

# JSR168Portlet

## Basics

JSR168 defines API for writing portable (across portal implementations) portlets in Java, and is similar (and related) to the Servlets spec.

To implement JSR168 Portlet using Cocoon, JSR168 Environment is introduced.

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If you are looking for a way to run a cocoon web app as a JSR168 portlet in a JSR168 portlet container see [CocoonAppAsJSR168Portlet](#).

– [BastianBowe](#) 03.02.05

## Environment

JSR168 environment for Cocoon maps Portlet primitives onto Cocoon primitives. Most of the time mapping is obvious:

<b>org.apache.cocoon.environment.portlet</b>	<b>javax.portlet</b>
PortletRequest	PortletRequest
PortletResponse	PortletResponse
ActionRequest	ActionRequest
...	...
PortletCookie	PortletPreferences

But there are times when it is not so obvious. Let's look at PortletRequest:

<b>org.apache.cocoon.environment.portlet.PortletRequest</b>	<b>javax.portlet.PortletRequest</b>
headers	properties
cookies (only name and value are populated)	preferences
header X-Portlet-Mode	portletMode
header X-Window-State	windowState
pathInfo	parameter cocoon-portlet-path
servletPath	<i>no analogy; populated by CocoonPortlet</i>
contentLength	-1
contentType	null
protocol	JSR168
remoteAddr	null
remoteHost	null
method	GET for RenderRequest, POST for ActionRequest
pathTranslated	null
queryString	""
requestURI	contextPath ( <i>what should be here?</i> )
isRequestedSessionIdFromCookie	false
isRequestedSessionIdFromURL	true

The rest of Request interface methods are mapped 1:1 to corresponding PortletRequest methods (no surprises).

## Deployment

This example documents how to install the R\*\_ssPortlet found at [Portlet Open Source Trading Site](#). You'll need:

- jars (found in webapps/WEB-INF/lib of your Cocoon build):
  - The pluto jar (pluto-1.0.1-rc1.jar in release 2.1.6).
  - portlet-api-1.0.jar.

Move these two jars into a library shared across web applications in your servlet container. In Tomcat this should be \$CATALINA\_BASE/shared/lib however as of release 5.0.28 this did not work and the jars need to be placed in \$CATALINA\_HOME/common/lib.

On Tomcat, Cocoon must be configured to allow access to other web applications. This is enabled by creating a configuration file with `crossContext="true"` specified. For Tomcat release 5.0, this is documented at [Server Configuration Reference](#). An example configuration file might look like:

```
<Context path="/cocoon" docBase="${catalina.home}/webapps/cocoon"
    debug="0" crossContext="true">
</Context>
```

Unjar `R_`ssPortlet.war` into an exploded web application directory in the servlet container (i.e. `webapps/R_`ssPortlet` in Tomcat).

- `web.xml` - Replace the `web.xml` with the following for Tomcat:

```
<?xml version="1.0" encoding="UTF-8"?>

<!DOCTYPE web-app PUBLIC "-//Sun Microsystems, Inc.//DTD Web Application 2.3//EN"
    "http://java.sun.com/dtd/web-app_2_3.dtd">

<web-app>
  <!-- Servlet Configuration ===== -->
  <servlet>
    <servlet-name>RssPortlet</servlet-name>
    <display-name>Pluto wrapper for RssPortlet</display-name>
    <servlet-class>org.apache.pluto.core.PortletServlet</servlet-class>
    <init-param>
      <param-name>portlet-guid</param-name>
      <param-value>RssPortlet.RssPortlet</param-value>
    </init-param>
    <init-param>
      <param-name>portlet-class</param-name>
      <param-value>com.plumtree.portlet.portlets.RssPortlet</param-value>
    </init-param>
  </servlet>

  <!-- URL space mappings ===== -->
  <servlet-mapping>
    <servlet-name>RssPortlet</servlet-name>
    <url-pattern>/*</url-pattern>
  </servlet-mapping>
</web-app>
```

To integrate the portlet into the Cocoon sample site:

- `copletdata/portal.xml`:  
After the `C_`ocoonPortlet` definition add:

```
<coplet-data id="RssPortlet" name="standard">
  <title>RssPortlet</title>
  <coplet-base-data>Portlet</coplet-base-data>
  <attribute>
    <name>portlet</name>
    <value xsi:type="java:java.lang.String" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
>RssPortlet.RssPortlet</value>
  </attribute>
  <attribute>
    <name>buffer</name>
    <value xsi:type="java:java.lang.Boolean" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">true<
/value>
  </attribute>
</coplet-data>
```

- `copletinstancedata/portal.xml`:  
After the `C_`ocoonPortlet` definition add:

```
<coplet-instance-data id="RssPortlet" name="standard">
  <coplet-data>RssPortlet</coplet-data>
</coplet-instance-data>
```

- layout/portal.xml:  
After the C\_ \*oconPortlet item definition add:

```
<item>
  <coplet-layout name="coplet" layout-renderer-name="portlet-window">
    <coplet-instance-data>RssPortlet</coplet-instance-data>
  </coplet-layout>
</item>
```