

Developer Guide

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GateIn Portal 3.5 Developer Guide

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1 Introduction

This is the GateIn Portal Developer Guide. This document is intended for those developing applications and gadgets for GateIn Portal and outlines options and strategies for successful deployments.

2 Architectural choices

Depending on environment and goals, decisions have to be made regarding the components that will make up the final website. Some elements may already be in place (such as an identity server) and some elements may still be free to choose. This section aims at helping taking the right decisions.

2.1 Identity server

GateIn Portal 3.5 comes with a component named PicketLink IDM, which is made to adapt to store and retrieve users and groups from various identity servers. We can separate the different options into three:

1. **Database:** users, groups and their relationships are stored in a RDBMS database. Table names and column names can be changed, but the overall relationship between tables remains the same. This solution is particularly adapted to a new identity server that will handle thousands of users.
2. **LDAP:** users, groups and their relationships are stored in an LDAP (or ActiveDirectory) server, the directory structure can be adapted by configuration to the most common scenarios. This solution is particularly suited to infrastructures that already use an LDAP server, infrastructures that will share the server identity among multiple services (and the website being one of them) or for very large sets of users (millions). When using LDAP with large number of users, it is recommended to use LDAP tools to do the provisioning of users.
3. **Custom:** when retrieving users, groups and their relationship cannot be done by configuration, it is possible to use the Picketlink IDM SPI to implement the methods which control retrieving and storing user information.

Picketlink IDM also supports mix environments, which is very useful when an LDAP infrastructure is provided in a read-only mode. Since a website may need to store additional information about users (such as their preferred language or skin), it can combine LDAP and database services to retrieve users from LDAP and store additional properties in a database. During the calls to the identity API, the information from both sources will be transparently merged.

For more information about PicketLink IDM, please check the GateIn Portal3.5 reference guide and the PicketLink IDM documentation.

2.2 Storage

The portal framework stores page compositions, portlet preferences, gadget code in a database through a Java Content Repository (JCR) API. A set of database servers and JDBC connectors are part of our quality assurance cycles and the certified environments are mentioned [here](#).

It is important to choose one of the combinations or check with a Red Hat contact for specific environments that would differ from this list.

The database schema will be automatically created during the very first start up of a website and then it is required that the database users have sufficient rights to create tables. This privilege can be revoked after the initial start up, also the database content can be exported and imported in a new server. This makes the installation of the product very easy in most cases.

We do not provide additional recommendation to choose one database server over another as long as it is one of the certified environment.

As said earlier, content is stored through a JCR API, RDBMS aren't a great fit to store large files and it is possible to configure eXo JCR to store such files in the filesystem instead of a database, whereas metadata about the files would still be stored into the database. Note that if the website is running on a cluster, the filesystem will need to be accessible from all the nodes and a NFS solution needs to be set up. For more details see the notion of "value storage" in the reference guide.

2.3 Cluster

Clustering for failover or load-balancing requirements requires spending more time configuring it for your environment, we made it easy to handle common situations though. There is a cost associated with clustering (GateIn Portal3.5 has some optimizations when running on a single node), but the product is designed to linearly scale up so that the same performance is added every time a new node is added. All critical parts are kept in sync among nodes and the less critical ones are left aside to achieve better performance. It will be equally critical that applications developed for the final websites pay the same attention when it comes to replicating data across a cluster of nodes.

The number of nodes will vary a lot depending on the applications developed and used on the final website. We recommend to do early performance analysis with tools such as JMeter, Grinder or similar to measure the impact of heavy loads.

It is usually recommended to run a cluster to achieve high availability.

2.4 SSO

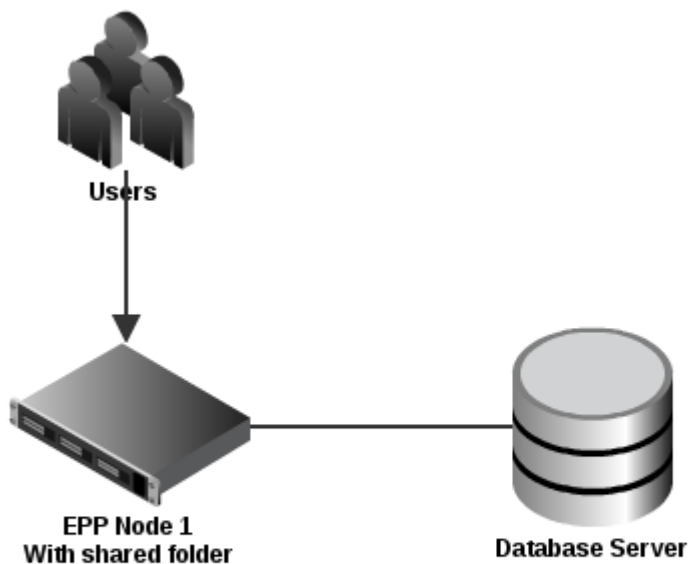
If a website is a part of a more global infrastructure with various components (the website being one of several), it may be in the benefit of users to use a Single-Sign-On solution. Various SSO solutions are supported by GateIn Portal3.5 as seen [here](#). In some cases it can be better to have the token manager service on a specific server.

2.4.1 Summary

By now you should know what infrastructure you will need:

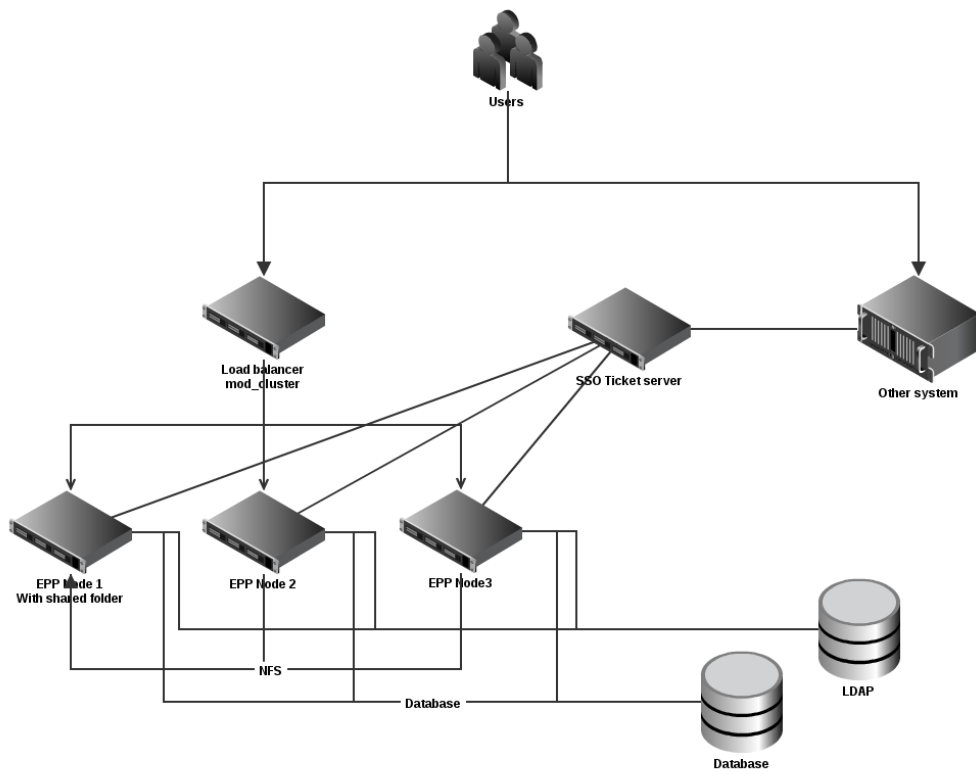
1. A database
1. Optionally LDAP, depending on your choice
1. Optionally NFS, depending on the configuration (mandatory on a cluster with default settings)
1. Optionally an SSO token service
1. Optionally a cluster of nodes

Here is an example of the simplest set-up:



simpleinfra

Here is an example of a more complex setup:



complexinfra

3 Design choices

Now that the main components of the architecture have been decided, choices must be made on the overall design.

3.1 Dashboards

User dashboards may be very costly in a website. Each user has an opportunity to design his own personal website, it comes with the cost of storing all that information. Efforts have been made (and are still being made) to reduce this cost, but there will always be an overhead.

This overhead might be hard to estimate as this will depend a lot on how the users will navigate through the website. Maybe only a minority will use this functionality, or maybe the website is only made of dashboards. In any case the impact of making this feature available must be measured by:

- estimating the number of dashboards and pages that will be created
- observing the impact on the database (through JCR) in terms of size

3.2 JCR index replication for cluster setup

The JCR implementation uses Apache Lucene for indexing the data. The indexes are used to search for content (It can be page nodes or WCM content for instance).

Lucene isn't cluster-ready, but on a cluster, each node will need to be able to search for content and will need to have access to the lucene indexes.

When it comes to searching, there is always a tradeoff. Everyone would want to achieve all of the following:

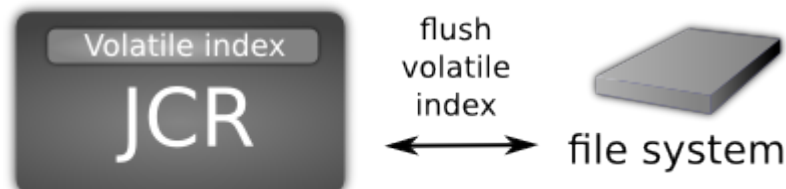
- Fast to search
- Fast to index
- Same search result on each node at the same time
- No need to rebuild the index ever (No inconsistency)
- No impact on overall performance
- Easy to setup (no infrastructure change)

But there are choices to be made. The JCR implementation used by EPP (eXo JCR) makes it possible to configure the storage and retrieval of indexes according to architect's choice on where it is acceptable to relax some constraints. For configuration details please refer to the EPP Reference Guide.

3.2.1 Standalone index

This is only for a non-cluster environment, this is obviously the easiest setup, with a combination of in-memory and file based indexes. There is no replication involved so any entry can be found by a search as

Standalone index



soon as it is created.

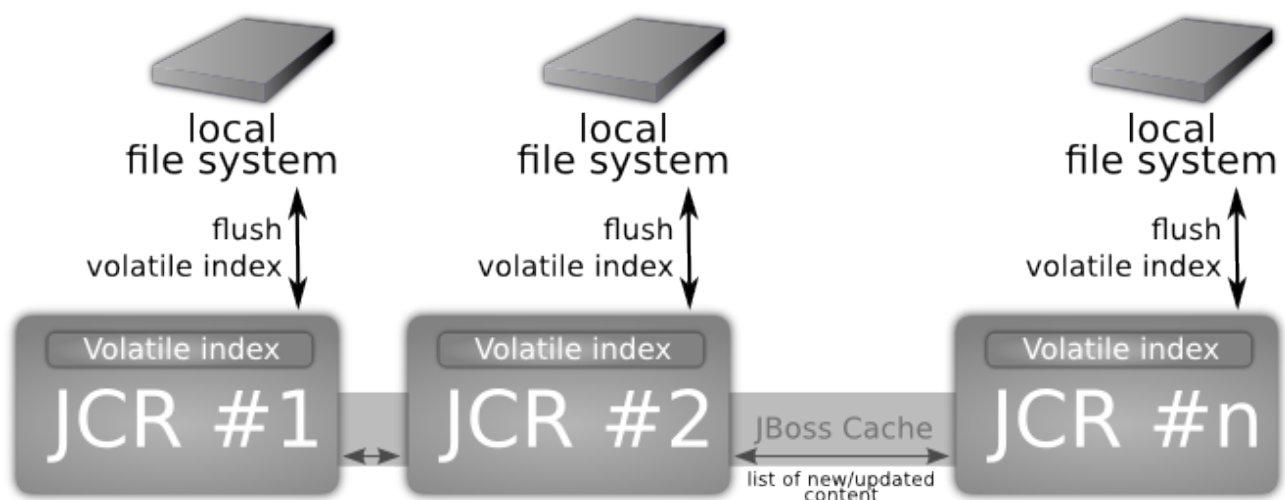
3.2.2 Local index

This environment is easy to set up, each node keeps a local copy of the full indexes so that when a search is requested on a node, there is no network communication required. The downside is that when a node indexes an item, it is required to replicate that index on each and every node. If a node is unavailable at that time, it may miss an index update request and then the different nodes may be inconsistent.

Also when a node is added, it has to recreate its own full index.

An alternative to this setup is to ask a node to retrieve the info from a coordinator on each search, which makes the startup of the new node faster, but impacts its performance during the runtime. This setup is new to EPP 5.2.

Local index



3.2.3 Shared index

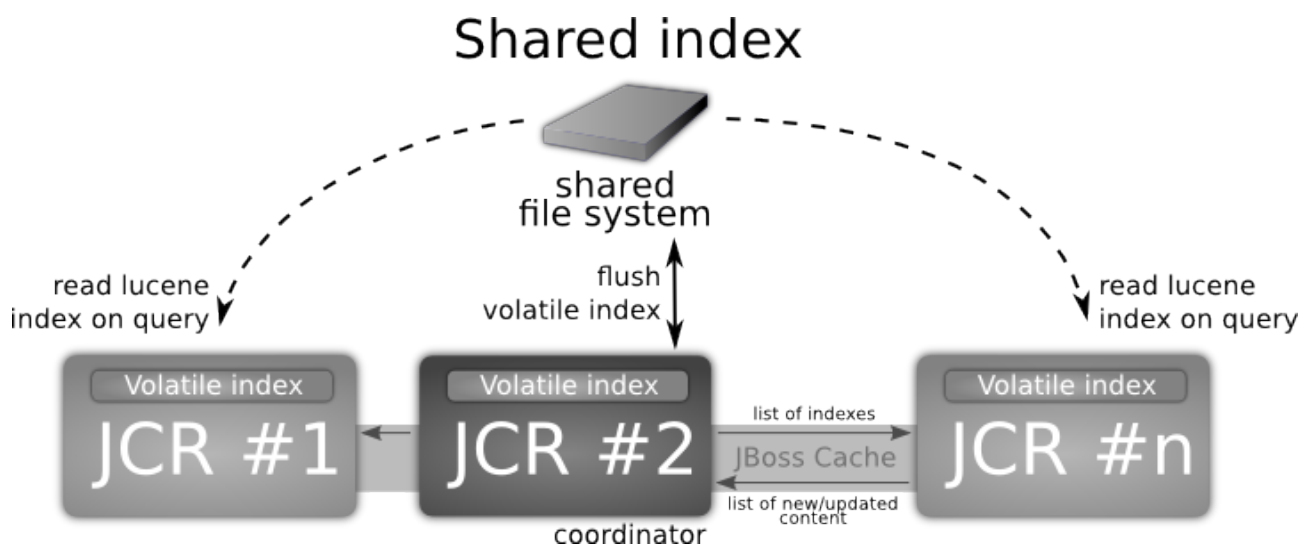
In this setup there is a unique index created and shared among all the nodes. It is required to configure the infrastructure so that a network file system is installed where all nodes can read content.

Advantages:

- Consistency, all the nodes see the same data

Drawback:

- Requires a highly available NFS setup (NFS 4 is recommended)
- More network communication



4 Portal Development

4.1 Portal Containers and Extensions

In a single GateIn Portal instance as well as in a GateIn Portal cluster, multiple portals can be hosted and share resources with other portals with two levels of granularity:

- Portal Container
- Site

Portal Containers represent the coarsest granularity. A Portal Container can host multiple *Sites*. Both Sites and Portal Containers have a unique identifier assigned to them which can be found in the default URL mapping according to the following scheme: `http://localhost:8080/<portalcontainer>/<site>`

A *Site* is comprised of a set of pages, navigation definitions, and can be assigned a unique skin.

When creating a portal based web, it is possible to either (a) create a Portal Container from scratch or (b) extend an existing one, e.g. the one available at <http://localhost:8080/portal> of the default GateIn Portal installation.

Option (b) is the recommended way. By creating a Portal Extension you can benefit from the default portal provided by GateIn Portal and be able to customize the parts you want. The benefit over directly modifying the shipped files is that it will make the updates much easier (by just replacing the archives provided by GateIn Portal).

While running multiple portal containers is possible, it is usually better to keep them on separate installations. Multiple Sites in a single Portal Container are mostly enough to achieve the desired diversity.

The mechanism used for creating Portal Containers from scratch and for extending existing Portal Containers is fairly the same: One creates an Enterprise Archive (EAR) containing some configuration, runnable code and static resources.

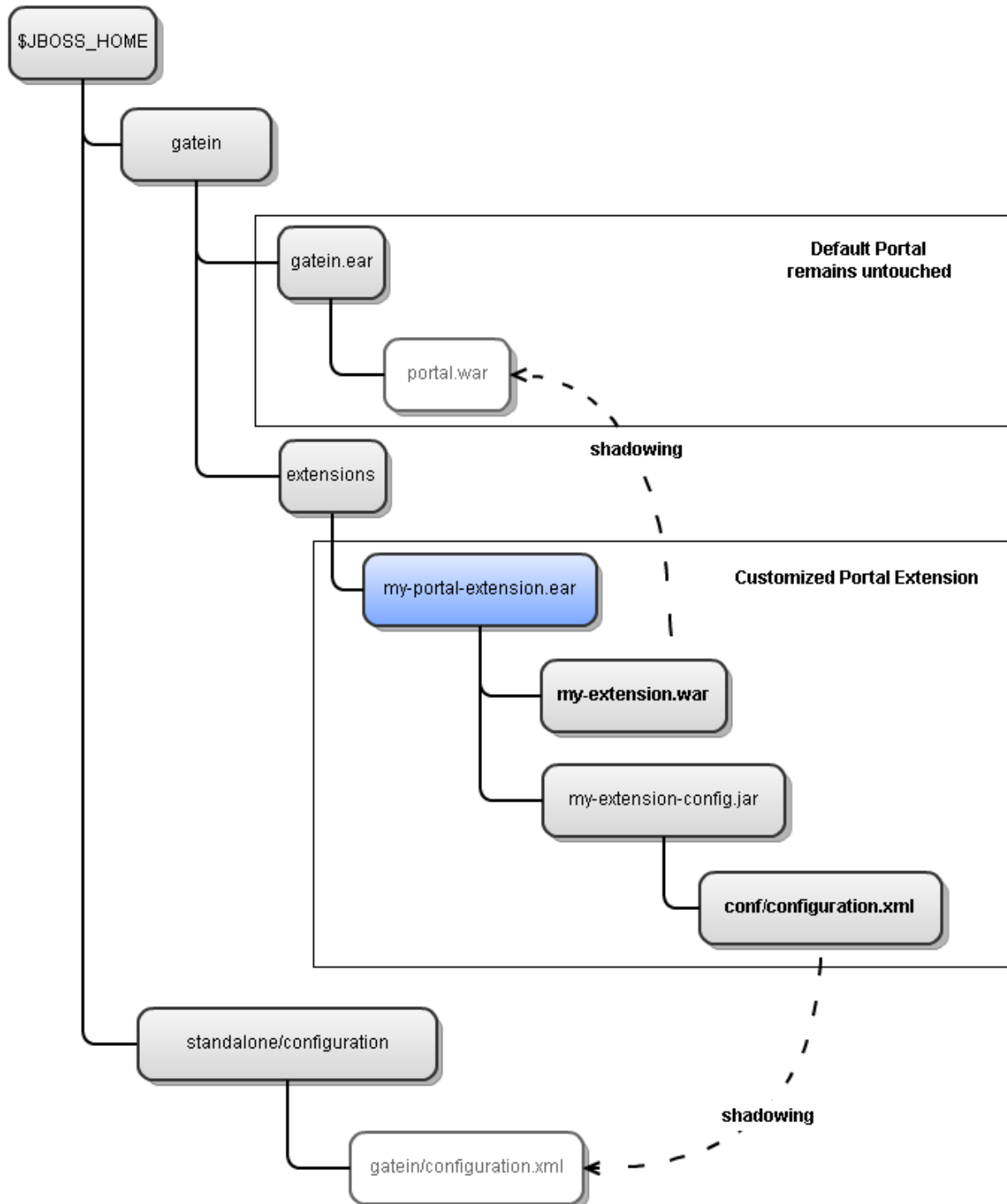
4.1.1 Portal Extension

When extending an existing Portal Container, the name of the portal in the Extension's configuration happens to be the same as the name of the existing Portal Container. The configuration (and other aspects) of the existing Portal Container can thus be shadowed by the Extension. Using this approach, many aspects of an available Portal Container can be customized, such as:

- [Groovy Templates of Portlets](#)
- [Portlet Skins, CSS and Images](#)
- [Navigation Definitions and Pages](#)
- [Translations](#)

How the Shadowing Mechanism Works

A schematic representation of the shadowing mechanism can be seen in the following diagram:



portalextensionstructure

The principal role in the extension mechanism is played by the definition of the Portal Container which happens in `conf/configuration.xml` of the Extension EAR. Consider the following snippet coming from [Portal Extension Quickstart](#). Note how the `name` parameter of the `PortalContainerDefinition` is set to "portal". Since a Portal Container called "portal" already exists in the default GateIn Portal installation, we actually redefine that existing Portal Container here:

configuration.xml

```
19. <configuration xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
20.     xsi:schemaLocation="http://www.exoplaform.org/xml/ns/kernel_1_2.xsd
http://www.exoplaform.org/xml/ns/kernel_1_2.xsd"
xmlns="http://www.exoplaform.org/xml/ns/kernel_1_2.xsd">
21.     <external-component-plugins>
22.         <!-- The full qualified name of the PortalContainerConfig -->
23.
<target-component>org.exoplaform.container.definition.PortalContainerConfig</target-component>
24.         <component-plugin>
25.             <!-- The name of the plugin -->
26.             <name>Add PortalContainer Definitions</name>
27.             <!-- The name of the method to call on the PortalContainerConfig in order to
register the PortalContainerDefinitions -->
28.             <set-method>registerPlugin</set-method>
29.             <!-- The full qualified name of the PortalContainerDefinitionPlugin -->
30.
<type>org.exoplaform.container.definition.PortalContainerDefinitionPlugin</type>
31.             <init-params>
32.                 <object-param>
33.                     <name>portal</name>
34.                     <object
type="org.exoplaform.container.definition.PortalContainerDefinition">
35.                         <!-- The name of the Portal Container: note that a Portal Container
called "portal"
36.                             already exists in the default GateIn installation. Therefore,
we actually redefine
37.                                 that existing Portal Container here. -->
38.                         <field name="name">
39.                             <string>portal</string>
40.                         </field>
41.                         <!-- The name of the context name of the rest web application -->
42.                         <field name="restContextName">
43.                             <string>rest</string>
44.                         </field>
45.                         <!-- The name of the realm -->
46.                         <field name="realmName">
47.                             <string>gatein-domain</string>
48.                         </field>
49.                         <field name="externalSettingsPath">
50.                             <string>configuration.properties</string>
51.                         </field>
52.                         <!--
53.                             The list of all the context names that are needed to initialize
the Portal Container properly.
54.                             The order of the dependencies will define the initialization
order and also the order for
55.                             loading resources. When a resource with the same path, say
/dir/subdir/resource, is available
```

```
56.             in more than one of the listed contexts, the one from the
context closest to the end of this list
57.             will be chosen. Here we want the resources available in
gatein-portal-extension to win over all
58.             other resources. Therefore we have added gatein-portal-extension
as the last element of the list.
59.             -->
60.             <field name="dependencies">
61.                 <collection type="java.util.ArrayList">
62.                     <value>
63.                         <string>eXoResources</string>
64.                     </value>
65.                     <value>
66.                         <string>portal</string>
67.                     </value>
68.                     <value>
69.                         <string>dashboard</string>
70.                     </value>
71.                     <value>
72.                         <string>exoadmin</string>
73.                     </value>
74.                     <value>
75.                         <string>eXoGadgets</string>
76.                     </value>
77.                     <value>
78.                         <string>gwtGadgets</string>
79.                     </value>
80.                     <value>
81.                         <string>eXoGadgetServer</string>
82.                     </value>
83.                     <value>
84.                         <string>rest</string>
85.                     </value>
86.                     <value>
87.                         <string>web</string>
88.                     </value>
89.                     <value>
90.                         <string>gatein-portal-extension</string>
91.                     </value>
92.                 </collection>
93.             </field>
94.         </object>
95.     </object-param>
96. </init-params>
97. </component-plugin>
98. </external-component-plugins>
99. </configuration>
```

Other resources available in an existing Portal Container can be customized in a similar way. Please refer to the following sections for more details.

Custom Groovy Template for a Portlet

After having set up the `conf/configuration.xml` file as described in the [Portal Extension](#) section you can proceed with customizing of Groovy templates of portlets.

This section mentions code from Portal Extension Example from the [GateIn Portal Quickstarts](#) collection.

Since we don't like the text and layout used in the default `HomePagePortlet` that comes with out-of-the-box GateIn Portal installation, we want to change it in our Extension. All we need to do is to copy the file

```
portal.war/templates/groovy/webui/component/UIHomePagePortlet.gtmpl
```

from `gatein.ear` into our Extension project where it needs to be placed under the analogous path, in our case under

```
war/src/main/webapp/templates/groovy/webui/component/UIHomePagePortlet.gtmpl
```

After adapting the copied file to our needs and deploying the Extension EAR, the `HomePagePortlet` mirrors the changes we have done.

Note that shadowing of built-in Groovy templates is controlled by the order of `<dependencies>` in the configuration of the Portal Container (or Extension) as described in the previous section. Namely, when a template with the same path, say `/dir/subdir/template.gtmpl`, is available in more than one of the dependencies, the one from the context closest to the end of the list of dependencies is chosen. To ensure that the template available in `gatein-portal-extension` will be chosen, we have added `gatein-portal-extension` as the last element of the list.

Custom Skin for a Portlet

This section mentions code from Portal Extension Example from the [GateIn Portal Quickstarts](#) collection.

When creating a custom skin for a built-in portlet distributed with GateIn Portal, the same guidelines apply as when [creating a new portlet skin](#): Firstly, you need to declare the skin in `gatein-resources.xml` file and secondly, you need to create the CSS (and eventually also images for backgrounds, etc.).

Note that shadowing of built-in portlet skins is controlled by the order of `<dependencies>` in the configuration of the Portal Container (or Extension) as described in the [Portal Extension](#) section. Namely, when a skin applicable to the same portlet, in our case `HomePagePortlet` defined in `web.war`, is available in more than one of the dependencies, the one from the context closest to the end of the list of dependencies is chosen. To ensure that the skin available in `gatein-portal-extension` will be chosen, we have added `gatein-portal-extension` as the last element of the list.

gatein-resources.xml

In our case `gatein-resources.xml` is located in the `war/src/main/webapp/WEB-INF` subfolder of Portal Extension quickstart project.

gatein-resources.xml

```
18. <gatein-resources xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
19.     xsi:schemaLocation="http://www.gatein.org/xml/ns/gatein_resources_1_3
http://www.gatein.org/xml/ns/gatein_resources_1_3"
20.     xmlns="http://www.gatein.org/xml/ns/gatein_resources_1_3">
21.
22.     <!-- GateIn will load this CSS for HomePagePortlet instead of the default one. -->
23.     <portlet-skin>
24.         <!--
25.             The name of the web application containing the portlet.xml file in which
26.             BannerPortlet is defined. The application name is usually the same as
27.             the name of the WAR through which the application was deployed.
28.         -->
29.         <application-name>web</application-name>
30.         <!-- <portlet-name> value from the portlet.xml referenced above -->
31.         <portlet-name>HomePagePortlet</portlet-name>
32.         <skin-name>Default</skin-name>
33.
<css-path>/templates/skin/webui/component/UIHomePagePortlet/DefaultStylesheet.css</css-path>
34.     </portlet-skin>
```

CSS and Images

In the above `gatein-resources.xml` we have declared that our custom skin should use the CSS file `/templates/skin/webui/component/UIHomePagePortlet/DefaultStylesheet.css` which translates to

`war/src/main/webapp/templates/skin/webui/component/UIHomePagePortlet/DefaultStylesheet.css` of Portal Extension quickstart project.

In the CSS file itself we refer to image files using relative pathes like the following:

DefaultStylesheet.css

```
051. .UIHomePagePortlet .TRContainer .DotLine {
052.     background: url("DefaultSkin/background/Line.gif") no-repeat -2px top;
053.     height: 1px;
054.     width: 182px;
055.     margin: 7px auto;
056. }
```

See Also

- [Creating New Portlet Skins](#)

Custom Navigation and Pages

This section mentions code from Portal Extension Example from the [GateIn Portal Quickstarts](#) collection.

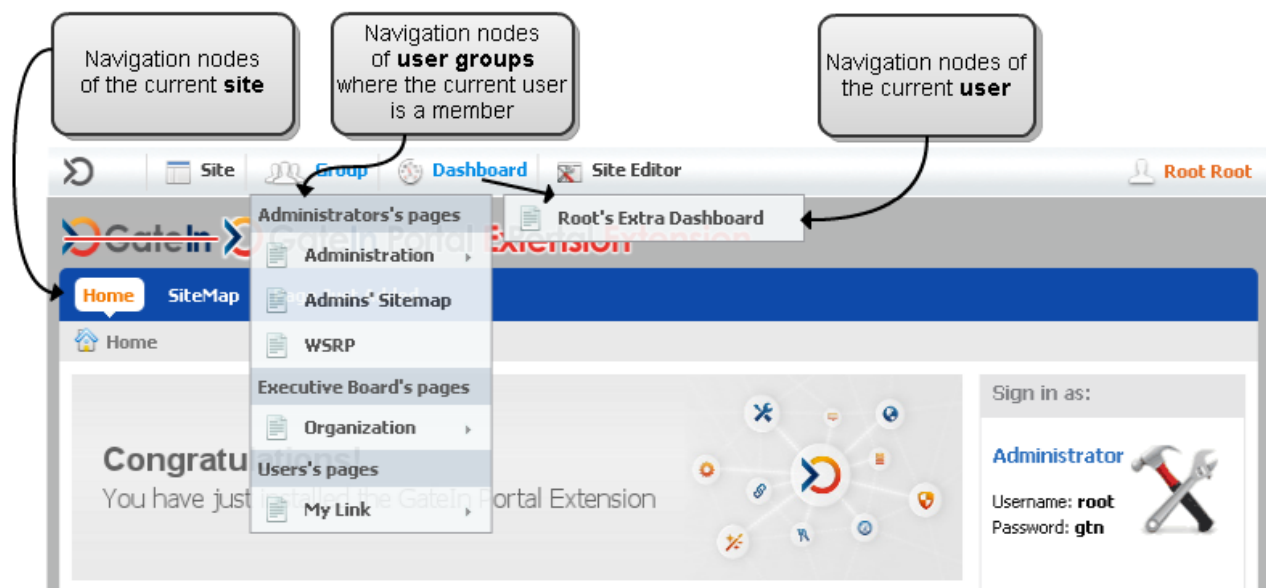
In Portal Extension quickstart, we have added a couple of navigation nodes and pages to the ones available in the default GateIn Portal installation.

portal-configuration.xml

In Portal Extension quickstart, this configuration file is located in `war/src/main/webapp/WEB-INF/conf/sample-ext/portal` directory. It is the starting point of the navigation customization. We will not say more about this file here as there is usually no need to change it. Please refer to [Portal Navigation Configuration](#) section of GateIn Portal Reference Guide for more information.

Three kinds of Navigation

Rather than using too many words to explain what and why, let us look at the following image:



Kinds of Navigation

Adding a Navigation Node to a Site Navigation

Let us have a look at

`war/src/main/webapp/WEB-INF/conf/sample-ext/portal/portal/classic/navigation.xml`. Note that in this path, *classic* is the name of the site the navigation of which we are which we want to define.

Site-wide navigation.xml

```
19. <node-navigation xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
20.     xsi:schemaLocation="http://www.gatein.org/xml/ns/gatein_objects_1_3
http://www.gatein.org/xml/ns/gatein_objects_1_3"
xmlns="http://www.gatein.org/xml/ns/gatein_objects_1_3">
21.     <!-- Priority has no significance in site navigations. But it is required. See
GTNPORTAL-2751 -->
22.     <priority>1</priority>
23.
24.     <!--
25.         In this file, we are adding a navigation node to the navigation of the site called
"classic".
26.         The site-wide navigation is used e.g. in NavigationPortlet.
27.         Visibility of navigation nodes depends on <access-permissions> set in the sibling
pages.xml file.
28.         See also portal.configuration section of the file ../../portal-configuration.xml.
29.     -->
30.     <page-nodes>
31.         <node>
32.             <name>page-just-added</name>
33.             <!--
34.                 #{portal.extension.justAddedPage} is place holder for an internationalized
string.
35.                 See WEB-INF/classes/locale/navigation/portal/classic_en.properties
36.             -->
37.             <label>#{portal.extension.justAddedPage}</label>
```

In this file, we have added `page-just-added` navigation node into the portal navigation. It can be seen in the navigation bar.



Home SiteMap **Page Just Added** Group Navigation

The `page-just-added` navigation node refers to `portal::classic::justAddedPage` which we define in `pages.xml` file located in the same directory as the above `navigation.xml`.

Site-wide pages.xml

```
19. <page-set xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://www.gatein.org/xml/ns/gatein_objects_1_3
http://www.gatein.org/xml/ns/gatein_objects_1_3"
20.     xmlns="http://www.gatein.org/xml/ns/gatein_objects_1_3">
21.     <page>
22.         <name>justAddedPage</name>
23.         <title>Page Just Added</title>
24.         <!-- This page and any navigation nodes referring to it will be visible to all
visitors (signed in or anonymous). -->
25.         <access-permissions>Everyone</access-permissions>
26.         <edit-permission>*:/platform/administrators</edit-permission>
27.         <portlet-application>
28.             <portlet>
29.                 <application-ref>gatein-portal-extension</application-ref>
30.                 <portlet-ref>JustAddedPortlet</portlet-ref>
31.             </portlet>
32.             <title>Just Added Portlet</title>
33.             <access-permissions>Everyone</access-permissions>
34.             <show-info-bar>false</show-info-bar>
35.             <show-application-state>false</show-application-state>
36.             <show-application-mode>false</show-application-mode>
37.         </portlet-application>
38.     </page>
39. </page-set>
```

Note that page-just-added navigation node and the related pages are visible to all portal visitors (signed in or anonymous) due to `<access-permissions>` set to Everyone in the above file.

Adding a Navigation Node to a Group Navigation

To add a new navigation node visible to the members of `/platform/administrators` group we need to create a `navigation.xml` file located in

`war/src/main/webapp/WEB-INF/conf/sample-ext/portal/group/platform/administrators`. Note that the name of the user group `/platform/administrators` is a part of the path.

navigation.xml of /platform/administrators group

```
19. <node-navigation xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
20.     xsi:schemaLocation="http://www.gatein.org/xml/ns/gatein_objects_1_3
http://www.gatein.org/xml/ns/gatein_objects_1_3"
xmlns="http://www.gatein.org/xml/ns/gatein_objects_1_3">
21.     <!-- Priority is currently ignored for importMode merge. But it is required. See
GTNPORTAL-2751 -->
22.     <priority>1</priority>
23.
24.     <page-nodes>
25.         <node>
26.             <name>admins-sitemap</name>
27.             <!--
28.                 #{platform.administrators.adminsSitemap} is place holder for an
internationalized string.
29.                 See
WEB-INF/classes/locale/navigation/group/platform/administrators_en.properties
30.             -->
31.             <label>#{platform.administrators.adminsSitemap}</label>
32.             <page-reference>group::/platform/administrators::adminsSitemap</page-reference>
33.         </node>
34.     </page-nodes>
35. </node-navigation>
```

The navigation node `admins-sitemap` refers to `adminsSitemap` page defined in the sibling `pages.xml` file:

pages.xml of /platform/administrators group

```
19.     xmlns="http://www.gatein.org/xml/ns/gatein_objects_1_3">
20.     <!--
21.         adminsSitemap page contains just SiteMapPortlet. There is nothing special about it.
22.         It is here just to demonstrate the adding of nodes to group navigation in the
sibling
23.         navigation.xml file.
24.     -->
25.     <page>
26.         <name>adminsSitemap</name>
27.         <title>Admins' Sitemap</title>
28.         <access-permissions>*/platform/administrators</access-permissions>
29.         <edit-permission>*/platform/administrators</edit-permission>
30.         <portlet-application>
31.             <portlet>
32.                 <application-ref>web</application-ref>
33.                 <portlet-ref>SiteMapPortlet</portlet-ref>
34.             </portlet>
35.             <title>Sitemap</title>
36.             <access-permissions>*/platform/administrators</access-permissions>
37.             <show-info-bar>false</show-info-bar>
38.         </portlet-application>
39.     </page>
40. </page-set>
```

Adding a Navigation Node to a User Navigation

To add a new navigation node visible to a particular user, say `root` we need to create a `navigation.xml` file located in

`war/src/main/webapp/WEB-INF/conf/sample-ext/portal/user/root/navigation.xml`. Note that the name of the user `root` is a part of the path.

navigation.xml of user root

```
19. <node-navigation xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
20.     xsi:schemaLocation="http://www.gatein.org/xml/ns/gatein_objects_1_3
http://www.gatein.org/xml/ns/gatein_objects_1_3"
xmlns="http://www.gatein.org/xml/ns/gatein_objects_1_3">
21.     <!-- Priority has no significance in user navigations. But it is required. See
GTNPOTAL-2751 -->
22.     <priority>1</priority>
23.
24.     <page-nodes>
25.         <node>
26.             <name>roots-extra-dashboard</name>
27.             <label>#{user.root.RootsExtraDashboard}</label>
28.             <page-reference>user::root::roots-dashboard</page-reference>
29.         </node>
30.     </page-nodes>
31. </node-navigation>
```

The navigation node `roots-extra-dashboard` refers to `roots-dashboard` page defined in the sibling `pages.xml` file:

pages.xml of user root

```
19. <page-set xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://www.gatein.org/xml/ns/gatein_objects_1_3
http://www.gatein.org/xml/ns/gatein_objects_1_3"
20.     xmlns="http://www.gatein.org/xml/ns/gatein_objects_1_3">
21.     <!--
22.         roots-dashboard page contains just DashboardPortlet. There is nothing special about
it.
23.         It is here just to demonstrate the adding of nodes to user navigation in the sibling
24.         navigation.xml file.
25.     -->
26.     <page>
27.         <name>roots-dashboard</name>
28.         <title>Root's Extra Dashboard</title>
29.         <access-permissions>*:/platform/users</access-permissions>
30.         <edit-permission>*:/platform/administrators</edit-permission>
31.         <portlet-application>
32.             <portlet>
33.                 <application-ref>dashboard</application-ref>
34.                 <portlet-ref>DashboardPortlet</portlet-ref>
35.             </portlet>
36.             <title>Root's Extra Dashboard</title>
37.             <access-permissions>*:/platform/users</access-permissions>
38.             <show-info-bar>false</show-info-bar>
39.         </portlet-application>
40.     </page>
41. </page-set>
42.
```

Internationalization of Navigation Nodes

As you can see in the above `navigation.xml` files the labels of navigation nodes can be internationalized. The files containing translation resources live under `war/src/main/webapp/WEB-INF/classes/locale/navigation`. The directory layout is similar to the one used for `navigation.xml` and `pages.xml` files:

Note that the navigation resource bundles also need to be named in `init.resources` parameter of `BaseResourceBundlePlugin` in `war/src/main/webapp/WEB-INF/conf/sample-ext/common/common-configuration.xml`:

common-configuration.xml containing declarations of navigation resource bundles

```
19. <configuration xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
20.     xsi:schemaLocation="http://www.exoplaform.org/xml/ns/kernel_1_2.xsd
http://www.exoplaform.org/xml/ns/kernel_1_2.xsd"
xmlns="http://www.exoplaform.org/xml/ns/kernel_1_2.xsd">
21.     <external-component-plugins>
22.         <!-- The full qualified name of the ResourceBundleService -->
23.
24.         <target-component>org.exoplaform.services.resources.ResourceBundleService</target-component>
25.         <component-plugin>
26.             <!-- The name of the plugin -->
27.             <name>Sample ResourceBundle Plugin</name>
28.             <!-- The name of the method to call on the ResourceBundleService in order to
register the ResourceBundles -->
29.             <set-method>addResourceBundle</set-method>
30.             <!-- The full qualified name of the BaseResourceBundlePlugin -->
31.             <type>org.exoplaform.services.resources.impl.BaseResourceBundlePlugin</type>
32.             <init-params>
33.                 <values-param>
34.                     <name>init.resources</name>
35.                     <description>Initiate the following resources during the first
launch.</description>
36.                     <value>locale.portal.extension</value>
37.                     <value>locale.navigation.user.root</value>
38.                     <!--
Note that we actually do not need to name
locale.navigation.portal.classic and
39.                     locale.navigation.group.platform.administrators here as they are in
init.resources
40.                     of the default GateIn installation. But it makes no harm to include
them once again here.
41.                     -->
42.                     <value>locale.navigation.portal.classic</value>
43.                     <value>locale.navigation.group.platform.administrators</value>
44.                 </values-param>
45.             </init-params>
```


Custom Internationalization Resource Bundles

This section mentions code from Portal Extension Example from the [GateIn Portal Quickstarts |Appendix - Code Examples alias Quickstarts] collection.

There are two resource bundle customization scenarios possible with a Portal Extension:

- to add new resource bundle items to the ones available in default GateIn Portal installation and
- to assign new values to resource bundle items available in default GateIn Portal installation

Both scenarios can be demonstrated on `locale.portal.extension` resource bundle. To use this bundle we need to include it in both `init.resources` and `portal.resource.names` parameters of `BaseResourceBundlePlugin` in

`war/src/main/webapp/WEB-INF/conf/sample-ext/common/common-configuration.xml`:

common-configuration.xml containing declarations of navigation resource bundles

```
019.
020.
021.
022.     <meta name="msapplication-TileImage" content="/windows-tile.png" />
023.     <meta name="msapplication-TileColor" content="#ffffff" />
024.     <meta name="selected-link" value="repo_source" data-pjax-transient />
025.     <meta content="collector.githubapp.com" name="octolytics-host" /><meta content="github"
name="octolytics-app-id" />
026.
027.
028.
029.     <link rel="icon" type="image/x-icon" href="/favicon.ico" />
030.
031.     <meta content="authenticity_token" name="csrf-param" />
032. <meta content="CHkUi5tQgI9oqHvhl5s7qVYXa2UM8EklyW4krudCtkg=" name="csrf-token" />
033.
034.     <link
href="https://a248.e.akamai.net/assets.github.com/assets/github-81b13ea53b1680d36f84ba58001e4a489c
media="all" rel="stylesheet" type="text/css" />
035.     <link
href="https://a248.e.akamai.net/assets.github.com/assets/github2-8b9943a538de5ba2343c96854d47c48eb
media="all" rel="stylesheet" type="text/css" />
036.
037.
038.
039.     <script
src="https://a248.e.akamai.net/assets.github.com/assets/frameworks-4c434fa1705bf526e191eec0cd8fab1
type="text/javascript"></script>
040.     <script
src="https://a248.e.akamai.net/assets.github.com/assets/github-5e72c8897c5b4f51f6829429a2f0045853a
type="text/javascript"></script>
041.
042.     <meta http-equiv="x-pjax-version" content="541ec61f9d9c0a273af8ee8616e5fc81">
043.
044.     <link data-pjax-transient rel='permalink'
href='/gatein/gatein-portal-quickstart/blob/fbb1ccf991d31be588217559b958a6eeb0469c89/gatein-portal
```

```
<meta property="og:title" content="gatein-portal-quickstart"/>
046.     <meta property="og:type" content="githubog:gitrepository"/>
047.     <meta property="og:url" content="https://github.com/gatein/gatein-portal-quickstart"/>
048.     <meta property="og:image"
content="https://secure.gravatar.com/avatar/243ca21b06760188c8418f521e2fa708?s=420&d=https://a
<meta property="og:site_name" content="GitHub"/>
050.     <meta property="og:description" content="gatein-portal-quickstart - The quickstarts
demonstrate Portlets for GateIn Portal. They provide small, specific, working examples that can
be used as a reference for your own project."/>
051.     <meta property="twitter:card" content="summary"/>
052.     <meta property="twitter:site" content="@GitHub">
053.     <meta property="twitter:title" content="gatein/gatein-portal-quickstart"/>
054.
055.     <meta name="description" content="gatein-portal-quickstart - The quickstarts
demonstrate Portlets for GateIn Portal. They provide small, specific, working examples that can
be used as a reference for your own project." />
056.
057.
058.     <meta content="420668" name="octolytics-dimension-user_id" /><meta content="gatein"
name="octolytics-dimension-user_login" /><meta content="5438587"
name="octolytics-dimension-repository_id" /><meta content="gatein/gatein-portal-quickstart"
name="octolytics-dimension-repository_nwo" /><meta content="true"
name="octolytics-dimension-repository_public" /><meta content="false"
name="octolytics-dimension-repository_is_fork" /><meta content="5438587"
name="octolytics-dimension-repository_network_root_id" /><meta
content="gatein/gatein-portal-quickstart"
name="octolytics-dimension-repository_network_root_nwo" />
059.     <link href="https://github.com/gatein/gatein-portal-quickstart/commits/master.atom"
rel="alternate" title="Recent Commits to gatein-portal-quickstart:master"
type="application/atom+xml" />
060.
061.     </head>
062.
063.
064.     <body class="logged_out page-blob vis-public env-production  ">
065.         <div id="wrapper">
066.
067.
068.
069.
070.
071.
072.             <div class="header header-logged-out">
073.         <div class="container clearfix">
074.
075.             <a class="header-logo-wordmark" href="https://github.com/">Github</a>
076.
077.             <div class="header-actions">
078.                 <a class="button primary" href="/signup">Sign up</a>
079.                 <a class="button"
href="/login?return_to=%2Fgatein%2Fgatein-portal-quickstart%2Fblob%2Fmaster%2Fgatein-portal-extens
in</a>
080.             </div>
081.
082.             <div class="command-bar js-command-bar in-repository">
083.
084.
085.                 <ul class="top-nav">
```

```
086.         <li class="explore"><a href="/explore">Explore</a></li>
087.         <li class="features"><a href="/features">Features</a></li>
088.         <li class="enterprise"><a
href="http://enterprise.github.com/">Enterprise</a></li>
089.         <li class="blog"><a href="/blog">Blog</a></li>
090.     </ul>
091.     <form accept-charset="UTF-8" action="/search" class="command-bar-form"
id="top_search_form" method="get">
092.     <a href="/search/advanced" class="advanced-search-icon tooltipped downwards
command-bar-search" id="advanced_search" title="Advanced search"><span class="octicon
octicon-gear "></span></a>
093.
094.     <input type="text" data-hotkey="/ s" name="q" id="js-command-bar-field"
placeholder="Search or type a command" tabindex="1" autocapitalize="off"
095.
096.         data-repo="gatein/gatein-portal-quickstart"
097.         data-branch="master"
098.         data-sha="bbf66572afd862772044a17ca365855917bed3fd"
099.     >
100.
101.     <input type="hidden" name="nwo" value="gatein/gatein-portal-quickstart" />
102.
103.     <div class="select-menu js-menu-container js-select-menu search-context-select-menu">
104.         <span class="minibutton select-menu-button js-menu-target">
105.             <span class="js-select-button">This repository</span>
106.         </span>
107.
108.         <div class="select-menu-modal-holder js-menu-content js-navigation-container">
109.             <div class="select-menu-modal">
110.
111.                 <div class="select-menu-item js-navigation-item selected">
112.                     <span class="select-menu-item-icon octicon octicon-check"></span>
113.                     <input type="radio" class="js-search-this-repository" name="search_target"
value="repository" checked="checked" />
114.                     <div class="select-menu-item-text js-select-button-text">This repository</div>
115.                 </div> <!-- /.select-menu-item -->
116.
117.                 <div class="select-menu-item js-navigation-item">
118.                     <span class="select-menu-item-icon octicon octicon-check"></span>
119.                     <input type="radio" name="search_target" value="global" />
120.                     <div class="select-menu-item-text js-select-button-text">All repositories</div>
121.                 </div> <!-- /.select-menu-item -->
122.
123.             </div>
124.         </div>
125.     </div>
126.
127.     <span class="octicon help tooltipped downwards" title="Show command bar help">
128.         <span class="octicon octicon-question"></span>
129.     </span>
130.
131.
132.     <input type="hidden" name="ref" value="cmdform">
133.
134.     <div class="divider-vertical"></div>
135.
136. </form>
137. </div>
```

```
138.
139.     </div>
140. </div>
141.
142.
143.
144.
145.
146.         <div class="site hfeed" itemscope itemtype="http://schema.org/WebPage">
147.     <div class="hentry">
148.
149.         <div class="pagehead repohead instapaper_ignore readability-menu ">
150.             <div class="container">
151.                 <div class="title-actions-bar">
152.
153.
154. <ul class="pagehead-actions">
155.
156.
157.
158.     <li>
159.         <a href="/login?return_to=%2Fgatein%2Fgatein-portal-quickstart"
160.             class="minibutton with-count js-toggler-target star-button entice tooltipped
161.             title="You must be signed in to use this feature" rel="nofollow">
162.             <span class="octicon octicon-star"></span>Star
163.         </a>
164.         <a class="social-count js-social-count"
165. href="/gatein/gatein-portal-quickstart/stargazers">
166.             4
167.         </a>
168.     </li>
169.     <li>
170.         <a href="/login?return_to=%2Fgatein%2Fgatein-portal-quickstart"
171.             class="minibutton with-count js-toggler-target fork-button entice tooltipped
172.             title="You must be signed in to fork a repository" rel="nofollow">
173.             <span class="octicon octicon-git-branch"></span>Fork
174.         </a>
175.         <a href="/gatein/gatein-portal-quickstart/network" class="social-count">
176.             15
177.         </a>
178.     </li>
179. </ul>
180.
181.         <h1 itemscope itemtype="http://data-vocabulary.org/Breadcrumb"
182. class="entry-title public">
183.             <span class="repo-label"><span>public</span></span>
184.             <span class="mega-octicon octicon-repo"></span>
185.             <span class="author vcard">
186.                 <a href="/gatein" class="url fn" itemprop="url" rel="author">
187.                 <span itemprop="title">gatein</span>
188.                 </a></span> /
189.                 <strong><a href="/gatein/gatein-portal-quickstart"
190. class="js-current-repository">gatein-portal-quickstart</a></strong>
191.             </h1>
192.         </div>
```

```
191.
192.   <ul class="tabs">
193.     <li class="pulse-nav"><a href="/gatein/gatein-portal-quickstart/pulse"
194.       class="js-selected-navigation-item " data-selected-links="pulse
195.       /gatein/gatein-portal-quickstart/pulse" rel="nofollow"><span class="octicon
196.       octicon-pulse"></span></a></li>
197.     <li><a href="/gatein/gatein-portal-quickstart" class="js-selected-navigation-item
198.       selected" data-selected-links="repo_source repo_downloads repo_commits repo_tags repo_branches
199.       /gatein/gatein-portal-quickstart">Code</a></li>
200.     <li><a href="/gatein/gatein-portal-quickstart/network"
201.       class="js-selected-navigation-item " data-selected-links="repo_network
202.       /gatein/gatein-portal-quickstart/network">Network</a></li>
203.     <li><a href="/gatein/gatein-portal-quickstart/pulls" class="js-selected-navigation-item
204.       " data-selected-links="repo_pulls /gatein/gatein-portal-quickstart/pulls">Pull Requests <span
205.       class='counter'>0</span></a></li>
206.     <li><a href="/gatein/gatein-portal-quickstart/issues"
207.       class="js-selected-navigation-item " data-selected-links="repo_issues
208.       /gatein/gatein-portal-quickstart/issues">Issues <span class='counter'>0</span></a></li>
209.     <li><a href="/gatein/gatein-portal-quickstart/wiki"
210.       class="js-selected-navigation-item " data-selected-links="repo_wiki
211.       /gatein/gatein-portal-quickstart/wiki">Wiki</a></li>
212.     <li><a href="/gatein/gatein-portal-quickstart/graphs"
213.       class="js-selected-navigation-item " data-selected-links="repo_graphs repo_contributors
214.       /gatein/gatein-portal-quickstart/graphs">Graphs</a></li>
215.   </ul>
216.
217. <div class="tabnav">
218.
219.   <span class="tabnav-right">
220.     <ul class="tabnav-tabs">
221.       <li><a href="/gatein/gatein-portal-quickstart/tags"
222.         class="js-selected-navigation-item tabnav-tab" data-selected-links="repo_tags
223.         /gatein/gatein-portal-quickstart/tags">Tags <span class="counter " >6</span></a></li>
224.     </ul>
225.   </span>
226.
227.   <div class="tabnav-widget scope">
228.
229.     <div class="select-menu js-menu-container js-select-menu js-branch-menu">
230.       <a class="minibutton select-menu-button js-menu-target" data-hotkey="w"
231.         data-ref="master">
232.         <span class="octicon octicon-git-branch"></span>
233.         <i>branch:</i>
234.         <span class="js-select-button">master</span>
235.       </a>
236.
237.       <div class="select-menu-modal-holder js-menu-content js-navigation-container">
238.
239.         <div class="select-menu-modal">
240.           <div class="select-menu-header">
241.             <span class="select-menu-title">Switch branches/tags</span>
```

```
231.         <span class="octicon octicon-remove-close js-menu-close"></span>
232.     </div> <!-- /.select-menu-header -->
233.
234.     <div class="select-menu-filters">
235.         <div class="select-menu-text-filter">
236.             <input type="text" id="commitish-filter-field" class="js-filterable-field
js-navigation-enable" placeholder="Filter branches/tags">
237.         </div>
238.         <div class="select-menu-tabs">
239.             <ul>
240.                 <li class="select-menu-tab">
241.                     <a href="#" data-tab-filter="branches"
class="js-select-menu-tab">Branches</a>
242.                 </li>
243.                 <li class="select-menu-tab">
244.                     <a href="#" data-tab-filter="tags" class="js-select-menu-tab">Tags</a>
245.                 </li>
246.             </ul>
247.         </div><!-- /.select-menu-tabs -->
248.     </div><!-- /.select-menu-filters -->
249.
250.     <div class="select-menu-list select-menu-tab-bucket js-select-menu-tab-bucket
css-truncate" data-tab-filter="branches">
251.
252.         <div data-filterable-for="commitish-filter-field"
data-filterable-type="substring">
253.
254.             <div class="select-menu-item js-navigation-item ">
255.                 <span class="select-menu-item-icon octicon octicon-check"></span>
256.                 <a
href="/gatein/gatein-portal-quickstart/blob/GTNPORTAL-2700/gatein-portal-extension/war/src/main/we
class="js-navigation-open select-menu-item-text js-select-button-text css-truncate-target"
data-name="GTNPORTAL-2700" rel="nofollow" title="GTNPORTAL-2700">GTNPORTAL-2700</a>
257.             </div> <!-- /.select-menu-item -->
258.             <div class="select-menu-item js-navigation-item selected">
259.                 <span class="select-menu-item-icon octicon octicon-check"></span>
260.                 <a
href="/gatein/gatein-portal-quickstart/blob/master/gatein-portal-extension/war/src/main/webapp/WEB
class="js-navigation-open select-menu-item-text js-select-button-text css-truncate-target"
data-name="master" rel="nofollow" title="master">master</a>
261.             </div> <!-- /.select-menu-item -->
262.         </div>
263.
264.         <div class="select-menu-no-results">Nothing to show</div>
265.     </div> <!-- /.select-menu-list -->
266.
267.
268.     <div class="select-menu-list select-menu-tab-bucket js-select-menu-tab-bucket
css-truncate" data-tab-filter="tags">
269.         <div data-filterable-for="commitish-filter-field"
data-filterable-type="substring">
270.
271.             <div class="select-menu-item js-navigation-item ">
272.                 <span class="select-menu-item-icon octicon octicon-check"></span>
273.                 <a
href="/gatein/gatein-portal-quickstart/blob/gatein-quickstart-3.6.0.Beta04/gatein-portal-extension
class="js-navigation-open select-menu-item-text js-select-button-text css-truncate-target"
data-name="gatein-quickstart-3.6.0.Beta04" rel="nofollow"
```

```
title="gatein-quickstart-3.6.0.Beta04">gatein-quickstart-3.6.0.Beta04</a>
274.         </div> <!-- /.select-menu-item -->
275.         <div class="select-menu-item js-navigation-item ">
276.             <span class="select-menu-item-icon octicon octicon-check"></span>
277.             <a
href="/gatein/gatein-portal-quickstart/blob/gatein-quickstart-3.6.0.Beta03/gatein-portal-extension
class="js-navigation-open select-menu-item-text js-select-button-text css-truncate-target"
data-name="gatein-quickstart-3.6.0.Beta03" rel="nofollow"
title="gatein-quickstart-3.6.0.Beta03">gatein-quickstart-3.6.0.Beta03</a>
278.             </div> <!-- /.select-menu-item -->
279.             <div class="select-menu-item js-navigation-item ">
280.                 <span class="select-menu-item-icon octicon octicon-check"></span>
281.                 <a
href="/gatein/gatein-portal-quickstart/blob/gatein-quickstart-3.6.0.Beta02/gatein-portal-extension
class="js-navigation-open select-menu-item-text js-select-button-text css-truncate-target"
data-name="gatein-quickstart-3.6.0.Beta02" rel="nofollow"
title="gatein-quickstart-3.6.0.Beta02">gatein-quickstart-3.6.0.Beta02</a>
282.                 </div> <!-- /.select-menu-item -->
283.                 <div class="select-menu-item js-navigation-item ">
284.                     <span class="select-menu-item-icon octicon octicon-check"></span>
285.                     <a
href="/gatein/gatein-portal-quickstart/blob/gatein-3.4-bom-1.0.0.Alpha02PBR310a1/gatein-portal-ext
class="js-navigation-open select-menu-item-text js-select-button-text css-truncate-target"
data-name="gatein-3.4-bom-1.0.0.Alpha02PBR310a1" rel="nofollow"
title="gatein-3.4-bom-1.0.0.Alpha02PBR310a1">gatein-3.4-bom-1.0.0.Alpha02PBR310a1</a>
286.                     </div> <!-- /.select-menu-item -->
287.                     <div class="select-menu-item js-navigation-item ">
288.                         <span class="select-menu-item-icon octicon octicon-check"></span>
289.                         <a
href="/gatein/gatein-portal-quickstart/blob/gatein-3.4-bom-1.0.0.Alpha01/gatein-portal-extension/w
class="js-navigation-open select-menu-item-text js-select-button-text css-truncate-target"
data-name="gatein-3.4-bom-1.0.0.Alpha01" rel="nofollow"
title="gatein-3.4-bom-1.0.0.Alpha01">gatein-3.4-bom-1.0.0.Alpha01</a>
290.                         </div> <!-- /.select-menu-item -->
291.                         <div class="select-menu-item js-navigation-item ">
292.                             <span class="select-menu-item-icon octicon octicon-check"></span>
293.                             <a
href="/gatein/gatein-portal-quickstart/blob/3.5.0.Final/gatein-portal-extension/war/src/main/webap
class="js-navigation-open select-menu-item-text js-select-button-text css-truncate-target"
data-name="3.5.0.Final" rel="nofollow" title="3.5.0.Final">3.5.0.Final</a>
294.                             </div> <!-- /.select-menu-item -->
295.                         </div>
296.
297.                     <div class="select-menu-no-results">Nothing to show</div>
298.
299.                 </div> <!-- /.select-menu-list -->
300.
301.             </div> <!-- /.select-menu-modal -->
302.         </div> <!-- /.select-menu-modal-holder -->
303.     </div> <!-- /.select-menu -->
304.
305. </div> <!-- /.scope -->
306.
307. <ul class="tabnav-tabs">
308.     <li><a href="/gatein/gatein-portal-quickstart" class="selected
js-selected-navigation-item tabnav-tab" data-selected-links="repo_source
/gatein/gatein-portal-quickstart">Files</a></li>
309.     <li><a href="/gatein/gatein-portal-quickstart/commits/master"
```

```
class="js-selected-navigation-item tabnav-tab" data-selected-links="repo_commits
/gatein/gatein-portal-quickstart/commits/master">Commits</a></li>
310.     <li><a href="/gatein/gatein-portal-quickstart/branches"
class="js-selected-navigation-item tabnav-tab" data-selected-links="repo_branches
/gatein/gatein-portal-quickstart/branches" rel="nofollow">Branches <span class="counter
">2</span></a></li>
311.   </ul>
312.
313. </div>
314.
315.
316.
317.
318.
319.
320.
321.     </div>
322.   </div><!-- /.repohead -->
323.
324.     <div id="js-repo-pjax-container" class="container context-loader-container"
data-pjax-container>
325.
326.
327.
328. <!-- blob contrib key: blob_contributors:v21:71cc615060e34402c5e0a3401374ef9a -->
329. <!-- blob contrib frag key:
views10/v8/blob_contributors:v21:71cc615060e34402c5e0a3401374ef9a -->
330.
331.
332. <div id="slider">
333.   <div class="frame-meta">
334.
335.     <p title="This is a placeholder element" class="js-history-link-replace hidden"></p>
336.
337.     <div class="breadcrumb">
338.       <span class='bold'><span itemscope=""
itemtype="http://data-vocabulary.org/Breadcrumb"><a href="/gatein/gatein-portal-quickstart"
class="js-slide-to" data-branch="master" data-direction="back" itemscope="url"><span
itemprop="title">gatein-portal-quickstart</span></a></span></span><span class="separator"> /
</span><span itemscope="" itemtype="http://data-vocabulary.org/Breadcrumb"><a
href="/gatein/gatein-portal-quickstart/tree/master/gatein-portal-extension" class="js-slide-to"
data-branch="master" data-direction="back" itemscope="url"><span
itemprop="title">gatein-portal-extension</span></a></span><span class="separator"> /
</span><span itemscope="" itemtype="http://data-vocabulary.org/Breadcrumb"><a
href="/gatein/gatein-portal-quickstart/tree/master/gatein-portal-extension/war"
class="js-slide-to" data-branch="master" data-direction="back" itemscope="url"><span
itemprop="title">war</span></a></span><span class="separator"> / </span><span itemscope=""
itemtype="http://data-vocabulary.org/Breadcrumb"><a
href="/gatein/gatein-portal-quickstart/tree/master/gatein-portal-extension/war/src"
class="js-slide-to" data-branch="master" data-direction="back" itemscope="url"><span
itemprop="title">src</span></a></span><span class="separator"> / </span><span itemscope=""
itemtype="http://data-vocabulary.org/Breadcrumb"><a
href="/gatein/gatein-portal-quickstart/tree/master/gatein-portal-extension/war/src/main"
class="js-slide-to" data-branch="master" data-direction="back" itemscope="url"><span
itemprop="title">main</span></a></span><span class="separator"> / </span><span itemscope=""
itemtype="http://data-vocabulary.org/Breadcrumb"><a
href="/gatein/gatein-portal-quickstart/tree/master/gatein-portal-extension/war/src/main/webapp"
class="js-slide-to" data-branch="master" data-direction="back" itemscope="url"><span
```



```
itemprop="title">webapp</span></a></span><span class="separator"> / </span><span itemscope=""
itemtype="http://data-vocabulary.org/Breadcrumb"><a
href="/gatein/gatein-portal-quickstart/tree/master/gatein-portal-extension/war/src/main/webapp/WEB
class="js-slide-to" data-branch="master" data-direction="back" itemscope="url"><span
itemprop="title">WEB-INF</span></a></span><span class="separator"> / </span><span itemscope=""
itemtype="http://data-vocabulary.org/Breadcrumb"><a
href="/gatein/gatein-portal-quickstart/tree/master/gatein-portal-extension/war/src/main/webapp/WEB
class="js-slide-to" data-branch="master" data-direction="back" itemscope="url"><span
itemprop="title">conf</span></a></span><span class="separator"> / </span><span itemscope=""
itemtype="http://data-vocabulary.org/Breadcrumb"><a
href="/gatein/gatein-portal-quickstart/tree/master/gatein-portal-extension/war/src/main/webapp/WEB
class="js-slide-to" data-branch="master" data-direction="back" itemscope="url"><span
itemprop="title">sample-ext</span></a></span><span class="separator"> / </span><span
itemscope="" itemtype="http://data-vocabulary.org/Breadcrumb"><a
href="/gatein/gatein-portal-quickstart/tree/master/gatein-portal-extension/war/src/main/webapp/WEB
class="js-slide-to" data-branch="master" data-direction="back" itemscope="url"><span
itemprop="title">common</span></a></span><span class="separator"> / </span><strong
class="final-path">common-configuration.xml</strong> <span class="js-zeroclipboard
zeroclipboard-button"
data-clipboard-text="gatein-portal-extension/war/src/main/webapp/WEB-INF/conf/sample-ext/common/co
data-copied-hint="copied!" title="copy to clipboard"><span class="octicon
octicon-clippy"></span></span>
339.     </div>
340.
341.     <a href="/gatein/gatein-portal-quickstart/find/master" class="js-slide-to"
data-hotkey="t" style="display:none">Show File Finder</a>
342.
343.
344.
345.     <div class="commit file-history-tease">
346.         
347.         <span class="author"><a href="/ppalaga" rel="author">ppalaga</a></span>
348.         <time class="js-relative-date" datetime="2013-02-01T09:59:14-08:00" title="2013-02-01
09:59:14">February 01, 2013</time>
349.         <div class="commit-title">
350.             <a
href="/gatein/gatein-portal-quickstart/commit/78d2c6d6814fa7ea305ce2f7b2359b57dfbfd11b"
class="message">Quickstarts productized</a>
351.         </div>
352.
353.         <div class="participation">
354.             <p class="quickstat"><a href="#blob_contributors_box"
rel="facebox"><strong>2</strong> contributors</a></p>
355.             <a class="avatar tooltipped downwards" title="ppalaga"
href="/gatein/gatein-portal-quickstart/commits/master/gatein-portal-extension/war/src/main/webapp/
height="20"
src="https://secure.gravatar.com/avatar/ee125db5761ea3e79edc5d18c9c56875?s=140&d=https://a248.
width="20" /></a>
356.             <a class="avatar tooltipped downwards" title="theute"
href="/gatein/gatein-portal-quickstart/commits/master/gatein-portal-extension/war/src/main/webapp/
height="20"
src="https://secure.gravatar.com/avatar/72b54135c38f6cd09c918700eaf2a58e?s=140&d=https://a248.
width="20" /></a>
357.
358.
359.         </div>
```

```
360.     <div id="blob_contributors_box" style="display:none">
361.         <h2 class="facebox-header">Users who have contributed to this file</h2>
362.         <ul class="facebox-user-list">
363.             <li class="facebox-user-list-item">
364.                 
365.                 <a href="/ppalaga">ppalaga</a>
366.             </li>
367.             <li class="facebox-user-list-item">
368.                 
369.                 <a href="/theute">theute</a>
370.             </li>
371.         </ul>
372.     </div>
373. </div>
374.
375.
376. </div><!-- ../frame-meta -->
377.
378. <div class="frames">
379.     <div class="frame"
data-permalink-url="/gatein/gatein-portal-quickstart/blob/fbb1ccf991d31be588217559b958a6eeb0469c89
data-title="gatein-portal-quickstart/gatein-portal-extension/war/src/main/webapp/WEB-INF/conf/samp
at master · gatein/gatein-portal-quickstart · GitHub" data-type="blob">
380.
381.         <div id="files" class="bubble">
382.             <div class="file">
383.                 <div class="meta">
384.                     <div class="info">
385.                         <span class="icon"><b class="octicon octicon-file-text"></b></span>
386.                         <span class="mode" title="File Mode">file</span>
387.                         <span>56 lines (53 sloc)</span>
388.                         <span>3.245 kb</span>
389.                     </div>
390.                     <div class="actions">
391.                         <div class="button-group">
392.                             <a class="minibutton js-entice" href=""
393.                                 data-entice="You must be signed in and on a branch to make or
propose changes">Edit</a>
394.                             <a
href="/gatein/gatein-portal-quickstart/raw/master/gatein-portal-extension/war/src/main/webapp/WEB-
class="button minibutton " id="raw-url">Raw</a>
395.                             <a
href="/gatein/gatein-portal-quickstart/blame/master/gatein-portal-extension/war/src/main/webapp/WE
class="button minibutton ">Blame</a>
396.                             <a
href="/gatein/gatein-portal-quickstart/commits/master/gatein-portal-extension/war/src/main/webapp/
class="button minibutton " rel="nofollow">History</a>
397.                         </div><!-- /.button-group -->
398.                     </div><!-- /.actions -->
399.                 </div>
400.             </div>
401.             <div class="blob-wrapper data type-xml js-blob-data">
402.                 <table class="file-code file-diff">
403.                     <tr class="file-code-line">
```

```
404.         <td class="blob-line-nums">
405.             <span id="L1" rel="#L1">1</span>
406. <span id="L2" rel="#L2">2</span>
407. <span id="L3" rel="#L3">3</span>
408. <span id="L4" rel="#L4">4</span>
409. <span id="L5" rel="#L5">5</span>
410. <span id="L6" rel="#L6">6</span>
411. <span id="L7" rel="#L7">7</span>
412. <span id="L8" rel="#L8">8</span>
413. <span id="L9" rel="#L9">9</span>
414. <span id="L10" rel="#L10">10</span>
415. <span id="L11" rel="#L11">11</span>
416. <span id="L12" rel="#L12">12</span>
417. <span id="L13" rel="#L13">13</span>
418. <span id="L14" rel="#L14">14</span>
419. <span id="L15" rel="#L15">15</span>
420. <span id="L16" rel="#L16">16</span>
421. <span id="L17" rel="#L17">17</span>
422. <span id="L18" rel="#L18">18</span>
423. <span id="L19" rel="#L19">19</span>
424. <span id="L20" rel="#L20">20</span>
425. <span id="L21" rel="#L21">21</span>
426. <span id="L22" rel="#L22">22</span>
427. <span id="L23" rel="#L23">23</span>
428. <span id="L24" rel="#L24">24</span>
429. <span id="L25" rel="#L25">25</span>
430. <span id="L26" rel="#L26">26</span>
431. <span id="L27" rel="#L27">27</span>
432. <span id="L28" rel="#L28">28</span>
433. <span id="L29" rel="#L29">29</span>
434. <span id="L30" rel="#L30">30</span>
435. <span id="L31" rel="#L31">31</span>
436. <span id="L32" rel="#L32">32</span>
437. <span id="L33" rel="#L33">33</span>
438. <span id="L34" rel="#L34">34</span>
439. <span id="L35" rel="#L35">35</span>
440. <span id="L36" rel="#L36">36</span>
441. <span id="L37" rel="#L37">37</span>
442. <span id="L38" rel="#L38">38</span>
443. <span id="L39" rel="#L39">39</span>
444. <span id="L40" rel="#L40">40</span>
445. <span id="L41" rel="#L41">41</span>
446. <span id="L42" rel="#L42">42</span>
447. <span id="L43" rel="#L43">43</span>
448. <span id="L44" rel="#L44">44</span>
449. <span id="L45" rel="#L45">45</span>
450. <span id="L46" rel="#L46">46</span>
451. <span id="L47" rel="#L47">47</span>
452. <span id="L48" rel="#L48">48</span>
453. <span id="L49" rel="#L49">49</span>
454. <span id="L50" rel="#L50">50</span>
455. <span id="L51" rel="#L51">51</span>
456. <span id="L52" rel="#L52">52</span>
457. <span id="L53" rel="#L53">53</span>
458. <span id="L54" rel="#L54">54</span>
459. <span id="L55" rel="#L55">55</span>
460.
461.         </td>
```

```
462.         <td class="blob-line-code">
463.             <div class="highlight"><pre><div class='line' id='LC1'><span
class="cp">&lt;?xml version=&quot;1.0&quot;
encoding=&quot;ISO-8859-1&quot;?&gt;</span></div><div class='line' id='LC2'><span
class="c">&lt;!--</span></div><div class='line' id='LC3'><span class="c">    JBoss, Home of
Professional Open Source</span></div><div class='line' id='LC4'><span class="c">    Copyright
2012, Red Hat, Inc. and/or its affiliates, and individual</span></div><div class='line'
id='LC5'><span class="c">    contributors by the @authors tag. See the copyright.txt in
the</span></div><div class='line' id='LC6'><span class="c">    distribution for a full listing
of individual contributors.</span></div><div class='line' id='LC7'><br/></div><div class='line'
id='LC8'><span class="c">    Licensed under the Apache License, Version 2.0 (the
&quot;License&quot;)</span></div><div class='line' id='LC9'><span class="c">    you may not use
this file except in compliance with the License.</span></div><div class='line' id='LC10'><span
class="c">    You may obtain a copy of the License at</span></div><div class='line'
id='LC11'><span class="c">    http://www.apache.org/licenses/LICENSE-2.0</span></div><div
class='line' id='LC12'><span class="c">    Unless required by applicable law or agreed to in
writing, software</span></div><div class='line' id='LC13'><span class="c">    distributed under
the License is distributed on an &quot;AS IS&quot; BASIS,</span></div><div class='line'
id='LC14'><span class="c">    WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or
implied.</span></div><div class='line' id='LC15'><span class="c">    See the License for the
specific language governing permissions and</span></div><div class='line' id='LC16'><span
class="c">    limitations under the License.</span></div><div class='line' id='LC17'><span
class="c">---&gt;</span></div><div class='line' id='LC18'><br/></div><div class='line'
id='LC19'><span class="nt">&lt;configuration</span> <span class="na">xmlns:xsi=</span><span
class="s">&quot;http://www.w3.org/2001/XMLSchema-instance&quot;</span></div><div class='line'
id='LC20'><span class="na">xsi:schemaLocation=</span><span
class="s">&quot;http://www.exoplatom.org/xml/ns/kernel_1_2.xsd
http://www.exoplatom.org/xml/ns/kernel_1_2.xsd&quot;</span> <span
class="na">xmlns=</span><span
class="s">&quot;http://www.exoplatom.org/xml/ns/kernel_1_2.xsd&quot;</span><span
class="nt">&gt;</span></div><div class='line' id='LC21'><span class="nt">&lt;external-component-plugins&gt;</span></div><div class='line'
id='LC22'><span class="c">&lt;!-- The full
qualified name of the ResourceBundleService --&gt;</span></div><div class='line'
id='LC23'><span class="nt">&lt;target-component&gt;</span>org.exoplatom.services.resources.ResourceBundleService
class="nt">&lt;/target-component&gt;</span></div><div class='line'
id='LC24'><span class="nt">&lt;component-plugin&gt;</span></div><div class='line'
id='LC25'><span class="c">&lt;!-- The name of the plugin --&gt;</span></div><div class='line'
id='LC26'><span class="nt">&lt;name&gt;</span>Sample ResourceBundle Plugin<span
class="nt">&lt;/name&gt;</span></div><div class='line'
id='LC27'><span class="c">&lt;!-- The name of the method to call on the ResourceBundleService in order to
register the ResourceBundles --&gt;</span></div><div class='line'
id='LC28'><span class="nt">&lt;set-method&gt;</span>addResourceBundle<span
class="nt">&lt;/set-method&gt;</span></div><div class='line'
id='LC29'><span class="c">&lt;!-- The full qualified name of the BaseResourceBundlePlugin
--&gt;</span></div><div class='line'
id='LC30'><span class="nt">&lt;type&gt;</span>org.exoplatom.services.resources.impl.BaseResourceBundlePlugin<span
class="nt">&lt;/type&gt;</span></div><div class='line'
id='LC31'><span class="nt">&lt;init-params&gt;</span></div><div class='line'
id='LC32'><span class="nt">&lt;/init-params&gt;</span></div></pre></div>
```

464.	</td>
465.	</tr>

```
466.         </table>
467.     </div>
468.
469.         </div>
470.     </div>
471.
472.         <a href="#jump-to-line" rel="facebox[.linejump]" data-hotkey="l"
class="js-jump-to-line" style="display:none">Jump to Line</a>
473.         <div id="jump-to-line" style="display:none">
474.             <form accept-charset="UTF-8" class="js-jump-to-line-form">
475.                 <input class="linejump-input js-jump-to-line-field" type="text"
placeholder="Jump to line&hellip;">
476.                 <button type="submit" class="button">Go</button>
477.             </form>
478.         </div>
479.
480.     </div>
481. </div>
482. </div>
483.
484. <div id="js-frame-loading-template" class="frame frame-loading large-loading-area"
style="display:none;">
485.     
486. </div>
487.
488.
489.     </div>
490. </div>
491.     <div class="modal-backdrop"></div>
492. </div>
493.
494.     <div id="footer-push"></div><!-- hack for sticky footer -->
495. </div><!-- end of wrapper - hack for sticky footer -->
496.
497.     <!-- footer -->
498.     <div id="footer">
499. <div class="container clearfix">
500.
501.         <dl class="footer_nav">
502.             <dt>GitHub</dt>
503.             <dd><a href="/about">About us</a></dd>
504.             <dd><a href="/blog">Blog</a></dd>
505.             <dd><a href="/contact">Contact &amp; support</a></dd>
506.             <dd><a href="http://enterprise.github.com/">GitHub Enterprise</a></dd>
507.             <dd><a href="http://status.github.com/">Site status</a></dd>
508.         </dl>
509.
510.         <dl class="footer_nav">
511.             <dt>Applications</dt>
512.             <dd><a href="http://mac.github.com/">GitHub for Mac</a></dd>
513.             <dd><a href="http://windows.github.com/">GitHub for Windows</a></dd>
514.             <dd><a href="http://eclipse.github.com/">GitHub for Eclipse</a></dd>
515.             <dd><a href="http://mobile.github.com/">GitHub mobile apps</a></dd>
516.         </dl>
517.
518.         <dl class="footer_nav">
```

```
519.         <dt>Services</dt>
520.         <dd><a href="http://get.gaug.es/">Gauges: Web analytics</a></dd>
521.         <dd><a href="http://speakerdeck.com">Speaker Deck: Presentations</a></dd>
522.         <dd><a href="https://gist.github.com">Gist: Code snippets</a></dd>
523.         <dd><a href="http://jobs.github.com/">Job board</a></dd>
524.     </dl>
525.
526.     <dl class="footer_nav">
527.         <dt>Documentation</dt>
528.         <dd><a href="http://help.github.com/">GitHub Help</a></dd>
529.         <dd><a href="http://developer.github.com/">Developer API</a></dd>
530.         <dd><a href="http://github.github.com/github-flavored-markdown/">GitHub Flavored
Markdown</a></dd>
531.         <dd><a href="http://pages.github.com/">GitHub Pages</a></dd>
532.     </dl>
533.
534.     <dl class="footer_nav">
535.         <dt>More</dt>
536.         <dd><a href="http://training.github.com/">Training</a></dd>
537.         <dd><a href="/edu">Students & teachers</a></dd>
538.         <dd><a href="http://shop.github.com">The Shop</a></dd>
539.         <dd><a href="/plans">Plans & pricing</a></dd>
540.         <dd><a href="http://octodex.github.com/">The Octodex</a></dd>
541.     </dl>
542.
543.     <hr class="footer-divider">
544.
545.
546.     <p class="right">&copy; 2013 <span title="0.06304s from
fe19.rs.github.com">GitHub</span>, Inc. All rights reserved.</p>
547.     <a class="left" href="/">
548.         <span class="mega-octicon octicon-mark-github"></span>
549.     </a>
550.     <ul id="legal">
551.         <li><a href="/site/terms">Terms of Service</a></li>
552.         <li><a href="/site/privacy">Privacy</a></li>
553.         <li><a href="/security">Security</a></li>
554.     </ul>
555.
556. </div><!-- /.container -->
557.
558. </div><!-- /.#footer -->
559.
560.
561.     <div class="fullscreen-overlay js-fullscreen-overlay" id="fullscreen_overlay">
562.     <div class="fullscreen-container js-fullscreen-container">
563.         <div class="textarea-wrap">
564.             <textarea name="fullscreen-contents" id="fullscreen-contents"
class="js-fullscreen-contents" placeholder="" data-suggester="fullscreen_suggester"></textarea>
565.             <div class="suggester-container">
566.                 <div class="suggester fullscreen-suggester js-navigation-container"
id="fullscreen_suggester"
567.                     data-url="/gatein/gatein-portal-quickstart/suggestions/commit">
568.                 </div>
569.             </div>
570.         </div>
571.     </div>
572.     <div class="fullscreen-sidebar">
```

```
573.     <a href="#" class="exit-fullscreen js-exit-fullscreen tooltiped leftwards" title="Exit
574.         <span class="mega-octicon octicon-screen-normal"></span>
575.     </a>
576.     <a href="#" class="theme-switcher js-theme-switcher tooltiped leftwards"
577.         title="Switch themes">
578.         <span class="octicon octicon-color-mode"></span>
579.     </a>
580. </div>
581. </div>
582.
583.
584.
585.     <div id="ajax-error-message" class="flash flash-error">
586.         <span class="octicon octicon-alert"></span>
587.         <a href="#" class="octicon octicon-remove-close close ajax-error-dismiss"></a>
588.         Something went wrong with that request. Please try again.
589.     </div>
590.
591.
592.     <span id='server_response_time' data-time='0.06342' data-host='fe19'></span>
593.
594. </body>
595. </html>
596.
```

The English version of `locale.portal.extension` can be found under

`war/src/main/webapp/WEB-INF/classes/locale/portal/extension_en.properties`:

English version of `locale.portal.extension`

```
017.     <link rel="assets" href="https://a248.e.akamai.net/assets.github.com/">
018.     <link rel="xhr-socket" href="/_sockets" />
019.
020.
021.
022.     <meta name="msapplication-TileImage" content="/windows-tile.png" />
023.     <meta name="msapplication-TileColor" content="#ffffff" />
024.     <meta name="selected-link" value="repo_source" data-pjax-transient />
025.     <meta content="collector.githubapp.com" name="octolytics-host" /><meta content="github"
026.     name="octolytics-app-id" />
027.
028.
029.     <link rel="icon" type="image/x-icon" href="/favicon.ico" />
030.
031.     <meta content="authenticity_token" name="csrf-param" />
032. <meta content="9johd+IspfsJ2CUEhwEa+lHsi6NjpylhJEFABAqwSbM=" name="csrf-token" />
033.
034.     <link
035. href="https://a248.e.akamai.net/assets.github.com/assets/github-81b13ea53b1680d36f84ba58001e4a489c
036. media="all" rel="stylesheet" type="text/css" />
037.
038.     <link
039. href="https://a248.e.akamai.net/assets.github.com/assets/github2-8b9943a538de5ba2343c96854d47c48eb
040. media="all" rel="stylesheet" type="text/css" />
```



```
037.
038.
039.      <script
src="https://a248.e.akamai.net/assets.github.com/assets/frameworks-4c434fa1705bf526e191eec0cd8fab1.
type="text/javascript"></script>
040.      <script
src="https://a248.e.akamai.net/assets.github.com/assets/github-5e72c8897c5b4f51f6829429a2f0045853a.
type="text/javascript"></script>
041.
042.      <meta http-equiv="x-pjax-version" content="541ec61f9d9c0a273af8ee8616e5fc81">
043.
044.      <link data-pjax-transient rel='permalink'
href='/gatein/gatein-portal-quickstart/blob/fbb1ccf991d31be588217559b958a6eeb0469c89/gatein-portal
<meta property="og:title" content="gatein-portal-quickstart"/>
046.      <meta property="og:type" content="githubog:gitrepository"/>
047.      <meta property="og:url" content="https://github.com/gatein/gatein-portal-quickstart"/>
048.      <meta property="og:image"
content="https://secure.gravatar.com/avatar/243ca21b06760188c8418f521e2fa708?s=420&d=https://a
<meta property="og:site_name" content="GitHub"/>
050.      <meta property="og:description" content="gatein-portal-quickstart - The quickstarts
demonstrate Portlets for GateIn Portal. They provide small, specific, working examples that can
be used as a reference for your own project."/>
051.      <meta property="twitter:card" content="summary"/>
052.      <meta property="twitter:site" content="@GitHub">
053.      <meta property="twitter:title" content="gatein/gatein-portal-quickstart"/>
054.
055.      <meta name="description" content="gatein-portal-quickstart - The quickstarts
demonstrate Portlets for GateIn Portal. They provide small, specific, working examples that can
be used as a reference for your own project." />
056.
057.
058.      <meta content="420668" name="octolytics-dimension-user_id" /><meta content="gatein"
name="octolytics-dimension-user_login" /><meta content="5438587"
name="octolytics-dimension-repository_id" /><meta content="gatein/gatein-portal-quickstart"
name="octolytics-dimension-repository_nwo" /><meta content="true"
name="octolytics-dimension-repository_public" /><meta content="false"
name="octolytics-dimension-repository_is_fork" /><meta content="5438587"
name="octolytics-dimension-repository_network_root_id" /><meta
content="gatein/gatein-portal-quickstart"
name="octolytics-dimension-repository_network_root_nwo" />
059.      <link href="https://github.com/gatein/gatein-portal-quickstart/commits/master.atom"
rel="alternate" title="Recent Commits to gatein-portal-quickstart:master"
type="application/atom+xml" />
060.
061.      </head>
062.
063.
064.      <body class="logged_out page-blob vis-public env-production" >
065.          <div id="wrapper">
066.
067.
068.
069.
070.
071.
072.          <div class="header header-logged-out">
073.          <div class="container clearfix">
074.
```

```
075.     <a class="header-logo-wordmark" href="https://github.com/">Github</a>
076.
077.     <div class="header-actions">
078.         <a class="button primary" href="/signup">Sign up</a>
079.         <a class="button"
href="/login?return_to=%2Fgatein%2Fgatein-portal-quickstart%2Fblob%2Fmaster%2Fgatein-portal-extens
in</a>
080.     </div>
081.
082.     <div class="command-bar js-command-bar in-repository">
083.
084.
085.         <ul class="top-nav">
086.             <li class="explore"><a href="/explore">Explore</a></li>
087.             <li class="features"><a href="/features">Features</a></li>
088.             <li class="enterprise"><a
href="http://enterprise.github.com/">Enterprise</a></li>
089.             <li class="blog"><a href="/blog">Blog</a></li>
090.         </ul>
091.         <form accept-charset="UTF-8" action="/search" class="command-bar-form"
id="top_search_form" method="get">
092.     <a href="/search/advanced" class="advanced-search-icon tooltipped downwards
command-bar-search" id="advanced_search" title="Advanced search"><span class="octicon
octicon-gear "></span></a>
093.
094.     <input type="text" data-hotkey="/ s" name="q" id="js-command-bar-field"
placeholder="Search or type a command" tabindex="1" autocapitalize="off"
095.
096.         data-repo="gatein/gatein-portal-quickstart"
097.         data-branch="master"
098.         data-sha="bbf66572afd862772044a17ca365855917bed3fd"
099.     >
100.
101.     <input type="hidden" name="nwo" value="gatein/gatein-portal-quickstart" />
102.
103.     <div class="select-menu js-menu-container js-select-menu search-context-select-menu">
104.         <span class="minibutton select-menu-button js-menu-target">
105.             <span class="js-select-button">This repository</span>
106.         </span>
107.
108.         <div class="select-menu-modal-holder js-menu-content js-navigation-container">
109.             <div class="select-menu-modal">
110.
111.                 <div class="select-menu-item js-navigation-item selected">
112.                     <span class="select-menu-item-icon octicon octicon-check"></span>
113.                     <input type="radio" class="js-search-this-repository" name="search_target"
value="repository" checked="checked" />
114.                     <div class="select-menu-item-text js-select-button-text">This repository</div>
115.                 </div> <!-- /.select-menu-item -->
116.
117.                 <div class="select-menu-item js-navigation-item">
118.                     <span class="select-menu-item-icon octicon octicon-check"></span>
119.                     <input type="radio" name="search_target" value="global" />
120.                     <div class="select-menu-item-text js-select-button-text">All repositories</div>
121.                 </div> <!-- /.select-menu-item -->
122.
123.             </div>
124.         </div>
```

```
125.     </div>
126.
127.     <span class="octicon help tooltipped downwards" title="Show command bar help">
128.         <span class="octicon octicon-question"></span>
129.     </span>
130.
131.
132.     <input type="hidden" name="ref" value="cmdform">
133.
134.     <div class="divider-vertical"></div>
135.
136. </form>
137.     </div>
138.
139. </div>
140. </div>
141.
142.
143.
144.
145.
146.         <div class="site hfeed" itemscope itemtype="http://schema.org/WebPage">
147.     <div class="hentry">
148.
149.         <div class="pagehead repohead instapaper_ignore readability-menu ">
150.             <div class="container">
151.                 <div class="title-actions-bar">
152.
153.
154. <ul class="pagehead-actions">
155.
156.
157.
158.     <li>
159.         <a href="/login?return_to=%2Fgatein%2Fgatein-portal-quickstart"
160.             class="minibutton with-count js-toggler-target star-button entice tooltipped
161.             title="You must be signed in to use this feature" rel="nofollow">
162.             <span class="octicon octicon-star"></span>Star
163.         </a>
164.         <a class="social-count js-social-count"
165. href="/gatein/gatein-portal-quickstart/stargazers">
166.             4
167.         </a>
168.     </li>
169.     <li>
170.         <a href="/login?return_to=%2Fgatein%2Fgatein-portal-quickstart"
171.             class="minibutton with-count js-toggler-target fork-button entice tooltipped
172.             title="You must be signed in to fork a repository" rel="nofollow">
173.             <span class="octicon octicon-git-branch"></span>Fork
174.         </a>
175.         <a href="/gatein/gatein-portal-quickstart/network" class="social-count">
176.             15
177.         </a>
178.     </li>
179. </ul>
```

```
180.         <h1 itemscope itemtype="http://data-vocabulary.org/Breadcrumb"
181.         class="entry-title public">
182.             <span class="repo-label"><span>public</span></span>
183.             <span class="mega-octicon octicon-repo"></span>
184.             <span class="author vcard">
185.                 <a href="/gatein" class="url fn" itemprop="url" rel="author">
186.                     <span itemprop="title">gatein</span>
187.                 </a></span> /
188.                 <strong><a href="/gatein/gatein-portal-quickstart"
189.                 class="js-current-repository">gatein-portal-quickstart</a></strong>
190.             </h1>
191.         </div>
192.     <ul class="tabs">
193.         <li class="pulse-nav"><a href="/gatein/gatein-portal-quickstart/pulse"
194.         class="js-selected-navigation-item " data-selected-links="pulse
195.         /gatein/gatein-portal-quickstart/pulse" rel="nofollow"><span class="octicon
196.         octicon-pulse"></span></a></li>
197.         <li><a href="/gatein/gatein-portal-quickstart" class="js-selected-navigation-item
198.         selected" data-selected-links="repo_source repo_downloads repo_commits repo_tags repo_branches
199.         /gatein/gatein-portal-quickstart">Code</a></li>
200.         <li><a href="/gatein/gatein-portal-quickstart/network"
201.         class="js-selected-navigation-item " data-selected-links="repo_network
202.         /gatein/gatein-portal-quickstart/network">Network</a></li>
203.         <li><a href="/gatein/gatein-portal-quickstart/pulls" class="js-selected-navigation-item
204.         " data-selected-links="repo_pulls /gatein/gatein-portal-quickstart/pulls">Pull Requests <span
205.         class='counter'>0</span></a></li>
206.         <li><a href="/gatein/gatein-portal-quickstart/issues"
207.         class="js-selected-navigation-item " data-selected-links="repo_issues
208.         /gatein/gatein-portal-quickstart/issues">Issues <span class='counter'>0</span></a></li>
209.         <li><a href="/gatein/gatein-portal-quickstart/wiki"
210.         class="js-selected-navigation-item " data-selected-links="repo_wiki
211.         /gatein/gatein-portal-quickstart/wiki">Wiki</a></li>
212.         <li><a href="/gatein/gatein-portal-quickstart/graphs"
213.         class="js-selected-navigation-item " data-selected-links="repo_graphs repo_contributors
214.         /gatein/gatein-portal-quickstart/graphs">Graphs</a></li>
215.     </ul>
216. <div class="tabnav">
217.     <span class="tabnav-right">
218.         <ul class="tabnav-tabs">
219.             <li><a href="/gatein/gatein-portal-quickstart/tags"
220.             class="js-selected-navigation-item tabnav-tab" data-selected-links="repo_tags
221.             /gatein/gatein-portal-quickstart/tags">Tags <span class="counter " >6</span></a></li>
222.         </ul>
223.     </span>
224. <div class="tabnav-widget scope">
225.
226.
```

```
219.     <div class="select-menu js-menu-container js-select-menu js-branch-menu">
220.         <a class="minibutton select-menu-button js-menu-target" data-hotkey="w"
data-ref="master">
221.             <span class="octicon octicon-git-branch"></span>
222.             <i>branch:</i>
223.             <span class="js-select-button">master</span>
224.         </a>
225.
226.     <div class="select-menu-modal-holder js-menu-content js-navigation-container">
227.
228.         <div class="select-menu-modal">
229.             <div class="select-menu-header">
230.                 <span class="select-menu-title">Switch branches/tags</span>
231.                 <span class="octicon octicon-remove-close js-menu-close"></span>
232.             </div> <!-- /.select-menu-header -->
233.
234.             <div class="select-menu-filters">
235.                 <div class="select-menu-text-filter">
236.                     <input type="text" id="commitish-filter-field" class="js-filterable-field
js-navigation-enable" placeholder="Filter branches/tags">
237.                 </div>
238.                 <div class="select-menu-tabs">
239.                     <ul>
240.                         <li class="select-menu-tab">
241.                             <a href="#" data-tab-filter="branches"
class="js-select-menu-tab">Branches</a>
242.                         </li>
243.                         <li class="select-menu-tab">
244.                             <a href="#" data-tab-filter="tags" class="js-select-menu-tab">Tags</a>
245.                         </li>
246.                     </ul>
247.                 </div><!-- /.select-menu-tabs -->
248.             </div><!-- /.select-menu-filters -->
249.
250.             <div class="select-menu-list select-menu-tab-bucket js-select-menu-tab-bucket
css-truncate" data-tab-filter="branches">
251.
252.                 <div data-filterable-for="commitish-filter-field"
data-filterable-type="substring">
253.
254.                     <div class="select-menu-item js-navigation-item ">
255.                         <span class="select-menu-item-icon octicon octicon-check"></span>
256.                         <a
href="/gatein/gatein-portal-quickstart/blob/GTNPORTAL-2700/gatein-portal-extension/war/src/main/we
class="js-navigation-open select-menu-item-text js-select-button-text css-truncate-target"
data-name="GTNPORTAL-2700" rel="nofollow" title="GTNPORTAL-2700">GTNPORTAL-2700</a>
257.                     </div> <!-- /.select-menu-item -->
258.                     <div class="select-menu-item js-navigation-item selected">
259.                         <span class="select-menu-item-icon octicon octicon-check"></span>
260.                         <a
href="/gatein/gatein-portal-quickstart/blob/master/gatein-portal-extension/war/src/main/webapp/WEB
class="js-navigation-open select-menu-item-text js-select-button-text css-truncate-target"
data-name="master" rel="nofollow" title="master">master</a>
261.                     </div> <!-- /.select-menu-item -->
262.                 </div>
263.
264.                 <div class="select-menu-no-results">Nothing to show</div>
265.             </div> <!-- /.select-menu-list -->
```

```
266.
267.
268.         <div class="select-menu-list select-menu-tab-bucket js-select-menu-tab-bucket
css-truncate" data-tab-filter="tags">
269.             <div data-filterable-for="commitish-filter-field"
data-filterable-type="substring">
270.
271.                 <div class="select-menu-item js-navigation-item ">
272.                     <span class="select-menu-item-icon octicon octicon-check"></span>
273.                     <a
href="/gatein/gatein-portal-quickstart/blob/gatein-quickstart-3.6.0.Beta04/gatein-portal-extension
class="js-navigation-open select-menu-item-text js-select-button-text css-truncate-target"
data-name="gatein-quickstart-3.6.0.Beta04" rel="nofollow"
title="gatein-quickstart-3.6.0.Beta04">gatein-quickstart-3.6.0.Beta04</a>
274.                 </div> <!-- /.select-menu-item -->
275.                 <div class="select-menu-item js-navigation-item ">
276.                     <span class="select-menu-item-icon octicon octicon-check"></span>
277.                     <a
href="/gatein/gatein-portal-quickstart/blob/gatein-quickstart-3.6.0.Beta03/gatein-portal-extension
class="js-navigation-open select-menu-item-text js-select-button-text css-truncate-target"
data-name="gatein-quickstart-3.6.0.Beta03" rel="nofollow"
title="gatein-quickstart-3.6.0.Beta03">gatein-quickstart-3.6.0.Beta03</a>
278.                 </div> <!-- /.select-menu-item -->
279.                 <div class="select-menu-item js-navigation-item ">
280.                     <span class="select-menu-item-icon octicon octicon-check"></span>
281.                     <a
href="/gatein/gatein-portal-quickstart/blob/gatein-quickstart-3.6.0.Beta02/gatein-portal-extension
class="js-navigation-open select-menu-item-text js-select-button-text css-truncate-target"
data-name="gatein-quickstart-3.6.0.Beta02" rel="nofollow"
title="gatein-quickstart-3.6.0.Beta02">gatein-quickstart-3.6.0.Beta02</a>
282.                 </div> <!-- /.select-menu-item -->
283.                 <div class="select-menu-item js-navigation-item ">
284.                     <span class="select-menu-item-icon octicon octicon-check"></span>
285.                     <a
href="/gatein/gatein-portal-quickstart/blob/gatein-3.4-bom-1.0.0.Alpha02PBR310a1/gatein-portal-ext
class="js-navigation-open select-menu-item-text js-select-button-text css-truncate-target"
data-name="gatein-3.4-bom-1.0.0.Alpha02PBR310a1" rel="nofollow"
title="gatein-3.4-bom-1.0.0.Alpha02PBR310a1">gatein-3.4-bom-1.0.0.Alpha02PBR310a1</a>
286.                 </div> <!-- /.select-menu-item -->
287.                 <div class="select-menu-item js-navigation-item ">
288.                     <span class="select-menu-item-icon octicon octicon-check"></span>
289.                     <a
href="/gatein/gatein-portal-quickstart/blob/gatein-3.4-bom-1.0.0.Alpha01/gatein-portal-extension/w
class="js-navigation-open select-menu-item-text js-select-button-text css-truncate-target"
data-name="gatein-3.4-bom-1.0.0.Alpha01" rel="nofollow"
title="gatein-3.4-bom-1.0.0.Alpha01">gatein-3.4-bom-1.0.0.Alpha01</a>
290.                 </div> <!-- /.select-menu-item -->
291.                 <div class="select-menu-item js-navigation-item ">
292.                     <span class="select-menu-item-icon octicon octicon-check"></span>
293.                     <a
href="/gatein/gatein-portal-quickstart/blob/3.5.0.Final/gatein-portal-extension/war/src/main/webapp
class="js-navigation-open select-menu-item-text js-select-button-text css-truncate-target"
data-name="3.5.0.Final" rel="nofollow" title="3.5.0.Final">3.5.0.Final</a>
294.                 </div> <!-- /.select-menu-item -->
295.             </div>
296.
297.             <div class="select-menu-no-results">Nothing to show</div>
298.
```

```
299.         </div> <!-- /.select-menu-list -->
300.
301.         </div> <!-- /.select-menu-modal -->
302.         </div> <!-- /.select-menu-modal-holder -->
303.     </div> <!-- /.select-menu -->
304.
305. </div> <!-- /.scope -->
306.
307. <ul class="tabnav-tabs">
308.     <li><a href="/gatein/gatein-portal-quickstart" class="selected
js-selected-navigation-item tabnav-tab" data-selected-links="repo_source
/gatein/gatein-portal-quickstart">Files</a></li>
309.     <li><a href="/gatein/gatein-portal-quickstart/commits/master"
class="js-selected-navigation-item tabnav-tab" data-selected-links="repo_commits
/gatein/gatein-portal-quickstart/commits/master">Commits</a></li>
310.     <li><a href="/gatein/gatein-portal-quickstart/branches"
class="js-selected-navigation-item tabnav-tab" data-selected-links="repo_branches
/gatein/gatein-portal-quickstart/branches" rel="nofollow">Branches <span class="counter
">2</span></a></li>
311. </ul>
312.
313. </div>
314.
315.
316.
317.
318.
319.
320.
321.         </div>
322.     </div><!-- /.repohead -->
323.
324.         <div id="js-repo-pjax-container" class="container context-loader-container"
data-pjax-container>
325.
326.
327.
328. <!-- blob contrib key: blob_contributors:v21:dba8949a616808ddfc9b44a2082603df -->
329. <!-- blob contrib frag key:
views10/v8/blob_contributors:v21:dba8949a616808ddfc9b44a2082603df -->
330.
331.
332. <div id="slider">
333.     <div class="frame-meta">
334.
335.         <p title="This is a placeholder element" class="js-history-link-replace hidden"></p>
336.
337.         <div class="breadcrumb">
338.             <span class='bold'><span itemscope=""
itemtype="http://data-vocabulary.org/Breadcrumb"><a href="/gatein/gatein-portal-quickstart"
class="js-slide-to" data-branch="master" data-direction="back" itemscope="url"><span
itemprop="title">gatein-portal-quickstart</span></a></span></span><span class="separator"> /
</span><span itemscope="" itemtype="http://data-vocabulary.org/Breadcrumb"><a
href="/gatein/gatein-portal-quickstart/tree/master/gatein-portal-extension" class="js-slide-to"
data-branch="master" data-direction="back" itemscope="url"><span
itemprop="title">gatein-portal-extension</span></a></span><span class="separator"> /
</span><span itemscope="" itemtype="http://data-vocabulary.org/Breadcrumb"><a
href="/gatein/gatein-portal-quickstart/tree/master/gatein-portal-extension/war"
```

```
class="js-slide-to" data-branch="master" data-direction="back" itemscope="url"><span
itemprop="title">war</span></a></span><span class="separator"> / </span><span itemscope=""
itemtype="http://data-vocabulary.org/Breadcrumb"><a
href="/gatein/gatein-portal-quickstart/tree/master/gatein-portal-extension/war/src"
class="js-slide-to" data-branch="master" data-direction="back" itemscope="url"><span
itemprop="title">src</span></a></span><span class="separator"> / </span><span itemscope=""
itemtype="http://data-vocabulary.org/Breadcrumb"><a
href="/gatein/gatein-portal-quickstart/tree/master/gatein-portal-extension/war/src/main"
class="js-slide-to" data-branch="master" data-direction="back" itemscope="url"><span
itemprop="title">main</span></a></span><span class="separator"> / </span><span itemscope=""
itemtype="http://data-vocabulary.org/Breadcrumb"><a
href="/gatein/gatein-portal-quickstart/tree/master/gatein-portal-extension/war/src/main/webapp"
class="js-slide-to" data-branch="master" data-direction="back" itemscope="url"><span
itemprop="title">webapp</span></a></span><span class="separator"> / </span><span itemscope=""
itemtype="http://data-vocabulary.org/Breadcrumb"><a
href="/gatein/gatein-portal-quickstart/tree/master/gatein-portal-extension/war/src/main/webapp/WEB
class="js-slide-to" data-branch="master" data-direction="back" itemscope="url"><span
itemprop="title">WEB-INF</span></a></span><span class="separator"> / </span><span itemscope=""
itemtype="http://data-vocabulary.org/Breadcrumb"><a
href="/gatein/gatein-portal-quickstart/tree/master/gatein-portal-extension/war/src/main/webapp/WEB
class="js-slide-to" data-branch="master" data-direction="back" itemscope="url"><span
itemprop="title">classes</span></a></span><span class="separator"> / </span><span itemscope=""
itemtype="http://data-vocabulary.org/Breadcrumb"><a
href="/gatein/gatein-portal-quickstart/tree/master/gatein-portal-extension/war/src/main/webapp/WEB
class="js-slide-to" data-branch="master" data-direction="back" itemscope="url"><span
itemprop="title">locale</span></a></span><span class="separator"> / </span><span itemscope=""
itemtype="http://data-vocabulary.org/Breadcrumb"><a
href="/gatein/gatein-portal-quickstart/tree/master/gatein-portal-extension/war/src/main/webapp/WEB
class="js-slide-to" data-branch="master" data-direction="back" itemscope="url"><span
itemprop="title">portal</span></a></span><span class="separator"> / </span><strong
class="final-path">extension_en.properties</strong> <span class="js-zeroclipboard
zeroclipboard-button"
data-clipboard-text="gatein-portal-extension/war/src/main/webapp/WEB-INF/classes/locale/portal/ext
data-copied-hint="copied!" title="copy to clipboard"><span class="octicon
octicon-clippy"></span></span>
339.         </div>
340.
341.         <a href="/gatein/gatein-portal-quickstart/find/master" class="js-slide-to"
data-hotkey="t" style="display:none">Show File Finder</a>
342.
343.
344.         <div class="commit commit-loader file-history-tease js-deferred-content"
data-url="/gatein/gatein-portal-quickstart/contributors/master/gatein-portal-extension/war/src/mai
Fetching contributors...
346.
347.         <div class="participation">
348.             <p class="loader-loading"></p>
349.             <p class="loader-error">Cannot retrieve contributors at this time</p>
350.         </div>
351.     </div>
352.
353. </div><!-- ./frame-meta -->
354.
355.     <div class="frames">
356.         <div class="frame"
data-permalink-url="/gatein/gatein-portal-quickstart/blob/fbb1ccf991d31be588217559b958a6eeb0469c89
```



```
data-title="gatein-portal-quickstart/gatein-portal-extension/war/src/main/webapp/WEB-INF/classes/1
at master · gatein/gatein-portal-quickstart · GitHub" data-type="blob">
357.
358.     <div id="files" class="bubble">
359.         <div class="file">
360.             <div class="meta">
361.                 <div class="info">
362.                     <span class="icon"><b class="octicon octicon-file-text"></b></span>
363.                     <span class="mode" title="File Mode">file</span>
364.                     <span>20 lines (19 sloc)</span>
365.                     <span>0.954 kb</span>
366.                 </div>
367.                 <div class="actions">
368.                     <div class="button-group">
369.                         <a class="minibutton js-entice" href=""
370.                             data-entice="You must be signed in and on a branch to make or
propose changes">Edit</a>
371.                         <a
href="/gatein/gatein-portal-quickstart/raw/master/gatein-portal-extension/war/src/main/webapp/WEB-
class="button minibutton " id="raw-url">Raw</a>
372.                         <a
href="/gatein/gatein-portal-quickstart/blame/master/gatein-portal-extension/war/src/main/webapp/WE
class="button minibutton ">Blame</a>
373.                         <a
href="/gatein/gatein-portal-quickstart/commits/master/gatein-portal-extension/war/src/main/webapp/
class="button minibutton " rel="nofollow">History</a>
374.                     </div><!-- /.button-group -->
375.                 </div><!-- /.actions -->
376.
377.             </div>
378.             <div class="blob-wrapper data type-ini js-blob-data">
379.                 <table class="file-code file-diff">
380.                     <tr class="file-code-line">
381.                         <td class="blob-line-nums">
382.                             <span id="L1" rel="#L1">1</span>
383. <span id="L2" rel="#L2">2</span>
384. <span id="L3" rel="#L3">3</span>
385. <span id="L4" rel="#L4">4</span>
386. <span id="L5" rel="#L5">5</span>
387. <span id="L6" rel="#L6">6</span>
388. <span id="L7" rel="#L7">7</span>
389. <span id="L8" rel="#L8">8</span>
390. <span id="L9" rel="#L9">9</span>
391. <span id="L10" rel="#L10">10</span>
392. <span id="L11" rel="#L11">11</span>
393. <span id="L12" rel="#L12">12</span>
394. <span id="L13" rel="#L13">13</span>
395. <span id="L14" rel="#L14">14</span>
396. <span id="L15" rel="#L15">15</span>
397. <span id="L16" rel="#L16">16</span>
398. <span id="L17" rel="#L17">17</span>
399. <span id="L18" rel="#L18">18</span>
400. <span id="L19" rel="#L19">19</span>
401.
402.                     </td>
403.                     <td class="blob-line-code">
404.                         <div class="highlight"><pre><div class='line' id='LC1'><span
class="c1">#</span></div><div class='line' id='LC2'><span class="c1"># JBoss, Home of
```

```
Professional Open Source</span></div><div class='line' id='LC3'><span class="c1"># Copyright
2012, Red Hat, Inc. and/or its affiliates, and individual</span></div><div class='line'
id='LC4'><span class="c1"># contributors by the @authors tag. See the copyright.txt in the
</span></div><div class='line' id='LC5'><span class="c1"># distribution for a full listing of
individual contributors.</span></div><div class='line' id='LC6'><span class="c1">#
</span></div><div class='line' id='LC7'><span class="c1"># Licensed under the Apache License,
Version 2.0 (the &quot;License&quot;);</span></div><div class='line' id='LC8'><span class="c1">#
you may not use this file except in compliance with the License.</span></div><div class='line'
id='LC9'><span class="c1"># You may obtain a copy of the License at</span></div><div
class='line' id='LC10'><span class="c1">#
http://www.apache.org/licenses/LICENSE-2.0</span></div><div class='line' id='LC11'><span
class="c1"># Unless required by applicable law or agreed to in writing,
software</span></div><div class='line' id='LC12'><span class="c1"># distributed under the
License is distributed on an &quot;AS IS&quot; BASIS, </span></div><div class='line'
id='LC13'><span class="c1"># WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or
implied.</span></div><div class='line' id='LC14'><span class="c1"># See the License for the
specific language governing permissions and</span></div><div class='line' id='LC15'><span
class="c1"># limitations under the License.</span></div><div class='line' id='LC16'><span
class="c1">#</span></div><div class='line' id='LC17'><span
class="na">UIHomePagePortlet.Label.Slogan</span><span class="o">=</span><span><span
class="s">Congratulations!</span></div><div class='line' id='LC18'><span
class="na">UIHomePagePortlet.Label.SubSlogan</span><span class="o">=</span><span><span class="s">You
have just installed the Portal Extension</span></div><div class='line' id='LC19'><span
class="na">UIHomePagePortlet.Label.Title</span><span class="o">=</span><span><span class="s">Sign in
as:</span></div></pre></div>
405.         </td>
406.     </tr>
407. </table>
408. </div>
409.
410.     </div>
411. </div>
412.
413.     <a href="#jump-to-line" rel="facebox[.linejump]" data-hotkey="l"
class="js-jump-to-line" style="display:none">Jump to Line</a>
414.     <div id="jump-to-line" style="display:none">
415.         <form accept-charset="UTF-8" class="js-jump-to-line-form">
416.             <input class="linejump-input js-jump-to-line-field" type="text"
placeholder="Jump to line&hellip;">
417.             <button type="submit" class="button">Go</button>
418.         </form>
419.     </div>
420.
421. </div>
422. </div>
423. </div>
424.
425. <div id="js-frame-loading-template" class="frame frame-loading large-loading-area"
style="display:none;">
426.     
427. </div>
428.
429.
430. </div>
431. </div>
432. <div class="modal-backdrop"></div>
```

```
433.     </div>
434.
435.         <div id="footer-push"></div><!-- hack for sticky footer -->
436.     </div><!-- end of wrapper - hack for sticky footer -->
437.
438.         <!-- footer -->
439.         <div id="footer">
440.     <div class="container clearfix">
441.
442.         <dl class="footer_nav">
443.             <dt>GitHub</dt>
444.             <dd><a href="/about">About us</a></dd>
445.             <dd><a href="/blog">Blog</a></dd>
446.             <dd><a href="/contact">Contact & support</a></dd>
447.             <dd><a href="http://enterprise.github.com/">GitHub Enterprise</a></dd>
448.             <dd><a href="http://status.github.com/">Site status</a></dd>
449.         </dl>
450.
451.         <dl class="footer_nav">
452.             <dt>Applications</dt>
453.             <dd><a href="http://mac.github.com/">GitHub for Mac</a></dd>
454.             <dd><a href="http://windows.github.com/">GitHub for Windows</a></dd>
455.             <dd><a href="http://eclipse.github.com/">GitHub for Eclipse</a></dd>
456.             <dd><a href="http://mobile.github.com/">GitHub mobile apps</a></dd>
457.         </dl>
458.
459.         <dl class="footer_nav">
460.             <dt>Services</dt>
461.             <dd><a href="http://get.gaug.es/">Gauges: Web analytics</a></dd>
462.             <dd><a href="http://speakerdeck.com">Speaker Deck: Presentations</a></dd>
463.             <dd><a href="https://gist.github.com">Gist: Code snippets</a></dd>
464.             <dd><a href="http://jobs.github.com/">Job board</a></dd>
465.         </dl>
466.
467.         <dl class="footer_nav">
468.             <dt>Documentation</dt>
469.             <dd><a href="http://help.github.com/">GitHub Help</a></dd>
470.             <dd><a href="http://developer.github.com/">Developer API</a></dd>
471.             <dd><a href="http://github.github.com/github-flavored-markdown/">GitHub Flavored
Markdown</a></dd>
472.             <dd><a href="http://pages.github.com/">GitHub Pages</a></dd>
473.         </dl>
474.
475.         <dl class="footer_nav">
476.             <dt>More</dt>
477.             <dd><a href="http://training.github.com/">Training</a></dd>
478.             <dd><a href="/edu">Students & teachers</a></dd>
479.             <dd><a href="http://shop.github.com">The Shop</a></dd>
480.             <dd><a href="/plans">Plans & pricing</a></dd>
481.             <dd><a href="http://octodex.github.com/">The Octodex</a></dd>
482.         </dl>
483.
484.         <hr class="footer-divider">
485.
486.
487.         <p class="right">&copy; 2013 <span title="0.06769s from
fe19.rs.github.com">GitHub</span>, Inc. All rights reserved.</p>
488.         <a class="left" href="/">
```

```
489.         <span class="mega-octicon octicon-mark-github"></span>
490.     </a>
491.     <ul id="legal">
492.         <li><a href="/site/terms">Terms of Service</a></li>
493.         <li><a href="/site/privacy">Privacy</a></li>
494.         <li><a href="/security">Security</a></li>
495.     </ul>
496.
497. </div><!-- /.container -->
498.
499. </div><!-- /.#footer -->
500.
501.
502.     <div class="fullscreen-overlay js-fullscreen-overlay" id="fullscreen_overlay">
503.     <div class="fullscreen-container js-fullscreen-container">
504.         <div class="textarea-wrap">
505.             <textarea name="fullscreen-contents" id="fullscreen-contents"
class="js-fullscreen-contents" placeholder="" data-suggester="fullscreen_suggester"></textarea>
506.             <div class="suggester-container">
507.                 <div class="suggester fullscreen-suggester js-navigation-container"
id="fullscreen_suggester"
508.                     data-url="/gatein/gatein-portal-quickstart/suggestions/commit">
509.                 </div>
510.             </div>
511.         </div>
512.     </div>
513.     <div class="fullscreen-sidebar">
514.         <a href="#" class="exit-fullscreen js-exit-fullscreen tooltipped leftwards" title="Exit
Zen Mode">
515.             <span class="mega-octicon octicon-screen-normal"></span>
516.         </a>
517.         <a href="#" class="theme-switcher js-theme-switcher tooltipped leftwards"
518.             title="Switch themes">
519.             <span class="octicon octicon-color-mode"></span>
520.         </a>
521.     </div>
522. </div>
523.
524.
525.
526.     <div id="ajax-error-message" class="flash flash-error">
527.         <span class="octicon octicon-alert"></span>
528.         <a href="#" class="octicon octicon-remove-close close ajax-error-dismiss"></a>
529.         Something went wrong with that request. Please try again.
530.     </div>
531.
532.
533.     <span id='server_response_time' data-time='0.06804' data-host='fe19'></span>
534.
535. </body>
536. </html>
537.
```

UIHomePagePortlet.Label.SubSlogan is a new key which is not available in default GateIn Portal installation.

However, `UIHomePagePortlet.Label.Slogan` is redefined in `extension_en.properties` shown above. In `gatein.ear/web.war/WEB-INF/classes/locale/portlet/web/GroovyPortlet_en.properties` it is already defined as

```
UIHomePagePortlet.Label.Slogan=The Best of eXo and JBoss Portal<div>GateIn  
#{gatein.version}</div>
```

and here, within the Portal Extension we assign a new value `Congratulations!` to it.

Please refer to the [previous section](#) for more details on internationalization of navigation nodes.

Custom Sign in Page

When accessing a page that requires privileges, a Sign in page is shown and it can be customized by using an extension. To do so, it would be enough to copy the file located at:

Login JSP

```
gatein.ear/portal.war/login/jsp/login.jsp
```

and include it in a portal extension such as `myExtension.ear/myWar.war/login/jsp/login.jsp`

All the logic must be carefully kept in the login page so that the portal will keep working as it should.

To modify the modal window which pops up when the user decides to sign-in, the extension would have a modified copy of:

Login Form

```
gatein.ear/portal.war/groovy/portal/webui/UILoginForm.gtmpl
```

4.2 Visual identity

A portal visual identity is made of HTML produced as a result of portal aggregation (the components that make a page like columns and rows combined with the content produced by the portlets) and associated CSS files.

EPP allows to deploy multiple skins consisting of CSS files, which makes it possible to apply styling to the page compositions and components of a page (portlets). Different skins can be applied to the different websites, also if made available to the users, they can choose their preferred skin.

5 Application development

5.1 Gadget Development

5.1.1 Introduction

In the context of EPP, gadgets are defined by the Google OpenSocial specifications. Since EPP 5.2, the portal framework includes Apache Shindig 2.0 which is made to support the version 0.9 and 1.0 of OpenSocial.

Within a portal, it is possible to embed any OpenSocial gadget in a page or in a user's dashboard. Gadgets can be added to the application registry and links can be added to the mini-composer (see the User Guide).

5.1.2 Developing Gadgets

OpenSocial gadgets are made of standard HTML and javascript. The container offers an API, the documentation for which is available [here](#).

Note that, unlike portlets, a gadget has very little knowledge of its context (the portal) and its integration within the portal may be more limited (in terms of visual integration for instance).

While Google Web Toolkit (GWT) applications can also technically be used as gadgets and GWT makes it easy to write user-friendly applications, we do not recommend its usage as its support can be limited and Google's strategy to keep GWT applications running as gadgets cannot clearly be established. Consequently, GWT applications are not supported by the EPP support agreement.

5.2 Portlet Development

GateIn Portal interface is fully customizable using applications called portlets. The Portlet API is described in JSR-286.

There are several technologies available for writing portlets. The most basic one is directly implementing the [plain JSR-286 portlet](#) interface. Alternatively, by means of JBoss Portlet Bridge, you can also use [JavaServer Faces \(JSF\)](#) and [RichFaces](#) for portlet development.

Whichever technology you choose, please refer to [Starting a Portlet Project](#) to learn how to set up your project in a robust and effective way using GateIn Portal Bill of Materials (BOM).

5.2.1 Starting a Portlet Project

The BOM Concept

To make the management of dependencies easier, GateIn Portal Team has prepared the Bill of Materials (BOM) needed for developing typical portlet applications. BOM is a Maven `pom.xml` file which specifies the versions, types and scopes of dependencies which are granted to be compatible with (or indeed in many cases provided by) GateIn Portal.

How to Use GateIn Portal BOM

Let us look at the `pom.xml` file from Simplest Hello World [Quickstart](#) below, which contains all necessary details.

In its `<dependencyManagement>` section, it declares `<dependency>` `gatein-3.5-bom` with `<scope>` `import`. It indicates that the dependency will *de facto* be replaced with the dependencies in its `dependencyManagement` section. Due to this fact, in the `<dependencies>` section of the Simplest Hello World `pom.xml`, we can declare the `javax.portlet:portlet-api` dependency without specifying its `<version>`, `<type>` or `<scope>`. All those details are managed by `gatein-3.5-bom`.

Simplest Hello World Portlet

```
<project xmlns="http://maven.apache.org/POM/4.0.0"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://maven.apache.org/POM/4.0.0
    http://maven.apache.org/maven-v4_0_0.xsd">
  <modelVersion>4.0.0</modelVersion>

  <artifactId>simplest-hello-world-portlet</artifactId>
  <groupId>org.gatein.portal.quickstarts</groupId>
  <name>Simplest Hello World Portlet</name>
  <version>3.5.0.Final</version>
  <packaging>war</packaging>
  <description>The very essence of every possible portlet.</description>
  <url>http://www.gatein.org</url>
  <licenses>
    <license>
      <name>Apache License, Version 2.0</name>
      <distribution>repo</distribution>
      <url>http://www.apache.org/licenses/LICENSE-2.0.html</url>
    </license>
  </licenses>

  <properties>
    <!-- GateIn Bill of Materials (BOM) version -->
    <org.jboss.bom.gatein-bom.version>1.0.0.Final</org.jboss.bom.gatein-bom.version>

    <!-- Plugin versions and settings -->
    <jboss.as.plugin.version>7.1.1.Final</jboss.as.plugin.version>
    <!-- maven-compiler-plugin -->
```

```
<maven.compiler.plugin.version>2.5.1</maven.compiler.plugin.version>
<maven.compiler.target>1.6</maven.compiler.target>
<maven.compiler.source>1.6</maven.compiler.source>
<project.build.sourceEncoding>UTF-8</project.build.sourceEncoding>
</properties>

<dependencyManagement>
  <dependencies>
    <!--
      Define the version of GateIn we build for. In its dependencyManagement,
      GateIn Bill of Materials (BOM) specifies the versions, types and scopes
      of dependencies which are granted to be compatible with (or indeed
      in many cases provided by) GateIn Portal.
    -->
    <dependency>
      <groupId>org.jboss.bom</groupId>
      <artifactId>gatein-3.5-bom</artifactId>
      <version>${org.jboss.bom.gatein-bom.version}</version>
      <type>pom</type>
      <scope>import</scope>
    </dependency>
  </dependencies>
</dependencyManagement>

<dependencies>
  <!--
    The versions, scopes and types of these dependencies are managed in gatein-*-bom.
    You need to name only groupId and artifactId here.
    Name only those artifacts you refer to in your code.
    Look at gatein-*-bom POM file for the complete list of available artifacts.
  -->
  <dependency>
    <groupId>javax.portlet</groupId>
    <artifactId>portlet-api</artifactId>
  </dependency>
</dependencies>

<build>
  <finalName>${project.artifactId}</finalName>
  <plugins>
    <plugin>
      <groupId>org.jboss.as.plugins</groupId>
      <artifactId>jboss-as-maven-plugin</artifactId>
      <version>${jboss.as.plugin.version}</version>
    </plugin>
    <plugin>
      <groupId>org.apache.maven.plugins</groupId>
      <artifactId>maven-compiler-plugin</artifactId>
      <version>${maven.compiler.plugin.version}</version>
      <configuration>
        <source>${maven.compiler.source}</source>
        <target>${maven.compiler.target}</target>
      </configuration>
    </plugin>
  </plugins>
</build>

</project>
```


Further steps, after you have set up the `pom.xml` file for your project, depend on the technology you have chosen for writing portlets.

5.2.2 Standard Portlet Development (JSR-286)

The Java Part

After setting up the the Maven `pom.xml` file as shown in the [previous section](#), we can continue with implementing a basic JSR-286 compatible portlet. Simplest Hello World Portlet from the [GateIn Quickstarts](#) collection shows the very essence of every JSR-286 Portlet:

SimplestHelloWorldPortlet.java

```
package org.jboss.portal.portlet.samples;

import java.io.IOException;
import java.io.PrintWriter;

import javax.portlet.GenericPortlet;
import javax.portlet.RenderRequest;
import javax.portlet.RenderResponse;

/**
 * The simplest possible Portlet.
 *
 * @author Peter Palaga
 */
public class SimplestHelloWorldPortlet extends GenericPortlet {
    /**
     * Serves the VIEW mode. Writes "Hello World !" to the response writer.
     *
     * @see javax.portlet.GenericPortlet#doView(javax.portlet.RenderRequest,
     javax.portlet.RenderResponse)
     */
    @Override
    public void doView(RenderRequest request, RenderResponse response) throws IOException {
        PrintWriter writer = response.getWriter();
        writer.write("Hello World !");
        writer.close();
    }
}
```

As you can see in the listing, we have done two important things:

- We extended `javax.portlet.GenericPortlet` from `javax.portlet:portlet-api` artifact.
- We have overridden the `doView()` method.

In this simplest portlet variant we have decided not to support EDIT and HELP portlet modes. To add them, just override the `doEdit()` and `doHelp` from `javax.portlet.GenericPortlet` and configure the `portlet.xml` file accordingly.

portlet.xml

The `portlet.xml` file for a plain JSR-286 portlet is pretty straightforward:

portlet.xml

```
<portlet-app xmlns="http://java.sun.com/xml/ns/portlet/portlet-app_2_0.xsd" version="2.0"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://java.sun.com/xml/ns/portlet/portlet-app_2_0.xsd
  http://java.sun.com/xml/ns/portlet/portlet-app_2_0.xsd">
  <portlet>
    <description>Simplest Hello World Portlet is the very essence of every possible
    Portlet.</description>
    <portlet-name>SimplestHelloWorldPortlet</portlet-name>
    <display-name>Simplest Hello World Portlet</display-name>

    <portlet-class>org.jboss.portal.portlet.samples.SimplestHelloWorldPortlet</portlet-class>
    <supports>
      <mime-type>text/html</mime-type>
      <portlet-mode>view</portlet-mode>
      <!-- You can uncomment the other modes when your portlet-class supports them
      <portlet-mode>edit</portlet-mode>
      <portlet-mode>help</portlet-mode>
      -->
    </supports>
    <portlet-info>
      <title>Simplest Hello World Portlet</title>
    </portlet-info>
  </portlet>
</portlet-app>
```

web.xml

There is no need to configure any filters, servlets, mapping & co. for a plain JSR-286 portlet to work but maven-war-plugin by default requires the `web.xml`. To solve it, just include a `web.xml` file which contains solely the root element like the following:

web.xml

```
<web-app xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://java.sun.com/xml/ns/javaee
  http://java.sun.com/xml/ns/javaee/web-app_2_5.xsd"
  version="2.5">
  <!--
    There is no need to configure any filters, servlets, mapping & co. for this demo to
    work
    but maven-war-plugin by default requires this file.
  -->
</web-app>
```

Further Steps

After having done all the above, it is time to [build and deploy the portlet](#), [import it](#) and [add it to a page](#) so that you can test its functionality.

See also

- [Portlet Primer](#)
- [JSR-286](#)

5.2.3 JSF2 Portlet Development

The Portlet Bridge pre-installed in GateIn Portal allows for implementing portlets with JavaServer Faces (JSF) 2.1 and RichFaces (RF) 4.2.3. As RichFaces is just a component library for JavaServer Faces, the guidelines for using both of them is very similar. More precisely, setup for a JavaServer Faces portlet project is a superset of a RichFaces project setup. In accordance with that, you need to read both [Basic JSF Portlet Development](#) and [JSF Portlet Development with RichFaces](#) when developing with RichFaces.

Basic JSF Portlet Development

JSF stands for JavaServer Pages. The JSF version delivered by the built-in Portlet Bridge is 2.1.

Example Code

This section cites code from JSF2 Hello World Portlet from the [GateIn Portal Quickstarts](#) collection.

pom.xml

There is only one noticeable difference in `pom.xml` against what we have shown as a general case in the [Starting a Portlet Project](#) section: We need to add different dependencies for JSF:

pom.xml

```
068.     <dependencies>
069.         <!--
070.             The versions, scopes and types of these dependencies are managed in
gatein-*-bom.
071.             You need to name only groupId and artifactId here.
072.             Name only those artifacts you refer to in your code.
073.             Look at gatein-*-bom POM file for the complete list of available artifacts.
074.         -->
075.         <dependency>
076.             <groupId>org.jboss.spec.java.faces</groupId>
077.             <artifactId>jboss-jsf-api_2.1_spec</artifactId>
078.         </dependency>
079.         <dependency>
080.             <groupId>org.jboss.portletbridge</groupId>
081.             <artifactId>portletbridge-api</artifactId>
082.         </dependency>
083.     </dependencies>
```

JSF Template Files

In the following listing you can see the beginning of a typical JSF portlet template. It is taken from `main.xhtml` file located in `src/main/webapp/pages` directory.

Beginning of a JSF portlet template

```
17. <f:view xmlns="http://www.w3.org/1999/xhtml" xmlns:f="http://java.sun.com/jsf/core"
xmlns:h="http://java.sun.com/jsf/html">
18.     <!-- the f:view above prevents an erroneous <html> within <body> coming from portal. -->
19.     <!-- <h:head /> and <h:body> in the following are always needed otherwise JSF Facelets
won't work -->
20.     <h:head />
21.     <h:body styleClass="jsf2HelloWorldPortlet">
22.         <h:outputStylesheet library="css" name="jsf2-hello-world-portlet.css" />
23.         <h2>JSF2 Hello World Portlet</h2>
```

Note that `<f:view>` as a root element of the portlet template above prevents an erroneous `<html>` within `<body>` coming from portal. Moreover, the `<h:head>` and `<h:body>` elements are always needed for JSF Facelets to work.

The following listing shows the use of several JSF elements, such as `<h:outputLabel>`, `<h:inputText>` and `<h:commandButton>` within `<h:form>`.

A form in a JSF portlet template

```
41.      <h:form id="jsf2HelloWorldPortlet">
42.          <h:outputLabel value="#{msgs.Name}" for="nameInput" />
43.          <h:inputText id="nameInput" value="#{helloBean.name}">
44.              <f:ajax render="output" event="keyup" />
45.          </h:inputText>
46.          <br />
47.
48.          <p>
49.              <h:panelGroup id="output">
50.                  <strong>
51.                      <h:outputFormat value="#{msgs.Hello_0}" rendered="#{not empty
helloBean.name}">
52.                          <f:param value="#{helloBean.name}" />
53.                      </h:outputFormat>
54.                  </strong>
55.              </h:panelGroup>
56.          </p>
57.
58.          <h:commandButton id="reset" value="#{msgs.Reset}"
actionListener="#{helloBean.reset}">
59.              <f:ajax render="@form" />
60.          </h:commandButton> - #{msgs.ResetComment}
61.          <br />
62.          <h:commandButton id="reload" value="#{msgs.Reload}" /> - #{msgs.ReloadComment}
63.          <br />
64.
65.          <h:messages />
66.      </h:form>
```

The complete source code of the above template can be found in `src/main/webapp/pages/main.xhtml` of JSF2 Hello World Portlet project.

Java Beans

In the JSF template file shown above, we refer to `helloBean`. This bean is implemented in Java as follows:

```
26. /**
27.  * {@link HelloBean} is the JSF backing bean for the application, holding the input data to
28.  * be re-displayed.
29.  */
30. @ManagedBean(name = "helloBean")
31. @SessionScoped
32. public class HelloBean implements Serializable {
33.
34.     private static final long serialVersionUID = -6239437588285327644L;
35.
36.     /**
37.      * Stores the name which will be used to greet the application user.
38.      */
39.     private String name;
40.
41.     /**
42.      * Initializes {@link #name} with the value {@code "World"}.
43.      */
44.     @PostConstruct
45.     public void postConstruct() {
46.         this.name = "World";
47.     }
48.
49.     /**
50.      * Returns {@link #name}.
51.      * @return {@link #name}
52.      */
53.     public String getName() {
54.         return name;
55.     }
56.
57.     /**
58.      * Set {@link #name}.
59.      *
60.      * @param name
61.      */
62.     public void setName(String name) {
63.         this.name = name;
64.     }
65.
66.     /**
67.      * Resets {@link #name} to the default value {@code "World"}.
68.      *
69.      * @param ae ignored
70.      */
71.     public void reset(ActionEvent ae) {
72.         this.name = "World";
73.     }
74.
75. }
```

The `@ManagedBean` and `@SessionScoped` annotations allow for omitting of equivalent declarations in the `faces-config.xml` file.

portlet.xml

portlet.xml is the place where we tie the JSF templates with the portlet.

portlet.xml

```
<portlet-app xmlns="http://java.sun.com/xml/ns/portlet/portlet-app_2_0.xsd" version="2.0"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://java.sun.com/xml/ns/portlet/portlet-app_2_0.xsd
http://java.sun.com/xml/ns/portlet/portlet-app_2_0.xsd">
  <portlet>
    <description>A simple JSF2 portlet.</description>
    <portlet-name>jsf2HelloWorldPortlet</portlet-name>
    <display-name>JSF2 Hello World Portlet</display-name>
    <portlet-class>javax.portlet.faces.GenericFacesPortlet</portlet-class>
    <init-param>
      <name>javax.portlet.faces.defaultViewId.view</name>
      <value>/pages/main.xhtml</value>
    </init-param>
    <init-param>
      <name>javax.portlet.faces.defaultViewId.edit</name>
      <value>/pages/edit.xhtml</value>
    </init-param>
    <init-param>
      <name>javax.portlet.faces.defaultViewId.help</name>
      <value>/pages/help.xhtml</value>
    </init-param>
    <init-param>
      <name>javax.portlet.faces.preserveActionParams</name>
      <value>true</value>
    </init-param>
    <expiration-cache>0</expiration-cache>
    <supports>
      <mime-type>text/html</mime-type>
      <portlet-mode>VIEW</portlet-mode>
      <portlet-mode>EDIT</portlet-mode>
      <portlet-mode>HELP</portlet-mode>
    </supports>
    <portlet-info>
      <title>JSF2 Hello World Portlet</title>
    </portlet-info>
    <container-runtime-option>
      <name>org.gatein.pc.remotable</name>
      <value>true</value>
    </container-runtime-option>
  </portlet>
</portlet-app>
```

Note that the `javax.portlet.faces.defaultViewId.*` init-params are used to bind the JSF templates with the respective portlet view modes. `javax.portlet.faces.GenericFacesPortlet` as a `<portlet-class>` will serve the purpose for most JSF portlets.

web.xml

JSF portlets require a few tweaks in the `web.xml` file:

web.xml

```
<web-app xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://java.sun.com/xml/ns/javaee"
xmlns:web="http://java.sun.com/xml/ns/javaee/web-app_2_5.xsd"
xsi:schemaLocation="http://java.sun.com/xml/ns/javaee
http://java.sun.com/xml/ns/javaee/web-app_2_5.xsd" version="2.5">
  <display-name>jsf2-hello-world-portlet</display-name>
  <context-param>
    <description>See https://docs.jboss.org/author/display/PBR/Render+Policy</description>
    <param-name>javax.portlet.faces.RENDER_POLICY</param-name>
    <param-value>ALWAYS_DELEGATE</param-value>
  </context-param>

  <!-- The following params are documented here:
http://myfaces.apache.org/core21/myfaces-impl/webconfig.html -->
  <context-param>
    <param-name>javax.faces.FACELETS_VIEW_MAPPINGS</param-name>
    <param-value>*.xhtml</param-value>
  </context-param>
  <context-param>
    <param-name>facelets.DEVELOPMENT</param-name>
    <param-value>>false</param-value>
  </context-param>
  <context-param>
    <param-name>javax.faces.DEFAULT_SUFFIX</param-name>
    <param-value>*.xhtml</param-value>
  </context-param>

  <servlet>
    <servlet-name>Faces Servlet</servlet-name>
    <servlet-class>javax.faces.webapp.FacesServlet</servlet-class>
    <load-on-startup>1</load-on-startup>
  </servlet>
  <servlet-mapping>
    <servlet-name>Faces Servlet</servlet-name>
    <url-pattern>*.faces</url-pattern>
  </servlet-mapping>
</web-app>
```

Custom CSS

Portlet Bridge supports loading of CSS resources in the "JSF way". Just use the `<h:outputStylesheet library="css" name="jsf2-hello-world-portlet.css" />` as we do in the `main.xhtml` file above. The `jsf2-hello-world-portlet.css` file needs to be placed in `resources/css` folder of the web application.

Note that relative paths like `url('css/background/jsf-logo.png')` do not work when used in CSS loaded via `<h:outputStylesheet ...>`. Rather a JSF Expression Language expression `{resource`

```
[ '/css/background/jsf-logo.png' ]
```

`}` needs to be used. This expression is dynamically evaluated to a proper public URL. The path `'/css/background/jsf-logo.png'` used in the expression is relative to `resources` folder of the web application. See also [Resource Serving](#).

jsf2-hello-world-portlet.css

```
17. div.jsf2HelloWorldPortlet {
18.     padding: 10px;
19.     /* In the following we use a JSF Expression Language expression rather than plain
relative path.
20.         Plain relative paths do not work in JSF portlets. The expression #{resource['...']}
is
21.         dynamically evaluated to a proper public URL. The path '/css/background/jsf-logo.png'

22.         used in the expression is relative to resources folder of this web application.
23.         See https://docs.jboss.org/author/display/PBR/Resource+Serving */
24.     background: url("#{resource['/css/background/jsf-logo.png']}") no-repeat;
25.     background-position-x: 753px;
26.     background-position-y: 10px;
27. }
28. div.jsf2HelloWorldPortlet p {
29.     width: 713px;
30. }
```

Internationalization

Internationalization is supported via standard Java Resource bundles. In our example project the *.property files of org.jboss.as.quickstarts.jsf.messages resource bundle are stored under src/main/resources/org/jboss/as/quickstarts/jsf. The following settings in faces-config.xml are needed so that this bundle can be used in JSF templates.

faces-config.xml

```
<faces-config xmlns="http://java.sun.com/xml/ns/javaee"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://java.sun.com/xml/ns/javaee
http://java.sun.com/xml/ns/javaee/web-facesconfig_2_0.xsd" version="2.0">
  <application>
    <!-- Declare the internationalization resources -->
    <resource-bundle>
      <!-- The resource bundle property files are in
src/main/resources/org/jboss/as/quickstarts/jsf -->
      <base-name>org.jboss.as.quickstarts.jsf.messages</base-name>
      <var>msgs</var>
    </resource-bundle>
    <locale-config>
      <default-locale>en</default-locale>
      <supported-locale>de</supported-locale>
    </locale-config>
  </application>
</faces-config>
```

Note that in the above faces-config.xml, we have made our bundle visible in JSF templates under the variable `msgs`. Its individual entries can then be accessed using the usual Expression Language dot notation: e.g. `# {msgs.Name}`.

Further Steps

After having done all the above, it is time to [build and deploy the portlet](#), [import it](#) and [add it to a page](#) so that you can test its functionality.

See also

- [Portlet Primer](#)

JSF Portlet Development with RichFaces

As we have already noted, RichFaces (RF) is just a component library for JavaServer Faces (JSF). Therefore, everything said in the [Basic JSF Portlet Development](#) chapter applies here too.

Example Code

This section cites code from JSF2+RF4 Hello World Portlet from the [GateIn Portal Quickstarts](#) collection.

pom.xml

We need to add several RF-specific dependencies to the general JSF ones:

pom.xml

```
068.     <dependencies>
069.         <!--
070.             The versions, scopes and types of these dependencies are managed in
gatein-*-bom.
071.             You need to name only groupId and artifactId here.
072.             Name only those artifacts you refer to in your code.
073.             Look at gatein-*-bom POM file for the complete list of available artifacts.
074.         -->
075.     <!-- General JSF dependencies -->
076.     <dependency>
077.         <groupId>org.jboss.spec.java.faces</groupId>
078.         <artifactId>jboss-jsf-api_2.1_spec</artifactId>
079.     </dependency>
080.     <dependency>
081.         <groupId>org.jboss.portletbridge</groupId>
082.         <artifactId>portletbridge-api</artifactId>
083.     </dependency>
084.
085.     <!-- RF-specific dependencies -->
086.     <dependency>
087.         <groupId>org.jboss.portletbridge</groupId>
088.         <artifactId>portletbridge-extension-richfaces</artifactId>
089.     </dependency>
090.     <dependency>
091.         <groupId>org.richfaces.ui</groupId>
092.         <artifactId>richfaces-components-api</artifactId>
093.     </dependency>
094.     <dependency>
095.         <groupId>org.richfaces.ui</groupId>
096.         <artifactId>richfaces-components-ui</artifactId>
097.     </dependency>
098.     <dependency>
099.         <groupId>org.richfaces.core</groupId>
100.         <artifactId>richfaces-core-impl</artifactId>
101.     </dependency>
102. </dependencies>
```

JSF Template Files

We use `<rich:*>` components in the templates:

Form with rich: components in main.xhtml

```
43.         </p>
44.         <h:form id="jsf2HelloWorldPortlet">
45.             <h:panelGrid columns="2">
46.                 <h:outputLabel value="#{msgs.Greeting}" for="greeting"/>
47.                 <rich:select id="greeting" value="#{helloBean.greeting}">
48.                     <f:selectItems value="#{helloBean.greetings}" />
49.                     <f:ajax render="output" event="selectitem"/>
50.                 </rich:select>
51.
52.                 <h:outputLabel value="#{msgs.Name}" for="nameInput"/>
53.                 <h:inputText id="nameInput" value="#{helloBean.name}">
54.                     <f:validateLength minimum="1" maximum="50" />
55.                     <f:ajax render="output" event="keyup"/>
56.                 </h:inputText>
57.             </h:panelGrid>
58.             <p>
59.                 <h:panelGroup id="output">
60.                     <strong><h:outputText value="#{helloBean.greeting} #{helloBean.name}!"
rendered="#{not empty helloBean.name}"/></strong>
61.                 </h:panelGroup>
62.             </p>
63.             <p>
64.                 <h:commandButton id="reset" value="#{msgs.Reset}"
actionListener="#{helloBean.reset}">
65.                     <f:ajax render="@form" />
66.                 </h:commandButton> - #{msgs.ResetComment}
67.             </p>
68.             <p>
69.                 <h:commandButton id="reload" value="#{msgs.Reload}" /> -
#{msgs.ReloadComment}
70.             </p>
```

The complete source code of the above template can be found in `src/main/webapp/pages/main.xhtml` of JSF2+RF4 Hello World Portlet quickstart.

Java Beans

The `HelloBean` presented in the [Basic JSF Portlet Development](#) chapter was extended firstly to provide a list of greeting phrases selectable in the drop-down box on the `main.xhtml` page and secondly to be able to store the greeting phrase selected in the drop-down box.

HelloBean.java

```
039.     /**
040.      * Static list of greetings. Contains {@code "Hello"} and {@code "Hi"}.
041.      */
042.     private static final List<SelectItem> GREETINGS;
043.
044.     static {
045.         List<SelectItem> l = new ArrayList<SelectItem>(2);
046.         l.add(new SelectItem("Hello"));
047.         l.add(new SelectItem("Hi"));
048.         GREETINGS = Collections.unmodifiableList(l);
049.     }
050.
051.     /**
052.      * Stores the greeting phrase which will be used to greet the application user.
053.      */
054.     private String greeting;
```

HelloBean.java

```
088.     /**
089.      * Returns {@link #greeting}.
090.      *
091.      * @return {@link #greeting}
092.      */
093.     public String getGreeting() {
094.         return greeting;
095.     }
096.
097.     /**
098.      * Set {@link #greeting}.
099.      *
100.      * @param greeting
101.      */
102.     public void setGreeting(String greeting) {
103.         this.greeting = greeting;
104.     }
105.
106.     /**
107.      * Returns {@link #GREETINGS}.
108.      *
109.      * @return {@link #GREETINGS}
110.      */
111.     public List<SelectItem> getGreetings() {
112.         return GREETINGS;
113.     }
114.
115.
116.     /**
117.      * Resets {@link #name} to the default value {@code "World"} and {@link #greeting} with
118.      * the default value {@code "Hello"}.
119.      *
120.      * @param ae ignored
121.      */
121.     public void reset(ActionEvent ae) {
122.         this.name = "World";
123.         this.greeting = "Hello";
124.     }
125.
126. }
```

portlet.xml

There is no substantial change in portlet.xml against the [Basic JSF Portlet Development](#) chapter. Only <description>, <portlet-name>, <display-name> and <title> have been changed.

portlet.xml

```
<portlet-app xmlns="http://java.sun.com/xml/ns/portlet/portlet-app_2_0.xsd" version="2.0"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://java.sun.com/xml/ns/portlet/portlet-app_2_0.xsd
http://java.sun.com/xml/ns/portlet/portlet-app_2_0.xsd">
  <portlet>
    <description>A simple portlet usinf JSF2 and RF4.</description>
    <portlet-name>jsf2Rf4HelloWorldPortlet</portlet-name>
    <display-name>JSF2+RF4 Hello World Portlet</display-name>
    <portlet-class>javax.portlet.faces.GenericFacesPortlet</portlet-class>
    <init-param>
      <name>javax.portlet.faces.defaultViewId.view</name>
      <value>/pages/main.xhtml</value>
    </init-param>
    <init-param>
      <name>javax.portlet.faces.defaultViewId.edit</name>
      <value>/pages/edit.xhtml</value>
    </init-param>
    <init-param>
      <name>javax.portlet.faces.defaultViewId.help</name>
      <value>/pages/help.xhtml</value>
    </init-param>
    <init-param>
      <name>javax.portlet.faces.preserveActionParams</name>
      <value>true</value>
    </init-param>
    <expiration-cache>0</expiration-cache>
    <supports>
      <mime-type>text/html</mime-type>
      <portlet-mode>VIEW</portlet-mode>
      <portlet-mode>EDIT</portlet-mode>
      <portlet-mode>HELP</portlet-mode>
    </supports>
    <portlet-info>
      <title>JSF2+RF4 Hello World Portlet</title>
    </portlet-info>
    <container-runtime-option>
      <name>org.gatein.pc.remotable</name>
      <value>true</value>
    </container-runtime-option>
  </portlet>
</portlet-app>
```

web.xml

We set a few more init-params in web.xml for RichFaces components to work:

web.xml


```
<web-app xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://java.sun.com/xml/ns/javaee"
xmlns:web="http://java.sun.com/xml/ns/javaee/web-app_2_5.xsd"
xsi:schemaLocation="http://java.sun.com/xml/ns/javaee
http://java.sun.com/xml/ns/javaee/web-app_2_5.xsd" version="2.5">
  <display-name>jsf2-rf4-hello-world-portlet</display-name>
  <context-param>
    <description>See
https://docs.jboss.org/author/display/PBR/Installing+Portlet+Bridge#InstallingPortletBridge-Disabl
  <param-name>org.gatein.portletbridge.WAR_BUNDLES_PORTLETBRIDGE</param-name>
    <param-value>true</param-value>
  </context-param>
  <context-param>
    <description>See https://docs.jboss.org/author/display/PBR/Render+Policy</description>
    <param-name>javax.portlet.faces.RENDER_POLICY</param-name>
    <param-value>ALWAYS_DELEGATE</param-value>
  </context-param>

  <!-- The following params are documented here:
http://myfaces.apache.org/core21/myfaces-impl/webconfig.html -->
  <context-param>
    <param-name>javax.faces.FACELETS_VIEW_MAPPINGS</param-name>
    <param-value>*.xhtml</param-value>
  </context-param>
  <context-param>
    <param-name>facelets.DEVELOPMENT</param-name>
    <param-value>>false</param-value>
  </context-param>
  <context-param>
    <param-name>javax.faces.DEFAULT_SUFFIX</param-name>
    <param-value>.xhtml</param-value>
  </context-param>
  <context-param>
    <param-name>javax.faces.STATE_SAVING_METHOD</param-name>
    <param-value>server</param-value>
  </context-param>
  <context-param>
    <param-name>javax.faces.PROJECT_STAGE</param-name>
    <!-- Change to Production to compress js files, etc. -->
    <param-value>Development</param-value>
  </context-param>

  <context-param>

  <description>http://docs.jboss.org/richfaces/latest\_4\_X/Developer\_Guide/en-US/html/chap-Developer\_
  <param-name>org.richfaces.skin</param-name>
    <param-value>#{skinBean.skin}</param-value>
  </context-param>
  <context-param>
    <description>See
http://docs.jboss.org/richfaces/latest\_4\_X/Developer\_Guide/en-US/html/chap-Developer\_Guide-Advance
  <param-name>org.richfaces.resourceOptimization.enabled</param-name>
    <param-value>true</param-value>
  </context-param>

  <servlet>
    <servlet-name>Faces Servlet</servlet-name>
    <servlet-class>javax.faces.webapp.FacesServlet</servlet-class>
```

```
<load-on-startup>1</load-on-startup>
</servlet>
<servlet-mapping>
  <servlet-name>Faces Servlet</servlet-name>
  <url-pattern>*.faces</url-pattern>
</servlet-mapping>
<servlet-mapping>
  <servlet-name>Faces Servlet</servlet-name>
  <url-pattern>*.jsf</url-pattern>
</servlet-mapping>
<servlet-mapping>
  <servlet-name>Faces Servlet</servlet-name>
  <url-pattern>/faces/*</url-pattern>
</servlet-mapping>

<mime-mapping>
  <extension>xcss</extension>
  <mime-type>text/css</mime-type>
</mime-mapping>

</web-app>
```

Custom CSS

Fully analogous with [plain JSF portlets](#).

Internationalization

Fully analogous with [plain JSF portlets](#).

Further Steps

After having done all the above, it is time to [build and deploy the portlet](#), [import it](#) and [add it to a page](#) so that you can test its functionality.

See also

- [Portlet Primer](#)

5.2.4 Building and Deploying Portlets

1. Make sure you have your GateIn Portal instance is running.
2. Open a command line and navigate to the root directory of your portlet project.
3. Type this command to build and deploy the archive:

```
mvn clean package jboss-as:deploy
```

To deploy to other than default `localhost:9999` JBoss instance, copy the following configuration just after `<version>${jboss.as.plugin.version}</version>` in the `pom.xml` file and adjust it to suit your needs.

Note that `<username>` and `<password>` elements can be omitted sometimes, depending on your JBoss security settings.

```
<configuration>
  <hostname>127.0.0.1</hostname>
  <port>9999</port>
  <username>admin</username>
  <password>secret</password>
</configuration>
```

This will deploy `target/simplest-hello-world-portlet.war` to the running instance of the portal.

6 Appendix - Code Examples alias Quickstarts

GateIn Portal Quickstarts provide small, specific, working examples that can be used as a reference for your own project.

GateIn Portal Quickstarts can be obtained in one of the following ways:

6.1 1. GateIn Portal Downloads Page

- A ZIP file containing all Quickstarts can be downloaded from [GateIn Portal Downloads page](#).

6.2 2. JBoss Developer Studio or Eclipse with JBoss Tools

- In your Workbench, go to `File > New > Example... > JBoss Tools > Project Examples`
- In the New Project Example dialog, select the `Site JBoss Community GateIn Portal Examples` from the drop down menu
- Select one of the available Quickstarts, e.g. `Simplest Hello World Portlet`
- Click `Finish` and the example project will be imported into your workspace.

6.3 3. GitHub

Issue the following command

```
git clone https://github.com/gatein/gatein-portal-quickstart.git
```

... and switch to the branch compatible with your GateIn Portal version.