.3.2 Removals

None

3.3.3 Changes

- LDAP URL changed in RaspConfiguration.xml (<ConfigurationSection xsi:type="LdapSettings"/>/Host) to crtdir.certifikat.dk [1054].
- RASP library identifies itself by platform and version number when making Uddi Inquiry requests [1141].

3.3.4 Fixes

- Error messages for invalid certificate (before activation or after expire) has been updated to show certificate subject [1101].

3.4 RASP version 1.3.0

Main purposes of this release have been:

- Support for oces2 certificates. This release has prepared and tested code to handle these new certificates. It will not be possible to start testing this in the general public before DanID later in 2012 opens the last infrastructure components. DanID will sometime in 2013 stop issuing oces1 certificates and at that time, the RASP 1.3.0 (or newer) will be mandatory in NemHandel. It will be announced when the date is set and notification will be given at least 6 months in advance.
- Optimize performance. Caches have been made configurable, memory consumption have been minimized, style-sheets are now pre-compiled, code is optimized – all to optimize the throughput of communication.

This release is fully compatible with RASP 1.2.1 and 1.2.3 when using oces1 certificates. The 1.3.0 release is not a patch release, due to several breaking changes.

In the provided Rasp Configuration file a number of default values for e.g. cache sizes have been proposed. These are only default values, and can be changes by users as needed. It is recommended to use the provided Rasp Configuration file as starting point. Please see the details below for configuration.

Default values:

Cache name	OIORASP 1.2.3	OIORASP 1.3.0
-------------------	----------------------	----------------------

LdapCertificateLookup/CertificateCache	TimedCache - 14 days	TimedCache, 24 hours validity, each 1 hour check for expiration
OcspLookup	TimedCache - 1 hour	TimedCache, 1 hour validity, each 10 mins check for expiration
UddiLookupClient.getServiceCache	TimedCache - 24 hours	TimedCache, 10 hours validity, each 10 minutes check for expiration
UddiLookupClient.getTModelCache	TimedCache - 24 hours	TimedCache, 24 hours validity, each 1 hour check for expiration
SchematronStore	QuantityCache - 2 path entries	LFU cache (max size 20), no expiration
CrlCache	Unlimited hashtable for each CRL url, checks for expiration each time it is accessed, updates in the same thread where it was found that it is expired	LFU cache (max size 10), if failed to update - reattempt in 5 minutes by special scheduled job, which is started after each successful cache update depending on revocation next update date from CRL server
SchemaStoreCache	N/A - Schema object is built each time when required	deleted from RaspConfiguration Test and Live

3.4.1 New features

- Oces2 certificates are now supported. OIORASP 1.3.0 is prepared for DanID to start issuing oces2 certificates.
- Possibility to configure caches: It's now possible to configure almost any cache setting. Please see file "release-notes-1.3.0_CacheConfiguration.txt" for detailed description and configuration [917].
- Preload schematron validators before actual documents validation. Preload and cache common used validators to optimize performance. Please see file "release-notes-1.3.0_PreloadSchematronValidators.txt" for detailed description and configuration [920].
- Initialize CRL revocation cache during startup. CRL can now be fetched, processed and cached on startup to optimize performance. Please see file "release-notes-1.3.0_CrlCachePreloading.txt" for detailed description and configuration [919].
- Monitor cache states. To be able to optimize cache settings, it is vital to know something about the size of the cached content. Please see file "release-notes-1.3.0_MonitorCacheStates.txt" for detailed description and configuration [993].
- Internal representation of XML is updated in receiver code (AxisServiceReceiver) to minimize memory usage (do not clone payload) [918]
RASP still used some memory to hold precompiled stylesheets, CRL, etc.
Reading from development setup:

Object	Megabytes
Schematron objects	
OIOUBL Invoice schematron	11,01
OIOUBL CreditNote schematron	7,72
OIOXML schematron	0,28
Other expensive objects	
CrlInstance	47,35

- Representation of XML is optimized in object XmlDocument, so that transformation to/from DOM is not executed more than once [929]
- Lots of logging has been added around the code base.

3.4.2 Removals

- Deprecated class dk.gov.oiosi.addressing.EndpointAddressURL deleted.
- Various unused classes have been marked as Deprecated.
- Configuration of old VANS GW adapter removed from configuration files [526]
- Unused Axis2 module removed. Please see file “release-notes-1.3.0_Removed_Axis2_Module.txt” for detailed description and configuration [1005].

3.4.3 Changes

- <http://discoverybackup.uddi.ehandel.gov.dk/registry/uddi/inquiry> is put in as default backup [622]
- December 2012 schematron files (version 1.3) put in as default files [669]
- Optimize schematron validation: Stop after first error. Only first error is returned, so stop when first error is found [914]
- BouncyCastle and other libraries are updated to latest version.
- Default location for schema and schematron files have changed, to get clearer file structure (related to how e.g. Schematron updates are released [631+634+869])

3.4.4 Fixes

- Xpath for KreditNota made absolute [368]
- Old test certificates in project updated [713]
- AxisMercuryDispatcher updated, so that cleanup is also executed upon exception [866]
- OIORASP 1.2.3 does not free resources on TransportController.shutdown(). Please see file “release-notes-1.3.0_TransportController_Shutdown.txt” for detailed description [867+1000]

3.5 RASP version 1.2.3 hotfix 1

The following bugs have been fixed since 1.2.3:

- Ability to handle all endpoint types defined by OIOUBL (GLN, CVR, etc.)

3.6 RASP version 1.2.3

The following features are new or have changed since 1.2.1:

Non-breaking changes

- Updated the schematron style-sheets to the newest version.
- Added support for the Utility Statement document and profiles
- Updated Axis2, Mercury and Rampart with newest fixes.

Breaking changes

No known issues.

3.7 RASP version 1.2.1

The following features are new or have changed since 1.2.0:

Non-breaking changes

- Updated the UDDI lookup so it can handle different conformance claims
- Updated the UDDI lookup so it's possible to lookup all services that has been registered under a specific identifier.
- Examples have been split into client- and service-example projects.
- Updated to AXIS2 1.5.1
- Added class TransportController that can be used to shut down the transport layer of AXIS.
- Mail configuration added to RASPConfiguration (only client side)
- HTTP endpoints can now receive any SOAP-action (like .Net)

Breaking changes

- Removed ArgumentException. Use IllegalArgumentException instead
- Removed NullArgumentException since it was copy of ArgumentNullException

4 System Requirements

See "OIOSI RASP Library for Java Installation Guide.doc"

5 Installation

See "OIOSI RASP Library for Java Installation Guide.doc"

6 Compatibility

This RASP 2.0 release has been tested OK with RASP 1.2.1 and 1.2.3 for both Java and .NET when running with Oces1 certificate at sender and receiver side.

Running with an Oces2 certificate, requires that both sender and receiver uses RASP 2.0

7 Known issues

Processing large sized documents will consume large size of RAM and CPU. The RASP library itself should no longer be the obstacle for sending and handling large files – but the hardware must be well equipped, as well as internet connection speed between sender and receiver.

8 Licenses

Some of the source code is licensed under the Mozilla Public License Version 1.1. The used license is stated below.

```
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 */
```

Licenses for external dependencies distributed with the RASP library can be found under the /lib folder.