OIO Service Oriented Infrastructure

RASP Library for .Net
Version 2.1.0
Release Notes

Contents

1 Introduction

The OIOSI RASP Library for .Net is a .Net based toolkit for implementation of RASP 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/Loesninger-og-infrastruktur/NemHandel/For-it-udviklere for more information.

The framework can be downloaded from http://digitaliser.dk/group/405467.

2 Release Content

This release comprises the following deliverables:

- dk.gov.oiosi.library.sln – Main Visual Studio 2008 solution

Documentation:

- OIOSI RASP Library for .Net Installation Guide.pdf
- OIOSI RASP Library for .Net Release Notes.pdf – this document
- OIOSI RASP Library for .Net 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

- dk.gov.oiosi.samples.TestCertificate – Test certificates using RASP
- dk.gov.oiosi.samples.httpEndpointExample – Deployable test endpoint
- dk.gov.oiosi.samples.ClientExample – A client example that can send a document
- dk.gov.oiosi.samples.consolesClientExample – A console client, use to send a user specific document

For testing (as sub components of the **RaspClientTests** solution file):

- dk.gov.oiosi.test.request – Sending test project
- dk.gov.oiosi.test.extendedRequest – Uddi, ldap and ocsp test project
- dk.gov.oiosi.test.nunit.library – Nunit test project
- dk.gov.oiosi.test.nunit.interop – Nunit interoperability test project
- dk.gov.oiosi.integration – Nunit integration tests

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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.
- Send document, having a Sender part with other KeyType than the valid Danish receiver KeyTypes.
- 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.
- Support schematron styling using XSLT version 2.0 (Peppol schematrons), by using IKWM and Saxon.

3.1.2 Fixes
- Minor memory improvement (release resource after use).

3.1.3 Changes
- Minor restricting of internal functionality
- BouncyCastle.Crypto.dll has been updated from version 1.7 to version 1.8.
- dk.gov.oiosi.xml.dll has been removed, as it was not used.
- Add several new required libraries (IKWM and saxon) for the XSLT version 2.0 styling.

3.1.4 Removals
- Functionality and classes that convert and KeyType to a specific Identifier implementation, using the enum EndpointKeyTypeCode.
- Removed lesnikowskiMailProvider and some code around mail sending and receiving.
- Removed invalid and not used enum EndpointAddressTypeCode values.

3.2 RASP version 2.0.2

Main purposes of this patch release have been fixing smaller issues not related to functionality.

3.2.1 New features

None

3.2.2 Removals

None

3.2.3 Changes

- Unit tests depending on old UDDI Test setup, has been updated to depend on new NHR Test setup.
- Schematron version 1.5 to project (2013.09.15) added to project (http://digitaliser.dk/resource/2514884)
- Presentation style-sheets version 1.5 (2013.03.15) added to project (http://digitaliser.dk/resource/2455502)
- dk.gov.oiosi.raspProfile.dll added to binary package.

3.2.4 Fixes

- Spelling and divided text strings fixed.
- Minor exception error fixed in OcspConfig.
- Some invalid example files updated.

3.3 RASP version 2.0.1

Main purposes of this patch release have been fixing a serious cache issue.

The problem also persists in RASP version 1.3.0, but by intention, a patch is not released for RASP 1.3.0 because all NemHandel parties must upgrade to RASP 2.x.x latest June 2013.

3.3.1 New features
None

3.3.2 Removals
None

3.3.3 Changes
None

3.3.4 Fixes
- Implementation of TimedCache had an error multiplying the cache time by 60. So a CertificateCache with validityTimeInHours=24 cached the certificates for 60 days [1210].

3.4 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.

3.4.1 New features
None

3.4.2 Removals
None

3.4.3 Changes
- LDAP URL changed in RaspConfiguration.xml (<ConfigurationSection xsi:type="LdapSettings">/Host) to crtdir.certifikat.dk [1053].
- RASP library identifies itself by platform and version number when making Uddi Inquiry requests [1142].
- Log4net library updated from version 1.2.10 to 1.2.11 [1168].

3.4.4 Fixes
- Error messages for invalid certificate (before activation or after expire) has been updated to show certificate subject [1098].

3.5 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.HotFix1	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

3.5.1 New features

- Oces2 certificates are now supported. OIORASP 1.3.0 is prepared for DanID to start issuing oces2 certificates.
- Schematron validation speed has been improved.

- New internal Rasp logger that can be used to get status information from inside the RASP. Can be replaced by another logging implementation, by updating the configuration file.
- Configurable cache and improved implementation.
- Schema and schematron validation is moved before the sending process begins.
- Update OIOSIMessage, so the receiving document can be received as a test string, instead of an XmlDocument (much faster processing, if the document is stored in e.g. database).
- Lots of logging has been added around the code base.

3.5.2 Removals
- Configuration of old VANS GW adapter removed from configuration files.

3.5.3 Changes
- http://discoverybackup.uddi.ehandel.gov.dk/registry/uddi/inquiry put in as default backup [621]
- BouncyCastle and other libraries are updated to latest version.
- December 2012 schematron files (version 1.3) put in as default files [668]
- Schema is now placed correct, and loading of included schema, is also handled correct.
- Improved samples, that show how sending and receiving should be done.
- Use revocation CRL instead of OCSP.
- Rasp Request interface has changed.
- Implemented functionalities that can test certificates validity.
- Restructuring of source code for easy reading / debugging.
- Default location for schema and schematron files have changed, to get clearer file structure (related to how e.g. Schematron updates are released [633]

3.5.4 Fixes
- Xpath for KreditNota made absolute [367]
- Profile validation error in test-code [579]
- Code reference to .NET 3.0 stuff fixed [598]
- Enable code to allow SE as sender type [613]
- Field ServiceType always empty in UddiLookupResponse [637]
- Error in EndpointAddress corrected [644]

3.6 RASP version 1.2.3

The following features are new or have changed since version 1.2.1:

Non-breaking changes

- Updated the schematron style-sheets to the newest version.
- Added support for the Utility Statement document and profiles

Breaking changes

No known issues.

3.7 RASP version 1.2.1

The following features are new or have changed since version 1.2.0:

Non-breaking changes

- Updated the UDDI lookup so it can handle different conformance claims
- Updated the UDDI lookup so its possible to lookup all services that has been registered under a specific identifier.

Breaking changes

- Non known issues.

4 System Requirements

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

5 Installation

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

6 Compatibility

This RASP 2.0.x 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.x.

7 Known Issues

Calling Abort() on the request may occasionally crash if one tries to update configuration or shut down the application during sending.
This is due to a bug in the WCF WS-RM implementation that Microsoft has recognized. [as reported: http://forums.microsoft.com/MSDN/ShowPost.aspx?PostID=2189376&SiteID=1]

Processing large sized documents will consume large size of RAM and CPU. The RASP library it self 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.

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