Advanced Usage of Multi Site Functionality

by

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About Us…

• **Clicks and Links**
  – UK based IT consultancy
  – Specialised in innovation (Second Life) and Open Source software
  – The oldest UK based OpenCms solution provider, since OpenCms version 4
  – Released many OpenCms Open Source modules and fixes over the years
  – Contributions to OpenCms Wiki

• **Olli Aro**
  – Involved in OpenCms project, since 2001
  – Active member of OpenCms community
  – Reviewer for all published OpenCms books
Why should we get excited...
… about Multi Site Functionality

- Single platform to maintain
- Single platform to backup
- Reduced hardware
- Possibility to share functionality between sites
- Better for environment
- Reduced project costs → more competitive pricing
Real Life Show Cases
Our Hosted OpenCms Platform

- Hosted OpenCms platform for small to medium scale website projects
- Option to choose between a generic configurable template or completely bespoken website functionality
- Identical functionality available compared to dedicated OpenCms installations
- More attractive project costs
- More competitive hosting and support costs
- Always up to date
OnCampus UK

- Provides websites for over 300 student unions in the UK
- Websites are free to the unions, hence the project and ongoing costs are critical
- Same functionality, individual look and feel
- Fast site roll out, 5 sites per day
- Bespoken functionality and integration

www.clicksandlinks.com
Multi Site Infrastructure
Web Server
(Virtual Hosts)

Application Server
(OpenCms application)

Database Server
(Dynamic data storage)

File System
(Static data storage)
Web Server Configuration
Virtual Host Configuration

<VirtualHost *:80>
  ServerName www.site1.com
  ServerAdmin systemadmin@clicksandlinks.com
  ErrorLog /usr/local/apache/logs/www.site1.com-error_log
  CustomLog /usr/local/apache/logs/www.site1.com-access_log combined
  JkMount /opencms/* ajp13w
</VirtualHost>
<VirtualHost *:80>
  ServerName www.site1.com
  ServerAdmin systemadmin@clicksandlinks.com
  ErrorLog logs/www.site1.com-error_log
  CustomLog logs/www.site1.com-access_log combined

  RewriteEngine on
  RewriteLog logs/www.site1.com-rewrite_log
  RewriteLogLevel 0

  Alias /static_files "/usr/local/tomcat/webapps/opencms/export"
  RewriteRule ^/download/(.*)$ /static_files/download/$1 [PT]
  RewriteRule ^/pics/(.*)$ /static_files/pics/$1 [PT]

  JkMount /opencms/* ajp13w
</VirtualHost>
Application Configurations

- opencms-system.xml

```xml
...<sites>
  <workplace-server>http://opencms.clicksandlinks.com</workplace-server>
  <default-uri>/sites/default/</default-uri>
  <site server="http://opencms.clicksandlinks.com" uri="/sites/default/"/>
  <site server="http://www.site1.com" uri="/sites/site1/"/>
  <site server="http://www.site2.com" uri="/sites/site2/"/>
  <site server="http://www.site3.com" uri="/sites/site3/"/>
  <site server="http://www.site4.com" uri="/sites/site4/"/>
...
</sites>
...
User Management & Access Permissions

- Site specific organisation unit

- Remove default Users group permissions from /sites folder (excluding read permission)

- Give permissions for each /sites/site1 folder for the Users group in that organisational unit

- Remove default Users group permissions from /system/galleries folder

- Give permissions for each /system/galleries/… folder for the User group in that organisation unit
Search Management

- Create a dedicated search index for each site
- Make sure that your search page utilises the correct index
Template Configuration
Single Master Template Approach

- Template drop down is confusing → Risk of users selecting a wrong template → a support ticket

- Using single master template allows you to revise your template structure in future without need to rename template properties for pages

- Difficult to get content types working between different sites without single master template

- Ways to implement:-
  - Select the sub template dynamically e.g. based on URL pattern
  - Configurable template based on XML configuration file
... 

if (DOMAIN_NAME.equals("www.site1.com")
    cms.include("/system/modules/site1/templates/contenttemplate.jsp");
else if (DOMAIN_NAME.equals("www.site2.com")
    cms.include("/system/modules/site2/templates/contenttemplate.jsp");
else if (DOMAIN_NAME.equals("www.site3.com")
    cms.include("/system/modules/site3/templates/contenttemplate.jsp");
...
## Configurable Master Template

<table>
<thead>
<tr>
<th><strong>Site Name:</strong></th>
<th>Peover Superior (E.C.) Primary School</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CSS Location:</strong></td>
<td>/system/modules/com.clicksandlinks.opencms.sites.schools.peoversuperior/css/</td>
</tr>
<tr>
<td><strong>Rotator CSS Location:</strong></td>
<td>/system/modules/com.clicksandlinks.opencms.sites.schools.peoversuperior/css/rotators/</td>
</tr>
<tr>
<td><strong>Achievement Badge [1]:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Badge Title:</strong></td>
<td>School Achievement Award 2003</td>
</tr>
<tr>
<td><strong>Badge Link:</strong></td>
<td><a href="http://www.teachernet.gov.uk/educationoverview/events/eventsarchive/">http://www.teachernet.gov.uk/educationoverview/events/eventsarchive/</a></td>
</tr>
<tr>
<td><strong>Badge Image:</strong></td>
<td>/system/modules/com.clicksandlinks.opencms.sites.schools.peoversuperior/</td>
</tr>
<tr>
<td><strong>Achievement Badge [2]:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Badge Title:</strong></td>
<td>Sport England</td>
</tr>
<tr>
<td><strong>Badge Link:</strong></td>
<td><a href="http://www.sportengland.org/">http://www.sportengland.org/</a></td>
</tr>
<tr>
<td><strong>Badge Image:</strong></td>
<td>/system/modules/com.clicksandlinks.opencms.sites.schools.peoversuperior/</td>
</tr>
<tr>
<td><strong>Google Analytics Id:</strong></td>
<td>UA-1555170-1</td>
</tr>
<tr>
<td><strong>Disable Text Resize:</strong></td>
<td>[ ]</td>
</tr>
<tr>
<td><strong>Bottom Bar Disclaimer:</strong></td>
<td>(Click on the “New” button on the right side to activate this element)</td>
</tr>
</tbody>
</table>
<type class="org.opencms.file.types.CmsResourceTypeXmlContent" name="rsspage" id="151">
    <properties>
        <property>
            <name>template-elements</name>
            <value type="shared"><![CDATA[/system/modules/com.clicksandlinks.opencms.rss/pages/rsspage_empty.jsp]]]</value>
        </property>
        <property>
            <name>template</name>
            <value type="shared"> <![CDATA[/system/modules/com.clicksandlinks.opencms.sites.generic/templates/contentTemplate.jsp]]]</value>
        </property>
        <property>
            <name>body-template</name>
            <value type="shared"> <![CDATA[/system/modules/com.clicksandlinks.opencms.rss/pages/rsspage.jsp]]]</value>
        </property>
    </properties>
    <param name="schema">/system/modules/com.clicksandlinks.opencms.rss/schema/rsspage.xsd</param>
</type>
rsspage_empty.jsp

```jsp
<%@ taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core" %>
<%@ taglib prefix="cms" uri="http://www.opencms.org/taglib/cms" %>
<c:set var="temp_template"><cms:property name="template" /></c:set>
<c:if test="${!empty temp_template}">
    <cms:include><c:out value="${temp_template}" /></cms:include>
</c:if>
```

pagebody.jsp

```jsp
<%@ taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core" %>
<%@ taglib prefix="cms" uri="http://www.opencms.org/taglib/cms" %>
<c:set var="temp_body_template"><cms:property name="body-template" /></c:set>
<c:if test="${!empty temp_body_template}">
    <cms:include><c:out value="${temp_body_template}" /></cms:include>
</c:if>
<c:if test="${empty temp_body_template}">
    <cms:include element="body" editable="true" />
</c:if>
```
Questions?
Thank you
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