

# **jAPS 2.0 - Plugin SOA-Content**

## **Do It The jAPS Way**

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# **jAPS 2.0 - Plugin SOA-Content**

by Stefano Puddu

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## **Abstract**

Lo scopo di questo documento è quello di fornire una descrizione completa della struttura del Plugin SOA-Content.

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# Chapter 1. Scopo del documento

## Introduzione

Lo scopo di questo documento è quello di fornire una descrizione completa della struttura del Plugin SOA-Content.

## A chi è destinato

Questo documento è destinato a chi intende conoscere le funzionalità del jAPS Plugin SOA-Content, e sta prendendo in considerazione la eventuale integrazione in un Ambiente di Produzione già funzionante o nel proprio Ambiente di Sviluppo (Progetto in IDE Eclipse).

Il documento è indirizzato sia a Sistemisti (responsabili di installazioni di Applicazioni su base jAPS 2.0) che a Java Developers (con una conoscenza base del Framework jAPS 2.0).

## Prerequisiti

Per poter utilizzare efficacemente le informazioni contenute in questo documento, occorre un po' di esperienza su alcune tecnologie del web base: la piattaforma Java, gli strumenti di sviluppo Eclipse, il servlet container Apache Tomcat, il database PostgreSQL, e del Framework jAPS 2.0. E' inoltre necessario aver letto il documento *jAPS 2.0 - Plugin Pattern*.

## Riferimenti

Ulteriori informazioni possono essere richieste scrivendo alla mailing-list, attraverso i seguenti indirizzi:

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

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# Chapter 2. Caratteristiche del Plugin

## Caratteristiche del Plugin

Il Plugin SOA-Content permette operazioni sui contenuti per mezzo di WebServices.

Nello specifico il plugin espone due metodi:

- Un metodo che permette ad un client di aggiungere un contenuto all'interno del sistema
- Un metodo che permette ad un client di richiedere un contenuto in base all'identificativo.

**Table 2.1. Riassunto delle caratteristiche**

Codice	Nome	Tipo	Versione Plugin	del	Versione di jAPS 2.0
jpwscontent	SOA-Content	Modification	1.1		2.0.10

## Funzionalità

Il modulo fornisce l'infrastruttura server necessaria per lo scambio dei contenuti con applicazioni terze di diverso tipo.

In particolare il plugin fornisce, attraverso l'interfaccia wsdl, due metodi in particolare: addContent e getContent.

## Aggiunta di un contenuto da remoto

Tramite questa funzionalità (realizzata attraverso l'esposizione del metodo addContent) è possibile aggiungere nei contenuti del CMS di jAPS 2.0, insieme a tutte le risorse ad esso correlate.

Per aggiungere un contenuto da remoto è sufficiente creare un oggetto `WsContentEnvelope`, contenente il contenuto che si desidera aggiungere sotto forma di stringa xml. Al termine dell'operazione il sistema restituisce un valore di ritorno. Il contenuto verrà direttamente inserito tra l'insieme dei contenuti pubblici.

Se il contenuto che si sta aggiungendo ha delle risorse referenziate, è necessario aggiungere all'oggetto `WsContentEnvelope` le risorse sotto forma di array di oggetti `WsResource`. Se il portale che riceve l'oggetto envelope contiene già un file con lo stesso nome o una risorsa con lo stesso identificativo, il sistema provvederà ad assegnare un nuovo identificativo e/o rinominare il file.

## Richiesta di un contenuto da remoto

Tramite questa funzionalità (realizzata attraverso l'esposizione del metodo getContent) è possibile richiedere un contenuto del CMS di jAPS 2.0, insieme a tutte le eventuali risorse ad esso correlate.

Il sistema restituisce un oggetto `WsContentEnvelope` contenente l'xml del contenuto richiesto, e nel caso siano presenti delle risorse referenziate, valorizza opportunamente l'array delle risorse sotto forma di oggetti `WsResource`.

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# Chapter 3. Installazione e Integrazione Plugin

## Installazione e Integrazione Plugin

### Caratteristiche tecniche

Il Plugin ha la caratteristica di *Modification* in quanto, in fase di installazione, necessita di una modifica al *Deployment Descriptor* (il file `web.xml`) per la definizione di nuove servlet.

### Descrizione del Pacchetto

Il pacchetto del Plugin contiene l'insieme delle cartelle (cartelle `doc` ed `src` più il file `Readme`) definite nel documento di descrizione generale del *jAPSPugin Pattern*.

In particolare, la directory `src` è strutturata come di seguito descritto:

- Directory `java`. Contiene le sorgenti `java` complete e i test `jUnit` del Plugin.

Directory `webapp`. Contiene i files di configurazione di `Spring`, `Axis` e il file `wsdl`.

### Integrazione in Ambiente di Produzione

Da questo momento in poi ci si riferisce all'ambiente in produzione dove il plugin sta per essere installato come *mioportale*. Inoltre ci si riferisce al file compresso contenente tutti gli elementi del plugin come 'pacchetto' infine 'sistema' è *sempre* riferito all'installazione del framework `jAPS 2.0` e non al sistema operativo su cui `jAPS` stesso viene eseguito.

Per eseguire l'installazione in una applicazione Web in produzione basata sulla versione di `jAPS 2.0` dichiarata compatibile con il plugin, i passi da eseguire sono i seguenti:

1. Interrompere l'esecuzione del servlet container
2. Modificare il file `web.xml`, e inserire il listato sotto riportato subito dopo l'ultima dichiarazione dell'ultima 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-clas
<load-on-startup>100</load-on-startup>
</servlet>
<servlet-mapping>
  <servlet-name>AdminServlet</servlet-name>
  <url-pattern>/servlet/AdminServlet</url-pattern>
</servlet-mapping>
```

3. Nel caso che nella directory mioportale/WEB-INF non sia presente un file di nome `server-config.wsdd`, copiare il file presente nella cartella `src/webapp/WEB-INF/plugins/jpwscontent` del pacchetto dato in dotazione, sotto la directory mioportale/WEB-INF. Nel caso che nella directory mioportale/WEB-INF sia già presente un file di nome `server-config.wsdd`, inserire opportunamente la definizione del servizio (elemento xml di nome `ns1:service` e attributo `name="WsContentEndpoint"` del file `src/webapp/WEB-INF/plugins/jpwscontent/server-config.wsdd` del pacchetto dato in dotazione) nel file `server-config.wsdd` presente.
4. Copiare il contenuto della directory `src/webapp/WEB-INF/lib` del pacchetto dato in dotazione, all'interno della directory mioportale/WEB-INF/lib/ in produzione.
5. Copiare il contenuto della directory `src/webapp/WEB-INF/plugins` del pacchetto dato in dotazione, all'interno della directory mioportale/WEB-INF/plugins/ in produzione. Creare la directory `plugins` se non è presente.
6. Copiare il contenuto della directory `src/webapp/resources/plugins` del pacchetto dato in dotazione, all'interno della directory mioportale/resources/plugins/ in produzione.
7. A questo punto è possibile riavviare il servlet container.

## Installazione in Ambiente di Sviluppo

Per eseguire l'installazione in un progetto Eclipse basato sulla versione di jAPS 2.0 dichiarata compatibile con il plugin, i passi da eseguire sono i seguenti:

1. Modificare il file `web.xml`, e inserire il listato sotto riportato.

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

2. Nel caso che nella directory `mioprogetto/WebContent/WEB-INF` non sia presente un file di nome `server-config.wsdd`, copiare il file presente nella cartella `src/webapp/WEB-INF/plugins/jpwscontent` del pacchetto dato in dotazione, sotto la directory `mioprogetto/WebContent/WEB-INF`. Nel caso che nella directory `mioprogetto/WebContent/WEB-INF` sia già presente un file di nome `server-config.wsdd`, inserire opportunamente la definizione del servizio (elemento xml di nome `ns1:service` e attributo `name="WsContentEndpoint"` del file `src/webapp/WEB-INF/plugins/jpwscontent/server-config.wsdd` del pacchetto dato in dotazione) nel file `server-config.wsdd` presente.
3. Copiare il contenuto della directory `src/webapp/WEB-INF/lib` del pacchetto dato in dotazione, all'interno della directory `mioprogetto/WebContent/WEB-INF/lib/`, con l'esclusione del file `jAPSPugin-jpwscontent-1.1.jar`.
4. Assicurarsi dell'esistenza della directory `plugins` in `src/webapp/WEB-INF/`. In caso contrario crearla. Copiare il contenuto della directory `src/webapp/WEB-INF/plugins` del pacchetto dato in dotazione, all'interno della directory `mioprogetto/WebContent/WEB-INF/plugins/`.
5. Copiare il contenuto della directory `src/webapp/resources/plugins` del pacchetto dato in dotazione, all'interno della directory `mioprogetto/WebContent/resources/plugins/`.
6. Copiare il contenuto della directory `src/java/main/com` nella directory `mioprogetto/src/com` del proprio progetto.
7. Copiare il contenuto della directory `src/java/test/test` nella directory `mioprogetto/src/test` del proprio progetto.

Una volta eseguiti i passi sopra descritti, far partire il progetto da Eclipse e verificare la presenza della voce specifica voce di menù nell'area di amministrazione del progetto.

Per eseguire i test, è necessario lanciare una istanza di `PortalExample`, con il plugin installato, con settati i database di test.

Per lanciare `PortalExample` con i database di test aprire il file `PortalExample/WebContent/META-INF/context.xml`

- nelle risorse `jdbc/portDataSource` e `jdbc/servDataSource` cambiare la URL dei database puntati dai driver specificando il nome appropriato dei database di test (`PortalExampletestPort` and `PortalExampletestServ` nel caso di `PortalExample`).
- nello stesso file, cambiare il valore di `configVersion` da 'production' a 'test'. `<Environment name="configVersion" value="test" type="java.lang.String" override="false" />`

Attenzione: è necessario ripulire manualmente il di test di `PortalExample` in quanto non è possibile effettuare la cancellazione tramite `WebServices`.

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# **Chapter 4. Configurazione del plugin *SOA-Content***

## **Configurazione del plugin *SOA-Content***

Il Plugin non necessita di nessuna configurazione particolare.

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