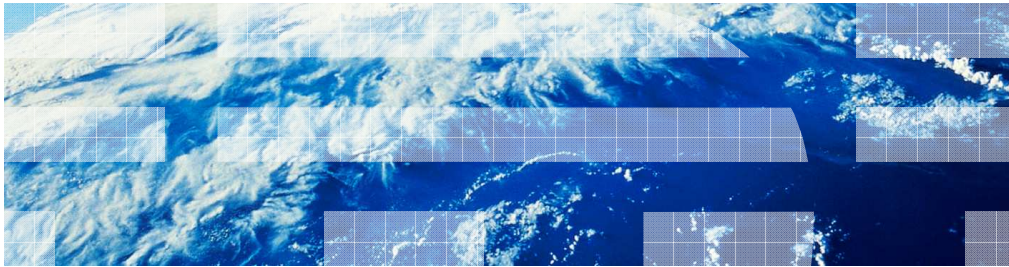


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# WebSphere Commerce V7 Feature Pack 3

## Sterling Configurator integration



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This presentation provides an overview of the Sterling Configurator Integration with WebSphere® Commerce V7.0 Feature Pack 3.

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This presentation starts with some key concept introductions, then highlights the main features provided by the Sterling Configurator integration. The integration main flows and implementations will be discussed in detail. Next, the presentation explains how dynamic kit price is calculated and how you can use a price rule to adjust a dynamic kit price. Following that is a summary of the supported and unsupported functional areas. The presentation then concludes with the Sterling Configurator integration topology.

## Key concepts

- **Dynamic kit** - a group of **components** that are ordered as a unit and must be fulfilled together
- **Component** - an item (SKU) which can be selected as part of a **configuration**
- **Configuration** - a selected set of components based on predefined **rules**
- **Preconfiguration** (or default configuration) - a configuration that can be added to a shopper's cart without requiring the shopper to configure it
- **Configurator** - an external product used to model complex products
- **Model** - a set of rules that define the options for creating a valid configuration

A dynamic kit is a group of components that are purchased as a unit and must be fulfilled together. A dynamic kit is a catalog entry type in WebSphere Commerce. Each component is a specific item that can be selected as part of a configuration. The only catalog entry type that can be used as a component is an item. A product, a bundle or a kit cannot be a component.

Before you can purchase a dynamic kit, a dynamic kit configuration must exist. A Dynamic kit configuration is a selected set of components based on some predefined rules. A configuration is only valid if it obeys all of the rules defined in a model. A dynamic kit preconfiguration is a 'default' configuration created by a product manager. A preconfigured dynamic kit can be added directly to the shopping cart without requiring the shopper to configure it first. Each dynamic kit can have a maximum of one preconfiguration and the use of preconfiguration is optional.

A configurator is an external product used to create valid configurations. When a product manager or a shopper creates a configuration, the configurator makes sure the configuration complies with the rules.

A model is a set of rules that define the options for creating a valid configuration.

## Limited dynamic kit support in previous versions

- Limited database support for managing dynamic kit data
  - Tables for dynamic kit preconfiguration were provided
  - Tables for dynamic kit reconfiguration were not provided
- Did not provide a solution for dynamic kit configuration
- Did not provide a solution for model creation and model management
- Starter stores were not enabled to display dynamic kits

WebSphere Commerce provides limited support for dynamic kits in previous versions. For example, you can store a dynamic kit preconfiguration in the database but there are no tables defined to store dynamic kit reconfigurations. Also, there is not a complete end-to-end solution. Third party products are required for creating and managing dynamic kit models and configurations. The starter stores in earlier versions are not enabled to allow shoppers to view or purchase dynamic kits.

## Sterling Configurator integration

- Provide end-to-end dynamic kit authoring and shopping flows
- Integrate with **Sterling Visual Modeler (VM)**
  - Enable product managers to define models for dynamic kits
- Integrate with **Sterling Configurator (SC)**
  - Enable product managers to pre-configure dynamic kits in Management Center
  - Enable shoppers to configure or reconfigure dynamic kits in the storefront
- All product, catalog and price information is stored and managed in WebSphere Commerce
- Model data is stored and managed in Sterling Configurator
- Sterling product needs to be purchased separately

The Sterling Configurator integration solution in Feature Pack 3 integrates Sterling Visual Modeler and Sterling Configurator to provide end-to-end shopping and authoring flows for WebSphere Commerce dynamic kits. Product managers can launch Sterling Visual Modeler and Sterling Configurator from the Management Center Catalogs tool to create models and preconfigurations for dynamic kits. The Sterling Configurator is also integrated with the WebSphere Commerce starter stores so that shoppers can launch Sterling Configurator to configure or reconfigure dynamic kits in the store.

To minimize synchronization of data and avoid duplicating business logic, all product, catalog and price information is stored and managed in WebSphere Commerce. The model data continues to be stored on the Sterling Configurator server.

Note that the Sterling products required for this integration are not bundled with WebSphere Commerce Feature Pack 3. You need to purchase the Sterling products separately if you want to enable this solution on your site.



## WebSphere Commerce enhancements for Sterling Configurator integration

- Management Center updates
  - Launch Visual Modeler and Sterling Configurator with single sign-on
  - Search and browse models using integrated **Utility view**
  - Assign models to dynamic kits
  - Create preconfigurations for dynamic kits
  - Manage prices for dynamic kits
- Storefront enhancements
  - Display dynamic kits in many areas
    - Catalog pages
    - e-Marketing Spots
    - Merchandising associations
  - Allow shoppers to configure a dynamic kit

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Sterling Configurator integration

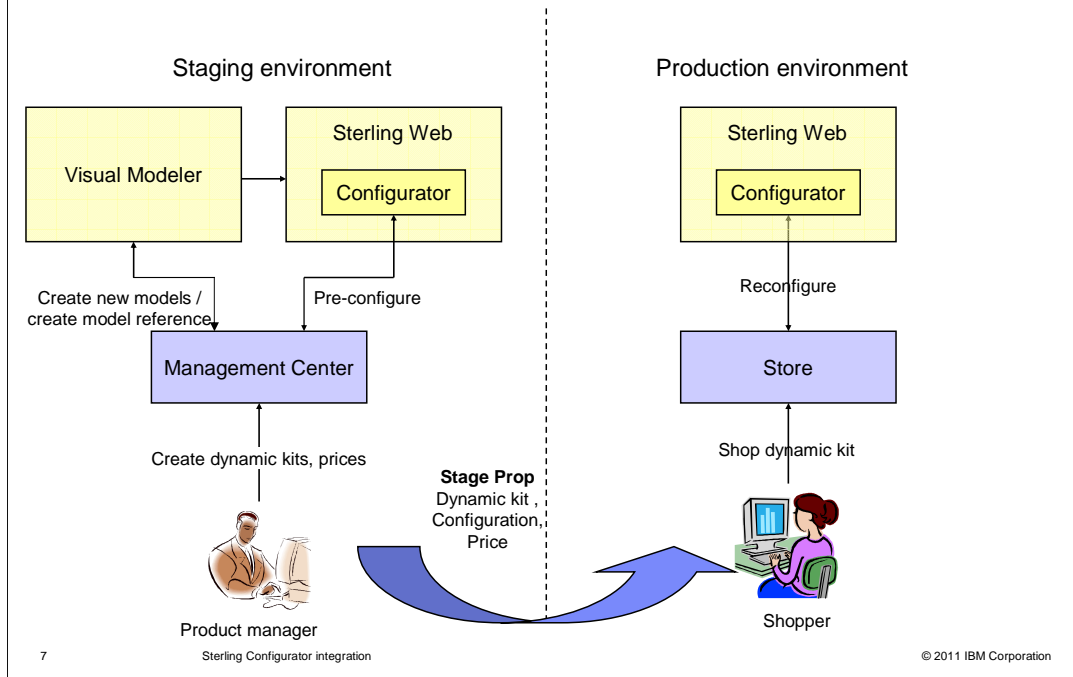
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WebSphere Commerce Management Center and the starter stores have been enhanced in many areas for the Sterling Configurator integration.

From business user perspective, Sterling Visual Modeler and Sterling Configurator are integrated with Management Center so that you can launch them from the Management Center using single sign-on. The Management Center utility view has been enhanced so that you can search and browse models managed in Sterling, and associate a model with a dynamic kit. The integration with Sterling Configurator enables you to create and view dynamic kit preconfigurations. The Management Center Price Rule tool has been updated with a new dynamic kit branch that you can use to adjust dynamic kit prices.

The starter store pages have been updated to allow shoppers to see dynamic kits during catalog browsing. Dynamic kit display has been enabled in areas such as catalog pages, e-Marketing Spots and merchandising associations. Sterling Configurator is also integrated with the storefront pages to allow shoppers to configure or reconfigure dynamic kits.

## Sterling Configurator integration main flows



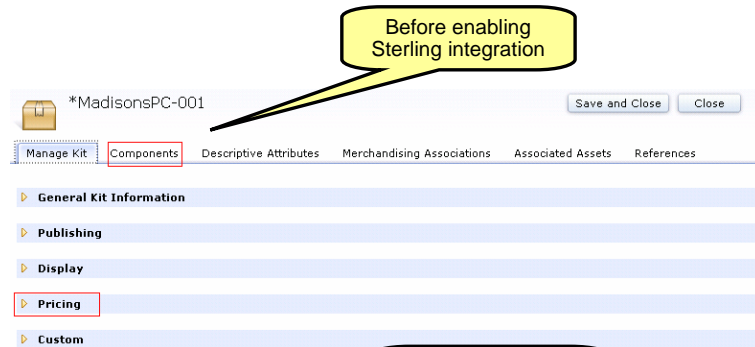
This slide summarizes the end-to-end scenarios that are supported for dynamic kits. The left side is the staging environment. From there, product managers can create dynamic kits and manage the dynamic kit prices. They can launch the Visual Modeler to create new models and associate models to new dynamic kits. Optionally product managers can launch the Configurator to preconfigure the dynamic kit by creating a default configuration.

Once the changes are copied to the production environment, shoppers can search and browse for dynamic kits in the store. Shoppers can add preconfigured dynamic kits into their shopping cart or re-configure them using Sterling Configurator. Note that WebSphere Commerce does not provide any utility to move dynamic kit model definitions from staging to production.

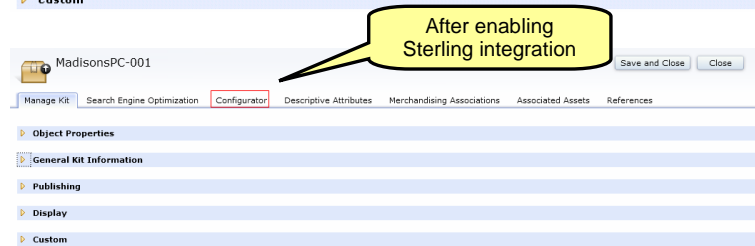
You will see each flow depicted here in more detail on upcoming slides.

## Product manager flow – create a dynamic kit

- Before enabling Sterling Integration
  - Default configuration pricing and component selection are enabled



- After enabling Sterling Integration
  - Pricing and component selection are disabled. The Configurator tab is added



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Sterling Configurator integration

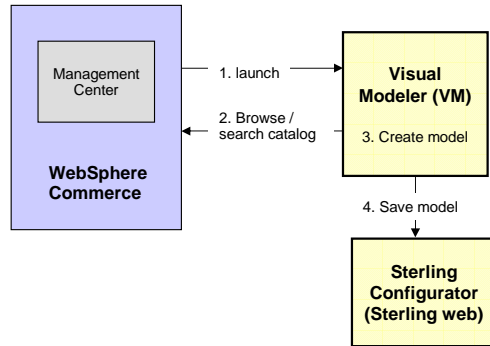
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Before Feature Pack 3, Management Center allows product managers to enter a default configuration price and components for a dynamic kit. Feature Pack 3 relies on Sterling Commerce® to determine the components and dynamic kit prices. Once you enable the Sterling integration, the Pricing section under the Manage Kit tab and the entire Components tab are hidden. A new Configurator tab is added.



## Product manager flow – create model

- Launch VM from Management Center Catalogs tool using single sign-on
- Browse or search WebSphere Commerce catalog from VM, add components to the model and define the rules
- The model is saved to Sterling Configurator

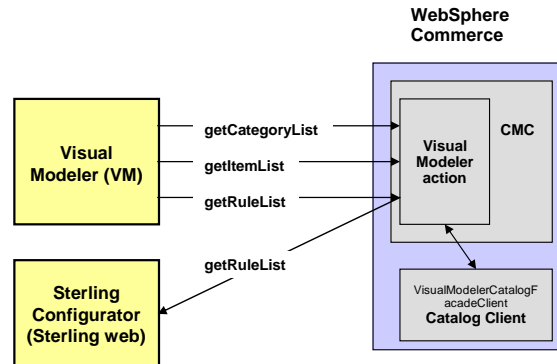


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To create a dynamic kit model, you first launch Visual Modeler (VM) from the new Configurator tab. You are automatically logged into the VM with single sign-on. In the VM you can browse or search the WebSphere Commerce catalog, select components for your model and then define your rules. Once you finish your model configuration, you need to save your model. The model is saved on the Sterling Configurator server's file system as an XML file.

## Implementation for Management Center integration with Visual Modeler

- New **VisualModelerAction** added in Management Center web application to handle the communication
- VisualModelerAction
  - Parses Visual Modeler requests and passes the requests to **VisualModelerCatalogFacadeClient** in Catalog client
  - **VisualModelerCatalogFacadeClient** then calls the GetCatalogEntry and GetCatalogGroup methods in the Catalog client
  - Combines response of each client method and sends the response to Visual Modeler
  - Redirects the **getRuleList** request to Sterling Configurator



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Sterling Configurator integration

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To handle the communication between Visual Modeler and WebSphere Commerce, a new Struts action, `VisualModelerAction`, is added to the Management Center web application.

When Visual Modeler needs to get the WebSphere Commerce catalog information, it sends `getCategoryList` and `getItemList` requests to WebSphere Commerce. The `VisualModelerAction` parses the requests and then passes them to the `VisualModelerCatalogFacadeClient`. The façade client calls the `GetCatalogEntry` and `GetCatalogGroup` methods of the Catalog façade client, which in turn calls the catalog services. Finally, `VisualModelerAction` transforms the service response into VM format and sends it back to VM.

Since the models are saved on the Sterling Configurator file system, VM has a limitation that it can only fetch data from one system at a time. For this integration, VM is configured to fetch the data from WebSphere Commerce. When WebSphere Commerce receives a `getRuleList` request, it is rerouted to Sterling Configurator to get the model information.

## Product manager flow - associate a model with a dynamic kit

- Product manager uses enhanced **Utility view** to browse and search models
- Associate a model with a dynamic kit
- The model's reference is saved in the **CATCONFINF** database table
  - Model data is saved on the Sterling side

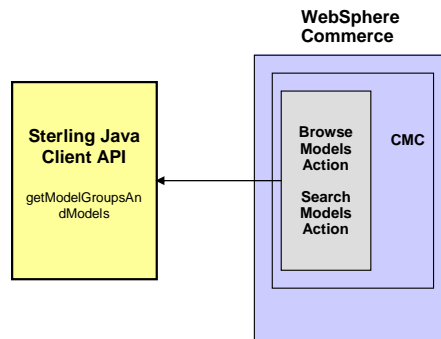
The screenshot shows the IBM Sterling Configurator interface. At the top right, there is a search and navigation area with 'Find', 'Browse', and 'Clipboard' buttons. A dropdown menu titled 'Configurator Models' is open, listing various categories like 'Master Catalog', 'Sales Catalog Categories', and 'Attribute Dictionary'. The 'Configurator Models' option is highlighted. Below this, the main interface has a tabbed view with 'Configurator' selected. A search bar contains 'zhen\*' and a 'Find and Add' button. Below the search bar is a table with columns for '\* Type', '\* Name', and 'Path'. One row is selected, showing 'zhen-model-0521' with the path 'MadisonsESite/zhen\_002Dmodel\_002D0521'. Below this table is a 'Preconfigured Components' section with a 'Configurator' button and a 'Delete Preconfiguration' button. A table below this section is empty. At the bottom, there is a note: '\* Save the Dynamic kit before you open Configurator. To view the Preconfigured Components, click Reload.'

As a product manager, you need to associate a model with your dynamic kit so that WebSphere Commerce knows which rules to follow when you or shoppers create a configuration. You can use Management Center's Utility view to search for or browse to the model you have created.

The **Utility view** has been integrated with Sterling Commerce to enable model browsing and searching. Once you assign a model to your dynamic kit and save the dynamic kit, a reference to the model is stored in the CATCONFINF table. The model itself is on the Sterling Commerce server.

## Implementation for model browsing and searching

- Browse models
  - New Management Center web application action **BrowseModelsAction** calls Sterling Java™ Client API **getModelGroupsAndModels** to get the models
- Search models
  - New Management Center web application action **SearchModelsAction** calls Sterling Java Client API **getModelGroupsAndModels** to get the models



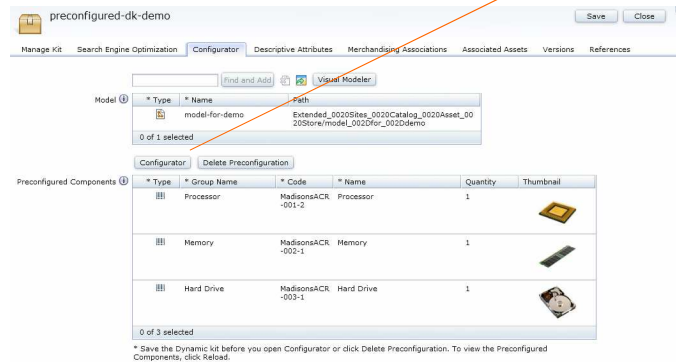
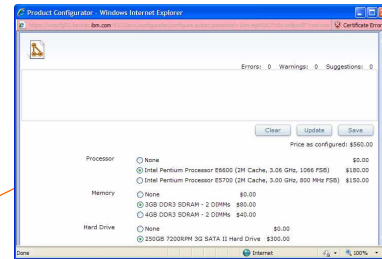
New actions have been added to the Management Center web application to support browsing and searching models.

The BrowseModelsAction calls the Sterling Java Client API **getModelGroupsAndModels** to get model information from Sterling Commerce. This action returns the models and the directories the models are saved in. Business users can then browse the directories to find the required model.

The SearchModelsAction also calls the Sterling Java Client API **getModelGroupsAndModels** to get model information. This action makes one request for each store in the WebSphere Commerce store path. It then filters the results based on the provided search expression.

## Product manager flow – pre-configure the dynamic kit (optional)

- Launch the Configurator from the Catalogs tool using single-sign on
- Select components defined in the associated dynamic kit model
- After saving, a list of selected components displays the Preconfigured components table



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Sterling Configurator integration

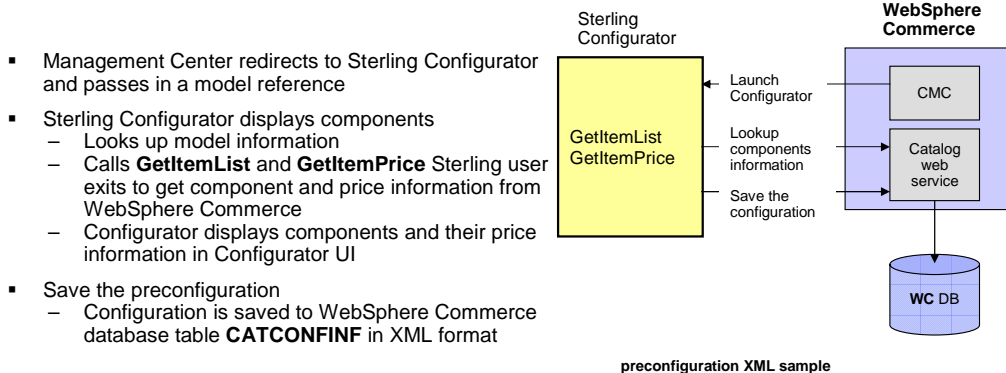
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Product managers can optionally preconfigure a dynamic kit after a model is assigned to it. Dynamic kit preconfiguration allows shoppers to add the default configuration into their shopping cart directly without configuring it themselves. Shoppers always have the option to reconfigure the dynamic kit using Sterling Configurator.

To create a preconfiguration, you need to use Sterling Configurator which can be launched directly from Management Center using single sign-on. In Sterling Configurator you select components according to the model rules. Once the configuration is saved, a list of selected components is displayed in the Preconfigured components table.

When you select the **Save** button in the Sterling Configurator UI, Sterling Configurator sends your configuration to WebSphere Commerce as an XML message. The XML configuration is then stored in the WebSphere Commerce database.

## Implementation for Management Center integration with Sterling Configurator



- Management Center redirects to Sterling Configurator and passes in a model reference
- Sterling Configurator displays components
  - Looks up model information
  - Calls **GetItemList** and **GetItemPrice** Sterling user exits to get component and price information from WebSphere Commerce
  - Configurator displays components and their price information in Configurator UI
- Save the preconfiguration
  - Configuration is saved to WebSphere Commerce database table **CATCONFINF** in XML format

### preconfiguration XML sample

```

- <ConfiguratorBOM ModelName="MadisonsESite/zhen_002Dmodel_002D0521" errors="false" containerOnly="false" Version="1.0">
- <LineItem Name="zhen-model-0525" Quantity="1" CommerceItemKey="" Price="0.0000" leadTime="0.0" ItemID="0" ItemKey="602375" Visible="false" RulePicked="false">
- <LineItem UOM="EACH" Name="option-1" Quantity="1" CommerceItemKey="" Price="0.0000" leadTime="0.0" ItemID="1" ItemKey="602376" Visible="false"
  RulePicked="false">
  <LineItem SKU="A00001330" UOM="C62" Name="A00001330" Description="Thrust load bearings" Quantity="1" CommerceItemKey="" Price="39.9900" leadTime="0.0"
  ItemID="4" ItemKey="602382" Visible="true" RulePicked="false" />
</LineItem>
- <LineItem UOM="EACH" Name="option-2" Quantity="1" CommerceItemKey="" Price="0.0000" leadTime="0.0" ItemID="5" ItemKey="602384" Visible="false"
  RulePicked="false">
  <LineItem SKU="A00001485" UOM="C62" Name="A00001485" Description="Compression springs" Quantity="1" CommerceItemKey="" Price="137.0000"
  leadTime="0.0" ItemID="6" ItemKey="602386" Visible="true" RulePicked="false" />
</LineItem>
</ConfiguratorBOM>
  
```

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When you launch Sterling Configurator, the dynamic kit model reference is passed to Sterling Configurator. Sterling Configurator uses the model reference to lookup the model XML file. Sterling Configurator retrieves the components in the model and calls **GetItemList** and **GetItemPrice** Sterling user exits to get the component and price information from WebSphere Commerce. Sterling Configurator displays the components and prices in its UI.

After you finish the configuration and select the Save button, the configuration is sent back to WebSphere Commerce and saved into database table **CATCONFINF** in XML format.

## Shopper flow - find a dynamic kit in the store

- A dynamic kit can be displayed in the same ways as any other catalog entry
  - Category page
  - Search result page
  - e-Marketing Spots
  - Merchandising associating area

The screenshot shows the MADISONS website interface with three callout boxes highlighting dynamic kit displays:

- Category page:** A callout box points to a banner for "Electronics Super Sale" on a category page, with a dynamic kit (laptop) displayed below it.
- Search result page:** A callout box points to a search result page for "GD280 Desktop", showing a grid of product cards with dynamic kits.
- Featured products E-spot:** A callout box points to a "Featured Products" section on a page, where a dynamic kit is featured alongside other products.

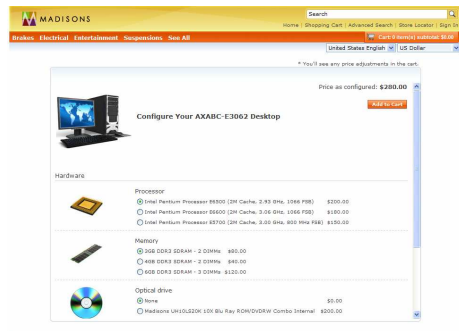
At the bottom of the screenshot, the text "Sterling Configurator integration" and "© 2011 IBM Corporation" are visible.

A dynamic kit can be displayed in any of the ways that any other catalog entries can be. For example, dynamic kits can be displayed on category pages; the search result page, e-Marketing Spots and a catalog entry's merchandising associating area.

Dynamic kit display is similar to products except there is a Configure button under the dynamic kit image. The **Add to Cart** button is only displayed when a preconfiguration exists for the dynamic kit.

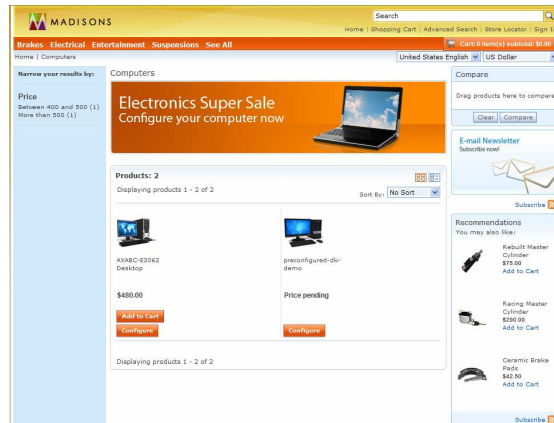
## Shopper flow - configure a dynamic kit

- A dynamic kit can only be added to the shopping cart when a configuration exists
  - Add pre-configured dynamic kit to cart
  - Reconfigure preconfigured dynamic kit, then add to cart
  - Configure a configurable dynamic kit, then add to cart



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- To configure a dynamic kit
  - Press **Configure** button to launch Sterling Configurator
  - Select components in the Sterling Configurator
  - Add dynamic kit to cart from Configurator

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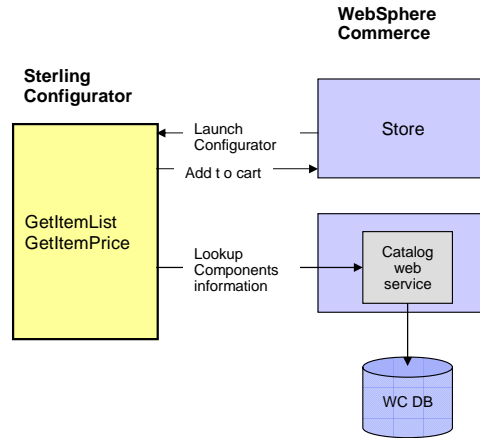
Before a shopper is able to add a dynamic kit to their shopping cart, the dynamic kit must be configured. If a dynamic kit has been preconfigured, the shopper can add the preconfiguration directly to their shopping cart, or reconfigure it to create their own configuration. If a preconfiguration does not exist, the shopper must select a configuration before adding the dynamic kit to the cart.

To configure a dynamic kit, the shopper selects the “Configure” button to launch Sterling Configurator. The Configurator is embedded in the store page and has the same styling as other store pages. The shopper selects the components to create their own configuration and then adds it to their cart.



## Implementation for storefront integration with Sterling Configurator

- Store redirects to Sterling Configurator and passes in a model reference and a token
- Sterling Configurator looks up component information
  - Look up model information
  - Calls **GetItemList** and **GetItemPrice** user exits to get product and price information from WebSphere Commerce
  - Displays product and price information
- Shopper selects components that he wants and adds the configured kit to his cart



The Sterling Configurator launched from storefront is the same tool that is launched from Management Center. The storefront integration with Sterling Configurator is the same as Management Center except that when Configurator is launched, the storefront passes a token to Sterling Configurator in addition to the model reference. The token is used when Sterling Configurator requests catalog and price details, so that any pricing and catalog filtering for the shopper is taken into account.

## Shopper flow - add the configured dynamic kit to cart

- Shopper can view dynamic kit selected components
- Shopper can re-configure the dynamic kit
- Dynamic kit price and total price adjustment are applied (price rule, contract, promotion discount)

The screenshot shows a 'Shopping Cart' page with the following details:

PRODUCT	AVAILABILITY	QTY	EACH	TOTAL
<pre> preconfigured-dk-demo SKU: preconfigured-dk-demo Configuration • Intel Pentium Processor E5700 (2M Cache, 3.00 GHz, 800 MHz FSB) • 3GB DDR3 SDRAM - 2 DIMMs • 250GB 7200RPM 3G SATA II Hard Drive Change configuration Remove                     </pre>	In-Stock	1	\$530.00	\$530.00

Below the table, there is a 'Promotional code' field with an 'Apply' button. The pricing summary shows:

Order Subtotal:	\$530.00
Product Discounts:	(\$100.00)
Discount:	\$0.00
<b>Order Total:</b>	<b>\$424.00</b>

Callouts in the image point to the configuration list ('Selected components'), the 'Change configuration' link, and the 'Discount' line in the pricing summary ('Promotion discount on kit').

When a dynamic kit has been added to the cart, the shopper can view the selected components from the shopping cart page. They can also reconfigure the dynamic kit by launching the Configurator from here.

On the shopping cart page, the price for a dynamic kit is adjusted according to the shopper's contract and any price rules in the store. Any dynamic kit promotions are also applied at this point.

## Implementation of adding kit to cart and submitting the order

- Dynamic kit configuration XML is saved in WebSphere Commerce database as part of the order
  - Configuration XML is saved in table **OICONFIG** (*new*)
  - Components are saved in table **OICOMPLIST**
- The saved Configuration XML is used for
  - Configuration validation as part of order prepare
  - Displaying order history after the order is submitted
- **Order** noun has be extended to contain the configuration XML in **OrderItemType**
- SOI Order services provided for accessing configuration information in the database

OrderItemType		
OrderItemIdentifier	[0..1]	OrderItemIdentifierType
CatalogEntryIdentifier	[0..1]	CatalogEntryIdentifierType
ItemAttributes	[0..*]	NameValuePairType
OrderItemComponent	[0..*]	OrderItemComponentType
Quantity	[0..1]	QuantityType
ConfigurationID	[0..1]	string
OrderItemConfiguration	[0..1]	string
ContractIdentifier	[0..1]	ContractIdentifierType

When a dynamic kit is added to the cart, its configuration XML is saved in the database along with the order details. The configuration XML is used for the order history display once the shopper completes the purchase.

The configuration XML is saved in a new table, **OICONFIG** (Order Item CONFIG). Components in the configuration are saved in the **OICOMPLIST** (Order Item COMPONENT LIST) table.

The saved configuration XML is used for validation when the order is processed. It is possible that between the time a customer creates a configuration, and the time the shopper checks out, the model might have been changed or certain components might have become unavailable to the shopper. To ensure that the configuration to be purchased is valid, WebSphere Commerce will send a request to Sterling Configurator to validate the configuration as part of order prepare.

To support the new data, the Order noun has been extended to contain the configuration XML in the OrderItemType noun part. Several SOI Order services have been provided for accessing this information.

## Dynamic kit pricing

- Only configured dynamic kits display a price
- Dynamic kit price is the sum of all the component prices in a configuration plus adjustments
  - Dynamic kit price formula:  
Sum (Component offer price \* qty)
- Prices in Configurator
  - Component prices are adjusted by contracts and price rules
  - Dynamic kit price in Configurator is the sum of all the component prices without kit level adjustments
- Shopping cart pages show adjusted dynamic kit prices

The diagram illustrates the dynamic pricing process. It starts with two product listings: 'Madisons-PC-Accessory-1' priced at \$580.00 and 'Madisons-PC-Accessory-2' with 'No price available.' Both have 'Add to Cart' and 'Configure' buttons. An arrow points from the 'Configure' button of the first accessory to the 'Configurator UI'. The configurator UI is titled 'Configure Your preconfigured-dk-demo' and shows a list of components with their prices:

Component	Price
Processor	
<input type="radio"/> None	\$0.00
<input type="radio"/> Intel Pentium Processor E6600 (2M Cache, 3.06 GHz, 1066 FSB)	\$180.00
<input checked="" type="radio"/> Intel Pentium Processor E5700 (2M Cache, 3.00 GHz, 800 MHz FSB)	\$150.00
Memory	
<input type="radio"/> None	\$0.00
<input checked="" type="radio"/> 308 DDR3 SDRAM - 2 DIMMs	\$60.00
<input type="radio"/> 408 DDR3 SDRAM - 2 DIMMs	\$40.00
Hard Drive	
<input type="radio"/> None	\$0.00
<input checked="" type="radio"/> 150GB 7200RPM 30 SATA II Hard Drive	\$300.00

A callout box labeled 'Components and prices' points to this list. Another callout box labeled 'Dynamic kit price' points to a box in the configurator UI that says 'Price as configured: \$530.00' with an 'Add to Cart' button. A note at the top right of the configurator UI says '\* You'll see any price adjustments in the cart.'

The storefront only displays a dynamic kit price when the dynamic kit has a configuration. For this Sterling Configurator integration solution, the dynamic kit price is the sum of all the component prices in the configuration plus any adjustments.

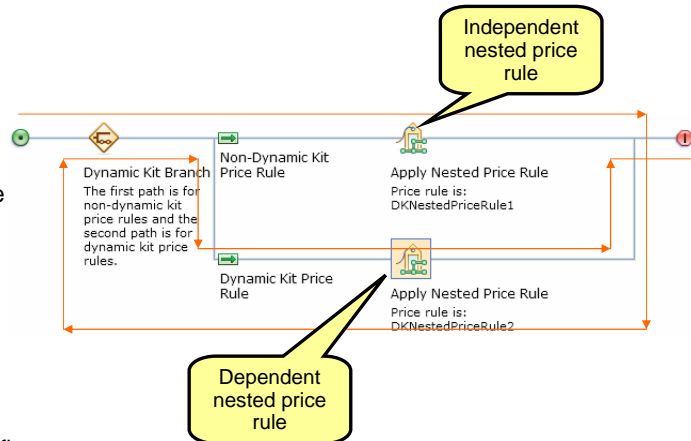
When you configure a dynamic kit in Sterling Configurator, the component prices shown are the offer prices plus any price rule and contract adjustments. The dynamic kit price in the configurator is the sum of all the components that the shopper has chosen. Price rule and contract adjustments at the dynamic kit level are not applied in the configurator view.

The shopping cart page shows the final adjusted dynamic kit price. As with other catalog entries, promotion discounts for dynamic kit are also applied in the shopping cart.

## Price rule for dynamic kit and its price calculation flow

- Use **Dynamic Kit Branch** in price rule for dynamic kit pricing (**optional**)

- Non-dynamic Kit Price Rule path: uses independent nested price rule
- Dynamic Kit Price Rule path: uses dependent nested price rule



- Dynamic kit price calculation flow:
  - Calculates each component price through Non-Dynamic Kit Price Rule path
  - Add up all component prices
  - Use total component price as input, reenter the price rule, calculate dynamic kit price through Dynamic Kit Price Rule path

You can use the new Dynamic Kit Branch in the price rule to adjust the dynamic kit prices. Adjusting dynamic kit prices is optional. If you do not specify a price rule for a dynamic kit, the price a shopper pays is the sum of the components in that dynamic kit.

When you have dynamic kits in your store, you can use the Dynamic Kit Branch to create a single price rule that covers standard catalog entry price calculation and dynamic kit price calculation. The Dynamic Kit Branch contains two paths: Non-dynamic Kit Price Rule path and Dynamic Kit Price Rule path. The Non-dynamic Kit Price Rule path is for standard catalog entry price calculation. It requires an independent nested price rule so that the price rule engine can calculate the catalog entry price without depending on a price input from other price rule element. The Dynamic Kit Price Rule path is for dynamic kit price calculation. It requires a dependent nested price rule where the price input will come from the output of the Non-Dynamic Kit Price Rule path.

To calculate a dynamic kit price, the price rule engine first calculates each component pricing using the Non-Dynamic Kit Price Rule path and applies the nested price rule in that path. The price rule engine then adds up all the component prices and uses the total as input to evaluate the price rule a second time. This time it enters the Dynamic Kit Price Rule path and calculate the dynamic kit price by applying the corresponding nested price rule.

## Limitations for displaying price in Sterling Configurator

Price as configured: \$280.00

Configure Your AXABC-E3062 Desktop

Hardware

Component	Price
Processor	
Intel Pentium Processor E6500 (2M Cache, 2.93 GHz, 1066 FSB)	\$200.00
Intel Pentium Processor E6600 (2M Cache, 3.06 GHz, 1066 FSB)	\$180.00
Intel Pentium Processor E5700 (2M Cache, 3.00 GHz, 800 MHz FSB)	\$150.00
Memory	
3GB DDR3 SDRAM - 2 DIMMs	\$80.00
4GB DDR3 SDRAM - 2 DIMMs	\$40.00
6GB DDR3 SDRAM - 3 DIMMs	\$120.00
Optical drive	
None	\$0.00
Madisons UH10LS20K 10X Blu Ray ROM/DVDRW Combo Internal	\$200.00

Un-adjusted dynamic kit price

Adjusted component prices

Display price = quantity \* unit base price

- Component range prices are not supported
  - Range prices are respected in shopping cart
- Configurator does not show price adjustments (price rules and contracts) for the dynamic kit
  - Dynamic kit price: sum of all the components that the shopper has chosen so far
  - Dynamic kit price is adjusted in shopping cart

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Sterling Configurator integration

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There are some limitations when displaying the component price and dynamic kit price in Sterling Configurator.

Component prices in Configurator are adjusted according to the shopper's contract and price rules, however Range prices for components are not supported in the configurator. For example, suppose catalog entry A has a base price of \$20 and a range price with minimum quantity of 3 for \$15. If the quantity of catalog entry A in the model is 3, the display price for catalog entry A in the configurator is \$60 rather than \$45.

The configurator does not show price adjustments for the dynamic kit. If a shopper has a contract that gives him 5% off the dynamic kit, Sterling Configurator does not show the 5% off. The dynamic kit price shown in Sterling Configurator is the sum of all the components the shopper has chosen. Shoppers can view the adjusted dynamic kit price in the shopping cart..

## Relationship between dynamic kit and its components

- Availability
  - If any component in a **configured dynamic kit** is out of stock, the dynamic kit is out of stock
- Buyable
  - The component's **Buyable** flag has no effect on the dynamic kit
- Display to customers
  - If a **dynamic kit** preconfiguration contains a component whose “Display to customers” flag is not selected, the preconfiguration is not valid. Shoppers need to reconfigure the dynamic kit
- Discount
  - Component level discounts are ignored
- Contract
  - If a component is excluded from a contract, the dynamic kit cannot be added to the cart
- Search
  - If a shopper searches for a component that is contained within a dynamic kit, the dynamic kit is not returned in the results

Since a dynamic kit consists of components, the components' status or properties will affect the dynamic kit in many ways. Here you can see how several component properties affect the dynamic kit.

While you can search for dynamic kits in the store, searching for individual kit components will not automatically return dynamic kits in the results. For example, searching for a 40G hard drive will not return search result for dynamic kits that include 40G hard drives in their preconfiguration. If you want dynamic kits to be returned based on a search of the components, you need to ensure that you list the components in the keywords for the dynamic kit.

## Support and non-support functional areas

Supported functional area	Unsupported functional area
Madisons starter store	Updates through any Accelerator tool (catalog, price, order management, etc)
Elite starter store	Mobile store
Management Center	Store models other than Madisons, Elite, Madisons eSites, and Elite eSites
E-Marketing Spots	Gift Center
Wish list, Requisition list	Sales Center
Workspace	Remote widgets
Versioning	Subscriptions
SOA	Co-shopping
WebSphere Commerce search	Social Commerce
WebSphere Commerce Enterprise and Professional editions	Product compare of dynamic kits

The table here lists the supported and unsupported functional areas for the Sterling Configurator solution.



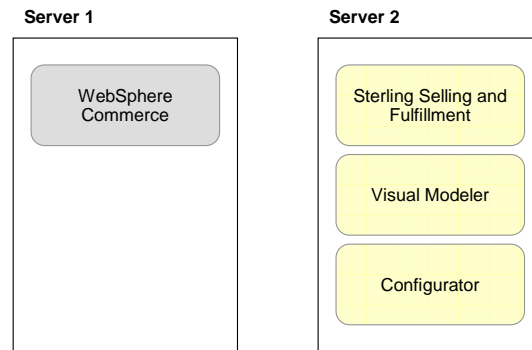
## Required software for Sterling Configurator integration

- Required software
  - WebSphere Commerce V7 with Feature Pack 3
  - Sterling Selling and Fulfillment Suite V9.1
- Sterling Selling and Fulfillment Suite consists of following applications
  - Visual Modeler
  - IBM Sterling Web (Sterling Configurator included)
  - IBM Sterling Selling and Fulfillment Foundation

To enable WebSphere Commerce integration with Sterling Configurator, you need to install WebSphere Commerce Version 7 with Feature Pack 3 and Sterling Selling and Fulfillment Suite V9.1 (SSFS).

Sterling Selling and Fulfillment Suite includes all the applications required for this integration. The Visual Modeler application is used to create dynamic kit models. Sterling Configurator, which is included in the IBM Sterling Web, is used by both the storefront and Management Center to create dynamic kit configurations. IBM Sterling Selling and Fulfillment Foundation is used for process control and configuration.

## Sterling Configurator integration topology – single WebSphere Commerce node



Here is the diagram for the Sterling Configurator integration topology for a single WebSphere Commerce node. You need to use one application server for the WebSphere Commerce application and a separate application server for Sterling Selling and Fulfillment Suite.

## Pre-requisite for enabling Sterling Configurator integration

- Install IBM Selling and Fulfillment Suite V9.1
- Install WebSphere Commerce Feature Pack 3
- Enable the **starter store enhancement** feature
- Publish a Feature Pack 3 level starter store Madisons, Elite or Extended Sites
- Publish Feature Pack 3 store enhancements
- Deploy WebSphere Commerce search server and configure the search for your site

Before you enable the Sterling Configurator integration with Commerce, you must complete the steps listed on this slide.

You must publish a Feature Pack 3 version of a starter store: Madisons, Elite or Extended Sites. Starter stores not listed here are not supported for this integration. You must also publish the Feature Pack 3 store enhancements. Store enhancements provided with previous feature packs are not compatible with this integration. Sterling Configurator integration requires the WebSphere Commerce search solution, you must configure search for the site.

## Main steps for enabling Sterling Configurator integration

- Enable IBM Sterling Configurator Add-on for WebSphere Commerce
  - Copy and deploy WebSphere Commerce JAR files to SSFS
  - Enable user exits GetItemList and GetItemPrice from Sterling Application Manager
  - Copying customized JSP files for Sterling Configurator
    - JSP files are provided in WebSphere Commerce Information Center

Here are the high level steps for enabling the Sterling Configurator integration with WebSphere Commerce. The detailed steps can be found in the WebSphere Commerce Information Center.

Sterling Configurator and Visual Modeler connect to WebSphere Commerce to retrieve dynamic kit components and price information. You need to copy several WebSphere Commerce JAR files to the Sterling server to enable the communication between SSFS and WebSphere Commerce. SSFS connects to WebSphere Commerce by using the GetItemList and GetItemPrice user exits provided by WebSphere Commerce. After you copy the WebSphere Commerce JAR files to Sterling, you then need to enable the GetItemList and GetItemPrice user exits from the Sterling Application Manager.

Sterling Configurator JSP files have been modified so that Sterling Configurator can retrieve dynamic kit prices from WebSphere Commerce. These JSP files display the Configurator pages used in the Madisons and Elite stores which provide the same look-and-feel as the storefront. The JSP files are provided in WebSphere Commerce Information Center. You need to copy them to the Sterling EAR directory.

## Enable Sterling Configurator integration in WebSphere Commerce

- In Administration Console, add transport parameters for Sterling Configurator and Visual Modeler

The screenshot shows the 'Transport Configuration Parameters' section of the Site Administration Console. It contains a table with the following parameters:

Sterling Parameter	Value
Sterling Organization Code	
Sterling Configurator URL	https://wcscfg02.torolab.ibm.com:9103/swc/configura
Sterling Selling and Fulfillment Suite User Name	admin
Sterling Selling and Fulfillment Suite Password	.....
Sterling Selling and Fulfillment Suite URL	http://wcscfg02.torolab.ibm.com:9101/smcs/interop/
Visual Modeler User Name	admin
Visual Modeler Password	.....
Visual Modeler URL	http://wcscfg02.torolab.ibm.com:8080/Sterling/en/US/

Below the table, there are navigation tabs: Store Properties, Search Engine Optimization, Styles, Customer Interactions, Registration, and Catalog. Under the 'Catalog' tab, there is a section titled 'Select catalog-related features that customers can use in your store:' with the following options:

- Search store catalog
- Compare zone
- Display inventory availability
- Product rankings
- Browsing history
- Category subscriptions
- Search-based navigation
- Sterling Configurator

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In order to enable business users to launch Sterling Configurator and Visual Modeler from Management Center using single sign-on, the site administrator must specify connection settings by configuring the Sterling transport in the WebSphere Commerce Site Administration Console. The URL format for Sterling Configurator and Visual Modeler can be found in the Information Center.

To enable Sterling Configurator integration for your store, you also need to make sure that the Sterling Configurator store function option is selected in the Store Management tool.

## Summary

- Key concepts
- Sterling Configurator integration features
- Sterling Configurator integration main flows and implementations
- Dynamic kit pricing
- Supported and unsupported functional areas for this integration
- Sterling Configurator integration topology

This presentation started with some key concept introductions, then highlighted the main features provided by the Sterling Configurator integration. The integration main flows and implementations were discussed in detail. Next, the presentation explained how dynamic kit price is calculated and how you can use the price rule to adjust a dynamic kit price. Following that was a summary of the supported and unsupported functional areas. The presentation then concluded with the Sterling Configurator integration topology.

## Reference

- Dynamic kit configuration with Sterling Configurator

[http://publib.boulder.ibm.com/infocenter/wchelp/v7r0m0/index.jsp?topic=/com.ibm.commerce.sterling-configurator.doc/concepts/cyasterlingconfigurator\\_overview.htm](http://publib.boulder.ibm.com/infocenter/wchelp/v7r0m0/index.jsp?topic=/com.ibm.commerce.sterling-configurator.doc/concepts/cyasterlingconfigurator_overview.htm)

- Sterling Selling and Fulfillment Suite

<http://help.sterlingcommerce.com/SFSF91/topic/Common/HomePage.htm>

- Sterling Selling and Fulfillment Foundation System Requirements

<http://help.sterlingcommerce.com/SFSF91/topic/Common/HomePage.htm>

– Path to the document: Sterling Selling and Fulfillment Foundation > System Requirements

This slide contains some useful references for understanding the Sterling Configurator integration.

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This module is also available in PDF format at: [../SterlingConfiguratorIntegration.pdf](http://SterlingConfiguratorIntegration.pdf)

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