

eXo Platform 3.0 - Knowledge Functions

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Chapter 1. Applications

1.1. Portlets

1.1.1. Forum Portlet

1.1.1.1. Overview

The Forum portlet is a discussion space where users can post or read messages on different topics.

Portlet name	ForumPortlet
War name	forum.war
Description	The Forum portlet is a full features bulletin board application.

- Declaration template

```
<portlet-application>
  <portlet>
    <application-ref>forum</application-ref>
    <portlet-ref>ForumPortlet</portlet-ref>
  </portlet>
</portlet-application>
```

1.1.1.2. Preferences

Preference name	Possible value	Default value	Description
useAjax	true, false	true	To define if links in the forum will be plain hrefs or javascript ajax links (better for SEO) or not.
showForumActionBar	true, false	true	This is the UIForumActionBar. If the value is set true, the UIForumActionBar is shown, and if the value is set false, the UIForumActionBar is hidden.
forumNewPost	day number	1	To specify if a post is new. If the post is created within the set period, it is new in the forum.
enableIPLogging	true, false	true	This enables using the

Preference name	Possible value	Default value	Description
			IPLogging function in the forum.
enableIPFiltering	true, false	true	This enables the IPFiltering function to be used in the forum.
invisibleCategories	id categories	empty	The list of all categories shown. If the value is set empty, all categories of the forum will be shown.
invisibleForums	id forums	empty	The list of all forums shown. If the value is set empty, all forums will be shown.
uploadFileSizeLimitMB	integer	20	To define the maximum size of the uploaded file in MB.
isShowForumJump	true,false	true	To specify if ForumJump is shown or not.
isShowIconsLegend	true,false	true	To specify if IconsLegend is shown or not.
isShowModerators	true,false	true	To specify if moderators are shown or not.
isShowPoll	true,false	true	To specify if Poll is shown or not.
isShowQuickReply	true,false	true	To specify if QuickReply is shown or not.
isShowRules	true,false	true	To specify if Rules are shown or not.
isShowStatistics	true,false	true	To specify if statistics are shown or not.

1.1.1.3. Portlet.xml

- See the portlet.xml file in the project following this path: forum/WEB-INF/portlet.xml

1.1.1.4. Events

Name	Description
ForumLinkEvent	This event is to setRender for UIForumLinkPortlet and to setValue for UIForumLinks.

Name	Description
ReLoadPortletEvent	This event is to reload UIForumPortlet.
OpenLink	This event is to update values for UIForumLinks.
ForumPollEvent	This event is to setRender for UIForumPollPortlet.
ForumModerateEvent	This event is to setRender for UIForumModeratorPortlet.
ForumRuleEvent	This event is to setRender for UIForumRulePortlet.
QuickReplyEvent	This event is to setRender for UIForumQuickReplyPortlet.

1.1.2. Answers Portlet

1.1.2.1. Overview

Portlet name	War name	Description
AnswersPortlet	faq.war	

1.1.2.2. Portlet Preferences

The Answers portlet consists of preferences as follows:

Preference name	Possible value	Default value	Description	
enableViewAvatar	true, false	true	To enable users to view the avatar of owner posting the question.	
enableAutomaticRSS	true, false	true	To enable users to get RSS automatically.	
enableVotesAndComments	true, false	true	To enable users to give votes and comments for the question.	
enableAnonymousSubmitQuestion		true	To enable anonymous users to submit questions.	
display	approved, both	both	To enable admins to view unapproved questions in the questions list in UIQuestions.	

Preference name	Possible value	Default value	Description	
SendMailAddNewQuestion		empty	To display the content of sent email when a new question is added.	
SendMailEditResponseQuestion		empty	To display the content of email when a response is edited.	
emailMoveQuestion	string	empty	To display the content of email when a question is moved.	
orderBy	alphabet, created	alphabet	To arrange questions in the alphabet or created date order.	
orderType	asc, desc	asc	To display questions in the ascending or descending order.	
isDiscussForum	true, false	false	To enable the DiscussQuestions function.	
idNameCategoryForum	categoryName, ForumName	empty	To select categories and forums for the DiscussionQuestions function.	
uploadFileSizeLimitMB	Integer	20	To set the maximum size of uploaded file.	

1.1.2.3. Portlet.xml

- See the portlet.xml file in the project following this path: /webapps/faq/WEB-INF/portlet.xml

1.1.3. FAQ Portlet

1.1.3.1. FAQ Portlet

1.1.3.1.1. Overview

Portlet name	War name	Description
FAQPortlet	faq.war	

1.1.3.1.2. Portlet Preferences

FAQ portlet has portlet preferences that you can configure to alter the behavior.

At runtime you can use the portlet EDIT mode to set the preferences:

Alternatively, you can configure the portlet in **portlet-preferences.xml** file.

Preference name	Possible values	Default value	Description	
useAjax	true, false	false		

1.1.3.1.3. Portlet.xml

- See the portlet.xml file in the project following this path: /webapps/faq/WEB-INF/portlet.xml

1.1.4. Polls Portlet

1.1.4.1. Basic information of Poll portlet

Portlet name	PollPortlet
War name	poll.war
Description	

1.1.4.2. Portlet Preferences

Preference name	Possible values	Default value	Description
pollIdShow	string	empty	The Id of poll is displayed in the poll portlet.

1.1.4.3. Portlet.xml

- See the portlet.xml file in the project following this path: poll/WEB-INF/portlet.xml

1.2. Gadgets

1.2.1. Overview

Gadget name	pollslist
War name	poll.war

Description	The list of polls.
--------------------	--------------------

1.2.2. Preferences

Preference name	pollId
Description	id of poll which is displayed in Pollgadget.

1.2.3. Links to used REST services

Links to used REST services:

- [portal/rest/private/ks/poll/viewpoll/pollId](#)
- [portal/rest/private/ks/poll/votepoll/pollId/indexVote](#)

Chapter 2. Configuration

2.1. Components

2.1.1. Components

2.1.1.1. Components of KS

Key	Data type	Description
org.exoplatform.ks.common.jcr.KSDataLocation	org.exoplatform.ks.common.jcr.KSDataLocation	The JCR storage location for KS data.
org.exoplatform.ks.rendering.MarkupRenderingService	org.exoplatform.ks.rendering.MarkupRenderingService	MarkupRenderingService
org.exoplatform.services.jcr.ext.hierarchy.NodeHierarchyCreator	org.exoplatform.services.jcr.ext.hierarchy.impl.NodeHierarchyCreatorImpl	
	org.exoplatform.services.scheduler.impl.QuartzSheduler	
	org.exoplatform.services.scheduler.QueueTasks	
org.exoplatform.services.scheduler.JobSchedulerService	org.exoplatform.services.scheduler.impl.JobSchedulerServiceImpl	

- Init-params of org.exoplatform.ks.common.jcr.KSDataLocation

Name	Possible values	Default values
repository	string	repository
workspace	string	knowledge

2.1.1.2. Components of Forum

Key	Data type	Description
org.exoplatform.ks.bbcode.api.BBCodeService	org.exoplatform.ks.bbcode.core.BBCodeService	Message CRUD operations on BBcodes
org.exoplatform.forum.service.DataStorage	org.exoplatform.forum.service.impl.JCRDataStorage	
org.exoplatform.forum.service.ForumService	org.exoplatform.forum.service.impl.ForumServiceImpl	
org.exoplatform.forum.service.ForumStatisticsService	org.exoplatform.forum.service.impl.ForumStatisticsServiceImpl	
	org.exoplatform.forum.service.ws.ForumWebservice	

2.1.1.3. Components of Answers

Key	Data type	Description
org.exoplatform.faq.service.FAQService	org.exoplatform.faq.service.impl.FAQServiceImpl	

Key	Data type	Description
org.exoplatform.faq.service.DataStorage	org.exoplatform.faq.service.impl.JCRDataStorage	
	org.exoplatform.faq.service.ws.FAQ	Webservice

2.1.1.4. Components of Poll

Key	Data type	Description
org.exoplatform.poll.service.DataStorage	org.exoplatform.poll.service.impl.JCRDataStorage	
org.exoplatform.poll.service.PollService	org.exoplatform.poll.service.impl.PollServiceImpl	
		org.exoplatform.poll.service.ws.Poll Webservice

2.2. External-component-plugin

2.2.1. Init data configuration

2.2.1.1. Init data

Application	Component	Description
Forum	KSDataLocation, ForumServiceImpl	Initialize default data of the Forum portlet
Answer	KSDataLocation, AnswerServiceImpl	Initialize default data of the Answers portlet
Poll	KSDataLocation, PollServiceImpl	Initialize default data of the Poll portlet

The Init data plug-in is used to define the default data in .xml file. It includes nodes (node of jcr).

When the component *org.exoplatform.services.jcr.config.RepositoryServiceConfiguration* is initialized, the component *org.exoplatform.services.jcr.impl.config.RepositoryServiceConfigurationPlugin* will be get and the function *addConfig* is called. Then, */ks-extension/jcr/repository-configuration.xml* will be loaded and the component *org.exoplatform.ks.common.jcr.KSDataLocation* is initialized. Once the component *org.exoplatform.ks.common.jcr.KSDataLocation* has been initialized, the function *setLocation* is called that will setup workspace and repository for KS. After that, the function *addPlugin* will be run, generating the *DataLocation* (some parent nodes) for KS.

2.2.1.2. Configuration

2.2.1.2.1. Initialize conf-part for loading repository-configuration.xml.

In details:

When the server starts, the *jcr-configuration.xml* is initialized. The component-plugin named *addConfig* will be

referred to `org.exoplatform.services.jcr.impl.config.RepositoryServiceConfigurationPlugin` to load the file `war:/ks-extension/jcr/repository-configuration.xml`.

```
<component-plugin>
  <!-- The name of the plugin -->
  <name>Sample RepositoryServiceConfiguration Plugin</name>
  <!-- The name of the method to call on the RepositoryServiceConfiguration in order to add the RepositoryServiceConfigurationPlugin -->
  <set-method>addConfig</set-method>
  <!-- The full qualified name of the RepositoryServiceConfigurationPlugin -->
  <type>org.exoplatform.services.jcr.impl.config.RepositoryServiceConfigurationPlugin</type>
  <init-params>
    <value-param>
      <name>conf-path</name>
      <description>JCR configuration file</description>
      <value>war:/ks-extension/jcr/repository-configuration.xml</value>
    </value-param>
  </init-params>
</component-plugin>
```

- In which:

Name	Set-method	Type	Description	
Sample RepositoryServiceConfiguration Plugin	addConfig	org.exoplatform.services.jcr.impl.config.RepositoryServiceConfigurationPlugin		

- Init-params

Name	Possible value	Default value	Description
conf-part	string	war:/ks-extension/jcr/repository-configuration.xml	JCR configuration file

2.2.1.2.2. Initialize workspace name and repository name in the file `storage-configuration.xml`.

In details:

After the file `war:/ks-extension/jcr/repository-configuration.xml` is initialized, the server will load `storage-configuration.xml` file, and the function `setLocation` in the component `org.exoplatform.ks.common.conf.DataLocationPlugin` will be run. The workspace name and repository name will be initialized.

```
<external-component-plugins>
  <target-component>org.exoplatform.ks.common.jcr.KSDataLocation</target-component>
  <component-plugin>
    <name>ks.data.location</name>
    <set-method>setLocation</set-method>
    <type>org.exoplatform.ks.common.conf.DataLocationPlugin</type>
    <init-params>
      <value-param>
        <name>repository</name>
        <description>JCR repository for KS data</description>
        <value>repository</value>
      </value-param>
      <value-param>
        <name>workspace</name>
        <description>workspace for KS data</description>
```

```

    <value>knowledge</value>
  </value-param>
</init-params>
</component-plugin>
</external-component-plugins>

```

In which,

Value- param	Possible values	Default values	Description
repository		repository	JCR repository for KS data
workspace		knowledge	workspace for KS data

2.2.1.2.3. Initialize data

Once the workspace name and repository name are registered, the server will load `org.exoplatform.services.jcr.ext.hierarchy.NodeHierarchyCreator` and the function `addPaths` in `org.exoplatform.services.jcr.ext.hierarchy.impl.AddPathPlugin` is called. Then, the data location will be built.

```

<component-plugin>
  <name>addPaths</name>
  <set-method>addPlugin</set-method>
  <type>org.exoplatform.services.jcr.ext.hierarchy.impl.AddPathPlugin</type>
  <init-params>
    <object-param>
      <name>ks.storage</name>
      <description>ks data storage tree</description>
      <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig">
        <field name="repository"><string>repository</string></field>
        <field name="workspaces">
          <collection type="java.util.ArrayList">
            <value><string>knowledge</string></value>
          </collection>
        </field>
        <field name="jcrPaths">
          <collection type="java.util.ArrayList">
            <value>
              <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$JcrPath">
                <field name="alias"><string>exoApplications</string></field>
                <field name="path"><string>/exo:applications</string></field>
                <field name="permissions">
                  <collection type="java.util.ArrayList">
                    <value>
                      <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$Permissions">
                        <field name="identity"><string>*:/platform/administrators</string></field>
                        <field name="read"><string>true</string></field>
                        <field name="addNode"><string>true</string></field>
                        <field name="setProperty"><string>true</string></field>
                        <field name="remove"><string>true</string></field>
                      </object>
                    </value>
                  </collection>
                </field>
              </object>
            </value>
          </collection>
        </field>
      </object>
    </value>
    <value>
      <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$JcrPath">
        <field name="alias"><string>ksUserAvatar</string></field>
        <field name="path"><string>/exo:applications/ksUserAvatar</string></field>
        <field name="nodeType"><string>nt:unstructured</string></field>
        <field name="permissions">
          <collection type="java.util.ArrayList">
            <value>
              <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$Permissions">
                <field name="identity"><string>*:/platform/administrators</string></field>
                <field name="read"><string>true</string></field>

```

```

        <field name="addNode"><string>true</string></field>
        <field name="setProperty"><string>true</string></field>
        <field name="remove"><string>true</string></field>
    </object>
</value>
</collection>
</field>
</object>
</value>

<value>
    <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$JcrPath">
        <field name="alias"><string>ForumService</string></field>
        <field name="path"><string>/exo:applications/ForumService</string></field>
        <field name="nodeType"><string>exo:forumHome</string></field>
        <field name="permissions">
            <collection type="java.util.ArrayList">
                <value>
                    <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$Permissi
                        <field name="identity"><string>*:/platform/administrators</string></field>
                        <field name="read"><string>true</string></field>
                        <field name="addNode"><string>true</string></field>
                        <field name="setProperty"><string>true</string></field>
                        <field name="remove"><string>true</string></field>
                    </object>
                </value>
            </collection>
        </field>
    </object>
</value>

<value>
    <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$JcrPath">
        <field name="alias"><string>ForumSystem</string></field>
        <field name="path"><string>/exo:applications/ForumService/ForumSystem</string></field>
        <field name="nodeType"><string>exo:forumSystem</string></field>
        <field name="permissions">
            <collection type="java.util.ArrayList">
                <value>
                    <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$Permissi
                        <field name="identity"><string>*:/platform/administrators</string></field>
                        <field name="read"><string>true</string></field>
                        <field name="addNode"><string>true</string></field>
                        <field name="setProperty"><string>true</string></field>
                        <field name="remove"><string>true</string></field>
                    </object>
                </value>
            </collection>
        </field>
    </object>
</value>

<value>
    <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$JcrPath">
        <field name="alias"><string>UserProfileHome</string></field>
        <field name="path"><string>/exo:applications/ForumService/ForumSystem/UserProfileHome</string></field>
        <field name="nodeType"><string>exo:userProfileHome</string></field>
        <field name="permissions">
            <collection type="java.util.ArrayList">
                <value>
                    <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$Permissi
                        <field name="identity"><string>*:/platform/administrators</string></field>
                        <field name="read"><string>true</string></field>
                        <field name="addNode"><string>true</string></field>
                        <field name="setProperty"><string>true</string></field>
                        <field name="remove"><string>true</string></field>
                    </object>
                </value>
            </collection>
        </field>
    </object>
</value>

<value>
    <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$JcrPath">
        <field name="alias"><string>StatisticHome</string></field>
        <field name="path"><string>/exo:applications/ForumService/ForumSystem/StatisticHome</string></field>
        <field name="nodeType"><string>exo:statisticHome</string></field>
        <field name="permissions">

```

```

        <collection type="java.util.ArrayList">
            <value>
                <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$Permissions">
                    <field name="identity"><string>*:/platform/administrators</string></field>
                    <field name="read"><string>true</string></field>
                    <field name="addNode"><string>true</string></field>
                    <field name="setProperty"><string>true</string></field>
                    <field name="remove"><string>true</string></field>
                </object>
            </value>
        </collection>
    </field>
</object>
</value>

    <value>
        <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$JcrPath">
            <field name="alias"><string>forumStatistic</string></field>
            <field name="path"><string>/exo:applications/ForumService/ForumSystem/StatisticHome/forumSta
            <field name="nodeType"><string>exo:forumStatistic</string></field>
            <field name="permissions">
                <collection type="java.util.ArrayList">
                    <value>
                        <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$Permissions">
                            <field name="identity"><string>*:/platform/administrators</string></field>
                            <field name="read"><string>true</string></field>
                            <field name="addNode"><string>true</string></field>
                            <field name="setProperty"><string>true</string></field>
                            <field name="remove"><string>true</string></field>
                        </object>
                    </value>
                </collection>
            </field>
        </object>
    </value>

    <value>
        <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$JcrPath">
            <field name="alias"><string>AdministrationHome</string></field>
            <field name="path"><string>/exo:applications/ForumService/ForumSystem/AdministrationHome</st
            <field name="nodeType"><string>exo:administrationHome</string></field>
            <field name="permissions">
                <collection type="java.util.ArrayList">
                    <value>
                        <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$Permissions">
                            <field name="identity"><string>*:/platform/administrators</string></field>
                            <field name="read"><string>true</string></field>
                            <field name="addNode"><string>true</string></field>
                            <field name="setProperty"><string>true</string></field>
                            <field name="remove"><string>true</string></field>
                        </object>
                    </value>
                </collection>
            </field>
        </object>
    </value>

    <value>
        <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$JcrPath">
            <field name="alias"><string>BanIPHome</string></field>
            <field name="path"><string>/exo:applications/ForumService/ForumSystem/BanIPHome</string></fie
            <field name="nodeType"><string>exo:banIPHome</string></field>
            <field name="permissions">
                <collection type="java.util.ArrayList">
                    <value>
                        <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$Permissions">
                            <field name="identity"><string>*:/platform/administrators</string></field>
                            <field name="read"><string>true</string></field>
                            <field name="addNode"><string>true</string></field>
                            <field name="setProperty"><string>true</string></field>
                            <field name="remove"><string>true</string></field>
                        </object>
                    </value>
                </collection>
            </field>
        </object>
    </value>

    <value>

```

```

<object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$JcrPath">
  <field name="alias"><string>forumBanIP</string></field>
  <field name="path"><string>/exo:applications/ForumService/ForumSystem/BanIPHome/ForumBanIP</string></field>
  <field name="nodeType"><string>exo:banIP</string></field>
  <field name="permissions">
    <collection type="java.util.ArrayList">
      <value>
        <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$Permissions">
          <field name="identity"><string>*:/platform/administrators</string></field>
          <field name="read"><string>true</string></field>
          <field name="addNode"><string>true</string></field>
          <field name="setProperty"><string>true</string></field>
          <field name="remove"><string>true</string></field>
        </object>
      </value>
    </collection>
  </field>
</object>
</value>

<value>
  <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$JcrPath">
    <field name="alias"><string>ForumData</string></field>
    <field name="path"><string>/exo:applications/ForumService/ForumData</string></field>
    <field name="nodeType"><string>exo:forumData</string></field>
    <field name="permissions">
      <collection type="java.util.ArrayList">
        <value>
          <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$Permissions">
            <field name="identity"><string>*:/platform/administrators</string></field>
            <field name="read"><string>true</string></field>
            <field name="addNode"><string>true</string></field>
            <field name="setProperty"><string>true</string></field>
            <field name="remove"><string>true</string></field>
          </object>
        </value>
      </collection>
    </field>
  </object>
</value>

<value>
  <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$JcrPath">
    <field name="alias"><string>TopicTypeHome</string></field>
    <field name="path"><string>/exo:applications/ForumService/ForumData/TopicTypeHome</string></field>
    <field name="nodeType"><string>exo:topicTypeHome</string></field>
    <field name="permissions">
      <collection type="java.util.ArrayList">
        <value>
          <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$Permissions">
            <field name="identity"><string>*:/platform/administrators</string></field>
            <field name="read"><string>true</string></field>
            <field name="addNode"><string>true</string></field>
            <field name="setProperty"><string>true</string></field>
            <field name="remove"><string>true</string></field>
          </object>
        </value>
      </collection>
    </field>
  </object>
</value>

<value>
  <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$JcrPath">
    <field name="alias"><string>CategoryHome</string></field>
    <field name="path"><string>/exo:applications/ForumService/ForumData/CategoryHome</string></field>
    <field name="nodeType"><string>exo:categoryHome</string></field>
    <field name="permissions">
      <collection type="java.util.ArrayList">
        <value>
          <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$Permissions">
            <field name="identity"><string>*:/platform/administrators</string></field>
            <field name="read"><string>true</string></field>
            <field name="addNode"><string>true</string></field>
            <field name="setProperty"><string>true</string></field>
            <field name="remove"><string>true</string></field>
          </object>
        </value>
      </collection>
    </field>
  </object>
</value>

```

```

        </collection>
      </field>
    </object>
  </value>

  <value>
    <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$JcrPath">
      <field name="alias"><string>TagHome</string></field>
      <field name="path"><string>/exo:applications/ForumService/ForumData/TagHome</string></field>
      <field name="nodeType"><string>exo:tagHome</string></field>
      <field name="permissions">
        <collection type="java.util.ArrayList">
          <value>
            <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$Permissions">
              <field name="identity"><string>*:/platform/administrators</string></field>
              <field name="read"><string>true</string></field>
              <field name="addNode"><string>true</string></field>
              <field name="setProperty"><string>true</string></field>
              <field name="remove"><string>true</string></field>
            </object>
          </value>
        </collection>
      </field>
    </object>
  </value>

  <value>
    <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$JcrPath">
      <field name="alias"><string>forumBBCode</string></field>
      <field name="path"><string>/exo:applications/ForumService/ForumData/forumBBCode</string></field>
      <field name="nodeType"><string>exo:forumBBCodeHome</string></field>
      <field name="permissions">
        <collection type="java.util.ArrayList">
          <value>
            <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$Permissions">
              <field name="identity"><string>*:/platform/administrators</string></field>
              <field name="read"><string>true</string></field>
              <field name="addNode"><string>true</string></field>
              <field name="setProperty"><string>true</string></field>
              <field name="remove"><string>true</string></field>
            </object>
          </value>
        </collection>
      </field>
    </object>
  </value>

  <value>
    <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$JcrPath">
      <field name="alias"><string>faqApp</string></field>
      <field name="path"><string>/exo:applications/faqApp</string></field>
      <field name="nodeType"><string>exo:faqHome</string></field>
      <field name="permissions">
        <collection type="java.util.ArrayList">
          <value>
            <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$Permissions">
              <field name="identity"><string>*:/platform/administrators</string></field>
              <field name="read"><string>true</string></field>
              <field name="addNode"><string>true</string></field>
              <field name="setProperty"><string>true</string></field>
              <field name="remove"><string>true</string></field>
            </object>
          </value>
        </collection>
      </field>
    </object>
  </value>

  <value>
    <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$JcrPath">
      <field name="alias"><string>settingHome</string></field>
      <field name="path"><string>/exo:applications/faqApp/settingHome</string></field>
      <field name="nodeType"><string>exo:faqSettingHome</string></field>
      <field name="permissions">
        <collection type="java.util.ArrayList">
          <value>

```

```

        <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$Permissions">
          <field name="identity"><string>*:/platform/administrators</string></field>
          <field name="read"><string>>true</string></field>
          <field name="addNode"><string>>true</string></field>
          <field name="setProperty"><string>>true</string></field>
          <field name="remove"><string>>true</string></field>
        </object>
      </value>
    </collection>
  </field>
</object>
</value>
<value>
  <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$JcrPath">
    <field name="alias"><string>userSettingHome</string></field>
    <field name="path"><string>/exo:applications/faqApp/settingHome/userSettingHome</string></field>
    <field name="nodeType"><string>exo:faqUserSettingHome</string></field>
    <field name="permissions">
      <collection type="java.util.ArrayList">
        <value>
          <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$Permissions">
            <field name="identity"><string>*:/platform/administrators</string></field>
            <field name="read"><string>>true</string></field>
            <field name="addNode"><string>>true</string></field>
            <field name="setProperty"><string>>true</string></field>
            <field name="remove"><string>>true</string></field>
          </object>
        </value>
      </collection>
    </field>
  </object>
</value>

  <value>
    <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$JcrPath">
      <field name="alias"><string>categories</string></field>
      <field name="path"><string>/exo:applications/faqApp/categories</string></field>
      <field name="nodeType"><string>exo:faqCategory</string></field>
      <field name="mixInTypes">
        <collection type="java.util.ArrayList">
          <value><string>mix:faqSubCategory</string></value>
        </collection>
      </field>
      <field name="permissions">
        <collection type="java.util.ArrayList">
          <value>
            <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$Permissions">
              <field name="identity"><string>*:/platform/administrators</string></field>
              <field name="read"><string>>true</string></field>
              <field name="addNode"><string>>true</string></field>
              <field name="setProperty"><string>>true</string></field>
              <field name="remove"><string>>true</string></field>
            </object>
          </value>
        </collection>
      </field>
    </object>
  </value>

  <value>
    <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$JcrPath">
      <field name="alias"><string>templateHome</string></field>
      <field name="path"><string>/exo:applications/faqApp/templateHome</string></field>
      <field name="nodeType"><string>exo:templateHome</string></field>
      <field name="permissions">
        <collection type="java.util.ArrayList">
          <value>
            <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$Permissions">
              <field name="identity"><string>*:/platform/administrators</string></field>
              <field name="read"><string>>true</string></field>
              <field name="addNode"><string>>true</string></field>
              <field name="setProperty"><string>>true</string></field>
              <field name="remove"><string>>true</string></field>
            </object>
          </value>
        </collection>
      </field>
    </object>
  </value>
</object>

```

```

</value>
<value>
  <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$JcrPath">
    <field name="alias"><string>eXoPolls</string></field>
    <field name="path"><string>/exo:applications/eXoPolls</string></field>
    <field name="nodeType"><string>nt:unstructured</string></field>
    <field name="permissions">
      <collection type="java.util.ArrayList">
        <value>
          <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$Permissions">
            <field name="identity"><string>*:/platform/administrators</string></field>
            <field name="read"><string>true</string></field>
            <field name="addNode"><string>true</string></field>
            <field name="setProperty"><string>true</string></field>
            <field name="remove"><string>true</string></field>
          </object>
        </value>
      </collection>
    </field>
  </object>
</value>

  <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$JcrPath">
    <field name="alias"><string>groupsPath</string></field>
    <field name="path"><string>/Groups</string></field>
    <field name="permissions">
      <collection type="java.util.ArrayList">
        <value>
          <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$Permissions">
            <field name="identity"><string>*:/platform/administrators</string></field>
            <field name="read"><string>true</string></field>
            <field name="addNode"><string>true</string></field>
            <field name="setProperty"><string>true</string></field>
            <field name="remove"><string>true</string></field>
          </object>
        </value>
        <value>
          <object type="org.exoplatform.services.jcr.ext.hierarchy.impl.HierarchyConfig$Permissions">
            <field name="identity"><string>any</string></field>
            <field name="read"><string>true</string></field>
            <field name="addNode"><string>false</string></field>
            <field name="setProperty"><string>true</string></field>
            <field name="remove"><string>false</string></field>
          </object>
        </value>
      </collection>
    </field>
  </object>
</value>
</collection>
</field>
</object>
</object-param>
</init-params>
</component-plugin>

```

2.2.2. Roles Configuration

2.2.2.1. Overview

The roles plugin component defines roles in eXo Forum. The roles plugin is a convenient application to define access to a set of functions within the application.

Currently, it only defines the person who has the *administrator* role. Administrators can get access to administration functions.

At runtime, the application gets data from the roles plugin to decide whether the logged user has the administration role or not.

2.2.2.2. Configuration

The plugin is configured in the *roles-configuration.xml* file.

When a user signs in, his or her username, group and membership is compared with the user roles defined in the *.xml* file that is provided by the roles plugin component.

In details:

At runtime of the Forum Service, the roles plugin component is called. The role plugin is configured in the *roles-configuration.xml* file. The component-plugin named *add.role.rules.plugin* will refer to *org.exoplatform.ks.common.conf.RoleRulesPlugin* to create users for eXo Forum corresponding to the users that exist in the Organization database. In addition, the list of users who have administration roles are also defined.

```
<component-plugin>
  <name>add.role.rules.plugin</name>
  <set-method>addRolePlugin</set-method>
  <type>org.exoplatform.ks.common.conf.RoleRulesPlugin</type>
  <description>add role rules</description>
  <init-params>
    <value-param>
      <name>role</name>
      <description>name of the role</description>
      <value>ADMIN</value>
    </value-param>
    <values-param>
      <name>rules</name>
      <description>rules of the role</description>
      <value>root</value>
      <!--value>admin</value -->
      <!--value>member:/demo</value-->
      <!--value>/forums/admin</value-->
      <!--value>*/forum/admin</value-->
      <!--value>/platform/administrators</value-->
      <!--value>manager:/platform/users</value-->
      <!--value>*/somegroup/somesubgroup</value-->
      <!--value>manager:/somegroup/someothergroup</value-->
    </values-param>
  </init-params>
</component-plugin>
```

Name	Set method	Type	Description
add.role.rules.plugin	addRolePlugin	org.exoplatform.ks.common.conf.RoleRulesPlugin	add role rules

- Init-params:

Name	Possible values	Default value	Description
role	string	ADMIN	The name of the role
rules	string	root	The rules of the role

- When the *role-configuration.xml* file is executed, the administration role (with ADMIN value) will be checked and assigned to a matrix of users/groups/memberships defined inside "value" tags as below:

```
<value>...</value>
```

For example:

```
...
    <value>root</value>
    <value>john</value>
    <value>/platform/administrators</value>
    <value>member:/VIP</value>
    <value>validator:/VIP</value>
...
```

In the example above, the default Forum Administrator are *root* , *john*, users in */platform/administrators* group and users who are *member/validator* memberships in the VIP group.

When *root*, *john* or any user who belongs to the */platform/administrators* group or users who have *amember/validator* memberships in the VIP group signs in the eXo Forum, he or she will be identified as the default Forum Administrator.

To add or remove the default Forum Administrator, simply edit the *roles-configuration.xml* file and add or remove the correspondent "value" tags.

```
...
    <values-param>
        ...
    <value>...</value>
        ...
    </values-param>
...
```

The default Forum Administrators can only change their roles by editing the *roles-configuration.xml* file.

At runtime, the modifications in the *roles-configuration.xml* file will be read and the database are updated, normal users of the forum and the default administration will be created correspondingly.

2.2.3. Forum Configuration

2.2.3.1. BBCode Configuration

2.2.3.1.1. Overview

The BBCode Plugin component defines the default BBCode data in the .xml file. It includes BBCode tags; for example, I, B, U, SIZE, COLOR.

When the BBCode Service runs, it will get values returned from the BBCode Plugin component to initialize the default BBCode data.

2.2.3.1.2. Configuration

2.2.3.1.2.1. Default BBCode data

The default BBCode data is configured in the *bbcodes-configuration.xml* file.

In particular, at the runtime of the BBCode Service, the BBCode plugin component is called. Then, the

bbcodes-configuration.xml file is executed, and the component-plugin named *registerBBCodePlugin* will be referred to *org.exoplatform.ks.bbcode.spi.BBCodePlugin* to excute some objects that will generate default data.

```
<component-plugin>
  <name>forum.default.bbcodes</name>
  <set-method>registerBBCodePlugin</set-method>
  <type>org.exoplatform.ks.bbcode.spi.BBCodePlugin</type>
  <description>default supported BBCodes</description>
  <init-params>
    <object-param>
      <name>I</name>
      <description>set text in italic</description>
      <object type="org.exoplatform.ks.bbcode.spi.BBCodeData">
        <field name="tagName">
          <string>I</string>
        </field>
        <field name="replacement">
          <string>&lt;i&gt;{param}&lt;/i&gt;</string>
        </field>
        <field name="description">
          <string>Set text in italic</string>
        </field>
        <field name="example">
          <string>[I]This text is italic[/I]</string>
        </field>
        <field name="isOption">
          <string>>false</string>
        </field>
        <field name="isActive">
          <string>true</string>
        </field>
      </object>
    </object-param>

    <object-param>
      <name>B</name>
      <description/>
      <object type="org.exoplatform.ks.bbcode.spi.BBCodeData">
        <field name="tagName">
          <string>B</string>
        </field>
        <field name="replacement">
          <string>&lt;b&gt;{param}&lt;/b&gt;</string>
        </field>
        <field name="description">
          <string>Set text in bold</string>
        </field>
        <field name="example">
          <string>[B]This text is bold[/B]</string>
        </field>
        <field name="isOption">
          <string>>false</string>
        </field>
        <field name="isActive">
          <string>true</string>
        </field>
      </object>
    </object-param>

    <object-param>
      <name>U</name>
      <description/>
      <object type="org.exoplatform.ks.bbcode.spi.BBCodeData">
        <field name="tagName">
          <string>U</string>
        </field>
        <field name="replacement">
          <string>&lt;u&gt;{param}&lt;/u&gt;</string>
        </field>
        <field name="description">
          <string>Set text in underline</string>
        </field>
        <field name="example">
          <string>[U]This text is underline[/U]</string>
        </field>
        <field name="isOption">
```

```

        <string>>false</string>
      </field>
      <field name="isActive">
        <string>true</string>
      </field>
    </object>
  </object-param>

  <object-param>
    <name>COLOR</name>
    <description/>
    <object type="org.exoplatform.ks.bbcode.spi.BBCodeData">
      <field name="tagName">
        <string>COLOR</string>
      </field>
      <field name="replacement">
        <string>&lt;font color="{option}"&gt;{param}&lt;/font&gt;</string>
      </field>
      <field name="description">
        <string>The [color=option] tag allows you to change the color of your text.</string>
      </field>
      <field name="example">
        <string>[COLOR=blue]This text is blue[/COLOR]</string>
      </field>
      <field name="isOption">
        <string>true</string>
      </field>
      <field name="isActive">
        <string>true</string>
      </field>
    </object>
  </object-param>

  <object-param>
    <name>SIZE</name>
    <description/>
    <object type="org.exoplatform.ks.bbcode.spi.BBCodeData">
      <field name="tagName">
        <string>SIZE</string>
      </field>
      <field name="replacement">
        <string>&lt;font size="{option}"&gt;{param}&lt;/font&gt;</string>
      </field>
      <field name="description">
        <string>The [size=option] tag allows you to change the size of your text.</string>
      </field>
      <field name="example">
        <string>[size=+2]this text is two sizes larger than normal[/size]</string>
      </field>
      <field name="isOption">
        <string>true</string>
      </field>
      <field name="isActive">
        <string>true</string>
      </field>
    </object>
  </object-param>

  <object-param>
    <name>FONT</name>
    <description/>
    <object type="org.exoplatform.ks.bbcode.spi.BBCodeData">
      <field name="tagName">
        <string>FONT</string>
      </field>
      <field name="replacement">
        <string>&lt;font face="{option}"&gt;{param}&lt;/font&gt;</string>
      </field>
      <field name="description">
        <string>The [font=option] tag allows you to change the font of your text.</string>
      </field>
      <field name="example">
        <string>[font=courier]this text is in the courier font[/font]</string>
      </field>
      <field name="isOption">
        <string>true</string>
      </field>
      <field name="isActive">
        <string>true</string>
      </field>
    </object>
  </object-param>

```

```

    </field>
  </object>
</object-param>

<object-param>
  <name>HIGHLIGHT</name>
  <description/>
  <object type="org.exoplatform.ks.bbcode.spi.BBCodeData">
    <field name="tagName">
      <string>HIGHLIGHT</string>
    </field>
    <field name="replacement">
      <string>&lt;span style="font-weight: bold; color: blue;"&gt;{param}&lt;/span&gt;</string>
    </field>
    <field name="description">
      <string>The [highlight] tag allows you to make highlight of your text.</string>
    </field>
    <field name="example">
      <string>[highlight]this text is highlighted[/highlight]</string>
    </field>
    <field name="isOption">
      <string>>false</string>
    </field>
    <field name="isActive">
      <string>true</string>
    </field>
  </object>
</object-param>

<object-param>
  <name>LEFT</name>
  <description/>
  <object type="org.exoplatform.ks.bbcode.spi.BBCodeData">
    <field name="tagName">
      <string>LEFT</string>
    </field>
    <field name="replacement">
      <string>&lt;div align="left"&gt;{param}&lt;/div&gt;</string>
    </field>
    <field name="description">
      <string>The [left] tag allows alignment text to left. </string>
    </field>
    <field name="example">
      <string>[LEFT]This text is left-aligned[/LEFT]</string>
    </field>
    <field name="isOption">
      <string>>false</string>
    </field>
    <field name="isActive">
      <string>true</string>
    </field>
  </object>
</object-param>

<object-param>
  <name>RIGHT</name>
  <description/>
  <object type="org.exoplatform.ks.bbcode.spi.BBCodeData">
    <field name="tagName">
      <string>RIGHT</string>
    </field>
    <field name="replacement">
      <string>&lt;div align="right"&gt;{param}&lt;/div&gt;</string>
    </field>
    <field name="description">
      <string>The [right] tag allows alignment text to right.</string>
    </field>
    <field name="example">
      <string>[RIGHT]example[/RIGHT]</string>
    </field>
    <field name="isOption">
      <string>[RIGHT]this text is right-aligned[/RIGHT]</string>
    </field>
    <field name="isActive">
      <string>true</string>
    </field>
  </object>
</object-param>

```

```

<object-param>
  <name>CENTER</name>
  <description/>
  <object type="org.exoplatform.ks.bbcode.spi.BBCodeData">
    <field name="tagName">
      <string>CENTER</string>
    </field>
    <field name="replacement">
      <string>&lt;div align="center"&gt;{param}&lt;/div&gt;</string>
    </field>
    <field name="description">
      <string>The [center] allows alignment text to center.</string>
    </field>
    <field name="example">
      <string>[CENTER]this text is center-aligned[/CENTER]</string>
    </field>
    <field name="isOption">
      <string>>false</string>
    </field>
    <field name="isActive">
      <string>true</string>
    </field>
  </object>
</object-param>

<object-param>
  <name>JUSTIFY</name>
  <description/>
  <object type="org.exoplatform.ks.bbcode.spi.BBCodeData">
    <field name="tagName">
      <string>JUSTIFY</string>
    </field>
    <field name="replacement">
      <string>&lt;div align="justify"&gt;{param}&lt;/div&gt;</string>
    </field>
    <field name="description">
      <string>The [justify] tag allows alignment text to justify.</string>
    </field>
    <field name="example">
      <string>[JUSTIFY]this text is justify-aligned[/JUSTIFY]</string>
    </field>
    <field name="isOption">
      <string>>false</string>
    </field>
    <field name="isActive">
      <string>true</string>
    </field>
  </object>
</object-param>

<object-param>
  <name>EMAIL</name>
  <description/>
  <object type="org.exoplatform.ks.bbcode.spi.BBCodeData">
    <field name="tagName">
      <string>EMAIL</string>
    </field>
    <field name="replacement">
      <string>&lt;a href="mailto:{param}"&gt;{param}&lt;/a&gt;</string>
    </field>
    <field name="description">
      <string>The [email] tag allows you to link to an email address.</string>
    </field>
    <field name="example">
      <string>[email]demo@example.com[/email]</string>
    </field>
    <field name="isOption">
      <string>>false</string>
    </field>
    <field name="isActive">
      <string>true</string>
    </field>
  </object>
</object-param>

<object-param>
  <name>EMAIL - OPT</name>
  <description/>
  <object type="org.exoplatform.ks.bbcode.spi.BBCodeData">

```

```

    <field name="tagName">
      <string>EMAIL</string>
    </field>
    <field name="replacement">
      <string>&lt;a href="mailto:{option}"&gt;{param}&lt;/a&gt;</string>
    </field>
    <field name="description">
      <string>The [email=option] tag allows link to an email address and use an optional parameter to 'r
    </field>
    <field name="example">
      <string>[email=demo@example.com]Click Here to Email me[/email] </string>
    </field>
    <field name="isOption">
      <string>true</string>
    </field>
    <field name="isActive">
      <string>true</string>
    </field>
  </object>
</object-param>

<object-param>
  <name>URL</name>
  <description/>
  <object type="org.exoplatform.ks.bbcode.spi.BBCodeData">
    <field name="tagName">
      <string>URL</string>
    </field>
    <field name="replacement">
      <string>&lt;a target='_blank' href="{param}"&gt;{param}&lt;/a&gt;</string>
    </field>
    <field name="description">
      <string>The [url] tag allows link to other websites and files.</string>
    </field>
    <field name="example">
      <string>[URL]http://www.exoplatform.com[/URL]</string>
    </field>
    <field name="isOption">
      <string>false</string>
    </field>
    <field name="isActive">
      <string>true</string>
    </field>
  </object>
</object-param>

<object-param>
  <name>URL-OPT</name>
  <description/>
  <object type="org.exoplatform.ks.bbcode.spi.BBCodeData">
    <field name="tagName">
      <string>URL</string>
    </field>
    <field name="replacement">
      <string>&lt;a target='_blank' href="{option}"&gt;{param}&lt;/a&gt;</string>
    </field>
    <field name="description">
      <string>The [url=option] tag allows link to other websites and files and usean optional parameter
    </field>
    <field name="example">
      <string>[URL=http://www.exoplatform.com]Click goto exoplatform website.[/URL]</string>
    </field>
    <field name="isOption">
      <string>true</string>
    </field>
    <field name="isActive">
      <string>true</string>
    </field>
  </object>
</object-param>

<object-param>
  <name>GOTO</name>
  <description/>
  <object type="org.exoplatform.ks.bbcode.spi.BBCodeData">
    <field name="tagName">
      <string>GOTO</string>
    </field>
    <field name="replacement">

```

```

        <string>&lt;a href="{option}"&gt;{param}&lt;/a&gt;</string>
    </field>
    <field name="description">
        <string>Allows goto directly to link instead of open a new window or a new tab. </string>
    </field>
    <field name="example">
        <string>[goto=http://www.exoplatform.com]Goto this link.[/goto]&gt;</string>
    </field>
    <field name="isOption">
        <string>true</string>
    </field>
    <field name="isActive">
        <string>true</string>
    </field>
</object>
</object-param>

<object-param>
    <name>LIST</name>
    <description/>
    <object type="org.exoplatform.ks.bbcode.spi.BBCodeData">
        <field name="tagName">
            <string>LIST</string>
        </field>
        <field name="replacement">
            <string>You can not define this bbcode tag. It is defined by the developer.</string>
        </field>
        <field name="description">
            <string>The [list] tag allows create simple, each bullet is denoted by the [*] tag.</string>
        </field>
        <field name="example">
            <string>[list][*]list item 1[*]list item 2[/list]</string>
        </field>
        <field name="isOption">
            <string>>false</string>
        </field>
        <field name="isActive">
            <string>true</string>
        </field>
    </object>
</object-param>

<object-param>
    <name>LIST-OPT</name>
    <description/>
    <object type="org.exoplatform.ks.bbcode.spi.BBCodeData">
        <field name="tagName">
            <string>LIST</string>
        </field>
        <field name="replacement">
            <string>You can not define this bbcode tag. It is defined by the developer.</string>
        </field>
        <field name="description">
            <string>The [list=option] tag allows create bulleted lists specifying an option. Within the value
        </field>
        <field name="example">
            <string>[list=1][*]list item 1[*]list item 2[/list]</string>
        </field>
        <field name="isOption">
            <string>true</string>
        </field>
        <field name="isActive">
            <string>true</string>
        </field>
    </object>
</object-param>

<object-param>
    <name>IMG</name>
    <description/>
    <object type="org.exoplatform.ks.bbcode.spi.BBCodeData">
        <field name="tagName">
            <string>IMG</string>
        </field>
        <field name="replacement">
            <string>&lt;img border="0" alt="" src="{param}" class="inlineimg"/&gt;</string>
        </field>
        <field name="description">
            <string>The [img] tag allows you to shows the image indicated by {url}</string>
        </field>
    </object>
</object-param>

```

```

    </field>
    <field name="example">
      <string>[url=http://www.google.com.vn] [img]http://groups.google.com.vn/groups/img/3nb/groups_medi
    </field>
    <field name="isOption">
      <string>>false</string>
    </field>
    <field name="isActive">
      <string>>true</string>
    </field>
  </object>
</object-param>

<object-param>
  <name>QUOTE</name>
  <description/>
  <object type="org.exoplatform.ks.bbcode.spi.BBCodeData">
    <field name="tagName">
      <string>QUOTE</string>
    </field>
    <field name="replacement">
      <string>&lt;div style="background:#ededf7; border:1px solid #d8d8d8; padding:6px 6px 6px 15px; mar
    </field>
    <field name="description">
      <string>The [quote] tag allows attribute content of post.</string>
    </field>
    <field name="example">
      <string>[quote]Lorem ipsum dolor sit amet[/quote]</string>
    </field>
    <field name="isOption">
      <string>>false</string>
    </field>
    <field name="isActive">
      <string>>true</string>
    </field>
  </object>
</object-param>

<object-param>
  <name>QUOTE-OPT</name>
  <description/>
  <object type="org.exoplatform.ks.bbcode.spi.BBCodeData">
    <field name="tagName">
      <string>QUOTE</string>
    </field>
    <field name="replacement">
      <string>&lt;div style="background:#ededf7; border:1px solid #d8d8d8; padding:6px 6px 6px 15px; mar
    </field>
    <field name="description">
      <string>The [quote=option] tag allows attribute content and user name of poster.</string>
    </field>
    <field name="example">
      <string>[quote=John Doe]Lorem ipsum dolor sit amet[/quote]</string>
    </field>
    <field name="isOption">
      <string>>true</string>
    </field>
    <field name="isActive">
      <string>>true</string>
    </field>
  </object>
</object-param>

<object-param>
  <name>CODE</name>
  <description/>
  <object type="org.exoplatform.ks.bbcode.spi.BBCodeData">
    <field name="tagName">
      <string>CODE</string>
    </field>
    <field name="replacement">
      <string>&lt;div style="background:#ededed; border:1px inset #7b7b7b; margin:5px; overflow:auto;"&g
    </field>
    <field name="description">
      <string>The [code] tag allows you to view source code html.</string>
    </field>
    <field name="example">
      <string>[code]&lt;div&gt;some text or code html&lt;/div&gt;[/code]</string>
    </field>
  </object>

```

```

    <field name="isOption">
      <string>false</string>
    </field>
    <field name="isActive">
      <string>true</string>
    </field>
  </object>
</object-param>

<object-param>
  <name>CSS</name>
  <description/>
  <object type="org.exoplatform.ks.bbcode.spi.BBCodeData">
    <field name="tagName">
      <string>CSS</string>
    </field>
    <field name="replacement">
      <string>&lt;span class="{option}"&gt;{param}&lt;/span&gt;</string>
    </field>
    <field name="description">
      <string>The [css=option] tag allows you to add div tag and set class Name for this it.</string>
    </field>
    <field name="example">
      <string>[css=highlight]Text is highlight[/css]</string>
    </field>
    <field name="isOption">
      <string>true</string>
    </field>
    <field name="isActive">
      <string>true</string>
    </field>
  </object>
</object-param>

<object-param>
  <name>SLIDESHARE</name>
  <description/>
  <object type="org.exoplatform.ks.bbcode.spi.BBCodeData">
    <field name="tagName">
      <string>SLIDESHARE</string>
    </field>
    <field name="replacement">
      <string>
        &lt;div style="width:425px; height:355px;" align="center"&gt;
          &lt;object style="margin:0px" width="425" height="355"&gt;
            &lt;param name="movie" value="http://static.slidesharecdn.com/swf/ssplayer2.swf?doc={option}&amp;
            &lt;param name="allowFullScreen" value="true"/&gt;
            &lt;param name="allowScriptAccess" value="always"/&gt;
            &lt;embed src="http://static.slidesharecdn.com/swf/ssplayer2.swf?doc={option}&amp;rel=0"
              type="application/x-shockwave-flash" allowscriptaccess="always" allowfullscreen="true"
              width="425" height="355"&gt;
            &lt;/embed&gt;
          &lt;/object&gt;
          &lt;b&gt;{param}&lt;/b&gt;&lt;/div&gt;
        </string>
      </field>
    <field name="description">
      <string>The [SLIDESHARE=option] tag allows you to run slide in slidesharecdn.com site.</string>
    </field>
    <field name="example">
      <string>[SLIDESHARE=slideId]My slide[/SLIDESHARE]</string>
    </field>
    <field name="isOption">
      <string>true</string>
    </field>
    <field name="isActive">
      <string>true</string>
    </field>
  </object>
</object-param>
</init-params>
</component-plugin>

```

- In which,

Name	Set method	Type	Description
forum.default.bbcodes	registerBBCodePlugin	org.exoplatform.ks.bbcode.spi.BBCodePlugin	Supported BB Codes

- The BBCode array is defined by the *object* `org.exoplatform.ks.bbcode.spi.BBCodeData` as below:

```
<object type="org.exoplatform.ks.bbcode.spi.BBCodeData">
  <field name="tagName">
    <string>I</string>
  </field>
  <field name="replacement">
    <string>&lt;i&gt;{param}&lt;/i&gt;</string>
  </field>
  <field name="description">
    <string>Set text in italic</string>
  </field>
  <field name="example">
    <string>[I]This text is italic[/I]</string>
  </field>
  <field name="isOption">
    <string>>false</string>
  </field>
  <field name="isActive">
    <string>>true</string>
  </field>
</object>
```

- The BBCode includes basic data which are defined in the field tag with a specific name as below:

```
<field name="tagName">
  <string>I</string>
</field>
<field name="replacement">
  <string>&lt;i&gt;{param}&lt;/i&gt;</string>
</field>
<field name="description">
  <string>Set text in italic</string>
</field>
<field name="example">
  <string>[I]This text is italic[/I]</string>
</field>
<field name="isOption">
  <string>>false</string>
</field>
<field name="isActive">
  <string>>true</string>
</field>
```

In which:

Field-name	Values	Description
tagName	string	This is the text for the BB code, which goes inside the square brackets. For example, for the bold tag, you type {b} - the BB Code Tag for this is simply b without the brackets.
replacement	string	This is the HTML code that

Field-name	Values	Description
		replaces the BBCode entered by the user. Make sure that you include 'param' (without the quotes) to insert the text between the opening and closing BBCode tags, and 'option' for the parameter within the BBCode tag. You can only use option if 'Use Option' is selected.
description	string	This is a piece of text to describe the BBCode tag. This can include HTML tags if you want.
example	string	This is a sample piece of BB code to use as an example for this particular BB code. e.g. to demonstrate the use of the b tag, you would enter b Some Text/ b .
isOption	true / false	Setting this option to yes will allow you to create a tag=option/tag style tag, rather than just a tag/tag style tag.
isActive	true/false	To activate the BBCode tag.

2.2.3.2. Forums Initializer

2.2.3.2.1. Overview

The Initialization Plugin component defines the default forum data in the *xml* file. It includes categories, forums, topics, and posts.

When the Forum Service runs, it will get values which are returned from Initialization Plugin component to initialize the default forum data.

2.2.3.2.2. Configuration

2.2.3.2.2.1. Default forum data

The default forum data is configured in the *war:webapp/WEB-INF/conf/ksdemo/ks/services-configuration.xml* file.

In particular, at the runtime of Forum Service, the Initialization Plugin component is called, then *services-configuration.xml* file is executed, the component-plugin named *addInitialDataPlugin* will be referred to *org.exoplatform.forum.service.conf.InitializeForumPlugin* to excute some objects to create default data for the forum application.

```
<component-plugin>
  <name>default.data</name>
  <set-method>addInitialDataPlugin</set-method>
```

```

<type>org.exoplatform.forum.service.conf.InitializeForumPlugin</type>
<description>description</description>
<init-params>
  <object-param>
    <name>livedemo.default.configuration</name>
    <description>initial data for live demo</description>
    <object type="org.exoplatform.forum.service.conf.ForumInitialData">
      <field name="categories">
        <collection type="java.util.ArrayList">
          <value>
            <object type="org.exoplatform.forum.service.conf.CategoryData">
              <field name="owner">
                <string>root</string>
              </field>
              <field name="name">
                <string>Knowledge Suite</string>
              </field>
              <field name="description">
                <string>All about eXo KS</string>
              </field>
              <field name="forums">
                <collection type="java.util.ArrayList">
                  <value>
                    <object type="org.exoplatform.forum.service.conf.ForumData">
                      <field name="owner"><string>root</string></field>
                      <field name="name"><string>Live demo</string></field>
                      <field name="description"><string>Questions about this demo</string></field>
                      <field name="topics">
                        <collection type="java.util.ArrayList">
                          <value>
                            <object type="org.exoplatform.forum.service.conf.TopicData">
                              <field name="name"><string>Demo data policy</string></field>
                              <field name="icon"><string>Shield</string></field>
                              <field name="owner"><string>root</string></field>
                              <field name="content"><string>
Welcome to eXo Knowledge Suite live demo!nnn

We hope you enjoy discovering eXo Forum and FAQ applications features.
You don't need to be logged in to see the applications in action. But the po
We didn't want you to miss them so, when you [b][url="/portal/public/classic
Anybody can become an administrator or a moderator and play in the sandbox!n
As a consequence, the data for this forum (including the accounts) is not me
[b][center]WE MAY RESET FORUMS AND FAQS ANYTIME[/center][b]nn
Enjoy and don't forget to send feedback at [email]ks@exoplatform.com[/email]
</object>
</value>
</collection>
</field>
</object>
</value>
</collection>
</field>
</object-param>
</init-params>
</component-plugin>

```

- In which,

Name	Set-method	Type	Description
default.data	addInitialDataPlugin	org.exoplatform.forum.service.conf.InitializeForumPlugin	the conf and initialize Forum

- Init-para

Name	Possible value	Default value	Description
livedemo.default.configuration	object	org.exoplatform.forum.service.conf.InitialData	Initial data for livedemo

- Category array

After `org.exoplatform.forum.service.conf.InitializeForumPlugin` object is executed, `org.exoplatform.forum.service.conf.ForumInitialData` object is called. It returns a category array. The value of the category array is defined by `org.exoplatform.forum.service.conf.CategoryData` object like below:

Exception occurred, see logs

1. category includes some basic data which are defined in *field* tag with specific *name* like below:

```
<field name="owner">
  <string>root</string>
</field>
<field name="name">
  <string>Knowledge Suite</string>
</field>
<field name="description">
  <string>All about eXo KS</string>
</field>
```

In which:

Field	Possible value	Default value	Description	
owner	user id	root	The user who is the creator of the category.	
name	string	Knowledge Suite	The name of the title of the category.	
description	string	All about eXo KS	The brief description of the category.	

- Category value modification

The values of the default category can be changed by changing text values in string tag of each field by the other one.

With the sample code above, `org.exoplatform.forum.service.conf.CategoryData` object is called only one time. It means that only one default category is defined. If you want to define more default categories, repeat calling `org.exoplatform.forum.service.conf.CategoryData` object and define values for the new category with the sample code below:

Exception occurred, see logs

2.2.3.2.2.2. Forum array

1. category may contain one or more forums. The value of the forum is defined in *forums* field. It returns a forum array. The value of the forum array is defined by *org.exoplatform.forum.service.conf.ForumData* object like below:

Exception occurred, see logs

- Basic forum data

A forum includes some basic data which are defined in field tag with specific name like above.

In which:

Field	Possible value	Default value	Description	
owner	user id	root	The creator of the default forum.	
name	string	Live demo	The name or the title of the default forum.	
description	string	Questions about this demo	The brief description of the default forum.	

The values of the default forum can be changed by changing text values in string tag of each field by the other one.

With the sample code above, *org.exoplatform.forum.service.conf.ForumData* object is called only one time. It means that only one default forum is defined inside the default category named Knowledge Suite. If you want to define more default forums, repeat calling *org.exoplatform.forum.service.conf.ForumData* object and define values for the new forum with the sample code below:

Exception occurred, see logs

2.2.3.2.2.3. Forum topics

1. Forum may contain one or more topics. The value of the topic is defined in *topics* field. It returns a topic array. The value of the topic array is defined by *org.exoplatform.forum.service.conf.TopicData* object like below:

Exception occurred, see logs

A topic includes some basic data which are defined in field tag with specific name like above. In which:

Field	Possible value	Default value	Description
name	string	Demo data policy	The name or the title of the default topic.

Field	Possible value	Default value	Description
icon	string	Tux	The default icon of the default topic.
owner	user id	root	The creator of the default topic.
content	string	Welcome to eXo Forum live demo...at anytime.	The main content of the default topic.

This values of the default topic can be changed by changing text values in string tag of each field by the other one.

With the sample code above, `org.exoplatform.forum.service.conf.TopicData` object is called only one time. It means that only one default topic is defined inside the default forum named Live demo. If you want to define more default topics, repeat calling `org.exoplatform.forum.service.conf.TopicData` object and define values for the new topic with the sample code below:

Exception occurred, see logs

1. Topic may contain one or more posts. The value of the post is defined in *posts* field. It returns a post array. The value of the post array is defined by `org.exoplatform.forum.service.conf.PostData` object like below:

Exception occurred, see logs

A post includes some basic data which are defined in *field* tag with specific *name* like above.

In which:

Field	Possible value	Default value	Description	
name	string	Reply: Demo data policy	The name or the title of the default post.	
icon	string	IconsView	The default icon of the default post.	
ownwer	user id	root	The creator of the default post.	
content	string	Enjoy and don't forget to send feedback at ks@exoplatform.com	The main content of the default post.	

These values of the default post can be changed by changing text values in *string* tag of each *field* by the other one.

With the sample code above, `org.exoplatform.forum.service.conf.PostData` object is called only one time. It

means that only one default post is defined inside the default topic named *Demo data policy*. If you want to define more default posts, repeat calling *org.exoplatform.forum.service.conf.PostData* object and define values for the new post with the sample code below:

Exception occurred, see logs

By fault, the default forum data can only be changed by editing in *services-configuration.xml* file.

At the runtime, the new changes in *services-configuration.xml* file will be executed and updated, the default forum data will be created correspondingly.

2.2.3.3. Auto Prune

2.2.3.3.1. Overview

The Auto-prune component is to activate the topics in specific Forums which are not activated (not viewed, edited or added post) for a period automatically.

When the Job Schedule Service runs, it will get values which are returned from the Auto-prune plugin component to identify the topics which have to be inactivated in Forum application. These topics will be invisible to users.

2.2.3.3.2. Configuration

The properties of Auto prune plugin is configured in *war:webapp/WEB-INF/ks-extension/ks/forum/prune-configuration.xml* file.

In details:

At the runtime of Job Schedule Service, Auto prune plugin component is called, then *prune-configuration.xml* file is executed, the component-plugin named *ForumDeactiveJob* will be referred to *org.exoplatform.forum.service.conf.DeactivePeriodJob* to inactivate the topics in specific Forums which meet predefined inactivation properties.

```
<component-plugin>
  <name>ForumDeactiveJob</name>
  <set-method>addPeriodJob</set-method>
  <type>org.exoplatform.forum.service.conf.DeactivePeriodJob</type>
  <description>add a Deactive job to the JobSchedulerService</description>
  <init-params>
    <properties-param>
      <name>job.info</name>
      <description>save the monitor data periodically</description>
      <property name="jobName" value="DeactiveJob"/>
      <property name="groupName" value="KnowlegedSuite"/>
      <property name="job" value="org.exoplatform.forum.service.conf.DeactiveJob"/>
      <property name="repeatCount" value="0"/>
      <property name="period" value="7200000"/> <!-- 2 hours-->
      <property name="startTime" value="+0"/>
      <property name="endTime" value=""/>
    </properties-param>
    <properties-param>
      <name>deactive.info</name>
      <description/>
      <property name="inactiveDays" value="15"/>
      <property name="forumName" value="Live demo"/>
    </properties-param>
  </init-params>
</component-plugin>
```

- In which,

Name	Set-method	Type	Description
ForumDeactiveJob	addPeriodJob	org.exoplatform.forum.service.addDeactivePeriodJob	addDeactivePeriodJob SchedulerService

- The properties for the Auto-prune plugin are defined in *property* tag with format like below:

```

...
    <property name="jobName" value="DeactiveJob"/>
    <property name="groupName" value="KnowlegedSuite"/>
    <property name="job" value="org.exoplatform.forum.service.conf.DeactiveJob"/>
    <property name="repeatCount" value="0"/>
    <property name="period" value="7200000"/> <!-- 2 hours-->
    <property name="startTime" value="+0"/>
    <property name="endTime" value=""/>
...
    <property name="inactiveDays" value="15"/>
    <property name="forumName" value="Live demo"/>
...

```

In details:

Property name	Possible value	Default value	Description
jobname	String	DeactiveJob	The name of job which will be executed.
groupname	String	KnowlegedSuite	The name of the application which will be executed.
job	Class path	org.exoplatform.forum.service.conf.DeactiveJob	The referenced function of the job which will be executed.
repeatCount	Long	0	The repeat time for the job. It means that how many time the job will be executed. It means that <i>DecactiveJob</i> is called at runtime only. It does not repeat. Assume that the value is 2 or 3, <i>DecactiveJob</i> is called 2 or 3 times.
period	Long	72000000	The time interval the job will be executed.
starttime	Integer	+0	The start time when the function will be executed. <i>starttime</i> is 0. It means <u>that the time to start executing DecactiveJob is</u>

Property name	Possible value	Default value	Description
			<u>the runtime</u>
endtime	Integer	null	The end time when the function will be stopped executing. <i>endtime</i> is blank. It means that there is no limitation for the end time for <i>DecactiveJob</i> .

With start and end time, you can give a specific date in format:yyyy-mm-dd HH:mm:ss.sss to define the start and end time for *DecactiveJob* . Besides, deactive information is also defined:

Property name	Possible value	Default value	Description
inactiveDays	Integer	15	The number of days the topic has not been activated. <i>inactivateDays</i> is 1. It means that all the topics which have 1 inactivated day, will be set inactivated status. They will be invisible.
forumname	String	Live Demo	The name of the Forum which will be checked for Auto prune. In case, <i>forumname</i> is blank. It means that all forums will be checked for auto prune. <i>forumname</i> is Live demo. It means that only the forum named 'Live demo' is checked for Auto prune.

By fault, the default properties can only be changed by editing its value in *prune-configuration.xml* file.

At the runtime, the new changes in the *prune-configuration.xml* file will be executed and updated, the Auto-prune plugin will be executed, depending on its properties.

2.2.3.4. User Statistics

2.2.3.4.1. Overview

The Auto-count Active Users component is to calculate automatically the number of active users. A user is considered as an active user only when he/she often adds topic/post in Forum and his/her last post date satisfies with the interval time that is predefined.

For example, after 15 days if one user does not have any new posts, he/she is not considered as an active user.

When Job Schedule Service runs, it will get values which are returned from Auto-count Active Users plugin component to identify the number of active users. This value is updated at Active Members information when viewing Forum statistics.

2.2.3.4.2. Configuration

The properties of Auto-count Active Users plugin is configured in `war:webapp/WEB-INF/ks-extension/ks/forum/statistics-configuration.xml` file.

In details:

At Job Schedule Service runtime, Auto-count Active Users plugin component is called, then `statistics-configuration.xml` file is executed, the component-plugin named `RecountActiveUserJob` will be referred to `org.exoplatform.forum.service.conf.RecountActiveUserPeriodJob` to calculate the number of active users.

Exception occurred, see logs

- In which,

Name	Method	Type	Description
RecountActiveUserJob	addPeriodJob	org.exoplatform.forum.service.conf.RecountActiveUserPeriodJob	add a RecountActiveUserPeriodJob job to the JobSchedulerService

- The properties for the Auto-count Active Members plugin are defined in property tag like below:

```
...
    <property name="jobName" value="RecountActiveUserJob"/>
    <property name="groupName" value="KnowlegedSuite"/>
    <property name="job" value="org.exoplatform.forum.service.conf.RecountActiveUserJob"/>
    <property name="repeatCount" value="0"/>
    <property name="period" value="7200000"/> <!-- 2 hours-->
    <property name="startTime" value="+0"/>
    <property name="endTime" value=""/>
...
    <property name="lastPost" value="15"/>
...
```

In which:

Property name	Possible value	Default value	Description
jobname	String	RecountActiveUserJob	The name of job which will be executed.
groupname	String	KnowlegedSuite	The name of the application which will be executed.
job	Class path	org.exoplatform.forum.service.conf.RecountActiveUserJob	The reference of the job which will be executed.

Property name	Possible value	Default value	Description
repeatCount	Long	0	The repeat time for the job. It means that how many time the job will be executed. <i>repeatCount</i> is 0. It means that <i>RecountActiveUserJob</i> is called at runtime only. It is does not repeat. Assume that the value is 2 or 3, <i>RecountActiveUserJob</i> is called 2 or 3 times.
period	Long	7200000 (millisecond) (equal to 2 hours)	The time interval the job will be executed.
starttime	Integer	0	The start time when the function will be executed. <i>starttime</i> is 0. <u>It means that the time to start executing <i>RecountActiveUserJob</i> is the runtime.</u>
endtime	Integer	null	The end time when the function will be stopped executing. <i>endtime</i> is blank. It means that there is no limitation for the end time for <i>RecountActiveUserJob</i> .

With start and end time, you can give a specific date in the format:yyyy-mm-dd HH:mm:ss.sss to define the start and end time for *RecountActiveUserJob*. Besides, the active time information is also defined:

Property name	Possible value	Default value	Description
lastPost	Integer	15	The number of days that the user has added last post. <i>lastPost</i> is 15. It means that all users, within 15 days since their last post date, have any new post, they are active members.

By default, the default properties can only be changed by editing its value in the *statistics-configuration.xml* file.

At the runtime, the new changes in the *statistics-configuration.xml* file will be executed and updated. The

Auto-count Active Users plugin will be executed, depending on its properties.

2.2.3.5. Default User Profile

2.2.3.5.1. Default forum setting configuration

2.2.3.5.2. Overview

Default forum setting includes settings set for new user account. It contains declarations of time zone, short date format, long date format, time format, max topic per page, max post per page and flag for showing forum jump or not. It's rather simple and user can change such settings by UI based function after that.

2.2.3.5.3. Configuration

This configuration is declared in a file named "ks-configuration.xml". Its path is "tomcat source/webapps/ks-extension/WEB-INF/ks-extension/ks/ks-configuration.xml" if you are running tomcat and "project source/extension/webapp/src/main/webapp/WEB-INF/ks-extension/ks/ks-configuration.xml" if you are in developing phase.

In details:

```
...
<external-component-plugins>
  <target-component>org.exoplatform.services.organization.OrganizationService</target-component>
  <component-plugin>
    ...
    <init-params>
      <properties-param>
        <name>user.profile.setting</name>
        <description>set default user profile</description>
        <property name="timeZone" value="GMT"/>
        <property name="shortDateFormat" value="MM/dd/yyyy"/>
        <property name="longDateFormat" value="DDD, MMM dd, yyyy"/>
        <property name="timeFormat" value="hh:mm a"/>
        <property name="maxTopic" value="10"/>
        <property name="maxPost" value="10"/>
        <property name="isShowForumJump" value="true"/>
      </properties-param>
    </init-params>
  </component-plugin>
</external-component-plugins>
...
```

In which:

Parameter	Possible Value	Default Value	Description
timeZone	Time zone id	GMT	Time zone of user. For example: GMT, GMT-05:00, GMT+07:00, GMT+08:30 ... Visit http://java.sun.com/j2se/1.4.2/docs/api for more detail.
shortDateFormat	Valid Java Date format	MM/dd/yyyy	The format to display short information of a

Parameter	Possible Value	Default Value	Description
			date (visit http://java.sun.com/j2se/1.4.2/docs/api to ensure the format exactly.)
longDateFormat	Valid Java Date format	DDD, MMM dd, yyyy	The format to display a date with more information visit http://java.sun.com/j2se/1.4.2/docs/api to ensure the format exactly.
timeFormat	valid Java Date format	hh:mm a	Format to view time (for example, hour, minute,) Visit http://java.sun.com/j2se/1.4.2/docs/api to ensure the format exactly.
maxTopic	Integer	10	Maximum number of topics on a page
maxPost	Integer	10	Maximum number of posts on a page
isShowForumJump	true / false	true	Show forum jump or not

2.2.4. Answer Configuration

2.2.4.1. FAQ Initializer

2.2.4.1.1. Answers Default Data Plugin

2.2.4.1.2. Overview

The Initialization plugin component is used to define the default answers data in *xml* or *zip* file. It includes categories of question and that should be exported from a eXo Answers application.

When Answers Service starts, it will get values which are returned from Initialization plugin component to initialize the default Answers data.

2.2.4.1.3. Configuration

2.2.4.1.3.1. Default Answers data

The default Answers data is configured in *services-configuration.xml* file.

In details:

At the run time of Answers Service, Initialization plugin component is called, then *services-configuration.xml* file is executed, the component-plugin named *addInitialDataPlugin* will be referred to

`org.exoplatform.faq.service.InitializeDataPlugin` to excute some objects to create default data for the forum application.

The default data in the `.zip` file is initialized

```
<component-plugin>
  <name>technical-faq</name>
  <set-method>addInitialDataPlugin</set-method>
  <type>org.exoplatform.faq.service.InitialDataPlugin</type>
  <description>Initialize</description>
  <init-params>
    <value-param>
      <name>location</name>
      <description>location where Answers export format file is stored</description>
      <value>war:/data/Technical-FAQ.zip</value>
    </value-param>
  </init-params>
</component-plugin>
```

- In which,

Name	Set-Method	Type	Description
technical-faq	addInitialDataPlugin	org.exoplatform.faq.service.InitialDataPlugin	Initialize

- Init-param

Name	Possible value	Default value	Description
location	string	war:/data/Technical-FAQ.zip	location where Answers export format file is stored.

If the default data is in the xml format

```
<value>war:/data/Technical-FAQ.xml</value>
```

By default, the default Answers data can only import if the importing categories does not exist in database.

To initialize default data in multiple files, it is required to declare them in multiple plugin.

```
<component-plugin>
  .....
</component-plugin>
```

2.2.4.2. Mails Templates

2.2.4.2.1. FAQ Mail Template Configuration

2.2.4.2.2. Overview

FAQ is configured mainly in two files:

- Portlet preferences: `/webapps/faq/WEB-INF/portlet.xml`
- Services configuration: `WEB-INF/conf/ks-plugins-configuration.xml`



Note

For general KS configuration information, please refer to [KS Configuration](#) section

2.2.4.2.3. Configuration

The Mail templates use a specific syntax that you can use to create a customized email message:

here for more details.' The text area has a rich text editor toolbar above it. At the bottom of the window are 'Save' and 'Cancel' buttons."/>

Parameters:

Parameter	Description
<i>&categoryName</i>	To load the category's name.
<i>&questionContent</i>	To load the question's content.
<i>&questionResponse</i>	To load the question's answer.
here	To load the link to question in FAQ.