XINS 2.1 features

101 new features of XINS 2.1.

This presentation has 102 pages

_xins-soap-map CC

- New calling convention
- Map request and response as done by the 'xins wsdl-to-api' command
- Useful for implementing an API according to a given WSDL.
- Can be extended in case the mapping doesn't match what is expected.
- Element attributes are mapped to sub elements.
- Namespaces are copied from the request.

ACL for calling convention

- Restrict request based on the calling convention used.
 - Force users to use a specific calling convention (for example for authentication).
 - Exclude one specific calling convention.

```
org.xins.server.acl=allow 127.0.0.1/24 *;\
deny 192.168.0.0/16 _ResetStatistics *;\
allow 192.168.0.0/16 _* _xins-std;\
allow 192.168.0.25 SimpleTypes;\
allow 0.0.0/0 * _xins-soap
```

Javadoc for error codes

• Added Javadoc of the error code exception to the call method of the CAPI.

Ajax section in user guide

 Added new section in the user guide on how to integrate Ajax with XINS.

Ant section in user guide

• Added new section in user guide on how to integrate Ant with XINS.

Auto detection of WAR file

 Automatic detection of the location of the WAR file in the HTTPServletStarter when not passed as parameter.

Bug fixes

- Several bug fixes.
- The main ones are explained in this presentation.

Categories in OpenDocument

• Categories have been added in the generated OpenDocument format.

ChainedMap cloneable and serialazable

• The ChainedMap class now implements Cloneable and Serialazable.

Order kept of Element attributes

- Asking for the attributes of an XML Element will return then in the same order as they were added.
 - Use ChainedMap instead of HashMap

Session properties order

• The session properties are now listed in the same order as they were added.

 The _inputs session property will also return the input parameters in the same order as they were set.

Use of equals() instead of ==

 Changed in the generated Request.equals() method the way to compare two values from == to equals()

clean-<api> deletes WSDL

• The clean-<api name> target now also delete the generated WSDL file.

Color in OpenDocument

- Added more colors to the generated OpenDocument format:
 - The example query
 - The example result
 - The table headers

runtime props passed to test

 In the nbbuild.xml the location of the runtime properties file is passed to the test target

New default log pattern

- The new default logs pattern moved the NDC to just before the message
 - Easier to read the message ID
 - Easier to read the log level of the message

Dependencies in run and test

- The dependencies are added to the classpath of the run-<api name> and test-<api name>.
 - No need to unpack them with the ServletClassLoader
 - Faster start-up

Upgraded Docbook libs

- Upgraded libraries used to generate the documentation
 - FOP 0.94
 - XSLT DOC 1.73.2

Servlet filters

- Indicated in api_to_webxml.xslt where to add Servlet filters if needed.
- Servlet filters can be used for encryption, compression, authentication, auditing, ...

Dojo toolkit documentation

 Added a new section in the user guide on how to use the Dojo toolkit with XINS

JMX downloaded if needed

• The JMX library is automatically downloaded if the user tries to recompile the XINS distribution with Java 1.4.

Spring framework downloaded

 The Spring Framework library is downloaded if you want to rebuild the XINS from the release.

emma target

- New XINS command: emma.
- This command will produce the code coverage of the API code by the unit tests.
- This command is similar to the coverage command expect that the EMMA library is used instead of Cobertura.
- http://emma.sourceforge.net

Equals in CAPI requests

- Equals (and hashCode) has been overridden in AbstractCAPIRequest to that two requests with the same destination and the same parameters are consider equals().
- Useful if you want to build a client side cache for example.

Equals in XML Element

 Overridden equals() and hashCode() in Element so that two Elements are equal if they represent the same XML.

PropertyReader equals()

- If two PropertyReader contain the same keys and same values, they are considered equals.
 - hashCode() also overridden.

ESB + Java EE documentation

 Added new section in the user guide on how to integrate XINS with an ESB and/or a Java EE server.

Favicon for specdocs

- A favicon is copied for the specdocs
- Avoid 404 returned by browser asking for it.
- http://en.wikipedia.org/wiki/Favicon

Watch multiple files

• The FileWatcher has been extended to be able to watch multiple files.

dojo directory in release

 src/tools/dojo is added to the release (bug fix)

wsdl-to-api working

• Fixed templates not found in wsdl-to-api

Full description in OpenDocument

- Fixed description of functions, errors and parameters contain all the sentences of the description in the generated OpenDocument format
 - Used to be only the first sentence

Correct Locale in xins.properties

 In the demo directory, the runtime property used for the logdoc locale was incorrect. This is fixed.

SOAP CC with correct transformation

 Fixed incorrect transformation for soap elements in __xins-soap calling convention

One textarea for input data elements

 If you had more than one input data element, you had more than one text area displayed in the test form. This is fixed.
getWithDefault()

- New utility method PropertiesReaderUtils#getWithDefault()
 - Gets the value of a PropertyReader or the provided fallback value if the null.

Shared error code in examples

• It is now possible to defined a shared error code in a function example.

Correct XML-RPC returned

• Correct XML-RPC is returned if there is an output data section.

New Fonts for OpenDocument

- Fonts in generated OpenDocument format have been improved
 - Less bold fonts
 - Courier New for literals

Correct element name from WSDL

- Generate API from WSDL uses the correct element name.
 - it used to use the type name

Smaller generated build.xml

- Much smaller
- Example: [

Before	After
38850 lines	8811 lines
37,768 KB	18,784 KB

ParameterSpec#getDefault()

 New method in ParameterSpec to get the default value of the parameter or the attribute.

Type#getDescription()

- New method to get the description of a type.
 - Simple types returns the same text.
 - Defined types uses the description provided by the user.

Calling Convention names

- New methods in calling convention:
 - void setName(String)
 - String getName()

Glean target

- New target: "glean"
 - Execute the glean tool for an API.
 - Generate an editable glean.properties if needed.
 - http://jbrugge.com/glean/

GWT documentation

 Added section in the user guide on how to integrate the Google Web Toolkit with XINS.

Meta function GUI

• New graphical user interface to call the meta functions of an API.

Specification GUI

• New graphical user interface to look at the specification of the API.

New maintainer Lex Uijthof

 Changed maintainer from Anthony Goubard to Lex Uijthof.

Upgraded HttpClient

• The HttpClient library has been upgraded from 3.0.1 to 3.1.

HTTPFileWatcher

• New utility class that monitor URLs for changes.

No empty context sent

• If no context is available, the _context parameter is not sent.

No empty data section sent

 If no data section, the _data parameter is not sent.

No environment -> test form

 If no environment set, the test form is still generated and a text field is used for the target location.

Specdocs CSS improved

Removed invalid element

XHTML of specdocs improved

• Better compliance with XHTML specifications.

Include of runtime properties

- It is possible to include other runtime properties from the main runtime properties file.
- org.xins.server.config.include
 - Can include more than one file (comma separated)
 - File locations are relative to the main runtime properties file.

java -jar <api name>.war

- Possibility to run the API with java -jar
 - The runtime properties location is given using -Dorg.xins.server.config=... (before -jar)
 - Defined the port number with -port=... (after the war file)
 - Also -help option
 - -loader=<class loader mode> option

javadoc-apis command

• New command 'xins javadoc-apis'

- Generates the Javadoc for all APIs

javadoc-test-<api name>

- New command: 'xins javadoc-test-<api name>'
 - Generates the Javadoc of the unit tests

Larger tables in ODT

- The tables in the generated OpenDocument format are larger.
 - Useful for description which are more readable

Log4J upgraded

• Log4J upgraded from 1.2.14 to 1.2.15

Maven documentation

 Added new section in the user guide about the integration of XINS with Maven.

Meta description in specdocs

- The generated specdocs have meta description in the html header.
 - <meta name="description" content="...">

Improved NetBeans debug

 xins-server.jar and xins-common.jar classes have been added to the debug sources which allow to trace deeper if a problem occurs.

More error detection in build.xml

- Improved detection of possible specification errors when generating the build.xml file.
 - if the name of the function does not match the name of the file.
 - if properties are defined in impl.xml without <bootstrap-properties> or <runtimeproperties>

More unit tests

• Added more unit tests.

Mule section in user guide

 Added new section in the user guide about the integration of XINS with the ESB mule.

Servlet container multithreaded

- The internal Servlet container can accept now more than one request at the same time.
 - Each request has its own thread.

Namespace prefix support

- The org.xins.common.xml.Element also has namespace prefix support.
 - Used to be ns0: ns1:

NetBean project in CVS

- NetBeans project files are added in CVS
 - Easier for users to apply modifications and try bug fixes.
New xslt-plus task

- New <xslt-plus> task that has a new option to never overwrite the destination file.
 - Make the generated build.xml smaller and with less targets

New XINS diagram

• New XINS explanation diagram in the frontpage.



Rename namespace

 Added possibility to change the namespace prefix and the namespace URI for an XML element.

Get all runtime properties

 Added new method to get all runtime properties in the generated RuntimeProperties class.

Regexp test on type page

- If the type is a pattern type, it is now possible to test the regular expression directly in the specdoc page of the type.
 - Done in Javascript
 - Removed patterntest element in the xinsproject.dtd

Regexp user interface

- Graphical User interface for testing regular expressions
 - User javakarta-oro
 - Test also the validity of the regular expression
 - Validate as you type
 - java -jar <api name>.war -port=-1 -gui; File
 Test regular expression

_errorResult when needed

- Removed creation of _errorResult when the function has no input parameters and no input data section.
 - There cannot be any error then.
 - Reported by FindBugs

No parameter if _text

- Removed creation of the parameter when the type is _text and is optional in checkOutputParameters() as not used.
 - Reported by FindBugs

REST demo fixed

• Fixed compilation error of the REST API.

URL for runtime properties

- The org.xins.server.config properties now also accept URL to indicate the location of the runtime properties files.
 - Check for update using last-modified HTTP header
 - Support the org.xins.server.config.include property
 - Useful to share properties in a team.
 - Useful to provide the API to clients/testers.

Script languages section

 Added new section in the XINS user guide on how to integrate XINS with script languages.

Servlet container GUI

- Swing Graphical User Interface for the Servlet container.
 - Logs are in color depending on the log level
 - Possibility to clear the console, copy logs
 - java [-Dorg.xins.server.config=...] -jar <api name>.war [-port=...] -gui

SessionId -> SessionID

 The name of the cookie used to store the session id in the front-end framework has changed from SessionId to SessionID.

SimpleDateFormat synchronized

 All instances of SimpleDateFormat has been synchronized as the class is not thread safe.

index.html regeneration

• The index.html of the specdocs is regenerated when impl.xml changes.

Spring Framework doc.

 Added new section in the XINS user guide about the integration of XINS with the Spring Framework.

BeanUtils support for 'is'

- BeanUtils now takes into account the methods starting with 'is' or 'has' and returning a boolean.
 - Used to be only 'get' methods.

Support for in ODT

 Added support for the element of the descriptions in the generated OpenDocument format.

Test form GUI

- New Swing Graphical User Interface to query API functions with a generate test form.
 - java -jar <api name>.war -port=-1 -gui;
 Test form -> function name.

check version

 The build directory is deleted if the version of XINS has changed between two build.

Class Loader xins detection

 The ServletClassLoader can detect the xins-common.jar using the XINS_HOME environment variable if needed.

This presentation

This presentation

Transaction logs

• The transaction are logged at one place.

Log4j config for unit tests

Unit test generated with default Log4J configuration.

Fixed package list for Javadoc

• Updated and fixed package-list used for Javadoc.

webstart target

- New 'xins webstart' command.
 - Does not sign the WAR file.
 - Dependencies and location of the runtime properties should be added.

XML-RPC fault

• XML-RPC returns a fault when an error occur instead of HTTP 400.

XMLViewer

- New class org.xins.common.xml.Viewer
 - XML viewer
 - Syntax highlight
 - Indentation if wanted
 - Show text if not XML

Filter logs

- Possibility to filter the logs based on a regular expression.
 - Only in the Servlet container UI (java -jar <api name>.war -gui)
 - Useful for finding errors or tracing request

Code checked

 XINS code have been checked with the latest version of PMD, FindBugs and Lint4J.