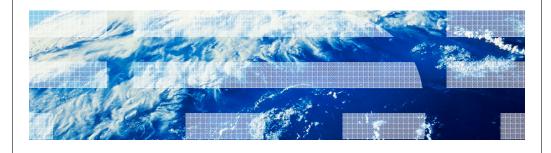


# IBM WebSphere Commerce V7 FEP 7

# Commerce Composer



WebSphere. software

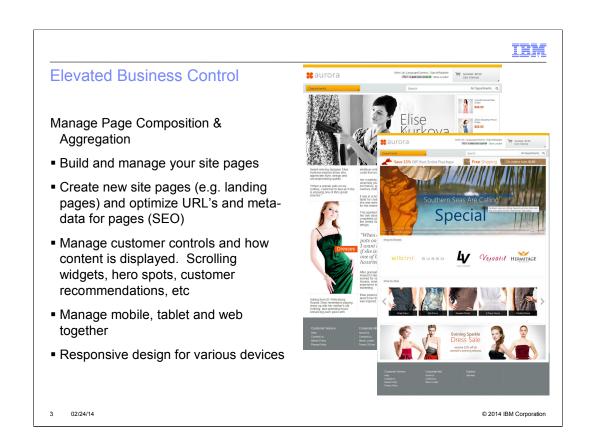
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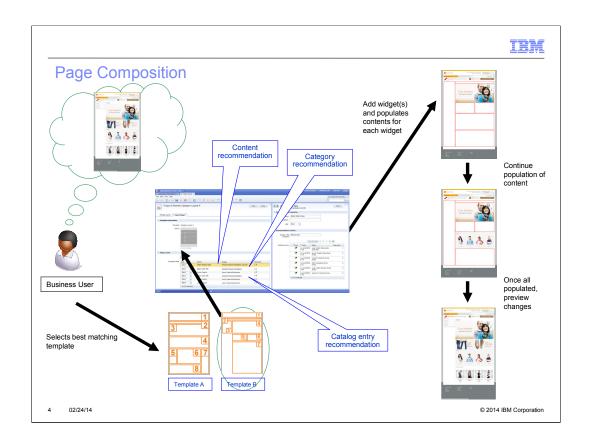
### Agenda

- 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
  - $\\ Migration$

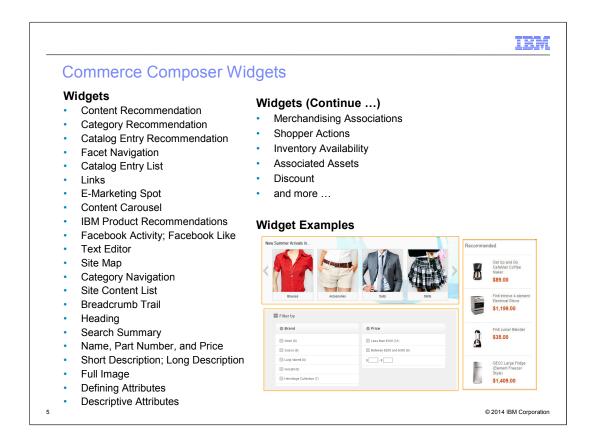
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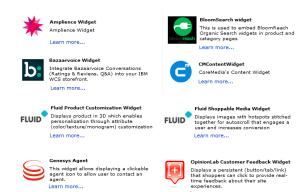
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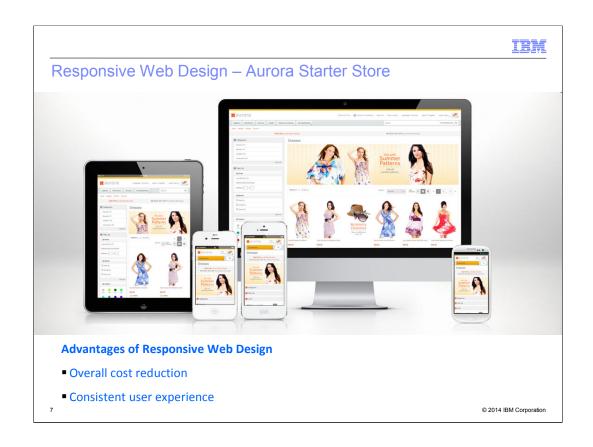
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# IBM Commerce Partners: 3rd Party Widgets

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



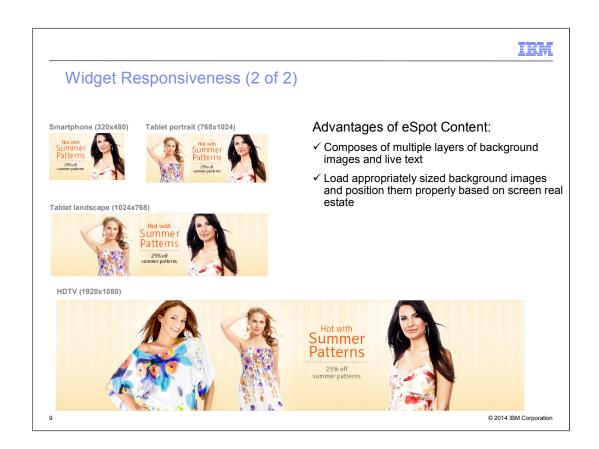
http://www.ibm.com/commerce-partners



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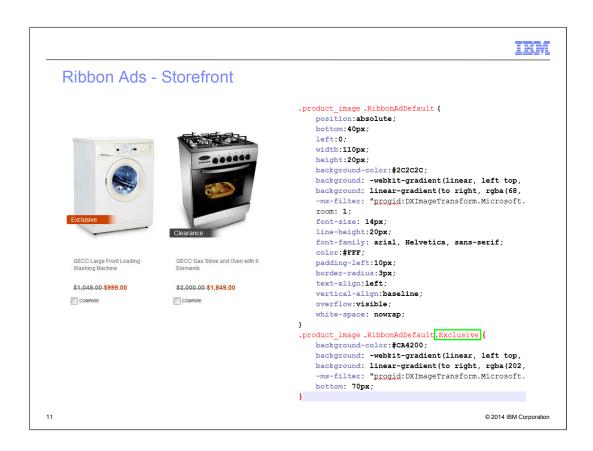
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## Commerce Composer Scope

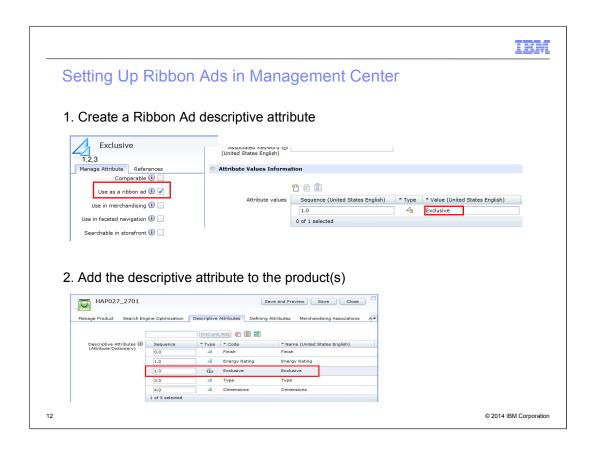
- Browsing pages
   Home
   Department/Category/Sub-category
   Product/Kit/Bundle/DynamicKit

  - Search results
    Landing pages/Promotional pages
    Content pages
- My account and checkout pages
   NOT in FEP 7

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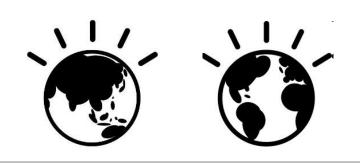


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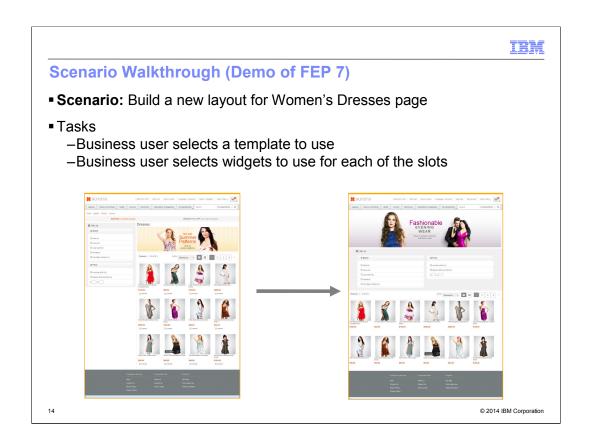
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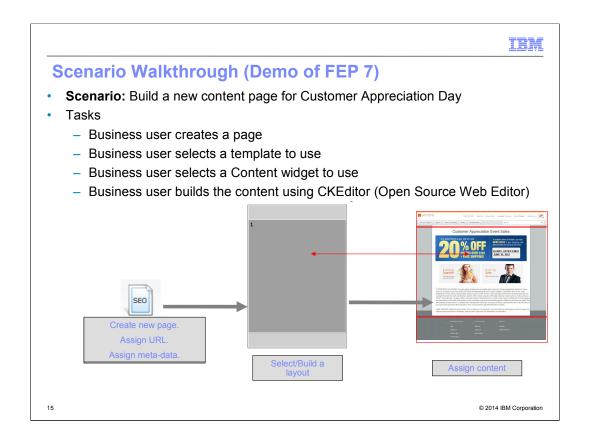


# Commerce Composer Demo

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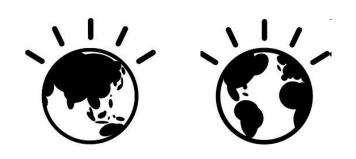


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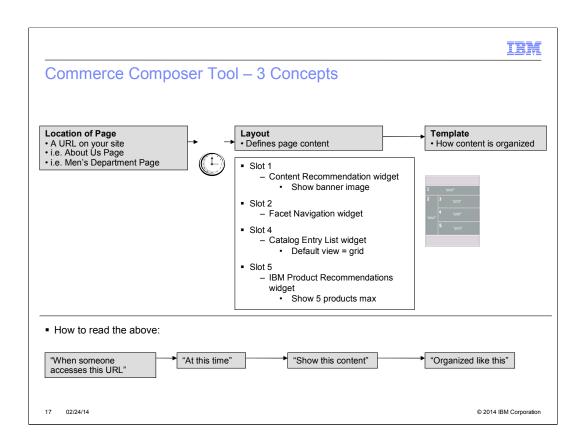
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# Commerce Composer Framework

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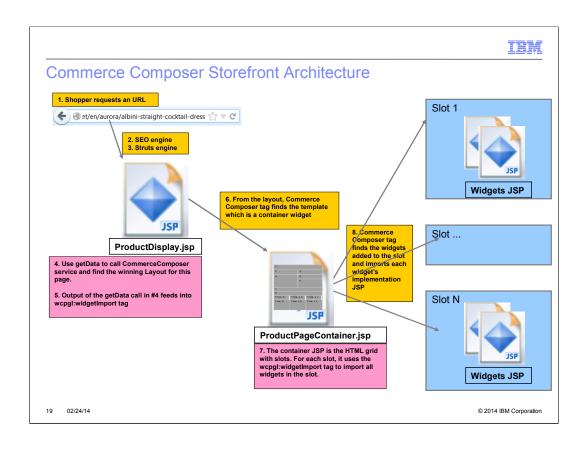


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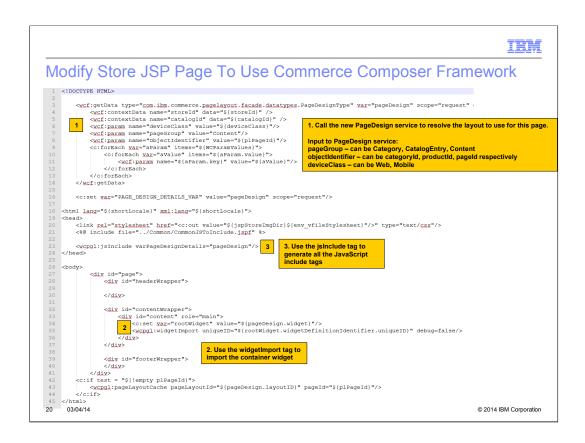
#### More Terminology

- 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.

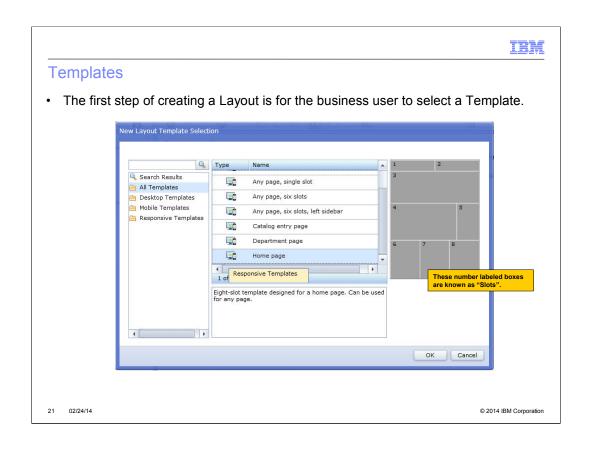
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http://pic.dhe.ibm.com/infocenter/wchelp/v7r0m0/topic/com.ibm.commerce.pagecomposerframework.doc/concepts/cpztemplateframework.htm



#### 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



# 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

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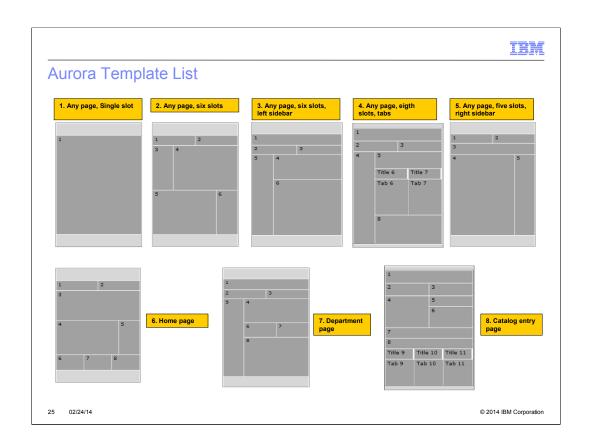
#### Register Template In Commerce Composer Framework

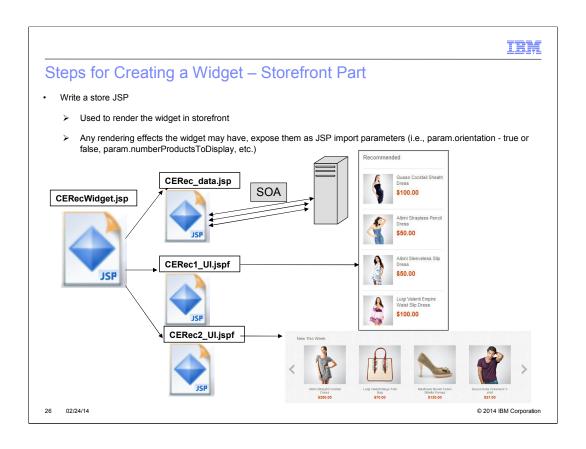
- 1. Register the template with an entry in PAGELAYOUT table and set the isTemplate to true.
- 1. The template must have a root widget that is a container widget. Register the widgets that the template has in PLWIDGET and PLWIDGETREL.
- 1. Describe the container widget for Management Center to display 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'

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http://pic.dhe.ibm.com/infocenter/wchelp/v7r0m0/topic/com.ibm.commerce.pagecomposerframework.doc/concepts/cpzwidgetframework.htm

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#### 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.

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```
A Closer Look At Widget DefinitionXML
 <Definition>
     <widget-property name="viewName">
                                      1. You can define properties with hard coded values
         <value>miniGrid</value>
     </widget-property>
     <widget-property name="emsName" required="false" datatype="java.lang.String"/>
                                                                                                 2. You can define properties that are to be set by the business user. It may or it may not have a value.
     <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>$(jskssetsDir)javascript/Widgets/ShoppingList/ShoppingList.js</value>
         <value>$(jskssetsDir)javascript/Widgets/QuickInfo/QuickInfo.js</value>
         <value>${js&ssetsDir}javascript/Widgets/swipe.js</value>
         <value>$(staticAssetContextRoot)/Widgets/com.ibm.commerce.store.widgets.CatalogEntryRecommendation/javascript/CatalogEntryRecommendation.js</value>
     </widget-property>
                                 3. Define the JavaScript files that the widget depends on. The framework will make sure to include this JS file only once in the
 </Definition>
                                  Note: you can use any variable that is available in the JSP page.
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                                                                                                                                © 2014 IBM Corporation
```



✓ Show Descriptions

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#### Management Center View For Selecting Widgets

Add Widgets to Slots

1. Select a slot

- 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)

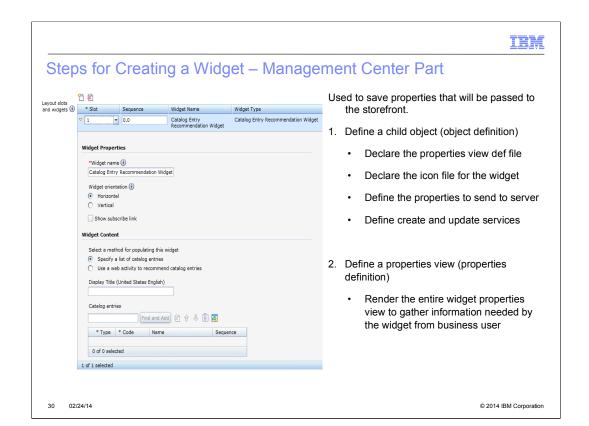
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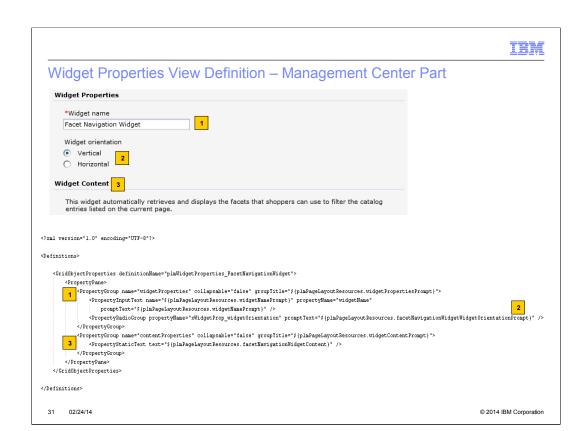


2. Select a widget and click OK

Filter by: Widget Name Category Page Widgets

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#### Widget Object Definition – Management Center Part

```
<?xml version="1.0" encoding="UTF-8"?>
<Definitions>
      <WidgetObjectDefinition package="plm"</pre>
           definitionName="plaBayoutWidget FacetNavigationWidget"
baseDefinitionName="plaBaseLayoutWidget"
parentDefinitionName="plaBaseDageLayoutPrimaryObjectDefinition"
objectType="FacetNavigationWidget"
                                                                                                                        Declare the properties view definition name and path to the icon file.
           <PropertyDefinition propertyName="xWidgetProp widgetOrientation">
                 <PropertyValue displayName="${plmPageLayoutResources.facetNavigationWidgetWidgetOrientation_Vertical}" value="vertical" />
<PropertyValue displayName="${plmPageLayoutResources.facetNavigationWidgetVidgetOrientation_Horizontal}" value="horizontal" />
           <CreateService baseDefinitionName="plmBaseCreateLayoutWidget" />
<UpdateService baseDefinitionName="plmBaseUpdateLayoutWidget" />
            <Xml name="template">
                 <xWidgetProp_widgetOrientation>vertical</xWidgetProp_widgetOrientation>
<sequence>0</sequence>
      </WidgetObjectDefinition>
</Definitions>
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                                                                                                                                                                                     © 2014 IBM Corporation
```

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#### 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

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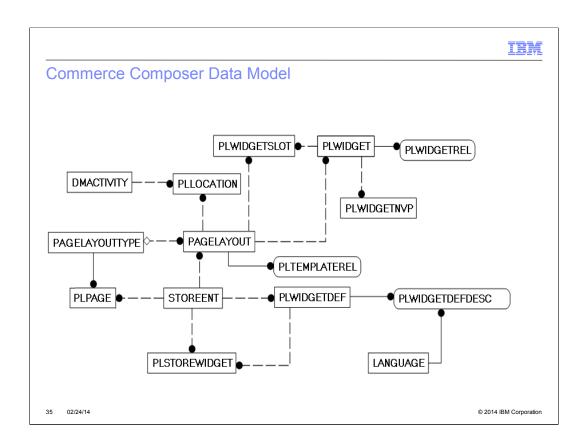
IRM

#### 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.pagecomposerfra mework.doc/tasks/tpzwidgetcreatesrccd.htm

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



http://pic.dhe.ibm.com/infocenter/wchelp/v7r0m0/topic/com.ibm.commerce.data.doc/refs/rdmcommercecomposerdatamodel.htm

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#### **Commerce Composer Support for Other Components**

- ▼ Extended Sites different stores can define a different layout
- Content versioning
- ▼ Dataload
  - New widgets or update widgets
  - Widget subscription for a store
  - Templates
  - Default layouts excludes widget content
  - Layouts excludes widget content

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http://pic.dhe.ibm.com/infocenter/wchelp/v7r0m0/topic/com.ibm.commerce.data.doc/refs/rmlbestpraccommercecomposer.htm



### 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 'pageLayoutld:layoutld' dependency ids to the cache entry

http://pic.dhe.ibm.com/infocenter/wchelp/v7r0m0/topic/com.ibm.commerce.pagecomposerframework.doc/concepts/cpzcccaching.htm

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## 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/>

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http://pic.dhe.ibm.com/infocenter/wchelp/v7r0m0/topic/com.ibm.commerce.pagecomposerframework.doc/concepts/cpzcccaching.htm



#### **How To Adopt Commerce Composer?**

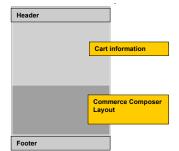
- 1) Use FEP 7 Aurora as a starting point
  - New customers
  - Existing customers looking for major site redesign and willing to start over (http://pic.dhe.ibm.com/infocenter/wchelp/v7r0m0/topic/com.ibm.commerce.aurorastarterstore.doc/tasks/tsmmigrate.htm)
- 1) Use FEP 7 Aurora templates and widgets
  - 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.pagecomposerfra mework.doc/tutorial/tpz\_createsitewidget\_introduction.htm)

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#### **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



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#### 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

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