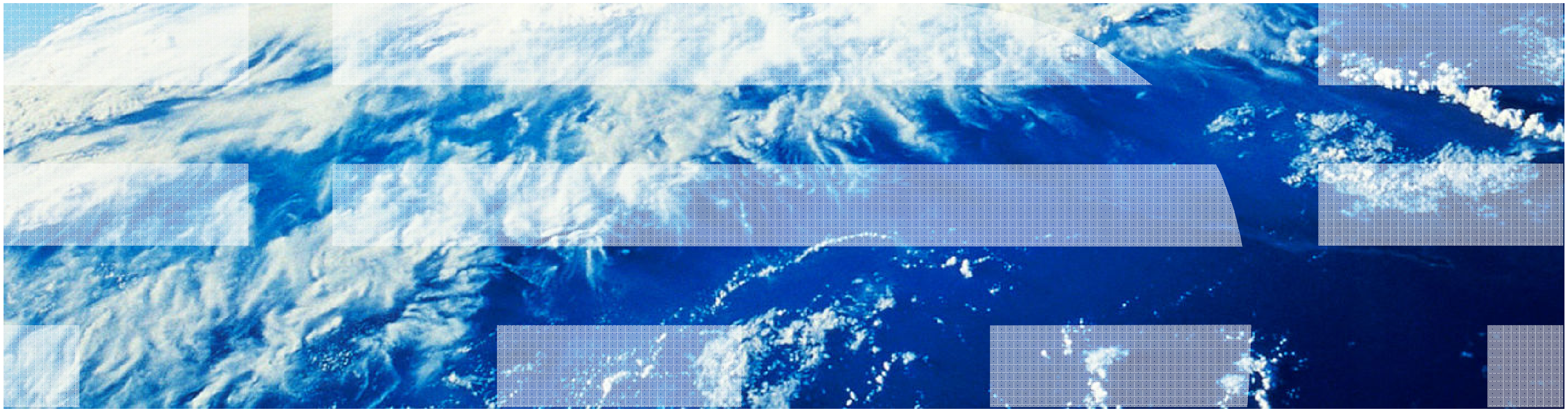
IBM WebSphere Commerce V7 FEP 7

Commerce Composer



WebSphere software

Agenda

- Solution Overview
  - Business user capabilities
  - Responsive web design
  - Scope
  - Ribbon Ads

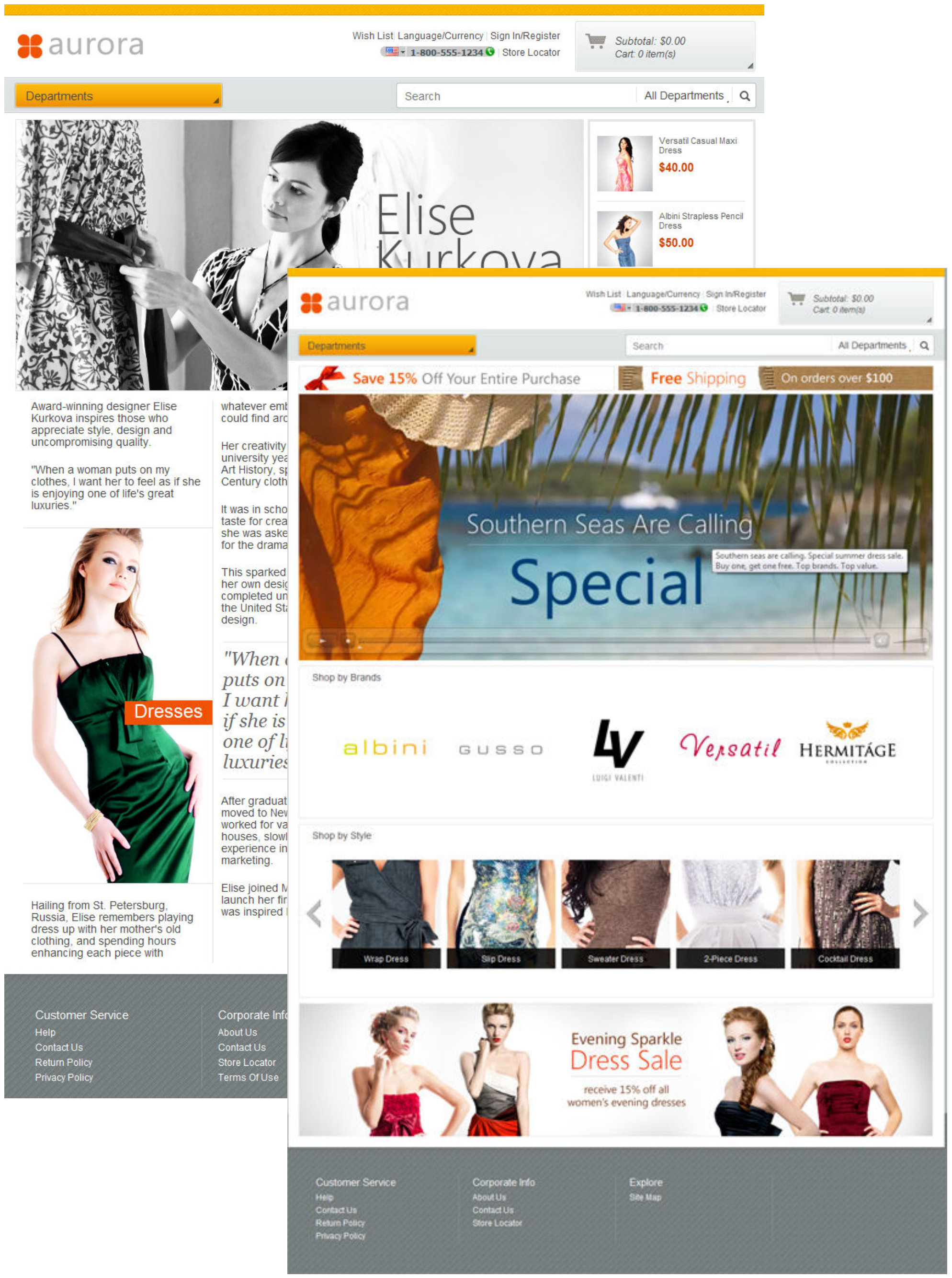
- Demo: Commerce Composer tool

- Commerce Composer Framework Design
  - Terminology
  - Widgets
  - Templates
  - Extended Sites/Content Versioning/Workspaces/Dataload
  - Caching
  - Migration

Elevated Business Control

Manage Page Composition & Aggregation

- Build and manage your site pages
- Create new site pages (e.g. landing pages) and optimize URL's and meta-data for pages (SEO)
- Manage customer controls and how content is displayed. Scrolling widgets, hero spots, customer recommendations, etc
- Manage mobile, tablet and web together
- Responsive design for various devices

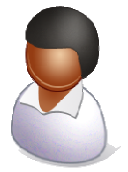


Award-winning designer Elise Kurkova inspires those who appreciate style, design and uncompromising quality.

"When a woman puts on my clothes, I want her to feel as if she is enjoying one of life's great luxuries."

Hailing from St. Petersburg, Russia, Elise remembers playing dress up with her mother's old clothing, and spending hours enhancing each piece with

Page Composition

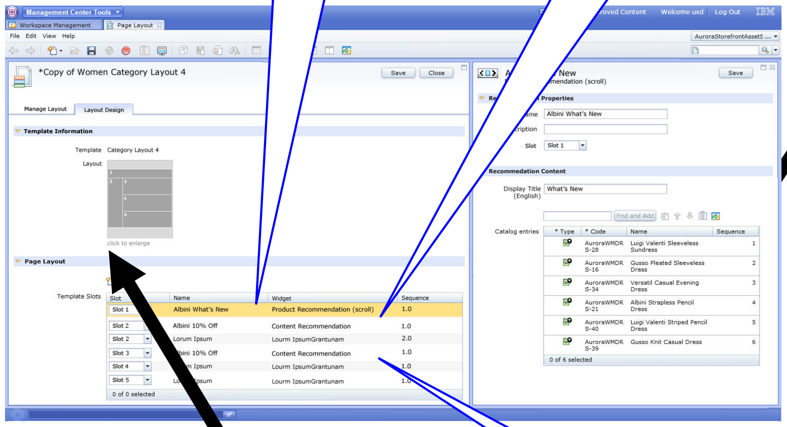


Business User

Selects best matching template

Content recommendation

Category recommendation



Management Center Tools | Workspace Management | Page Layout | File Edit View Help

*Copy of Women Category Layout 4

Save Close

Manage Layout | Layout Design

Template Information

Template: Category Layout 4

Layout

click to enlarge

Page Layout

Template Slots

Slot	Name	Widget	Sequence
Slot 1	Albini What's New	Product Recommendation (scroll)	1.0
Slot 2	Albini 10% Off	Content Recommendation	1.0
Slot 2	Lorum Ipsum	Lourm IpsumGrantunam	2.0
Slot 3	bini 10% Off	Content Recommendation	1.0
Slot 4	m Ipsum	Lourm IpsumGrantunam	1.0
Slot 5	Lo Ipsum	Lourm IpsumGrantunam	1.0

0 of 0 selected

roved Content | Welcome uxd | Log Out

AuroraStorefrontAssetS ...

A New
mendation (scroll)

Save

Re Properties

ame: Albini What's New

cription:

Slot: Slot 1

Recommedation Content

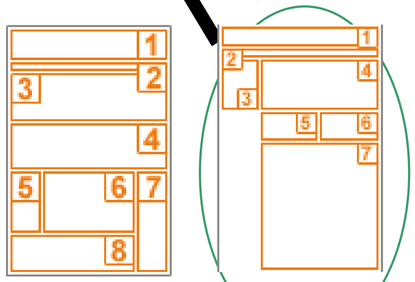
Display Title (English): What's New

Find and Add

Catalog entries

* Type	* Code	Name	Sequence
	AuroraWMDR S-28	Luigi Valenti Sleeveless Sundress	1
	AuroraWMDR S-16	Gusso Pleated Sleeveless Dress	2
	AuroraWMDR S-34	Versatil Casual Evening Dress	3
	AuroraWMDR S-21	Albini Strapless Pencil Dress	4
	AuroraWMDR S-40	Luigi Valenti Striped Pencil Dress	5
	AuroraWMDR S-39	Gusso Knit Casual Dress	6

0 of 6 selected

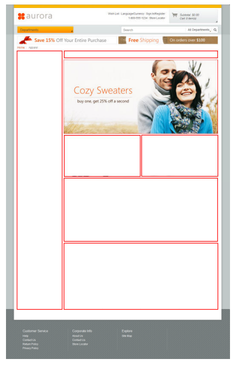


Template A

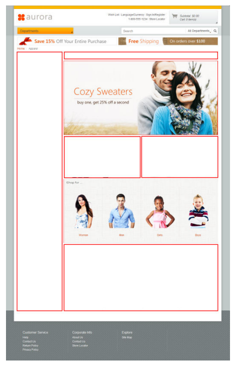
Template B

Catalog entry recommendation

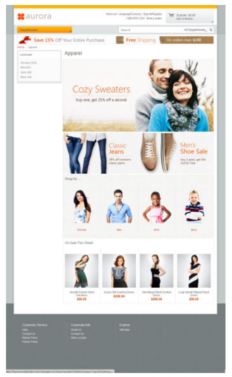
Add widget(s) and populates contents for each widget



Continue population of content



Once all populated, preview changes



Commerce Composer Widgets

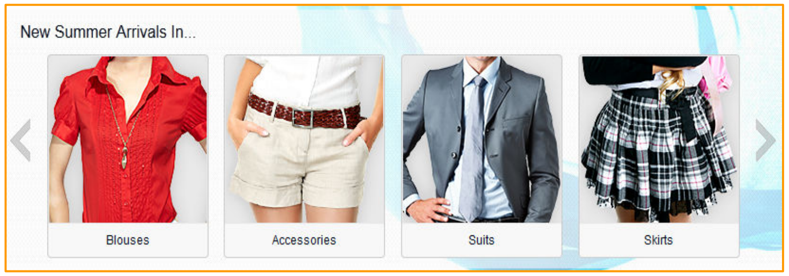
Widgets

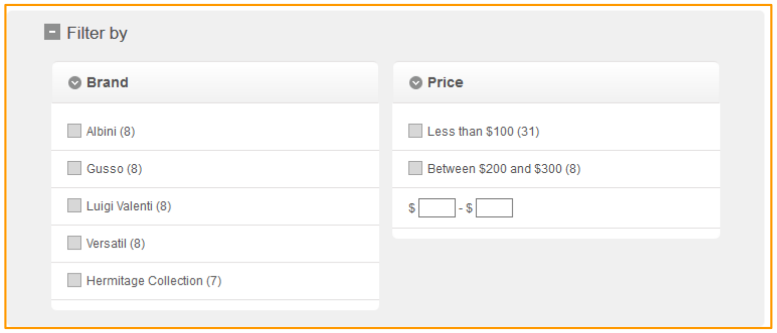
- Content Recommendation
- Category Recommendation
- Catalog Entry Recommendation
- Facet Navigation
- Catalog Entry List
- Links
- E-Marketing Spot
- Content Carousel
- IBM Product Recommendations
- Facebook Activity; Facebook Like
- Text Editor
- Site Map
- Category Navigation
- Site Content List
- Breadcrumb Trail
- Heading
- Search Summary
- Name, Part Number, and Price
- Short Description; Long Description
- Full Image
- Defining Attributes
- Descriptive Attributes

Widgets (Continue …)

- Merchandising Associations
- Shopper Actions
- Inventory Availability
- Associated Assets
- Discount
- and more …

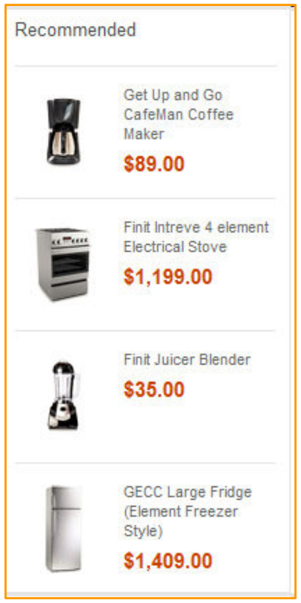
Widget Examples




Filter by

Brand
- Albini (8)
- Gusso (8)
- Luigi Valenti (8)
- Versatil (8)
- Hermitage Collection (7)

Price
- Less than $100 (31)
- Between $200 and $300 (8)
- $ - $


Recommended

Get Up and Go CafeMan Coffee Maker
$89.00

Finit Intreve 4 element Electrical Stove
$1,199.00

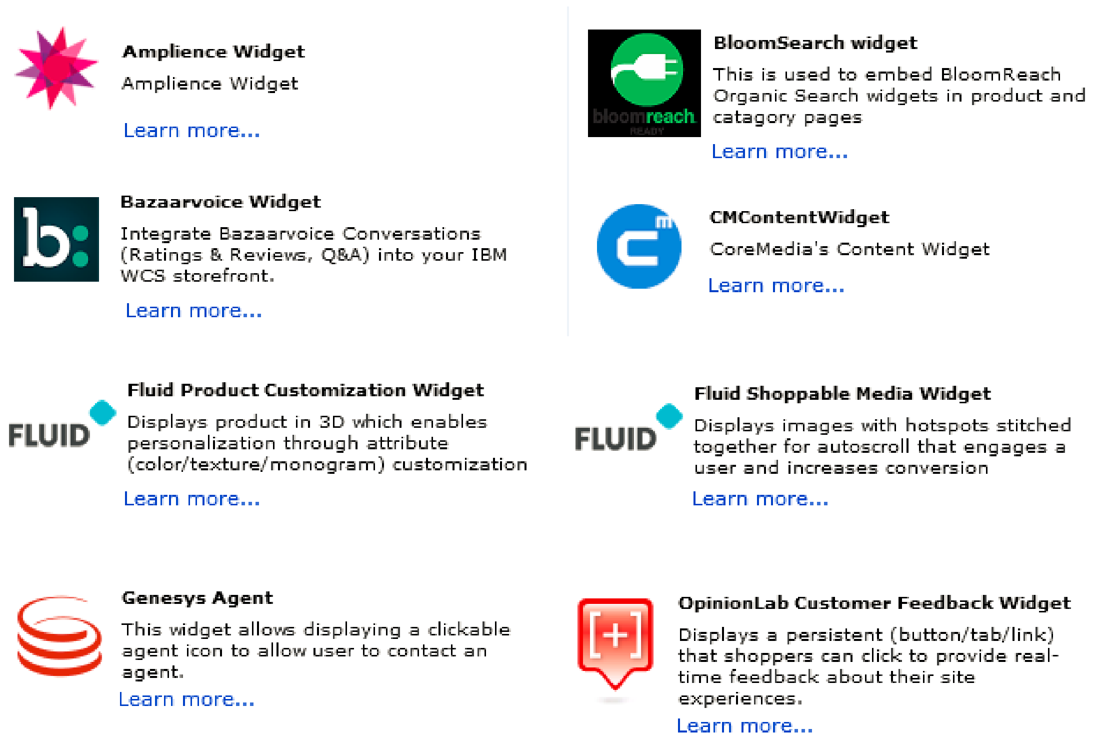
Finit Juicer Blender
$35.00

GECC Large Fridge (Element Freezer Style)
$1,409.00

IBM

IBM Commerce Partners: 3rd Party Widgets

http://www.ibm.com/commerce-partners



Amplience Widget
Amplience Widget
Learn more...

Bazaarvoice Widget
Integrate Bazaarvoice Conversations (Ratings & Reviews, Q&A) into your IBM WCS storefront.
Learn more...

BloomSearch widget
This is used to embed BloomReach Organic Search widgets in product and catagory pages
Learn more...

CMContentWidget
CoreMedia's Content Widget
Learn more...

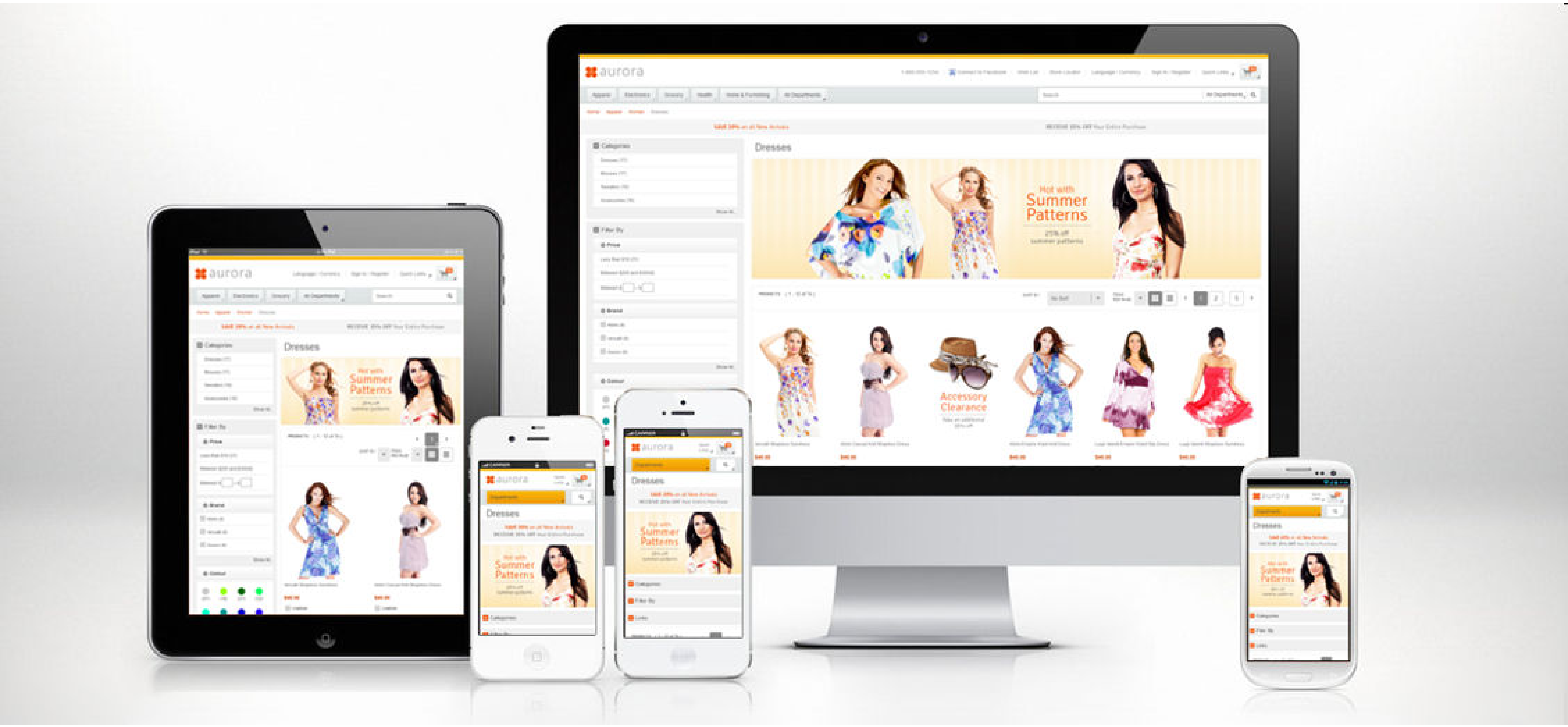
Fluid Product Customization Widget
Displays product in 3D which enables personalization through attribute (color/texture/monogram) customization
Learn more...

Fluid Shoppable Media Widget
Displays images with hotspots stitched together for autoscroll that engages a user and increases conversion
Learn more...

Genesys Agent
This widget allows displaying a clickable agent icon to allow user to contact an agent.
Learn more...

OpinionLab Customer Feedback Widget
Displays a persistent (button/tab/link) that shoppers can click to provide real-time feedback about their site experiences.
Learn more...

Responsive Web Design – Aurora Starter Store

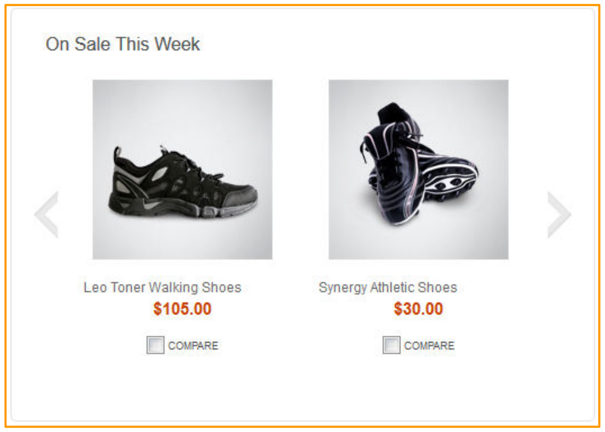


Advantages of Responsive Web Design

- Overall cost reduction
- Consistent user experience

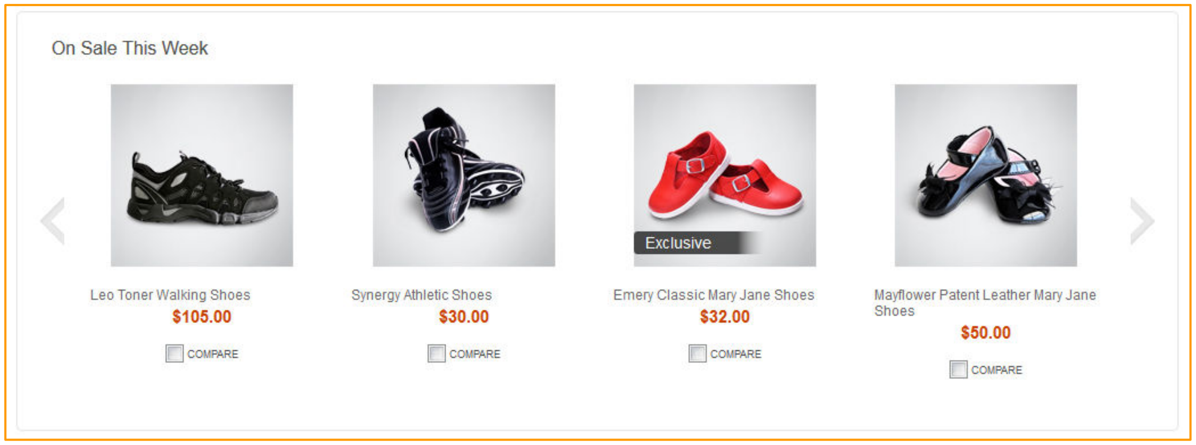
Widget Responsiveness (1 of 2)

✓ Widgets respond to screen real estate


On Sale This Week

Leo Toner Walking Shoes $105.00 COMPARE

Synergy Athletic Shoes $30.00 COMPARE


On Sale This Week

Leo Toner Walking Shoes $105.00 COMPARE

Synergy Athletic Shoes $30.00 COMPARE

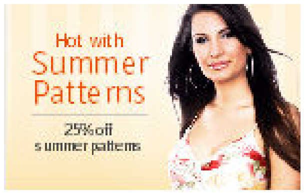
Exclusive

Emery Classic Mary Jane Shoes $32.00 COMPARE

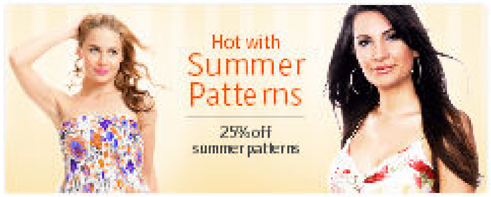
Mayflower Patent Leather Mary Jane Shoes $50.00 COMPARE

Widget Responsiveness (2 of 2)

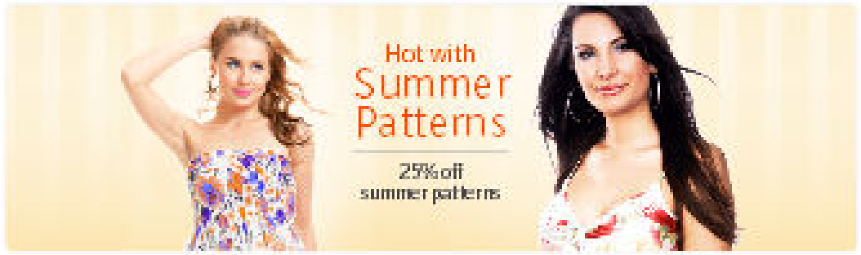
Smartphone (320x480)



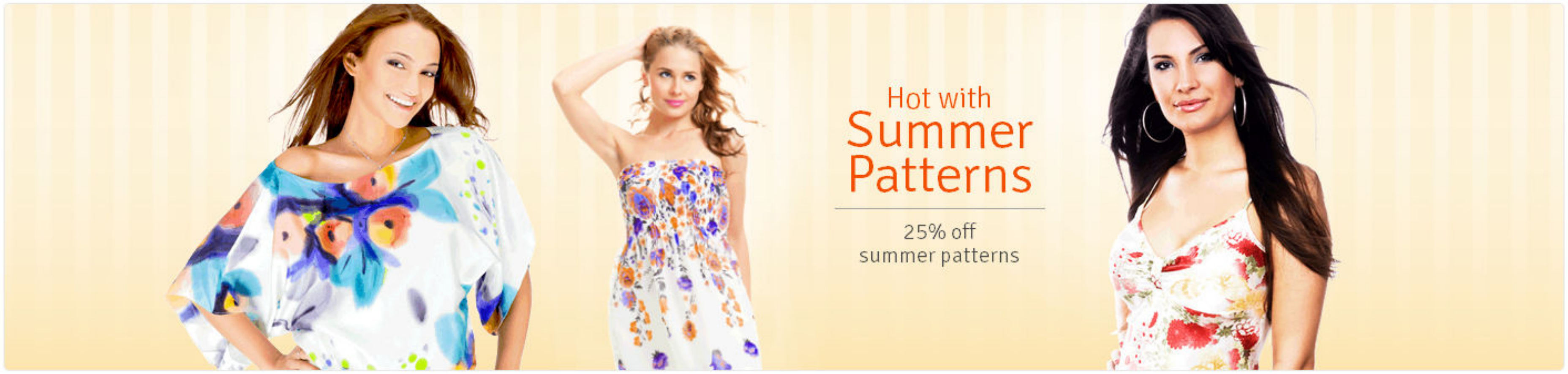
Tablet portrait (768x1024)



Tablet landscape (1024x768)



HDTV (1920x1080)



Advantages of eSpot Content:

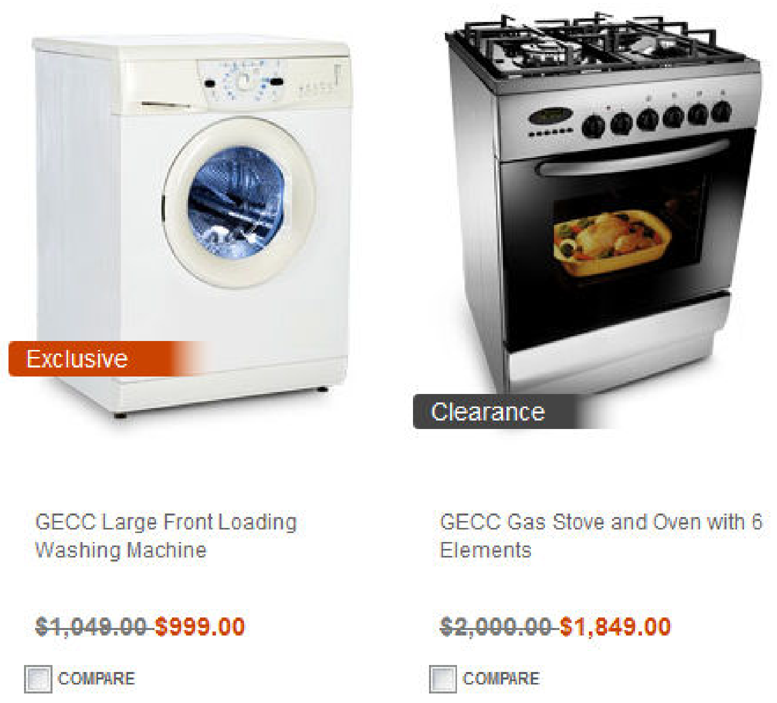
- ✓ Composes of multiple layers of background images and live text
- ✓ Load appropriately sized background images and position them properly based on screen real estate

Commerce Composer Scope

- Browsing pages
  - Home
  - Department/Category/Sub-category
  - Product/Kit/Bundle/DynamicKit
  - Search results
  - Landing pages/Promotional pages
  - Content pages

- My account and checkout pages
  - NOT in FEP 7

Ribbon Ads - Storefront



GECC Large Front Loading Washing Machine

~~$1,049.00~~ $999.00

COMPARE

GECC Gas Stove and Oven with 6 Elements

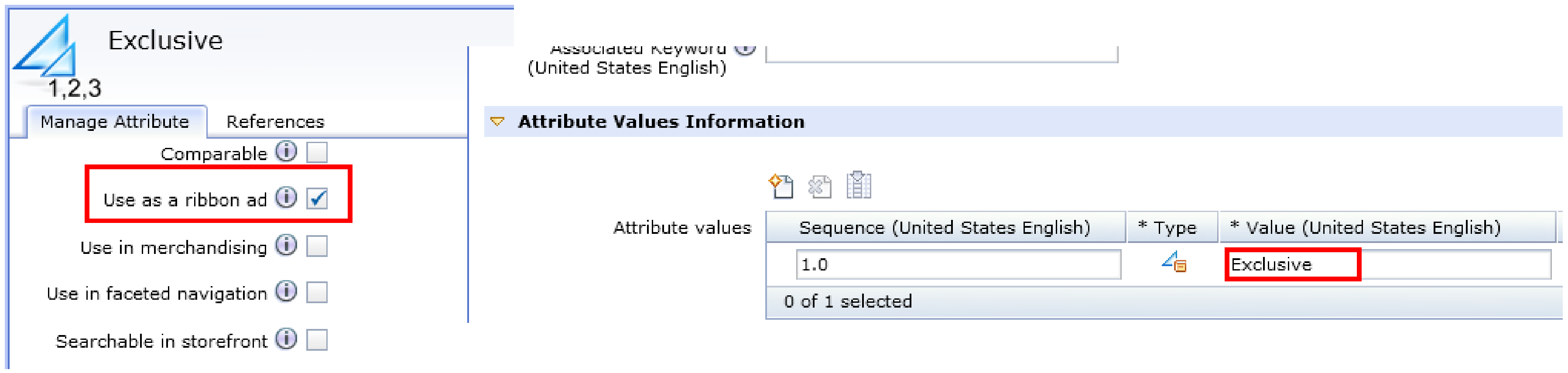
~~$2,000.00~~ $1,849.00

COMPARE

```
.product_image .RibbonAdDefault {
    position:absolute;
    bottom:40px;
    left:0;
    width:110px;
    height:20px;
    background-color:#2C2C2C;
    background: -webkit-gradient(linear, left top,
    background: linear-gradient(to right, rgba(68,
    -ms-filter: "progid:DXImageTransform.Microsoft.
    zoom: 1;
    font-size: 14px;
    line-height:20px;
    font-family: arial, Helvetica, sans-serif;
    color:#FFF;
    padding-left:10px;
    border-radius:3px;
    text-align:left;
    vertical-align:baseline;
    overflow:visible;
    white-space: nowrap;
}
.product_image .RibbonAdDefault.Exclusive {
    background-color:#CA4200;
    background: -webkit-gradient(linear, left top,
    background: linear-gradient(to right, rgba(202,
    -ms-filter: "progid:DXImageTransform.Microsoft.
    bottom: 70px;
}
```

Setting Up Ribbon Ads in Management Center

1. Create a Ribbon Ad descriptive attribute



Exclusive

1,2,3

Manage Attribute | References

Comparable	☐
Use as a ribbon ad	✓
Use in merchandising	☐
Use in faceted navigation	☐
Searchable in storefront	☐

Associated Keyword (United States English)

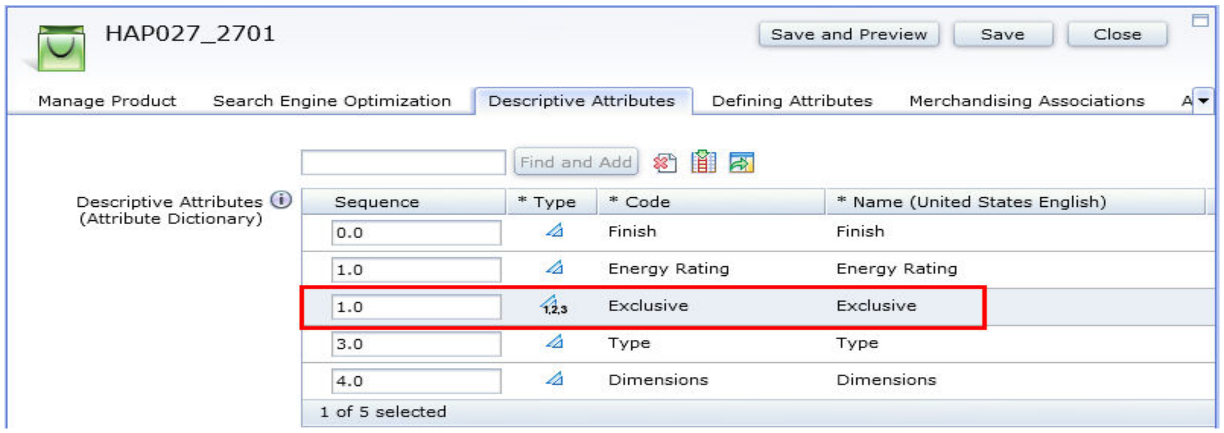
Attribute Values Information

Attribute values

Sequence (United States English)	* Type	* Value (United States English)
1.0		Exclusive

0 of 1 selected

2. Add the descriptive attribute to the product(s)



HAP027_2701

Save and Preview | Save | Close

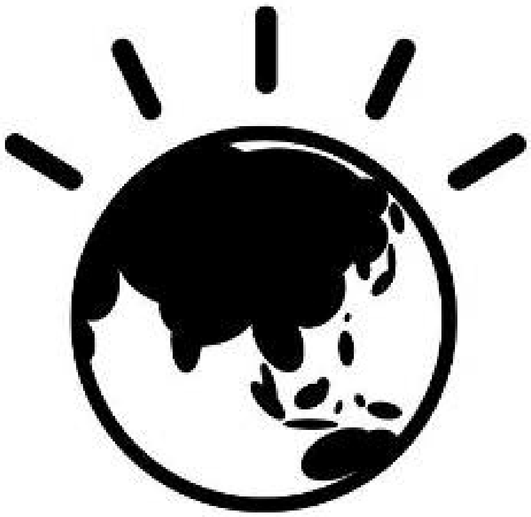
Manage Product | Search Engine Optimization | Descriptive Attributes | Defining Attributes | Merchandising Associations | A

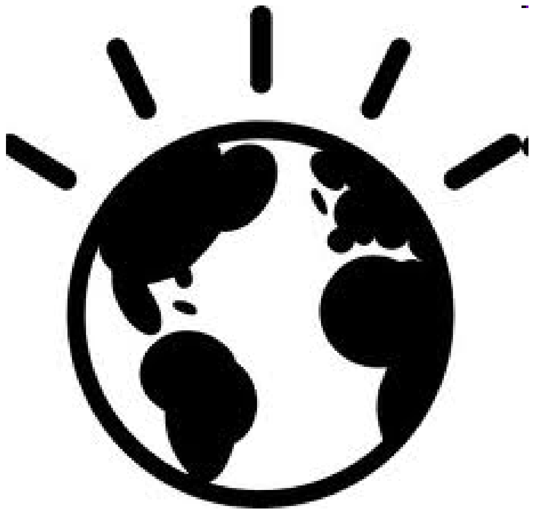
Find and Add

Descriptive Attributes (Attribute Dictionary)

Sequence	* Type	* Code	* Name (United States English)
0.0		Finish	Finish
1.0		Energy Rating	Energy Rating
1.0	1,2,3	Exclusive	Exclusive
3.0		Type	Type
4.0		Dimensions	Dimensions

1 of 5 selected

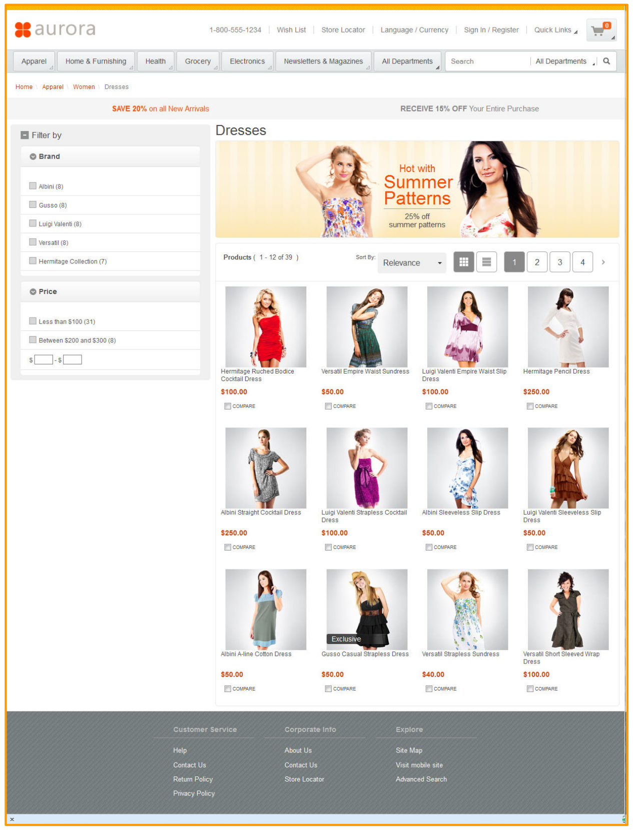


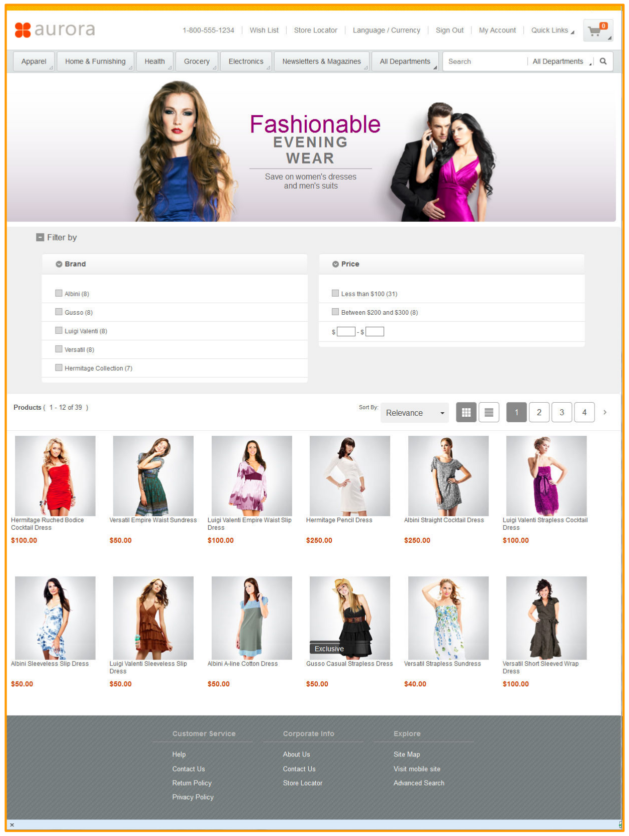


Commerce Composer Demo

Scenario Walkthrough (Demo of FEP 7)

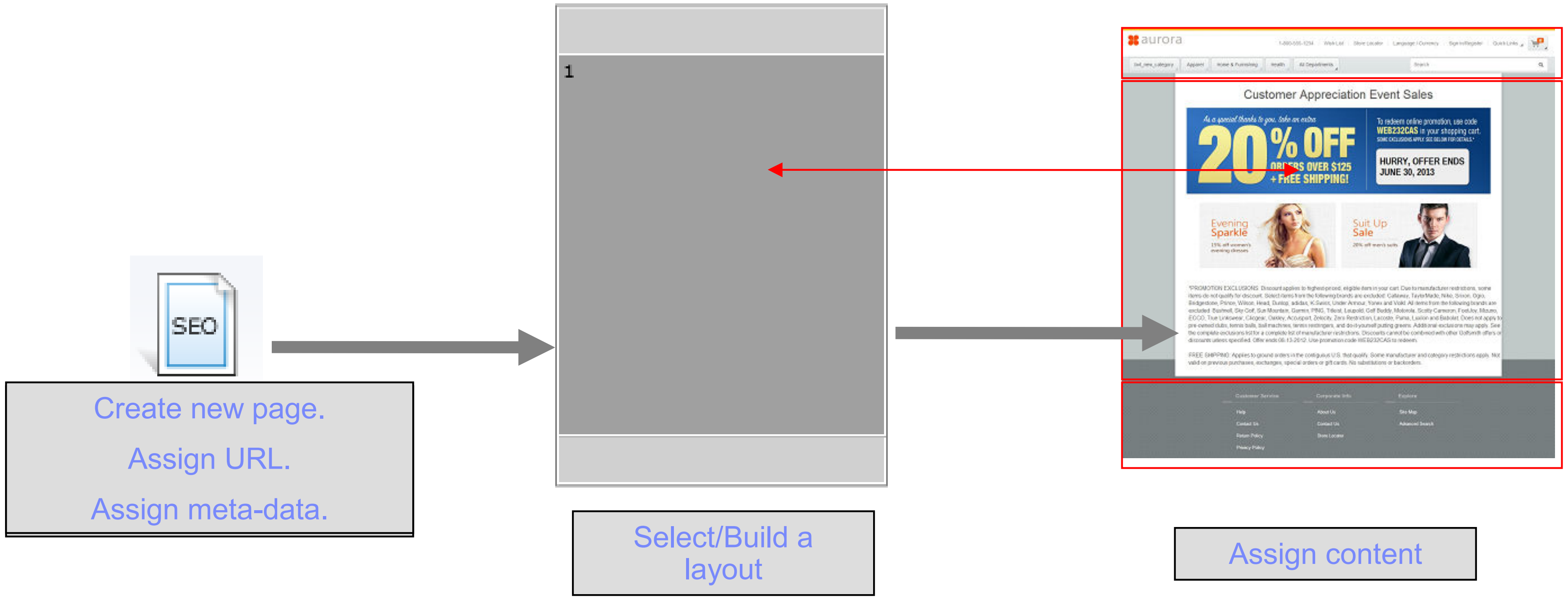
- **Scenario:** Build a new layout for Women's Dresses page
- Tasks
  - –Business user selects a template to use
  - –Business user selects widgets to use for each of the slots

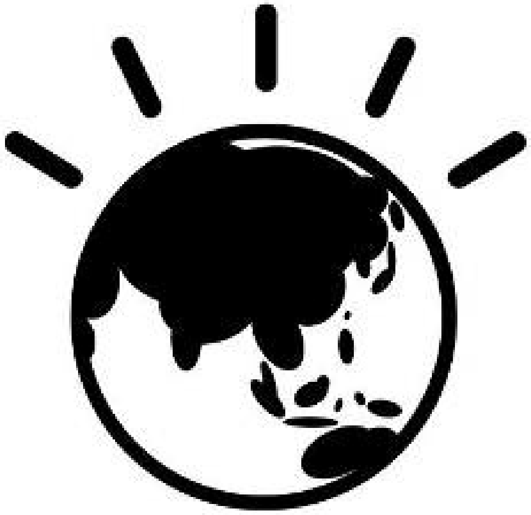


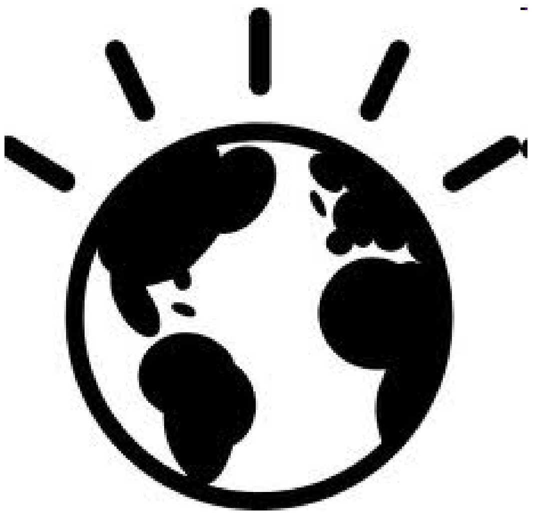


Scenario Walkthrough (Demo of FEP 7)

- **Scenario:** Build a new content page for Customer Appreciation Day
- Tasks
  - Business user creates a page
  - Business user selects a template to use
  - Business user selects a Content widget to use
  - Business user builds the content using CKEditor (Open Source Web Editor)







Commerce Composer Framework

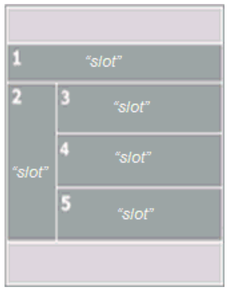
Commerce Composer Tool – 3 Concepts

Location of Page
- A URL on your site
- i.e. About Us Page
- i.e. Men's Department Page

Layout
- Defines page content

Template
- How content is organized

- Slot 1
  - Content Recommendation widget
    - Show banner image
- Slot 2
  - Facet Navigation widget
- Slot 4
  - Catalog Entry List widget
    - Default view = grid
- Slot 5
  - IBM Product Recommendations widget
    - Show 5 products max



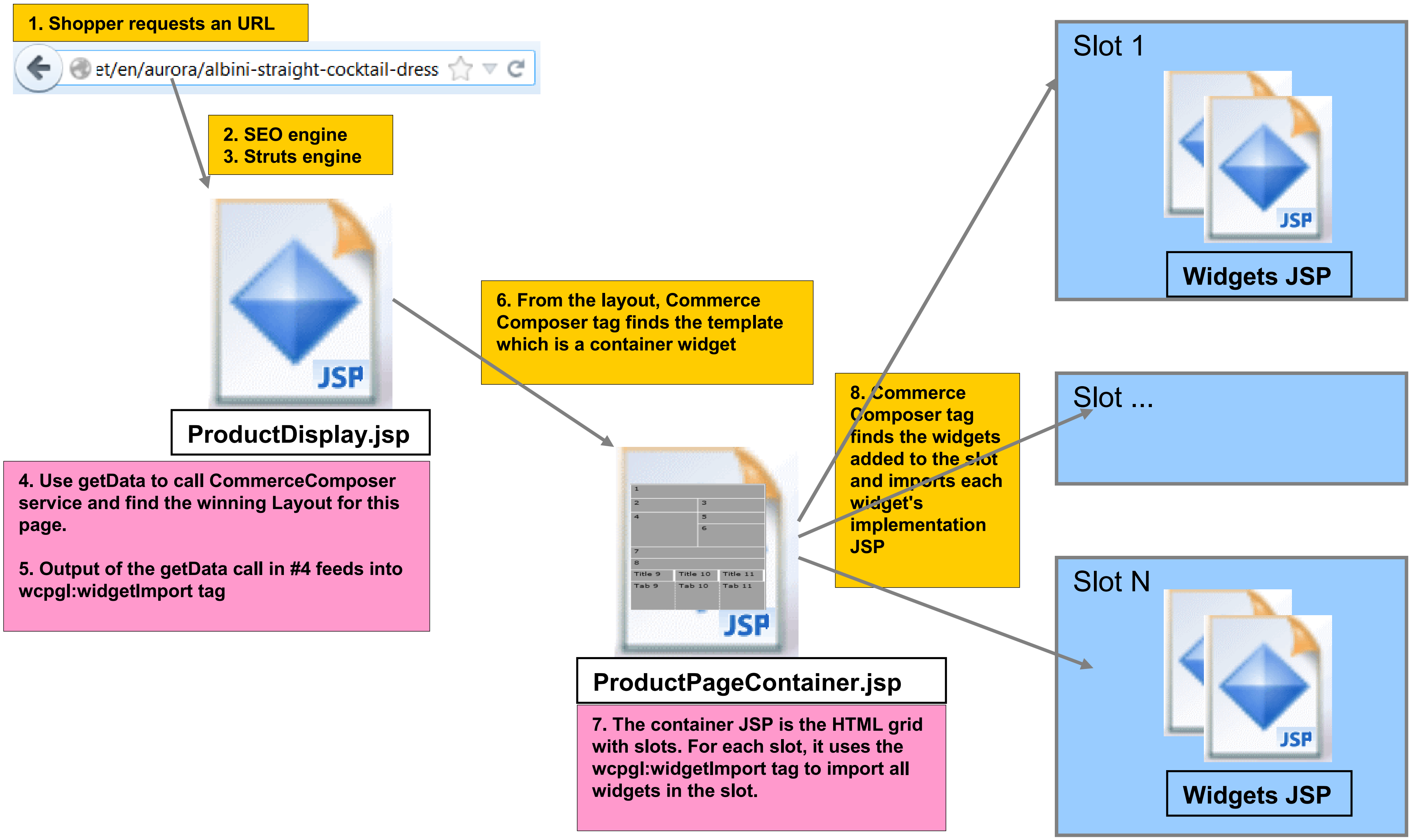
- How to read the above:

"When someone accesses this URL" → "At this time" → "Show this content" → "Organized like this"

More Terminology

- Page – a URL/location in the store.
- Widget – fundamental building blocks of a store page, renders object (s) with pre-defined actions and behaviours.
- Layout – the complete representation of what you see in the store page. It contains meta-data information about what widget (s) to render with its content, how to render them and where to render them in the page.
- Layout assignment – the association between a page in the store and a layout. Its meta-data has scheduling information.
- Template – starting point for creating new layouts, can be considered as an unfinished layout.

Commerce Composer Storefront Architecture



1. Shopper requests an URL

2. SEO engine
3. Struts engine

4. Use getData to call CommerceComposer service and find the winning Layout for this page.

5. Output of the getData call in #4 feeds into wcpgl:widgetImport tag

6. From the layout, Commerce Composer tag finds the template which is a container widget

7. The container JSP is the HTML grid with slots. For each slot, it uses the wcpgl:widgetImport tag to import all widgets in the slot.

8. Commerce Composer tag finds the widgets added to the slot and imports each widget's implementation JSP

Modify Store JSP Page To Use Commerce Composer Framework

```
<!DOCTYPE HTML>

    <wcf:getData type="com.ibm.commerce.pagelayout.facade.datatypes.PageDesignType" var="pageDesign" scope="request"
        <wcf:contextData name="storeId" data="${storeId}" />
        <wcf:contextData name="catalogId" data="${catalogId}" />
        <wcf:param name="deviceClass" value="${deviceClass}"/>
        <wcf:param name="pageGroup" value="Content"/>
        <wcf:param name="ObjectIdentifier" value="${plPageId}"/>
        <c:forEach var="aParam" items="${WCParamValues}">
            <c:forEach var="aValue" items="${aParam.value}">
                <wcf:param name="${aParam.key}" value="${aValue}"/>
            </c:forEach>
        </c:forEach>
    </wcf:getData>

    <c:set var="PAGE_DESIGN_DETAILS_VAR" value="pageDesign" scope="request"/>

<html lang="${shortLocale}" xml:lang="${shortLocale}">
<head>
    <link rel="stylesheet" href="<c:out value="${jspStoreImgDir}${env_vfileStylesheet}"/>" type="text/css"/>
    <%@ include file="../Common/CommonJSToInclude.jspf" %>

    <wcpgl:jsInclude varPageDesignDetails="pageDesign"/>
</head>

<body>
        <div id="page">
            <div id="headerWrapper">

            </div>

            <div id="contentWrapper">
                <div id="content" role="main">
                    <c:set var="rootWidget" value="${pageDesign.widget}"/>
                    <wcpgl:widgetImport uniqueID="${rootWidget.widgetDefinitionIdentifier.uniqueID}" debug=false/>
                </div>
            </div>

            <div id="footerWrapper">
            </div>
        </div>
    <c:if test = "${!empty plPageId}">
        <wcpgl:pageLayoutCache pageLayoutId="${pageDesign.layoutID}" pageId="${plPageId}"/>
    </c:if>
</html>
```

1

1. Call the new PageDesign service to resolve the layout to use for this page.

Input to PageDesign service:
pageGroup – can be Category, CatalogEntry, Content
objectIdentifier – can be categoryId, productId, pageId respectively
deviceClass – can be Web, Mobile

3

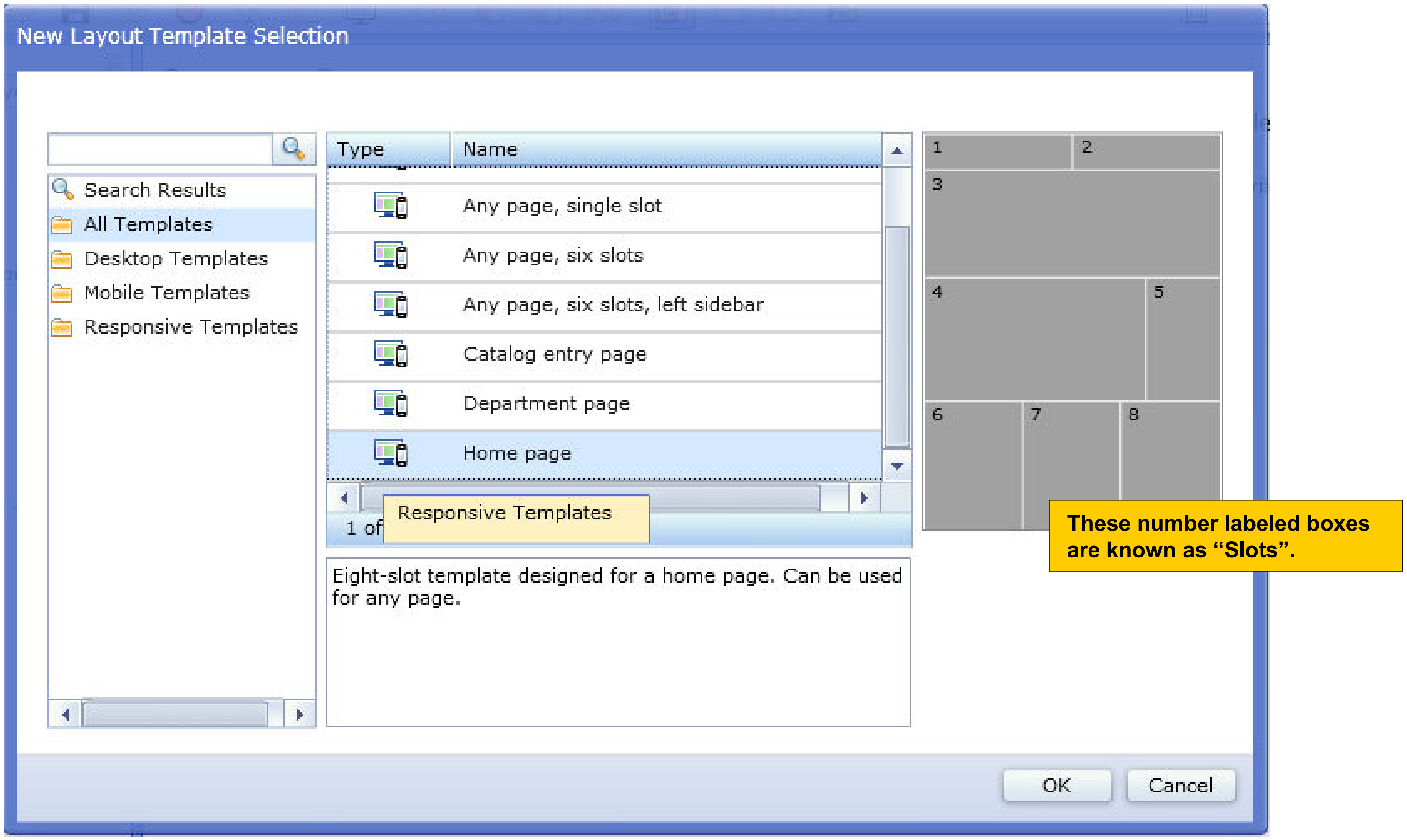
3. Use the jsInclude tag to generate all the JavaScript include tags

2

2. Use the widgetImport tag to import the container widget

Templates

- The first step of creating a Layout is for the business user to select a Template.



Type	Name
	Any page, single slot
	Any page, six slots
	Any page, six slots, left sidebar
	Catalog entry page
	Department page
	Home page

Responsive Templates

Eight-slot template designed for a home page. Can be used for any page.

These number labeled boxes are known as "Slots".

Steps for Creating a Template – Storefront Part

1. Create a container widget (steps are same as a regular widget)

   - Store JSP that mainly has the structure of the page

```
<%@include file="../Common/EnvironmentSetup.jspf" %>
<%@ taglib uri="http://commerce.ibm.com/pagelayout" prefix="wcpgl" %>

<div id="headerWrapper">
    <%out.flush();%>
    <c:import url = "${env_jspStoreDir}Widgets/Header/Header.jsp" />
    <%out.flush();%>
</div>

<div id="contentWrapper">
    <div id="content" role="main">
        <div class="row">
            <div class="col6 mcol12" data-slot-id="1"><wcpgl:widgetImport slotId="1"/></div>
            <div class="col6 mcol12" data-slot-id="2"><wcpgl:widgetImport slotId="2"/></div>
        </div>
        <div class="row">
            <div class="col12 mcol12" data-slot-id="3"><wcpgl:widgetImport slotId="3"/></div>
        </div>
        <div class="row">
            <div class="col8 mcol12" data-slot-id="4"><wcpgl:widgetImport slotId="4"/></div>
            <div class="col4 mcol12" data-slot-id="5"><wcpgl:widgetImport slotId="5"/></div>
        </div>
        <div class="row">
            <div class="col4 mcol12 dcol4 left" data-slot-id="6"><wcpgl:widgetImport slotId="6"/></div>
            <div class="col4 mcol12 dcol4" data-slot-id="7"><wcpgl:widgetImport slotId="7"/></div>
            <div class="col4 mcol12 dcol4" data-slot-id="8"><wcpgl:widgetImport slotId="8"/></div>
        </div>
    </div>
</div>

<div id="footerWrapper">
    <%out.flush();%>
    <c:import url = "${env_jspStoreDir}Widgets/Footer/Footer.jsp" />
    <%out.flush();%>
</div>
```

Use the new widgetImport tag to import all the widgets setup by the business user in each slot

- **FEP5 include a widget: <c:import url = "${env_jspStoreDir}Widgets/ESpot/ProdRecommendation.jsp" />**
- **FEP7 including a widget: <wcpgl:widgetImport slotId=“4"/>**

Steps for Creating a Template – Storefront Part (cont’d)

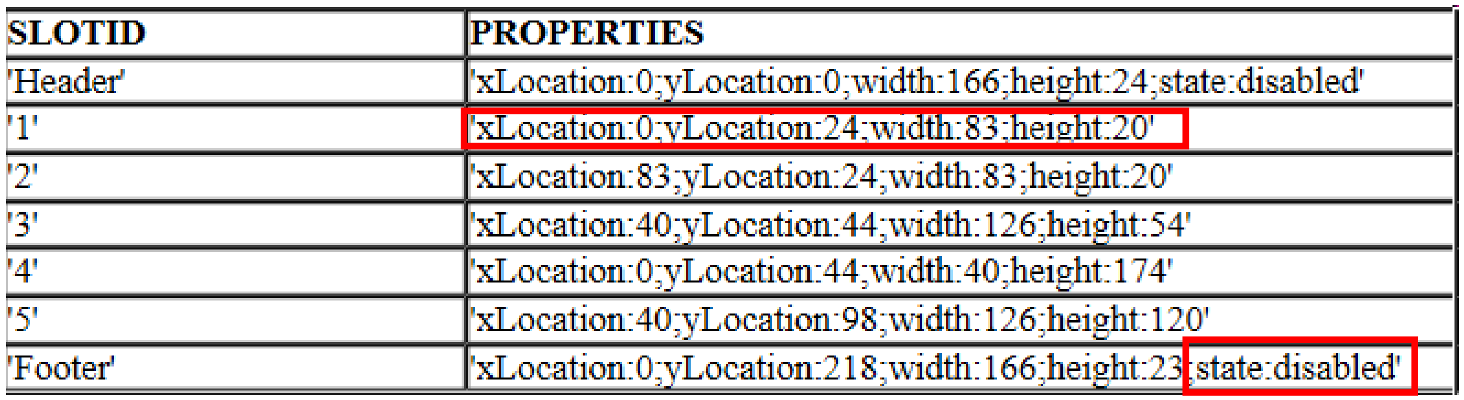
- Register container widget in Commerce Composer framework in PLWIDGETDEF table
- Subscribe the store to use the container widget in PLSTOREWIDGET
- Container widgets do not require Management Center object definition nor properties view definition

Register Template In Commerce Composer Framework

1. Register the template with an entry in PAGELAYOUT table and set the isTemplate to true.

1. The template must have a root widget that is a container widget. Register the widgets that the template has in PLWIDGET and PLWIDGETREL.

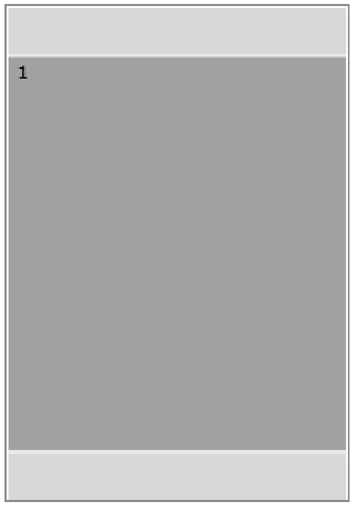
1. Describe the container widget for Management Center to display the template thumbnail. Each slot of the container widget needs to be described with exact positions and unitless dimensions.



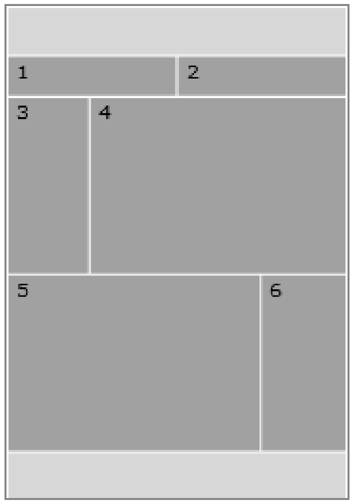
SLOTID	PROPERTIES
'Header'	'xLocation:0;yLocation:0;width:166;height:24;state:disabled'
'1'	'xLocation:0;yLocation:24;width:83;height:20'
'2'	'xLocation:83;yLocation:24;width:83;height:20'
'3'	'xLocation:40;yLocation:44;width:126;height:54'
'4'	'xLocation:0;yLocation:44;width:40;height:174'
'5'	'xLocation:40;yLocation:98;width:126;height:120'
'Footer'	'xLocation:0;yLocation:218;width:166;height:23;state:disabled'

Aurora Template List

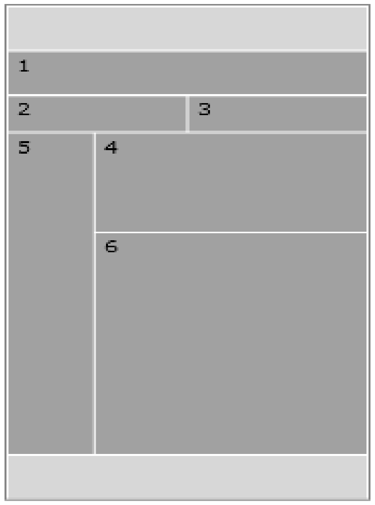
1. Any page, Single slot



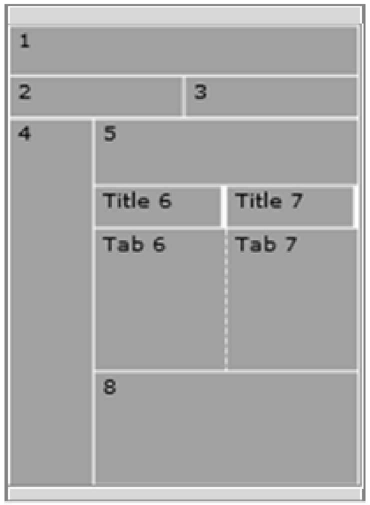
2. Any page, six slots



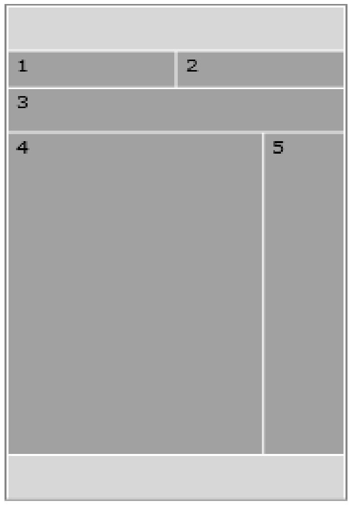
3. Any page, six slots, left sidebar

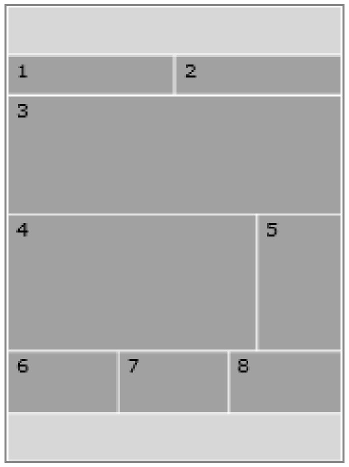


4. Any page, eigth slots, tabs

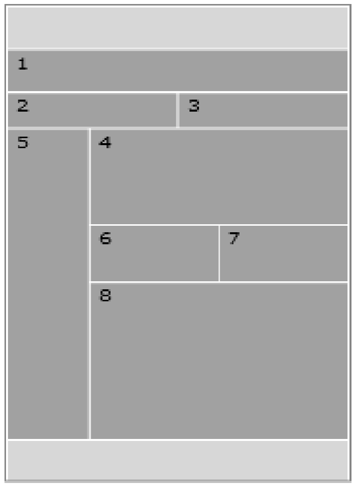


5. Any page, five slots, right sidebar

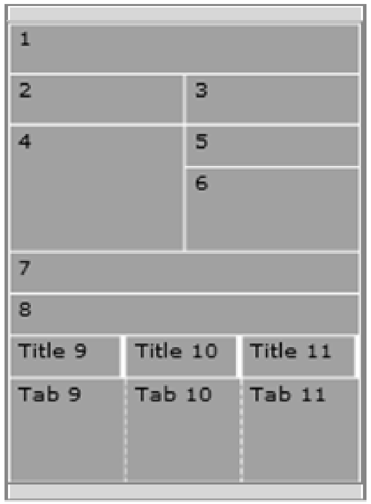




6. Home page



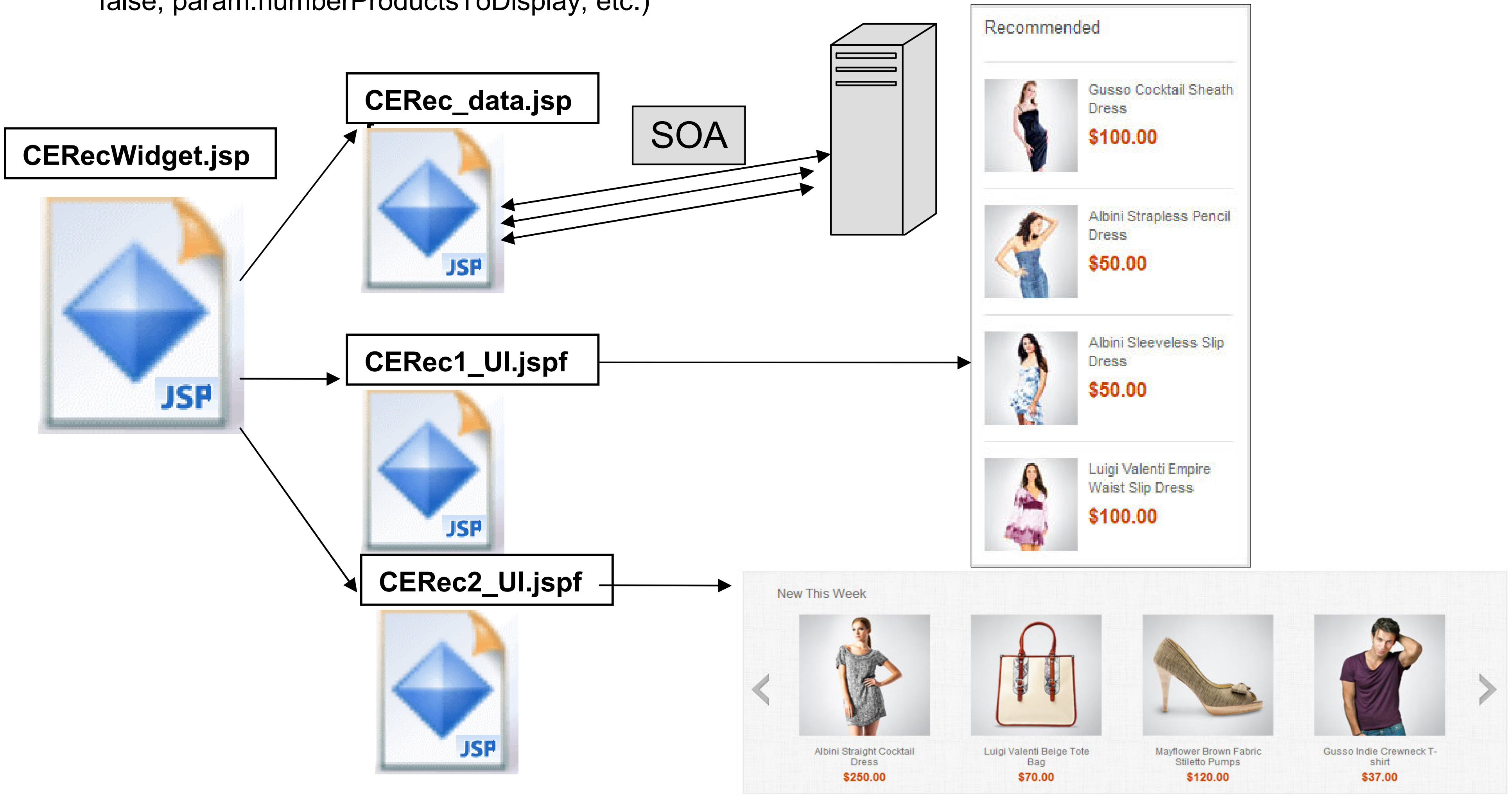
7. Department page



8. Catalog entry page

Steps for Creating a Widget – Storefront Part

- Write a store JSP
  - ➢ Used to render the widget in storefront
  - ➢ Any rendering effects the widget may have, expose them as JSP import parameters (i.e., param.orientation - true or false, param.numberProductsToDisplay, etc.)



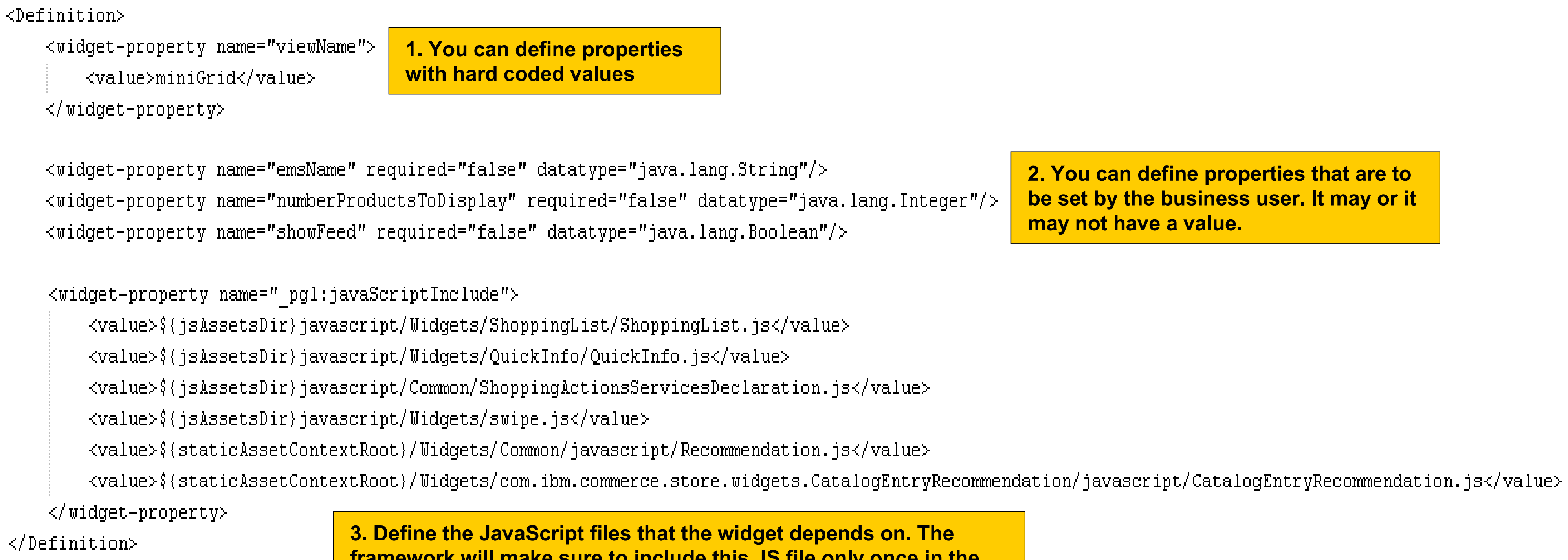
CERecWidget.jsp
CERec_data.jsp
SOA
CERec1_UI.jspf
CERec2_UI.jspf
JSP
Recommended
Gusso Cocktail Sheath Dress
$100.00
Albini Strapless Pencil Dress
$50.00
Albini Sleeveless Slip Dress
$50.00
Luigi Valenti Empire Waist Slip Dress
$100.00
New This Week
Albini Straight Cocktail Dress
$250.00
Luigi Valenti Beige Tote Bag
$70.00
Mayflower Brown Fabric Stiletto Pumps
$120.00
Gusso Indie Crewneck T-shirt
$37.00

Steps for Creating a Widget – Storefront Part

- Register the Widget with the Commerce Composer framework in PLWIDGETDEF
  - WidgetType – values of 1 for widget or 2 for container widget
  - Vendor – who provided the widget
  - JSPPath – path to the JSP relative to Stores.war
  - DefinitionXML – define the properties/parameters that the widget has. Another important property is **_pgl:javaScriptInclude**, it tells the framework to include these JavaScript files that the widget depends on.

- Stores need to subscribe to the widget in order to use it on layouts. The subscription is done in PLSTOREWIDGET table.

A Closer Look At Widget DefinitionXML



```xml
<Definition>
    <widget-property name="viewName">
        <value>miniGrid</value>
    </widget-property>

    <widget-property name="emsName" required="false" datatype="java.lang.String"/>
    <widget-property name="numberProductsToDisplay" required="false" datatype="java.lang.Integer"/>
    <widget-property name="showFeed" required="false" datatype="java.lang.Boolean"/>

    <widget-property name="_pgl:javaScriptInclude">
        <value>${jsAssetsDir}javascript/Widgets/ShoppingList/ShoppingList.js</value>
        <value>${jsAssetsDir}javascript/Widgets/QuickInfo/QuickInfo.js</value>
        <value>${jsAssetsDir}javascript/Common/ShoppingActionsServicesDeclaration.js</value>
        <value>${jsAssetsDir}javascript/Widgets/swipe.js</value>
        <value>${staticAssetContextRoot}/Widgets/Common/javascript/Recommendation.js</value>
        <value>${staticAssetContextRoot}/Widgets/com.ibm.commerce.store.widgets.CatalogEntryRecommendation/javascript/CatalogEntryRecommendation.js</value>
    </widget-property>
</Definition>
```

1. You can define properties with hard coded values

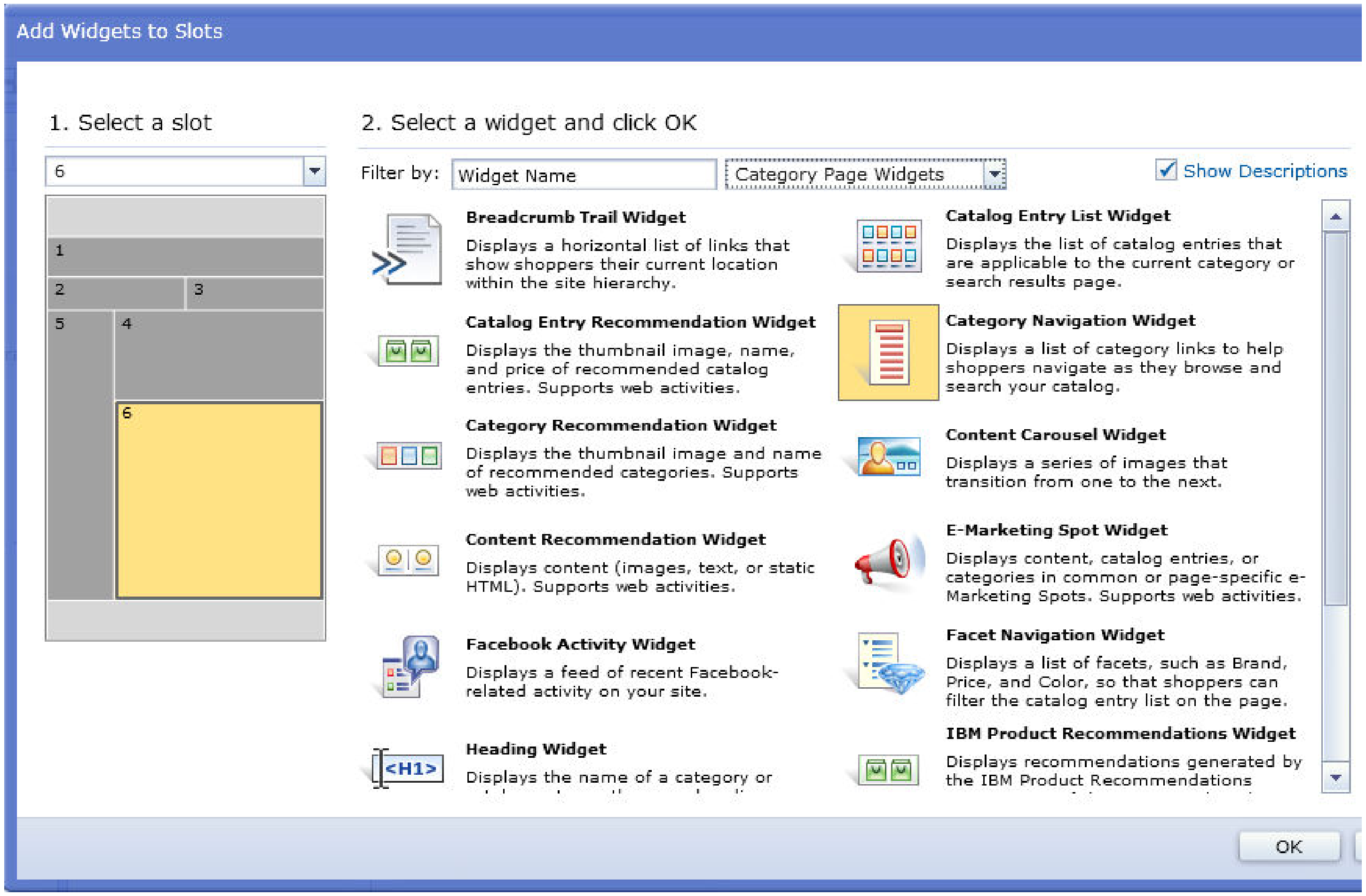
2. You can define properties that are to be set by the business user. It may or it may not have a value.

3. Define the JavaScript files that the widget depends on. The framework will make sure to include this JS file only once in the page.

Note: you can use any variable that is available in the JSP page.

Management Center View For Selecting Widgets

- When creating layouts, business users see the list of widgets from the widget library dialog and assign it to a slot in the layout.
- The widget library list comes from the widgets that the current store has access to.
- Widget library is categorized by widget groups that the widgets are allowed to be used in (ex: Category page, Search results page, Product page, etc)
- Type ahead feature to find widgets easily (within the context of the selected category)



Breadcrumb Trail Widget
Displays a horizontal list of links that show shoppers their current location within the site hierarchy.

Catalog Entry List Widget
Displays the list of catalog entries that are applicable to the current category or search results page.

Catalog Entry Recommendation Widget
Displays the thumbnail image, name, and price of recommended catalog entries. Supports web activities.

Category Navigation Widget
Displays a list of category links to help shoppers navigate as they browse and search your catalog.

Category Recommendation Widget
Displays the thumbnail image and name of recommended categories. Supports web activities.

Content Carousel Widget
Displays a series of images that transition from one to the next.

Content Recommendation Widget
Displays content (images, text, or static HTML). Supports web activities.

E-Marketing Spot Widget
Displays content, catalog entries, or categories in common or page-specific e-Marketing Spots. Supports web activities.

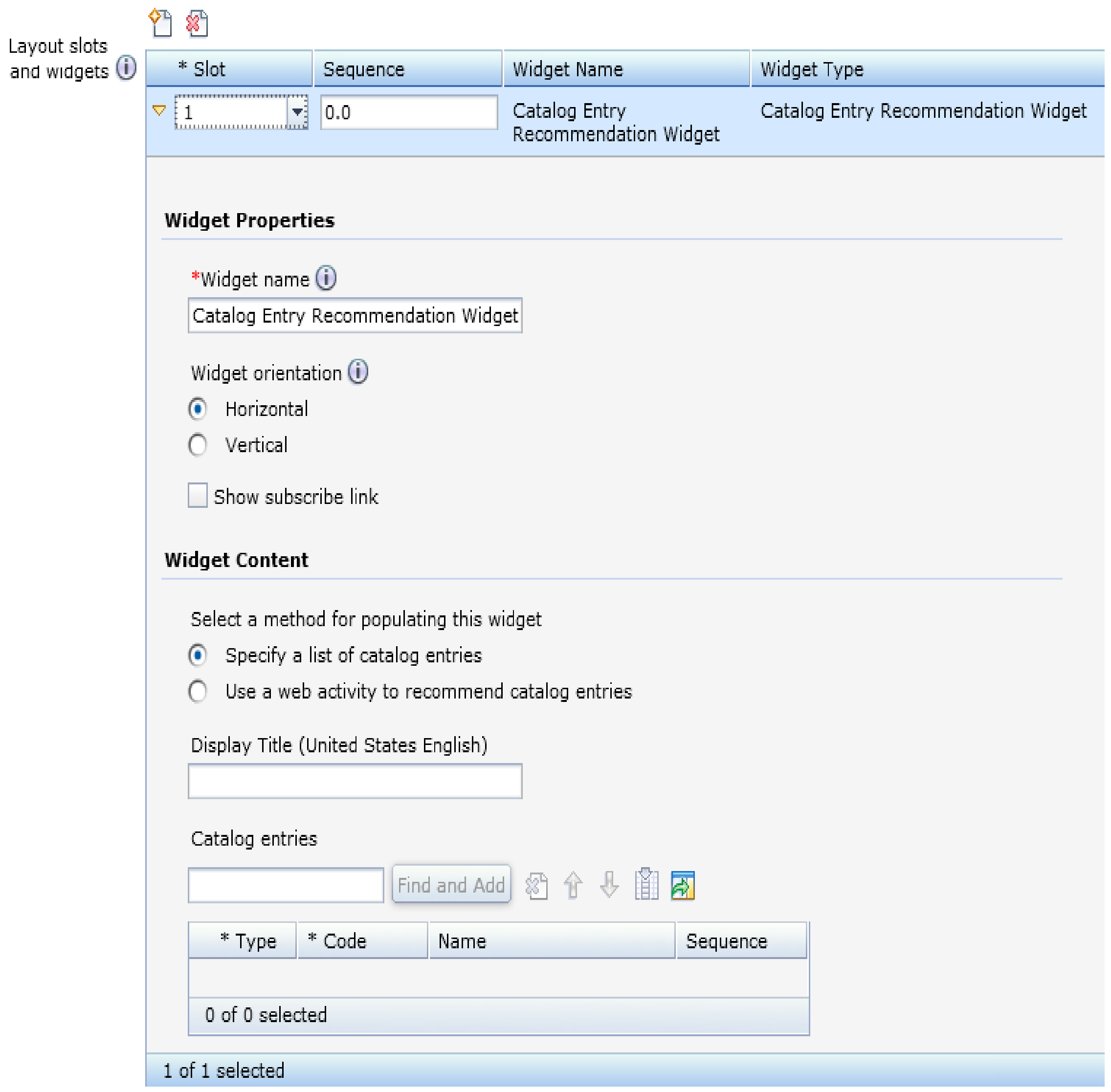
Facebook Activity Widget
Displays a feed of recent Facebook-related activity on your site.

Facet Navigation Widget
Displays a list of facets, such as Brand, Price, and Color, so that shoppers can filter the catalog entry list on the page.

Heading Widget
Displays the name of a category or

IBM Product Recommendations Widget
Displays recommendations generated by the IBM Product Recommendations

Steps for Creating a Widget – Management Center Part


Layout slots and widgets

* Slot	Sequence	Widget Name	Widget Type
1	0.0	Catalog Entry Recommendation Widget	Catalog Entry Recommendation Widget

Widget Properties

*Widget name: Catalog Entry Recommendation Widget

Widget orientation: [✓ Horizontal] Vertical

Show subscribe link

Widget Content

Select a method for populating this widget: [✓ Specify a list of catalog entries] Use a web activity to recommend catalog entries

Display Title (United States English)

Catalog entries

* Type	* Code	Name	Sequence

0 of 0 selected

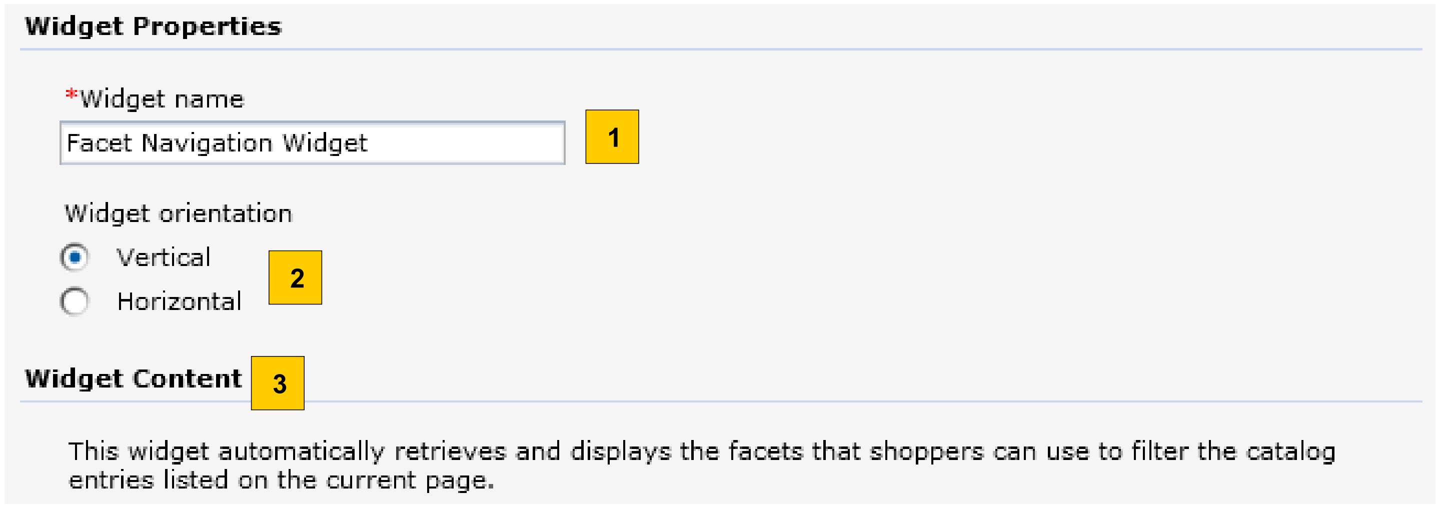
1 of 1 selected

Used to save properties that will be passed to the storefront.

1. Define a child object (object definition)
   - Declare the properties view def file
   - Declare the icon file for the widget
   - Define the properties to send to server
   - Define create and update services

2. Define a properties view (properties definition)
   - Render the entire widget properties view to gather information needed by the widget from business user

Widget Properties View Definition – Management Center Part


Widget Properties

*Widget name

Facet Navigation Widget

1

Widget orientation

(●) Vertical

( ) Horizontal

2

Widget Content

3

This widget automatically retrieves and displays the facets that shoppers can use to filter the catalog entries listed on the current page.

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

<Definitions>

    <GridObjectProperties definitionName="plmWidgetProperties_FacetNavigationWidget">
        <PropertyPane>
    1       <PropertyGroup name="widgetProperties" collapsable="false" groupTitle="${plmPageLayoutResources.widgetPropertiesPrompt}">
                <PropertyInputText name="${plmPageLayoutResources.widgetNamePrompt}" propertyName="widgetName"
                    promptText="${plmPageLayoutResources.widgetNamePrompt}" />                                                          2
                <PropertyRadioGroup propertyName="xWidgetProp_widgetOrientation" promptText="${plmPageLayoutResources.facetNavigationWidgetWidgetOrientationPrompt}" />
            </PropertyGroup>
    3       <PropertyGroup name="contentProperties" collapsable="false" groupTitle="${plmPageLayoutResources.widgetContentPrompt}">
                <PropertyStaticText text="${plmPageLayoutResources.facetNavigationWidgetContent}" />
            </PropertyGroup>
        </PropertyPane>
    </GridObjectProperties>

</Definitions>
```

Widget Object Definition – Management Center Part

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

<Definitions>

    <WidgetObjectDefinition package="plm"
        definitionName="plmLayoutWidget_FacetNavigationWidget"
        baseDefinitionName="plmBaseLayoutWidget"
        parentDefinitionName="plmBasePageLayoutPrimaryObjectDefinition"
        objectType="FacetNavigationWidget"
        gridPropertiesDefinitionName="plmWidgetProperties_FacetNavigationWidget"
        iconPath="/images/pagelayouts/widgetIcons/facet_nav.png"
        widgetDisplayGroups="Category,Search"
        widgetRestrictionGroups="Category,Search">

        <PropertyDefinition propertyName="xWidgetProp_widgetOrientation">
            <PropertyValue displayName="${plmPageLayoutResources.facetNavigationWidgetWidgetOrientation_Vertical}" value="vertical" />
            <PropertyValue displayName="${plmPageLayoutResources.facetNavigationWidgetWidgetOrientation_Horizontal}" value="horizontal" />
        </PropertyDefinition>

        <CreateService baseDefinitionName="plmBaseCreateLayoutWidget" />
        <UpdateService baseDefinitionName="plmBaseUpdateLayoutWidget" />

        <Xml name="template">
            <xWidgetProp_widgetOrientation>vertical</xWidgetProp_widgetOrientation>
            <sequence>0</sequence>
        </Xml>
    </WidgetObjectDefinition>

</Definitions>
```

Declare the properties view definition name and path to the icon file.

Specify which widget group to belong into (optional)

Widget Property Manager

- Greater fine grain control for widget properties in read (storefront) and write (Management Center) scenarios as they are persisted to PLWIDGETNVP table.
- A widget can declare its of logic for validation, persistence and retrieval of widget properties. If a widget does not declare its own Widget Property Manager class then the default logic would apply which is no validation and save/read all properties from PLWIDGETNVP table.
- Save
  - ➢ All properties from Management Center are passed to the widget specific class
  - ➢ Process as required, pass back a new set of properties
  - ➢ The new set of properties remaining will be saved in PLWIDGETNVP
- Read
  - ➢ All properties are passed to the widget specific class
  - ➢ Process as required, and pass back the set that will be sent to the widget JSP in store

Java Emitter Template (JET) package Transformation

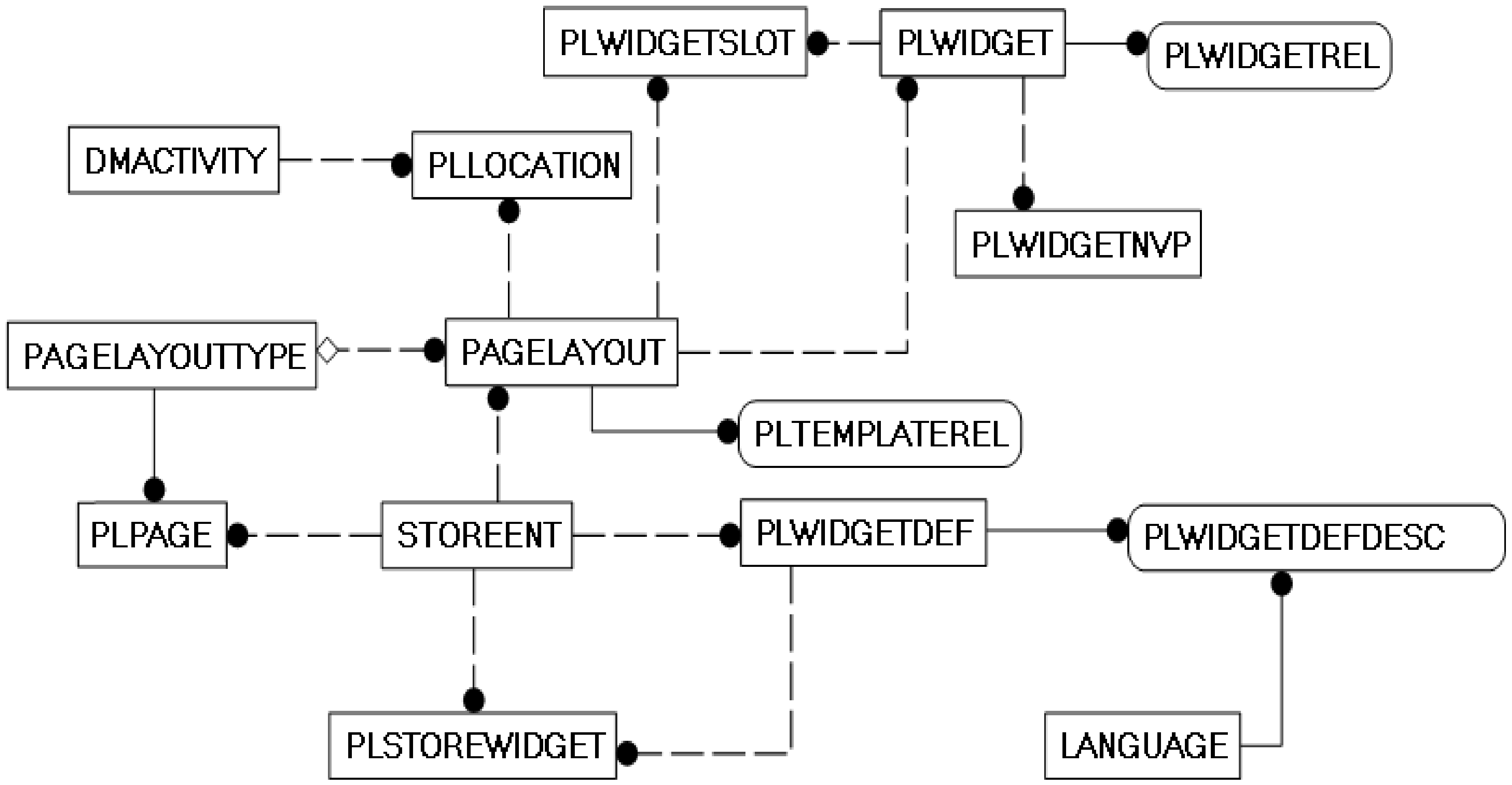
- Generates all the necessary source code and directory structure for creating a new widget
  - CSV files for registering widget and subscribing store to widget
  - Management Center files to display widget properties in Commerce Composer Tool
  - Store JSPs for display of widget contents

- Input file specifies information about your widget
  - Ex: vendor name, widget name, widget description, widget properties, etc

- Plugin is already part of the WebSphere Commerce Developer environment and can be executed from your workspace

- See Tutorial: http://pic.dhe.ibm.com/infocenter/wchelp/v7r0m0/topic/com.ibm.commerce.pagecomposerframework.doc/tasks/tpzwidgetcreatesrccd.htm

Commerce Composer Data Model

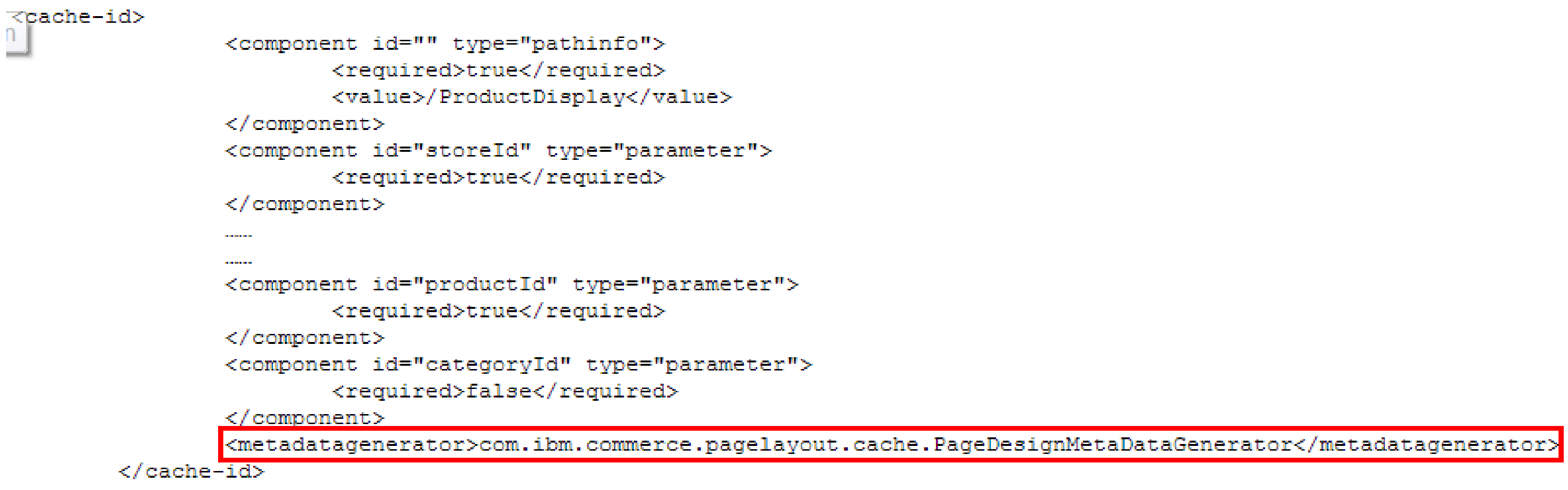


Commerce Composer Support for Other Components

- ✓ Extended Sites – different stores can define a different layout
- ✗ Content versioning
- ✓ Workspaces – complete workflow with approvals
- ✓ Dataload
  - New widgets or update widgets
  - Widget subscription for a store
  - Templates
  - Default layouts – excludes widget content
  - Layouts – excludes widget content

Layout JSP Caching And Invalidation

- Full page servlet caching is now affected by business user changes to Commerce Composer layouts
- For cache invalidation to work properly as layouts are modified or as new layouts are applied to pages, you must add 'PageDesignMetaDataGenerator' to the servlet cache entry in the cachespec.xml file
- PageDesignMetaDataGenerator does the following:
  – Determine if the layout can be cached
  – Add 'emsName:name' and 'pageLayoutId:layoutId' dependency ids to the cache entry



```
<cache-id>
                <component id="" type="pathinfo">
                        <required>true</required>
                        <value>/ProductDisplay</value>
                </component>
                <component id="storeId" type="parameter">
                        <required>true</required>
                </component>
                ……
                ……
                <component id="productId" type="parameter">
                        <required>true</required>
                </component>
                <component id="categoryId" type="parameter">
                        <required>false</required>
                </component>
                <metadatagenerator>com.ibm.commerce.pagelayout.cache.PageDesignMetaDataGenerator</metadatagenerator>
        </cache-id>
```

Widget JSP Caching And Invalidation

- Some widgets maybe better cached separately as JSP fragments, for example: Header widget, Footer widget, etc. Nothing new.
- Some widgets are very dynamic and cannot be cached, for example: Inventory widget, etc. Declare these JSPs as do-not-cache in cachespec.xml same as before.
- Some widgets can be sometimes dynamic and sometimes static...dynamically determine if they are static and can be cached by parent, or they are dynamic and cannot be cached or they can be cached separately as fragments. For example, espot or recommendations widgets.
  <metadatagenerator>
  com.ibm.commerce.marketing.cache.EMarketingSpotMetaDataGenerator
  </metadatagenerator>
- Some widgets are static and can be consumed by the parent servlet caching. However, since the widget can be placed on any page, then the invalidation need to be setup dynamically.
  – <dependency-id>ignoreDoNotConsume</dependency-id>
  – <wcpgl:pageLayoutWidgetCache/>

How To Adopt Commerce Composer?

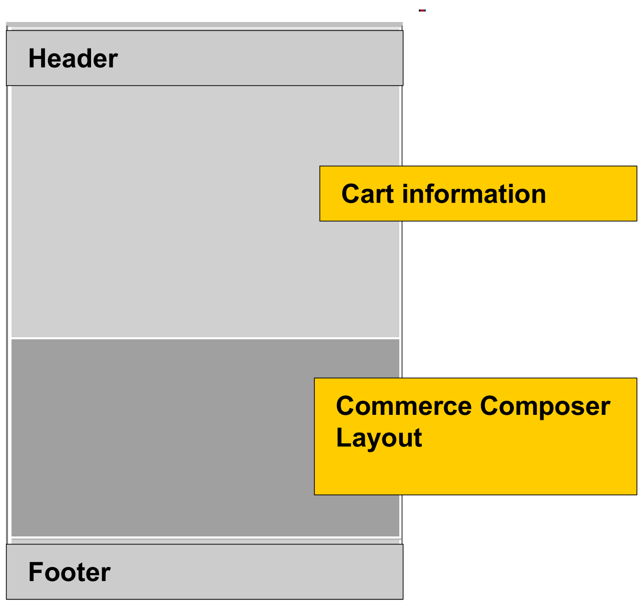
1) Use FEP 7 Aurora as a starting point
- New customers
- Existing customers looking for major site redesign and willing to start over (http://pic.dhe.ibm.com/infocenter/wchelp/v7r0m0/topic/com.ibm.commerce.aurora-starterstore.doc/tasks/tsmmigrate.htm)

1) Use FEP 7 Aurora templates and widgets
- Add a new store function called 'UseCommerceComposer'
- (If coming from PageLayout tool) Remove store function called 'UsePageLayout'
- Subscribe to site level widgets
- Dataload the Aurora templates or create new templates
- Modify main pages from the browsing pages to call Commerce Composer tags
- Dataload default layouts
- Keep custom store as is specially My Account and Checkout

2) Convert custom store into templates and widgets
- Add a new store function called 'UseCommerceComposer'
- (If coming from PageLayout tool) Remove store function called 'UsePageLayout'
- Follow info center instructions on how to create templates and widgets
- There is a tutorial that converts shopping cart page to Commerce Composer (http://pic.dhe.ibm.com/infocenter/wchelp/v7r0m0/topic/com.ibm.commerce.pagecomposerframework.doc/tutorial/tpz_createsitewidget_introduction.htm)

Best Practices

- Want manage the layout of another store page in Commerce Composer?
  - Any page can be managed in Commerce Composer
  - Represent the store page as a Content page
  - Mark the Content page as 'url not configurable'
  - Is not necessary to have the entire page open for business users
  - Have hardcoded widget or code in the main JSP page, and then just use the wcpgl:widgetImport tag in the preferred area



Best Practices (cont'd)

- Default layouts?
  - These layouts are not managed nor visible in Management Center
  - Every page group has a default layout which is defined by IT via dataload
  - Out of the box page groups: Content, CatalogGroup, Product, SKU, Bundle, Kit, DynamicKit, SearchResult
  - In Aurora, default for CatalogGroup page is the layout that you see for dresses and all leaf categories. Therefore, you will see that departments and category defines new layouts and do assignments to the select categories
  - In Aurora, default for Content page is the layout that you see for Help page, ContactUs page, etc...therefore for Home and Sitemap pages we define new layouts and do assignment for that page

Thank You!