GI – Backend API

Content

History

Version	Date	Adjustments
PA1	2007-08-10	First version of the document.

1 Introduction

This document describes how to build the Backend API. The build process is based on Ant [1], which is assumed to be installed in the development environment and configured in the path.

2 Deliverable Files

Name	Description	Environment

<File name>		

3 Libraries produced but not delivered

Name	Description	Environment
<Library name>		

4 Libraries used

Name	Description	Environment
<Library name>		

5 Make information

This chapter contains information about how to basic test, build and publish the Backend API. The Backend API is part of foundation and can be found in the following path:

```
/vobs/ipms/ipms_sys/backend
```

All relative paths that are mentioned in this document are relative to that path. Foundation has no branches in clearcase, so use a view that only shows latest on main.

All build related tasks are handled by ant. Here is the command that lists all targets in build.xml:

```
# ant -projecthelp
Buildfile: build.xml

Main targets:

clean                     Removes generated files
compile                   Compiles the source
compile.tests             Compile the tests
jar                       Build the JAR file jar
javadoc                   Generate javadoc (html) for the API
publish                   Publish to the foundation publishing area
runtest                   Run the JUnit tests
runcoverage               Run the coverage tests
```

```
Default target: compile
```

5.1 Basic test (unit test)

Run the following command:

```
#ant runtest
```

For each test class that is run ant presents test progress in the following way:

```
[junit] Tests run: 14, Failures: 0, Errors: 0, Time elapsed: 0.159
sec
```

An html report is generated for each test. These reports can be found in the testreports/html directory.

Note:

To run a specific test-class, add the argument –Dtest.name to the ant command.

Example

```
#ant runtest -Dtest.name=MediaObjectFactoryTest
```

5.2 Generate cobertura report

Cobertura [2] is a free Java tool that calculates the percentage of code accessed by tests.

Run the following command:

```
# ant runcoverage
```

The basic test will be performed using intrumented classes and the resulting coverage report is created in testreports/coverage directory.

5.3 Generate Javadoc for the API

Run the following commands:

```
# ant javadoc
```

Documentation about the Backend API will be generated using javadoc in the following directory:

`doc/javadoc`

The frontpage is an html file that is located here: `doc/dg_frontpage.html`

Update this frontpage before generating the javadoc.

5.4 Publish on the publishing area

Run the following commands:

```
# ant clean
# ant javadoc
# ant jar
# ant -Dversion=<VERSION> publish
```

Where <VERSION> is the version number that shall be used. i.e. P1A_01. This will copy the jar files and the documentation to:

/proj/ipms/backend/<VERSION>

Label source code with these commands:

```
# cleartool mklbtype -nc Backend_<VERSION>
```

```
# cleartool mklabel -replace -recurse Backend_<VERSION>
/vobs/ipms/ipms_sys/backend
```

6 References

[1] Apache Ant
http://ant.apache.org/

[2] Cobertura
http://cobertura.sourceforge.net/

7 Terminology

Term	Explanation