



Vignette Engineering

Integration of Vignette® Content Suite V6 and IBM® WebSphere™ Commerce Suite 5.1

Version 1.0

October 31, 2001

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Introduction

The “Vignette e-Business Application Suite Version 5.6.1 and IBM WebSphere Commerce Suite 5.1 Integration” white paper and toolkit provide detailed information on how Vignette Content Management Suite version 5.6.1 can integrate with WebSphere Commerce Suite 5.1. The white paper and toolkit can be downloaded from the VGM at <http://global.vignette.com/download/Vignette5.6.1AndWebSphereCommerceSuite5.1.pdf> and <http://global.vignette.com/download/Vignette5.6.1AndWebSphereCommerceSuite5.1.zip>. The Vignette Content Suite V6 provides a new feature called “servlet support” that can be used to make the integration of V6 and WCS 5.1 easier. This paper discusses a new approach using the servlet support feature in V6 to integrate with WCS 5.1. The servlet support feature provides a more straightforward integration. However, not all the Vignette APIs can be used in this environment and Vignette caching cannot be used to cache the results. If necessary, the integration approaches discussed in the previous white paper and toolkit for version 5.6.1 can still be used for version 6.0 to work around these limitations.

Knowledge Pre-Requisites

This document assumes that the user has reviewed the “Vignette e-Business Application Suite Version 5.6.1 and IBM WebSphere Commerce Suite 5.1 Integration White Paper” and also has previous knowledge of the following:

- Basic installation/configuration of WCS 5.1 product and WCS sample stores
- Basic concepts of the WCS 5.1 programming model
- Basic installation/configuration of Vignette Content Suite V6, Version 6.0, including configuration of a JSP Page Generator and enabling the direct servlet support.
- Basic understanding of JavaServer Pages (JSP) technology

Please refer to the *References* section of this document for more information on any of the software and/or concepts mentioned here.

Integration Overview

The WCS program model promotes Model-View-Controller design patterns. As such, a client request typically is initiated by a URL request that invokes a WCS command via the HTTP request servlet. Upon completion of a URL request, the web controller invokes a view command that invokes a JSP template. The WCS program model requires that a JSP template invoke the data bean manager to activate the data bean before the data can be accessed. The data bean manager rejects any URL for a JSP template that does not include the request servlet in its path.

VCMS Version 5.6.1 and WCS 5.1 Integration Overview

Because WCS 5.1 enforces the strict MVC programming model and VCMS version 5.6.x does not support direct servlet calls via the customer-facing web server that is associated to a Vignette CDS, one of the workarounds is to create a “façade” JSP to forward the requests to the WCS http request servlet. The details of this approach are documented in the “Vignette e-Business Application Suite Version 5.6.1 and IBM WebSphere Commerce Suite 5.1 Integration White Paper”.

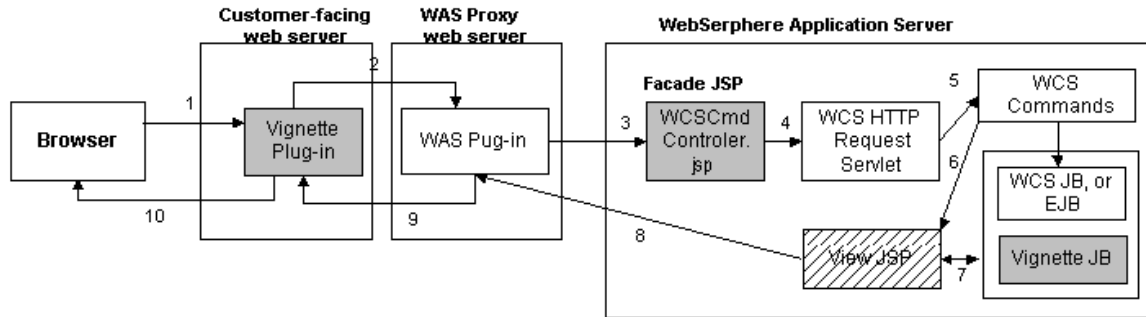


Figure 1. VCMS version 5.6.1 and WCS 5.1 Integration Control Flow

Figure 1 shows the control flow of the integration of VCMS version 5.6.1 and WCS 5.1 using a façade JSP:

1. A client request is sent with a browser to the customer-facing web server (i.e. using a valid Vignette template path such as <http://<hostname>/WCSCmdController?storeId=10001&catalogId=10001&langId=-1>) and is routed to the Vignette plug-in.
2. The Vignette plug-in forwards the request to the WebSphere Application Server (WAS) proxy web server that is associated with the Vignette JSP Page Generator and the request is sent to the WAS plug-in.
3. The WAS plug-in forwards the request to the façade JSP (i.e. called WCSCmdController.jsp) in the WebSphere Application Server.
4. The façade JSP forwards the request to the WCS http request servlet.
5. The WCS http request servlet forward the request to a WCS Controller command and then to a View command based on the WCS configuration.
6. The WCS View command forwards the request to the appropriate “view” JSP to present the data.
7. The view JSP may invoke Vignette Java Beans and/or WCS Java Beans or EJB to access the data.
8. The JSP returns the results to the WAS plug-in.
9. The WAS plug-in returns the results to the Vignette plug-in.
10. The Vignette plug-in returns the results to the browser.

VCMS Version 6.0 and WCS 5.1 Integration Overview

With the “direct servlet support” feature, the façade JSP template used in the previous integration approach is no longer needed in V6, provided that your application can work with the API limitations in the direct servlet environment.

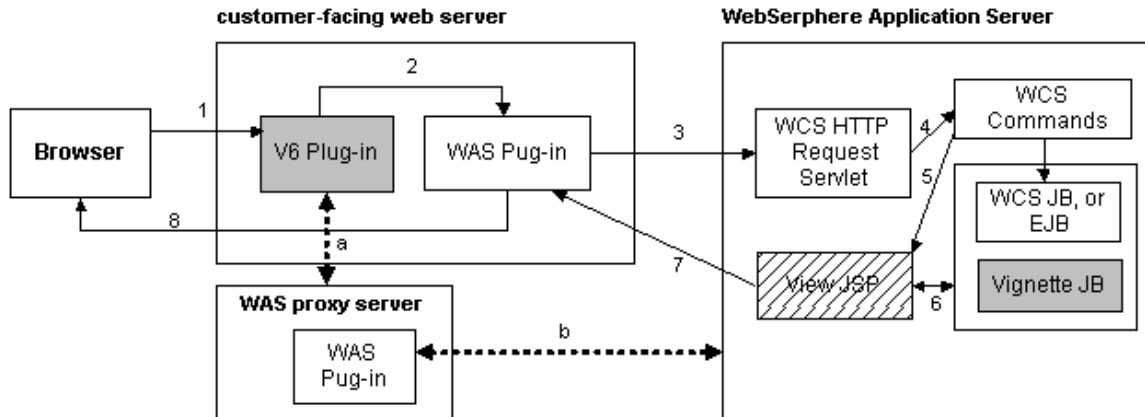


Figure 2. VCMS version 6.0 and WCS 5.1 Integration Control Flow

Figure 2 shows the control flow of the integration of VCMS version 6.0 and WCS 5.1 using the direct servlet support feature provided by V6:

1. A client request is sent with a browser to the customer-facing web server (i.e. using a valid WCS command path such as <http://<hostname>/webapp/wcs/stores/servlet/StoreCatalogDisplay?storeId=10001&catalogId=10001&langId=-1>) The request is routed to the Vignette plug-in first.
2. The Vignette plug-in adds the Vignette headers to the request and relinquish the control to the WAS plug-in in the web server instance.
3. The WAS plug-in forwards the request to the WCS http request servlet.
4. The WCS http request servlet forward the request to a WCS Controller command and then to a View command based on the WCS configuration.
5. The WCS View command forwards the request to the appropriate “view” JSP to present the data.
6. The view JSP may invoke Vignette Java Beans and/or WCS Java Beans to access the data. These view JSP templates can be managed by Vignette.
7. The JSP returns the results to the WAS plug-in.
8. The WAS plug-in returns the results to the browser.

NOTE: The path marked with “a” and “b” in figure 2 indicates that a separate web server instance and WAS plug-in must be configured to be associated to a VCDS JSP Page Generator.

Basic Integration Setup and Configuration

In order for an application to use both WCS 5.1 and V6 APIs in a JSP template running in the WCS and V6 integrated environment, some basic configurations must be done on both WCS and V6.

WCS Configuration

When a WebSphere Commerce Suite instance is created, the servlet engine mode of the WCS Web Container is set to WebSphere 3.5 Compatibility Mode by default. Since V6 does not support JSP templates running in the WebSphere 3.5 Compatibility Mode, the WCS Web Container must be reconfigured to “Servlet 2.2/JSP 1.1 Full Compliance Mode” (see figure 3).

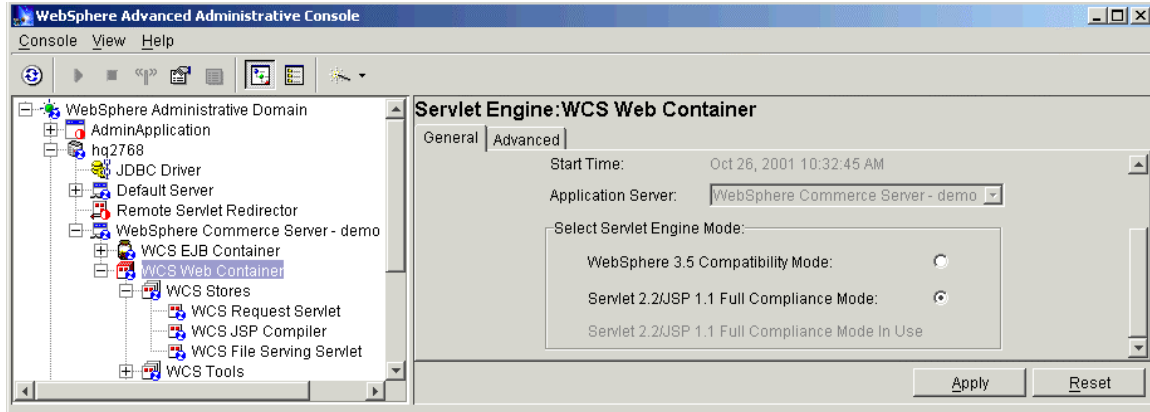


Figure 3. WCS Web Container Servlet Engine Mode Configuration

After the servlet engine mode is changed to “Servlet 2.2/JSP 1.1 Full Compliance Mode”, the “Servlet Web Path” of the WCS Request Servlet in both WCS Web Container and WCS Tools must be changed according to the servlet 2.2 standard (see figure 4).

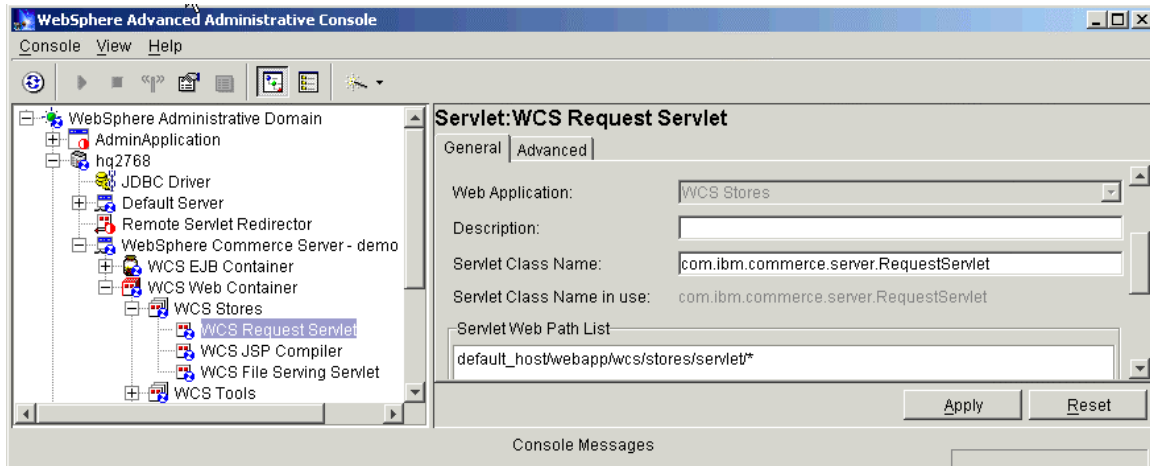


Figure 4. WCS Request Servlet Web Path Configuration

The WCS JSP Compiler will also need to be changed from a JSP 1.0 compiler, `com.sun.jsp.runtime.JspServlet`, to a JSP 1.1 compiler, `org.apache.jasper.runtime.JspServlet`.

Please refer to the “WebSphere Configuration” section of the “Vignette e-Business Application Suite Version 5.6.1 and IBM WebSphere Commerce Suite 5.1 Integration” white paper (<http://global.vignette.com/download/Vignette5.6.1AndWebSphereCommerceSuite5.1.pdf>) for more details on the WCS configuration.

V6 Configuration

A JSP Page Generator must be configured and the “direct servlet support” must be enabled on V6 in order for the new integration approach discussed in this paper to work.

One of the approaches is to configure a JSP Page Generator to be associated to the WCS Stores web application in the WCS Web Container. This approach allows the Vignette CMS component to manage and

deploy the JSP templates created for the WCS stores to the doc root of the WCS Stores web application. Please refer to the V6 Installation and Configuration Guide for more details on how to configure a JSP Page Generator. Figure 5 shows some of the JSP Page Generator information after it is configured to be associated to a WCS Stores web application.

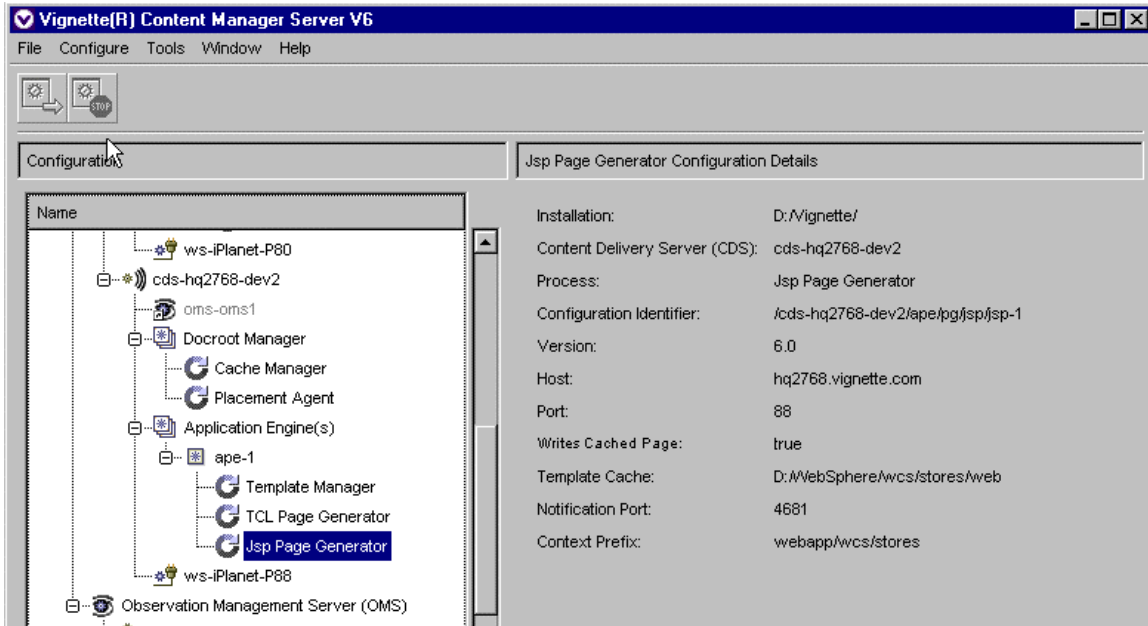


Figure 5. V6 JSP Page Generator for WCS Stores

Please refer to the Vignette Content Management V6 Servlet Support knowledge base item (#3300) for more details on how to enable the “direct servlet support”.

Integration Points

How V6 and WCS 5.1 can be integrated will vary from one application to another.

The following discusses some of the possible integration points to take advantage of the strengths provided by both products:

- Content Management Applications (CMA)**
 One possible approach is to let WCS manage all the content needed for an e-commerce web site (i.e. products, catalogs, stores information) while V6 manages the other content including all the JSP templates used by the WCS stores. For example, a web site may serve other content such as news in addition to selling products. In this case, V6 can manage all the news articles while WCS manage the product catalogs and on-line stores. Using this approach, all the non-WCS-related content and the WCS store JSP templates can take advantage of the features, such as workflow, provided by V6.
 Another approach is to create a CMA or use an existing CMA that maintains the catalog information in the V6 content database and then use the WCS Loader Package utility to import the catalog information into the WCS database. Unless a CMA already exists, this approach will require more work but can centralize the content management applications in one place and can take advantage of the features provided by V6.

- **Content Display/Delivery Applications**
In a V6 and WCS integrated environment, all the JSP templates must be served by the WebSphere Application Server (WAS). V6 can provide additional features, such as caching and personalization, to a content display application. In the approach discussed in this paper, the V6 plug-in and the WAS plug-in coexist in the same customer-facing web server. When a request is made to the WCS Request Servlet, V6 plug-in adds the Vignette header information to the HTTP header and relinquish control to the WAS plug-in. The WCS Request Servlet invokes the view JSP according to the configuration. One design decision to make is to decide what V6 and WCS APIs to use in each view JSP template. Since the JSP template invoked by a request made directly to the WCS Request Servlet cannot use all the V6 features, another design decision to make is to decide which JSP templates are non-WCS related and can be served using the Vignette template path to take advantage of all the features provided by V6 and which JSP templates are WCS related and must be served via the WCS Request Servlet.
- **Personalization**
Both V6 and WCS 5.1 provide features to personalize a web site. One of the integration approaches is to use V6's OMS to "implicitly" collect the customers' behaviors and either use the information collected directly in the JSP templates or pass the information to the WebSphere Personalization Rules Engine to personalize the JSP pages. The Vignette RMS product can also be used to analyze the logs and generate reports. For more information on how the Vignette and WebSphere Personalization can work together, please refer to the "IBM Personalization version 3.5.2 and Vignette CMS/RMS V6 Integration" white paper.

Sample Integration Application

A sample application has been created with this white paper to show a simple example of how V6 and WCS 5.1 can be integrated. The sample application uses the sample store (In Fashion) created by WCS to demonstrate how to integrate an e-commerce store managed by WCS into a fictitious company called "Company XYZ" which also provides news articles to the customers.

WCS Sample Store (In Fashion)

Figure 6 shows the screen shot of the WCS sample store's home page. The product promotions in figure 6 are not personalized based on the user's shopping behaviors and no V6 APIs are used in the original sample store JSP templates. The JSP template used to render this display is "StoreCatalogDisplay.jsp", which includes "header.jsp", "sidebar.jsp", and "footer.jsp".

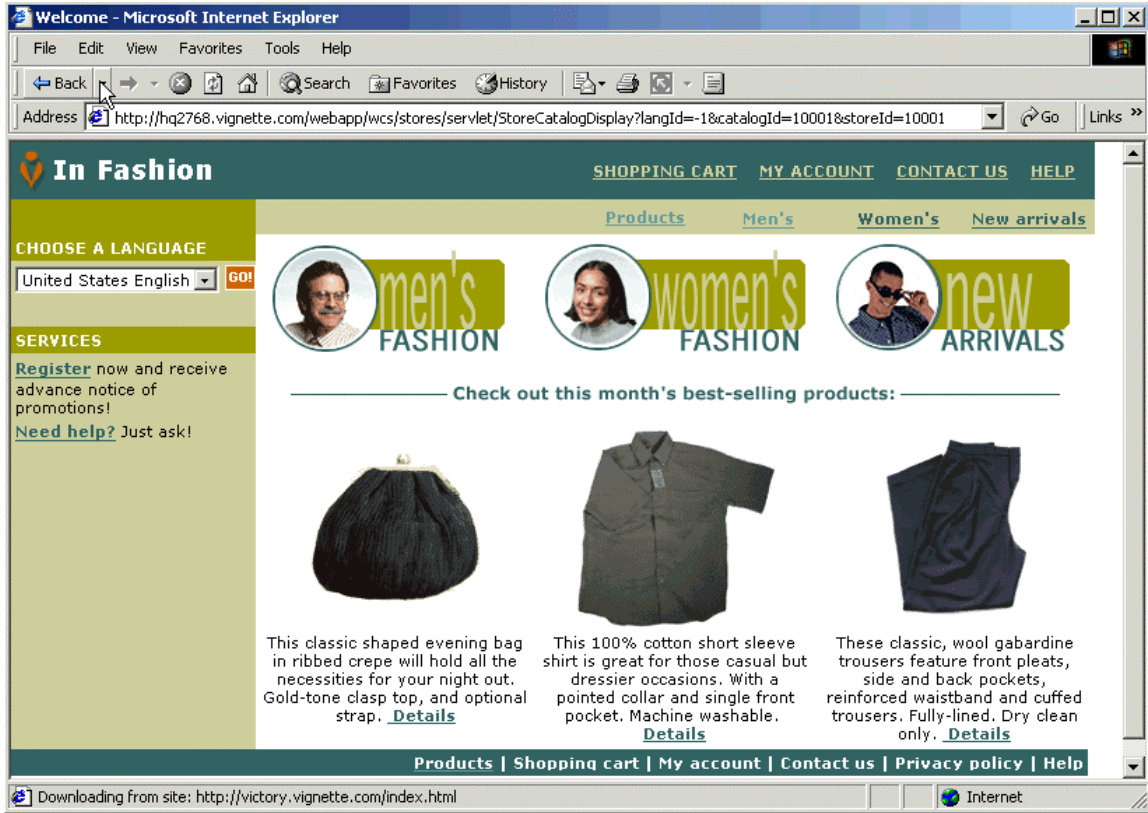


Figure 6. WCS Sample Store Home Page

When the user clicks on the “men’s fashion” image, figure 7 is displayed. The JSP templates used to render this display are “CategoryDisplay.jsp” and “topcategorydisplay.jsp”, which also include “header.jsp”, “sidebar.jsp”, and “footer.jsp”.

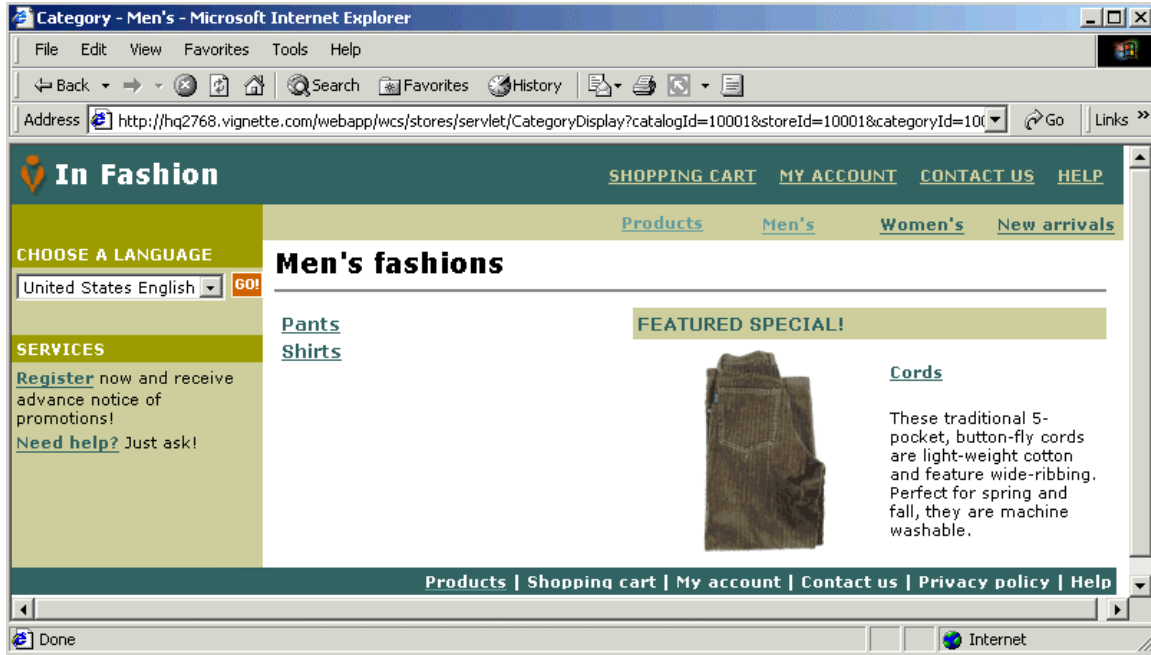


Figure 7. WCS Sample Store Men's Fashions Page

The Sample Application (Company XYZ)

The main objective of the sample application is to show how to build a web site that uses both the WCS APIs and the V6 APIs in a V6 and WCS 5.1 integrated environment. The sample application uses the following V6 APIs:

- makeCURL – to build a URL which can access a Vignette page (either cached or non-cached).
- visitor.profileMark – to track the user behaviors (i.e. the number of clicks on each category).
- visitor.personalize – to retrieve the user's most-clicked category (i.e. maxmark) and personalize the promotion list accordingly.

Figure 8 shows the screen shots of the sample application's home page. Notice that the navigation bar, the header, and the footer have all been changed from the WCS sample store. In order to keep the same style, the WCS sample store cascaded style sheet, `fashionfair.css`, is also used in the sample application.

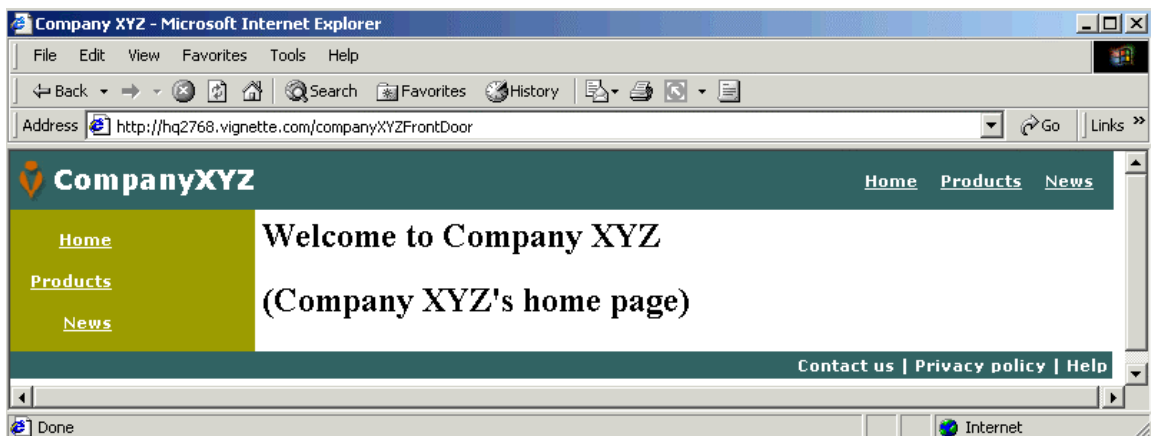


Figure 8. Sample Application Home Page

The JSP template used to display the home page is “companyXYZFrontDoor. CompanyXYZFrontDoor simply includes companyXYZHeader.jsp, companyXYZSidebar.jsp, and companyXYZ.footer.jsp to display the page. The source code is listed as follows:

```
<%
//*****
//*-----
//* companyXYZFrontDoor
//*
//*-----
//*****
%>

<head><title>Company XYZ</title>
<link rel=stylesheet href="/companyXYZ/fashionfair.css" type="text/css">
</head>

<body marginheight="0" marginwidth="0">

<jsp:include page="/companyXYZHeader.jsp" flush="true"/>

<jsp:include page="/companyXYZSidebar.jsp" flush="true"/>

<td bgcolor="#FFFFFF" width="600" rowspan="6" valign="top">

<!--MAIN CONTENT STARTS HERE-->

<table cellpadding="5" cellspacing="0" width="600" border="0">
<tr>
<td>
<h2>Welcome to Company XYZ</h2>
(Company XYZ's home page)
</td></tr></table>

</td>
</tr></table>
<jsp:include page="/companyXYZFooter.jsp" flush="true"/>

</body></html>
```

The companyXYZSidebar.jsp is included by every page, including the WCS store JSP templates, to display the navigation bar. It uses the makeCURL API to build the URLs of the non-WCS pages, the “Home” and the “News” pages. It links to the WCS sample store home page directly using the WCS StoreCatalogDisplay command.

```
<%
//*****
//*-----
//* companyXYZSideBar
//*
//*-----
//*****
%>
<jsp:useBean id="tc" scope="page" class="com.vignette.cds.client.beans.TemplateContext" />

<!--START SIDEBAR NAVIGATION-->
<td valign="top" bgcolor="#999900" with="300">
<table cellpadding="2" cellspacing="12" border="0">
<tr>
<td align="right" valign="middle">
<font class="buttons"><a href="<%=tc.makeCURL("/companyXYZFrontDoor")%>" style="color:
#FFFFFF">Home</a></font></td>
```

```

</tr>
<tr>
<td align="right" valign="middle">
<font class="buttons"><a href="/webapp/wcs/stores/servlet/StoreCatalogDisplay?langId=-1&catalogId=10001&storeId=10001" style="color: #FFFFFF">Products</a></font></td>
</tr>
<tr>
<td align="right" valign="middle">
<font class="buttons"><a href="<%=tc.makeCURL("/companyXYZNews")%>" style="color: #FFFFFF">News</a></font></td>
</tr>
</table>
</td>
<!--END SIDEBAR NAVIGATION-->

```

When the user clicks on the “Products” link, figure 9 is displayed. Notice that the navigation bar is different from figure 6 and the promotion list is also personalized to display a list of either women’s or men’s products based on the user’s shopping behaviors.



Figure 9. Sample Application Products Page

The JSP template used to render this display is “StoreCatalogDisplay.jsp”, which includes “/storeDir/header.jsp”, and “/companyZYXSidebar.jsp”.

The changes made to the StoreCatalogDisplay.jsp are highlighted in the code snippet listed below. The key statement used to personalize the page is the “visitor.personalize(“maxmarks”,“fashion”)” statement. This API call returns the most-clicked keyword in the fashion category tracked by the V6 OMS. The code to track the number of clicks on each category is in the topcategorydisplay.jsp, which will be discussed later. The sample code displays either the men’s or the women’s promotion products based on the “maxmarks” returned. This code can be modified to pass the information to the WebSphere Personalization Rules Engine to personalize the page.

```

.....
.....

<body marginheight="0" marginwidth="0">

<%
String incfile;

incfile = "/" + storeDir + "/header.jsp";
%>
<jsp:include page="<%=incfile%>" flush="true"/>

<%
incfile = "/companyXYZSidebar.jsp";
%>

<jsp:include page="<%=incfile%>" flush="true"/>

.....
.....

<!--START PROMO -->
<jsp:useBean id="visitor" scope="request" class="com.vignette.oms.client.beans.Visitor" />
<%
String maxViewedCategory = visitor.personalize("maxmarks","fashion");
if (maxViewedCategory.equals("men_s")) {
%>
    <!-- Promotion for Men's fashion -->
    <td align="center" valign="bottom" colspan="3">
    <b>=>Check out this month's specials for men=</b><br>
    <b>(List of men's products to be promoted)</b>
    </td>

<%
} else if (maxViewedCategory.equals("women_s")) {
%>
    <!-- Promotion for women's fashion -->
    <td align="center" valign="bottom" colspan="3">
    <b>=>Check out this month's specials for women=</b><br>
    <b>(List of women's products to be promoted)</b>
    </td>

<%
} else if (promo_category != null ) {
    CategoryDataBean subCategories[];

.....
.....

```

Figure 10 shows a screen shot of the V6 Keyword Manger. It shows that a category called “fashion” is defined with two keywords – men_s and women_s. At the time the screen shot was taken, there were 50 clicks made to the men’s fashions and 47 made to the women’s fashion.

Category:Keyword	Times Seen	Visitors Seen By	Last Seen
fashion	97		Oct 31 2001
men_s	50	2	Oct 31 2001
women_s	47	1	Oct 31 2001

Figure 10. V6 Keyword Manager

When the user clicks on the “men’s fashion” image, figure 11 is displayed.

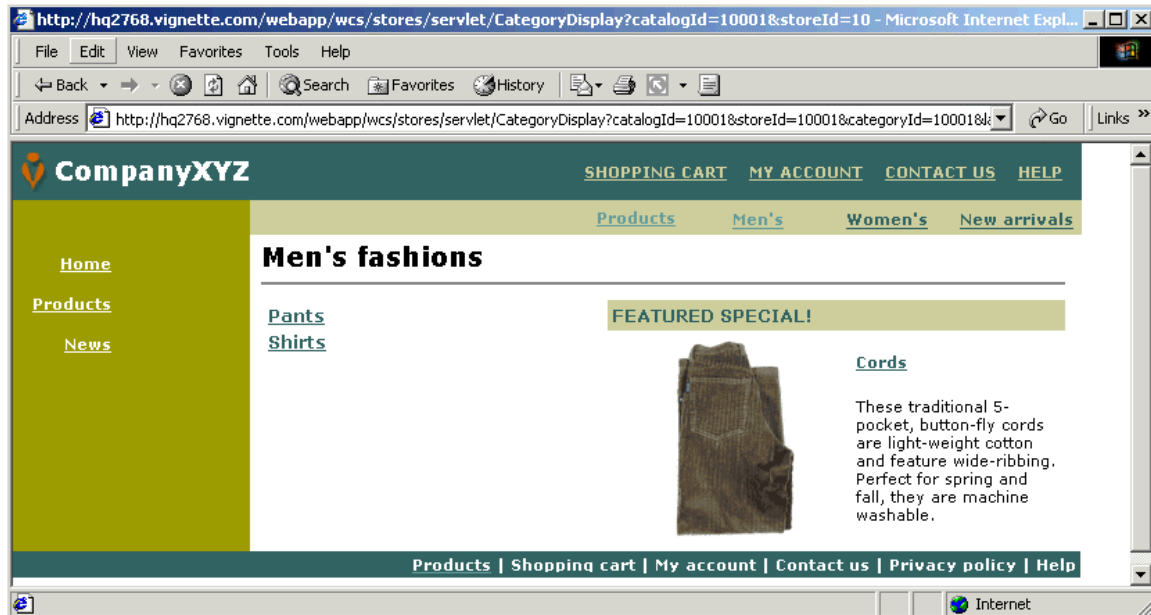


Figure 11. Sample Application Men’s Fashions Page

The view JSP template configured for the CategoryDisplay command is the CategoryDisplay.jsp. The CategoryDisplay.jsp invokes the topcategorydisplay.jsp to display this page.

The changes made to the topcategorydisplay.jsp are highlighted in the code snippet listed below. The key statement to pay attention to in the code is the “visitor.profileMark(“fashion”,categoryName)” statement. This API call informs the V6 OMS component to track the number of clicks on each keyword in the “fashion” category. In this case, the keywords defined in the V6 Keyword Manager map to the categories (men_s or women_s) in the WCS sample store.

```

.....
.....
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "DTD/xhtml1-transitional.dtd">
<jsp:useBean id="visitor" scope="request" class="com.vignette.oms.client.beans.Visitor" />
<%
    String categoryName = ((category.getDescription().getName()).replace('\', '_')).toLowerCase();
%>
<head><title><%=infashiontext.getString("MENS_TITLE")%> - <%=category.getDescription().getName()%></title>
<link rel="stylesheet" href="<%=storeDir%>/fashionfair.css" type="text/css">
</head>
<body marginheight="0" marginwidth="0">
<%= visitor.profileMark("fashion",categoryName) %>
<%
String incfile;
incfile = "/" + storeDir + "/header.jsp";
%>
<jsp:include page="<%=incfile%>" flush="true"/>
<%
incfile = "/companyXYZSidebar.jsp";
%>
<jsp:include page="<%=incfile%>" flush="true"/>
.....
.....

```

References

For further information relating to the topics mentioned in this document consult:

- IBM WebSphere Commerce Suite, Version 5.1 [Installation Guide](#)
- IBM WebSphere Commerce Suite, Version 5.1 [Fundamentals](#)
- IBM WebSphere Commerce Suite, Version 5.1 [Programmer's Guide](#)
- IBM WebSphere Commerce Suite, Version 5.1 [Store Developer: Creating a Store Using the Store Services](#)
- Vignette knowledge base item #3300 – Vignette Content Management V6 Servlet Support
- IBM WebSphere Personalization version 3.5.2 and Vignette CMS/RMS V6 Integration white paper

Relevant documentation for IBM WebSphere Commerce Suite 5.1 can be found on IBM's web site at www.ibm.com.

Relevant documentation for the Vignette Content Suite V6, version 6.0 can be found on Vignette's web site at www.vignette.com.

Appendix

New JSP Templates and Files Created

Template/File Name	Template/File Path	Comments
companyXYZFrontDoor	/companyXYZFrontDoor	Company XYZ's home page
companyXYZHeader	/companyXYZHeader	
companyXYZSidebar	/companyXYZSidebar	included by all the templates including the modified WCS store JSP templates
companyXYZFooter	/companyXYZFooter	
companyXYZNews	/companyXYZNews	
companyXYZContacts	/companyXYZContacts	
companyXYZPrivacy	/companyXYZPrivacy	
companyXYZHelp	/companyXYZHelp	
fashionfair.css	/companyXYZ/fashionfair.css	Imported from WCS sample store to have a consistent style
logo.gif	/companyXYZ/logo.gif	Imported from WCS sample store

WCS Sample Store JSP Templates and Files Modified

Template/File Name	Comments
StoreCatalogDisplay.jsp	<ol style="list-style-type: none"> 1. Include /companyXYZSidebar instead of /storeDir/sidebar 2. Add visitor.personalize() to get maxmarks
topcategorydisplay.jsp	<ol style="list-style-type: none"> 1. Include /companyXYZSidebar instead of /storeDir/sidebar 2. Add visitor.profileMark() to track user shopping behavior
header.jsp	Changed to display "Company XYZ" instead of "In Fashion"
infashiontext_en_US.properties	This file is used by the header.jsp and footer.jsp. Changed "Home" to display "Products" instead of "Home". "Home" should link to the

	companyXYZ home page instead of the StoreCatalogDisplay page. means the company XYZ home page now.
--	---

The “<% @ include file="/vgn/jsp/include.jsp" %>“ statement must be added to the top of the StoreCatalogDisplay.jsp and topcategorydisplay.jsp files if they are not imported to the V6 CMS and re-deployed into the WCS stores doc root. This statement is added to every JSP template managed and deployed by the V6 CMS. You will not be able to call any V6 API without this statement to initialize the V6 objects. Use /<storeDir>/StoreCatalogDisplay and /<storeDir>/topcategorydisplay as the template path names if they are imported into the V6 CMS. Where “<storeDir>” is the directory name chosen for the WCS sample store when it is created.

Sample Application Source Code

The changes made to the StoreCatalogDisplay.jsp and topcategorydisplay.jsp are listed in the previous section (make sure that you add the **flush="true"** parameter to the “jsp:include” statements in the sample store JSP templates to comply with the JSP 1.1 standard). The following provides the source code of all the new JSP templates created for this sample application:

CompanyXYZFrontDoor.jsp

```

<%
//*****
//*-----
//*  companyXYZFrontDoor
//*
//*-----
//*****
%>

<head><title>Company XYZ</title>
<link rel=stylesheet href="/companyXYZ/fashionfair.css" type="text/css">
</head>

<body marginheight="0" marginwidth="0">

<jsp:include page="/companyXYZHeader.jsp" flush="true"/>
<jsp:include page="/companyXYZSidebar.jsp" flush="true"/>
<td bgcolor="#FFFFFF" width="600" rowspan="6" valign="top">

<!--MAIN CONTENT STARTS HERE-->

<table cellpadding="5" cellspacing="0" width="600" border="0">
<tr>
<td>
<h2>Welcome to Company XYZ</h2>
(Company XYZ's home page)
</td></tr></table>

</td>
</tr></table>
<jsp:include page="/companyXYZFooter.jsp" flush="true"/>

</body></html>

```

CompanyXYZHeader.jsp

```

<%

```

```

/*****
/*-----
/* companyXYZHeader
/*
/*-----
/*****
%>

<jsp:useBean id="tc" scope="page" class="com.vignette.cds.client.beans.TemplateContext"
/>

<!--START HEADER-->
<table cellpadding="0" cellspacing="0" border="0" width="770">
<tr>
    <td class="banner" valign="middle" width="170">
        <table BORDER=0 CELLSPACING=0 CELLPADDING=0 >
            <tr>
                <td></td>
                <td><font class="storename">CompanyXYZ</font></td>
            </tr>
        </table>
    </td>
    <td class="buttonbar" valign="middle" width="600">

        <table cellpadding="2" cellspacing="12" border="0">
            <tr>
                <td align="middle" valign="middle">
                    <font class="buttons"><a href="<%=tc.makeCURL("/companyXYZFrontDoor") %>"
style="color: #FFFFFF">Home</a></font></td>
                <td align="middle" valign="middle">
                    <font class="buttons"><a
href="/webapp/wcs/stores/servlet/StoreCatalogDisplay?langId=-
1&catalogId=10001&storeId=10001" style="color: #FFFFFF">Products</a></font></td>
                <td align="middle" valign="middle">
                    <font class="buttons"><a href="<%=tc.makeCURL("/companyXYZNews") %>"
style="color: #FFFFFF">News</a></font></td>
            </tr></table>
    </td>
</tr>
<tr>
<!--END HEADER-->

```

CompanyXYZSidebar.jsp

```

<%
/*****
/*-----
/* companyXYZSidebar
/*
/*-----
/*****
%>

<jsp:useBean id="tc" scope="page" class="com.vignette.cds.client.beans.TemplateContext"
/>

<!--START SIDEBAR NAVIGATION-->
<td valign="top" bgcolor="#999900" width="300">
<table cellpadding="2" cellspacing="12" border="0">
<tr>
<td align="right" valign="middle">
<font class="buttons"><a href="<%=tc.makeCURL("/companyXYZFrontDoor") %>" style="color:
#FFFFFF">Home</a></font></td>
</tr>
<tr>

```

```

<td align="right" valign="middle">
<font class="buttons"><a href="/webapp/wcs/stores/servlet/StoreCatalogDisplay?langId=-
1&catalogId=10001&storeId=10001" style="color: #FFFFFF">Products</a></font></td>
</tr>
<tr>
<td align="right" valign="middle">
<font class="buttons"><a href="<%=tc.makeCURL("/companyXYZNews") %>" style="color:
#FFFFFF">News</a></font></td>
</tr>
</table>
</td>
<!--END SIDEBAR NAVIGATION-->

```

CompanyXYZFooter.jsp

```

<%
//*****
//*-----
//* companyXYZFooter
//*
//*-----
//*****
%>

<jsp:useBean id="tc" scope="page" class="com.vignette.cds.client.beans.TemplateContext"
/>

<!--START FOOTER-->
<table cellpadding="3" cellspacing="0" border="0" width="770">
<tr>
<td bgcolor="#336666" align="right" valign="middle">
<font class="footer">
<a href="<%=tc.makeCURL("/companyXYZContacts") %>">
<font class="footer">Contact us</font></a>
|
<a href="<%=tc.makeCURL("/companyXYZPrivacy") %>">
<font class="footer">Privacy policy</font></a>
|
<a href="<%=tc.makeCURL("/companyXYZHelp") %>">
<font class="footer">Help</font></a>
</font>
</td>
</tr></table>
<!--END FOOTER-->

```

CompanyXYZNews.jsp

```

<%
//*****
//*-----
//* companyXYZNews
//*
//*-----
//*****
%>

<%@ include file="/vgn/jsp/include.jsp" %><head><title>Company XYZ News</title>
<link rel="stylesheet" href="/companyXYZ/fashionfair.css" type="text/css">
</head>

<body marginheight="0" marginwidth="0">

<jsp:include page="/companyXYZHeader.jsp" flush="true"/>

<jsp:include page="/companyXYZSidebar.jsp" flush="true"/>

```

```
<td bgcolor="#FFFFFF" width="600" rowspan="6" valign="top">
<!--MAIN CONTENT STARTS HERE-->
<table cellpadding="5" cellspacing="0" width="600" border="0">
<tr>
<td>
<h2>Company XYZ News<h2>
(Company XYZ's News Main Page)
</td></tr></table>

</td>
</tr></table>
<jsp:include page="/companyXYZFooter.jsp" flush="true"/>
</body></html>
```

CompanyXYZContacts.jsp

```
<%
//*****
//*-----
//* companyXYZContacts
//*
//*-----
//*****
%>

<%@ include file="/vgn/jsp/include.jsp" %><head><title>Company XYZ Contacts</title>
<link rel="stylesheet" href="/companyXYZ/fashionfair.css" type="text/css">
</head>

<body marginheight="0" marginwidth="0">

<jsp:include page="/companyXYZHeader.jsp" flush="true"/>

<jsp:include page="/companyXYZSidebar.jsp" flush="true"/>

<td bgcolor="#FFFFFF" width="600" rowspan="6" valign="top">

<!--MAIN CONTENT STARTS HERE-->
<table cellpadding="5" cellspacing="0" width="600" border="0">
<tr>
<td>
<h2>Company XYZ<h2>
1234 ABC Street<br>
Austin, TX 78746<br>
Phone: (512) 555-0123
</td></tr></table>

</td>
</tr></table>
<jsp:include page="/companyXYZFooter.jsp" flush="true"/>
</body></html>
```

CompanyXYZPrivacy.jsp

```
<%
//*****
//*-----
//* companyXYZPrivacy
//*
//*-----
//*****
%>

<%@ include file="/vgn/jsp/include.jsp" %><head><title>Company XYZ Privacy Policy</title>
```

```

<link rel=stylesheet href="/companyXYZ/fashionfair.css" type="text/css">
</head>

<body marginheight="0" marginwidth="0">

<jsp:include page="/companyXYZHeader.jsp" flush="true"/>

<jsp:include page="/companyXYZSidebar.jsp" flush="true"/>

<td bgcolor="#FFFFFF" width="600" rowspan="6" valign="top">

<!--MAIN CONTENT STARTS HERE-->
<table cellpadding="5" cellspacing="0" width="600" border="0">
<tr>
<td>
<h2>Company XYZ Privacy Policy</h2>
(Company XYZ's Privacy Policy Page)
</td></tr></table>

</td>
</tr></table>
<jsp:include page="/companyXYZFooter.jsp" flush="true"/>
</body></html>

```

CompanyXYZHelp.jsp

```

<%
//*****
//*-----
//* companyXYZHelp
//*
//*-----
//*****
%>

<%@ include file="/vgn/jsp/include.jsp" %><head><title>Company XYZ Help</title>
<link rel=stylesheet href="/companyXYZ/fashionfair.css" type="text/css">
</head>

<body marginheight="0" marginwidth="0">

<jsp:include page="/companyXYZHeader.jsp" flush="true"/>

<jsp:include page="/companyXYZSidebar.jsp" flush="true"/>

<td bgcolor="#FFFFFF" width="600" rowspan="6" valign="top">

<!--MAIN CONTENT STARTS HERE-->
<table cellpadding="5" cellspacing="0" width="600" border="0">
<tr>
<td>
<h2>Company XYZ Help</h2>
(Company XYZ's Help Main Page)
</td></tr></table>

</td>
</tr></table>
<jsp:include page="/companyXYZFooter.jsp" flush="true"/>
</body></html>

```