

jAPS 2.0 - Plugin SOA-Content

Do It The jAPS Way

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Abstract

The aim of this document is to give a comprehensive description of the plugin SOA-Content.

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Chapter 1. Scope of the document

Introduction

The aim of this document is to fully describe the structure of the SOA-Content (jpwscontent) plugin.

Target audience

This document is for those who want to know more about the jpwscontent plugin functionalities and are considering to install it in a production or development environment with the Eclipse IDE. This document is aimed at system administrators (responsible for jAPS 2.0 installations) and Java developers (with a basic comprehension of the jAPS 2.0 framework).

Prerequisites

In order to take maximum advantage from the present document, it is necessary to have a basic knowledge about: the Java platform, the Eclipse IDE development environment, the Apache Tomcat servlet container, the PostgreSQL DBMS and the jAPS 2.0 framework. The reading of the *jAPS 2.0 Plugin Pattern* is mandatory.

Resources

Additional informations may be obtained through the following mailing-lists:

- <japs-devs@lists.sourceforge.net>, focused on developers
- <japs-users@lists.sourceforge.net>, focused on final users

Is it also possible to refer to the documentation found in the:

jAPS 2.0 Project - Developer Website [<http://dev.japsportal.org/>]

Chapter 2. Plugin characteristics

The SOA-Content plugin allows contents to be imported or exported through a web service.

Two methods can be invoked:

- the first that allows a client to add a content to the system.
- the last one allows a client to query a content given its ID.

Table 2.1. Plugin compatibility

Code	Name	Type	Plugin version	jAPS 2.0 version
jpwscontent	SOA-Content	Modification	1.1	2.0.10

Functionalities

This module provides the all the logic needed to exchange jAPS contents with third party applications.

More specifically two methods are exposed through the wsdl interface: `addContent` and `getContent`.

Adding an external content

Using the service method `addContent` it is possible to add an external content with all its resources to the jAPS 2.0 CMS contents.

To add an external content it is sufficient to create a `WsContentEnvelope` object that maps, in the form of a XML string, the content to add to the CMS. When the operation is completed the system returns the proper result code. Note: the content is added directly to the public contents.

If the content to add has referenced resources, these must be added to the `WsContentEnvelope` in the form of array of `WsResource` objects. If the receiving portal has resources or files sharing the same name or ID of the envelope objects, they will be automatically renamed with a new ID.

Remote request of a content

Using the service method `getContent` it is possible to ask for a content (and its resources) of the jAPS 2.0 CMS.

The system will return an object `WsContentEnvelope` containing the XML that maps the requested content. The references of the content, if present, are returned in a array of `WsResource` objects.

Chapter 3. Plugin installation and integration

Plugin installation and integration

Technical characteristics

JpWSContent is a *Modification* plugin because, in the installation process, it requires the modification of the *Deployment Descriptor* contained in the `web.xml`, for the use of the new servlets.

Package description

The package of the plugin contains all the needed directories (`doc` ed `src` and the `Readme` file) as required by the document *jAPSPugin Pattern*.

Moreover the `src` directory is structured as follows:

- Directory `java`. directory. It contains the source files and the test suites of the plugin.

Directory `webapp`. It contains the configuration files needed by Spring, Axis and the `wsdl` file.

Integration in a production environment.

From now on we refer to the application in the production environment where the plugin is going to be deployed as `myportal`. We also refer to the compressed file containing the all the plugin elements as 'package' or 'plugin package', and 'system' is *always* referred to the jAPS 2.0 framework installation and not to the hosting operating system.

To perform the installation in a production environment based on the jAPS 2.0 *compatible with this plugin*, please follow this procedure carefully:

1. Stop the servlet container before proceeding with the installation steps.
2. Modify the file `web.xml` and insert the code below after the *last* declaration of the last servlet

```
<servlet>
  <display-name>Apache-Axis Servlet</display-name>
  <servlet-name>AxisServlet</servlet-name>
  <servlet-class>org.apache.axis.transport.http.AxisServlet</servlet-class>
</servlet>
<servlet-mapping>
  <servlet-name>AxisServlet</servlet-name>
  <url-pattern>/servlet/AxisServlet</url-pattern>
</servlet-mapping>
<servlet-mapping>
  <servlet-name>AxisServlet</servlet-name>
  <url-pattern>*.jws</url-pattern>
</servlet-mapping>
<servlet-mapping>
  <servlet-name>AxisServlet</servlet-name>
  <url-pattern>/services/*</url-pattern>
</servlet-mapping>
```

```
<servlet>
  <display-name>Axis Admin Servlet</display-name>
  <servlet-name>AdminServlet</servlet-name>
  <servlet-class>org.apache.axis.transport.http.AdminServlet</servlet-class>
  <load-on-startup>100</load-on-startup>
</servlet>
<servlet-mapping>
  <servlet-name>AdminServlet</servlet-name>
  <url-pattern>/servlet/AdminServlet</url-pattern>
</servlet-mapping>
```

3. Please ensure that the directory `myportal/WEB-INF` contains a file named `server-config.wsdd`; if not a copy is contained in the directory `src/webapp/WEB-INF/plugins/jpwscontent` of the plugin package. Copy `server-config.wsdd` in the directory `myportal/WEB-INF`. If the target directory already contains that file you only have to set the values in the service definition to your needs. This is typically done modifying the `ns1:service` and `name="WsContentEndpoint"` elements of the `wsdd` file.
4. Copy the content of the directory `src/webapp/WEB-INF/lib` of the plugin package into `myportal/WEB-INF/lib/` within the server container.
5. Make sure that the directory `myportal/webapp/WEB-INF/plugins` exists, otherwise create it. Copy the content of the `src/webapp/WEB-INF/plugins` of the plugin package into `myportal/WEB-INF/plugins/`
6. Copy the content of the directory `src/webapp/resources/plugins` of the package into `myportal/resources/plugins/` within the servlet container.
7. Is now possible to restart the servlet container.

Installation in a development environment

As a convention, we call the project where the plugin is about to be installed `myproject`; all the directories inside `myproject` are local to your Eclipse project.

To perform the installation in a production environment based on the jAPS 2.0 *compatible with this plugin*, please follow this procedure carefully:

1. Modify the file `web.xml` and insert the code below after the *last* declaration of the last servlet

```
<servlet>
  <display-name>Apache-Axis Servlet</display-name>
  <servlet-name>AxisServlet</servlet-name>
  <servlet-class>org.apache.axis.transport.http.AxisServlet</servlet-class>
</servlet>
<servlet-mapping>
  <servlet-name>AxisServlet</servlet-name>
  <url-pattern>/servlet/AxisServlet</url-pattern>
</servlet-mapping>
<servlet-mapping>
  <servlet-name>AxisServlet</servlet-name>
  <url-pattern>*.jws</url-pattern>
</servlet-mapping>
<servlet-mapping>
  <servlet-name>AxisServlet</servlet-name>
  <url-pattern>/services/*</url-pattern>
```



```

</servlet-mapping>
<servlet>
  <display-name>Axis Admin Servlet</display-name>
  <servlet-name>AdminServlet</servlet-name>
  <servlet-class>org.apache.axis.transport.http.AdminServlet</servlet-class>
  <load-on-startup>100</load-on-startup>
</servlet>
<servlet-mapping>
  <servlet-name>AdminServlet</servlet-name>
  <url-pattern>/servlet/AdminServlet</url-pattern>
</servlet-mapping>

```

2. Please ensure that the directory `myportal/WEB-INF` contains a file named `server-config.wsdd`; if not a copy is contained in the directory `src/webapp/WEB-INF/plugins/jpwscontent` of the plugin package. Copy `server-config.wsdd` in the directory `myportal/WEB-INF`. If the target directory already contains that file you only have to set the values in the service definition to your needs. This is typically done modifying the `ns1:service` and `name="WsContentEndpoint"` elements of the `wsdd` file.
3. Copy the content of the directory `src/webapp/WEB-INF/lib` of the plugin package into `myportal/WEB-INF/lib/` within the server container, with the exclusion of the file `jAPSPugin-jpwscontent-1.1.jar`
4. Make sure that the directory `myportal/webapp/WEB-INF/plugins` exists, otherwise create it. Copy the content of the `src/webapp/WEB-INF/plugins` of the plugin package into `myportal/WEB-INF/plugins/`
5. Copy the content of the directory `src/webapp/resources/plugins` of the package in the directory `myproject/WebContent/resources/plugins/`.
6. Copy the contents of the directory `src/java/main/com` into `myproject/src/com`
7. Copy the content of the directory `src/java/test/test` into `myproject/src/test`

Once the steps above are completed, restart your Eclipse project and verify the presence of the new voices that this plugin adds in the administration area of this project.

To execute the test, it is necessary to run an instance of portal example (because it already contains predefined contents) with `jpwscontent` installed and the configured in a way that the system points to the test databases.

To make `jAPS` use the test database open the `PortalExample/WebContent/META-INF/context.xml`

- in the JNDI resources `jdbc/portDataSource` and `jdbc/servDataSource` modify the url of the databases the drivers point to specifying the appropriate name of the test database (`PortalExampleTestPort` and `PortalExampleTestServ` for `PortalExample`).
- in the same file, change the value of the `configVersion` from 'production' to 'test', as shown below: `<Environment name="configVersion" value="test" type="java.lang.String" override="false" />`

Warning: for safety reason reason is not possible to delete contents through webservice request, so you have to clean manually the tables after the tests.

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