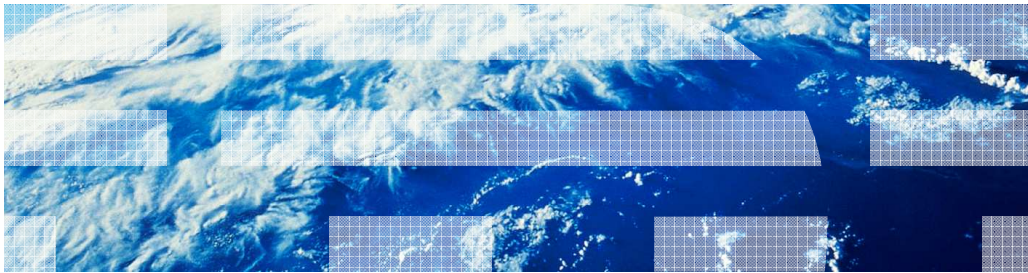

WebSphere Commerce V7 Feature Pack 5

Sterling Commerce integration overview



This presentation provides an overview of the WebSphere Commerce and Sterling Commerce integration. It introduces differences between FEP3 and FEP5, along with enhancements and new features in FEP5.

Agenda

- Introduction
- Supported scenarios in WebSphere Commerce Feature Pack 3
- Scenarios enhanced / changed in Feature Pack 5
- New supported scenarios in Feature Pack 5
- Components not integrated

This presentation first gives you an introduction about Sterling integration. Then it talks about the scenarios supported in WebSphere Commerce Feature Pack 3, the enhanced and the new scenarios supported in Feature Pack 5. Last it covers the components that have not been integrated in the Feature Pack 5 release.

Introduction

- What is WebSphere Commerce and Sterling OMS integration

- WebSphere Commerce is customer interaction platform
 - Capture orders from storefront
 - Manage product prices and promotions
 - Transfer orders to Sterling OMS
 - Execute payment authorization
 - Provide pricing service and order calculation

- Sterling Selling and Fulfillment Center is used as order life cycle management system
 - Manage inventory
 - Process and edit orders
 - Release orders to the appropriate fulfillment centers
 - Execute payment settlement / refund

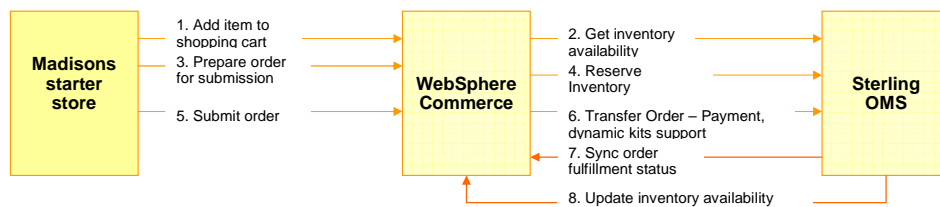
The WebSphere Commerce and Sterling integration provides end-to-end capabilities from order capturing to order management. This integration allows WebSphere Commerce customers to use Sterling OMS capabilities for a more comprehensive coverage of the order life cycle management across channels. It enables Sterling customers to use WebSphere Commerce for pricing, promotion and order calculation.

More specifically, this integration allows you to use the WebSphere Commerce store to capture orders, manage product prices and promotions, and do payment authorization. WebSphere Commerce provides pricing service, and order calculation service so that Sterling can use them for order calculation when orders are created from the Sterling Call Center.

In this integration, Sterling is responsible for managing product inventory, processing orders, releasing orders to the fulfillment centers, and executing payment settlement and refund.

Supported scenarios in WebSphere Commerce Feature Pack 3

- Order transfer from WebSphere Commerce to Sterling OMS
- Order fulfillment status synchronization from Sterling OMS to WebSphere Commerce
- Get inventory availability from Sterling OMS based on store and ship node mapping
- Reserve Inventory from Sterling OMS
- Inventory cache push synchronization support using Sterling Commerce's Real-time Availability Monitor (RTAM)



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WebSphere Commerce and Sterling Commerce integration overview

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In Feature Pack 3, several scenarios are implemented:

Order transfer flow is implemented. After an order is captured from the WebSphere Commerce store, the order is transferred from WebSphere Commerce to Sterling OMS. In the Feature Pack 3 release, both synchronous and asynchronous order transfer modes are supported.

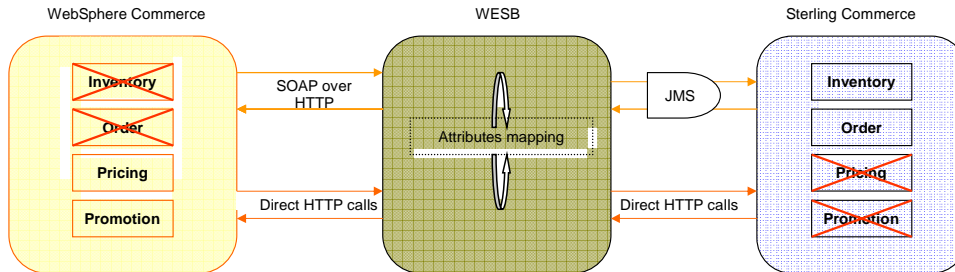
Order fulfillment status synchronization is implemented in Feature Pack 3. After an order is transferred to Sterling OMS, any change to the order status from Sterling OMS is synchronized back to WebSphere Commerce.

The Get inventory availability feature is also implemented. When WebSphere Commerce checks a product inventory of an online store, the inventory availability information is retrieved from Sterling OMS. In Feature Pack 3, each WebSphere Commerce online store or physical store can only be mapped to one ship node in Sterling OMS. The inventory availability checking is only against one mapped ship node.

The Reserve Inventory feature is also covered in Feature Pack 3. Reserve inventory typically happens when a shopper prepares the shopping cart, or updates the shopping cart.

To get the inventory availability, WebSphere Commerce can pull the inventory from Sterling OMS by calling the GetInventoryAvailability outbound service. Feature Pack 3 also supports pushing the inventory information from Sterling to WebSphere Commerce by using Sterling Commerce's Real-time Availability Monitor (RTAM).

Integration architecture for Feature Pack 5



- WebSphere Commerce and Sterling Commerce will use Sterling Commerce's Inventory and Order modules
- Sterling Commerce pricing and promotion is turned off
- Integration is implemented by service calls between WebSphere Commerce and Sterling Commerce
- WebSphere Commerce service BODs and Sterling service BODs are mapped in WebSphere Enterprise Service Bus mediation module
- Communication between WebSphere Commerce and Sterling Commerce
 - SOAP over HTTP and JMS
 - Directly HTTP calls

This slide shows the integration architecture supported by Feature Pack 5. For this integration, WebSphere Commerce does not manage its own inventory and Order status. Sterling OMS does not use its own pricing and promotion modules. Both systems use the WebSphere Commerce catalog entry's pricing and promotion modules and Sterling Commerce inventory and order modules. Integration is implemented by service calls between WebSphere Commerce and Sterling Commerce. Communication between WebSphere Commerce and Sterling is handled by a WebSphere Enterprise Service Bus mediation module. When Commerce calls Sterling APIs, the message format that WebSphere Commerce provides may not be the same as the one that Sterling requires. The WebSphere Enterprise Service Bus mediation module is used to convert WebSphere Commerce messages to the message format required by Sterling. In some cases, SOAP over HTTP is used for the communication between Commerce and WESB, and JMS for the communication between WebSphere Enterprise Service Bus and Sterling Commerce. In some cases, the direct HTTP calls are used among these three products.

Changes for getting inventory availability

- Physical stores

Feature Pack 3	Feature Pack 5
One physical store is mapped to one ship node	One physical store is mapped to one ship node
Call Sterling findInventory API to get inventory availability	Call Sterling findInventory API to get inventory availability
Get inventory availability information from the local cache or Sterling OMS	get the inventory directly from Sterling

- Online store

Feature Pack 3	Feature Pack 5
One online store is mapped to one ship node	One online store can be mapped to multiple ship nodes
Call Sterling findInventory API to get inventory availability	Call Sterling <i>MonitorItemAvailability</i> API to get inventory availability
Get inventory availability information from the local cache or Sterling OMS	Get inventory availability information from the local cache or Sterling OMS

In the feature pack 5 release, several changes have been made regarding getting inventory availability from Sterling OMS. The top table is the comparison for physical stores in Feature Pack 3 and Feature Pack 5.

There is no difference between store and ship node mapping, and the API for getting inventory availability from Sterling OMS between Feature Pack 5 and Feature Pack 3.

In Feature Pack 3, physical stores can get inventory availability information either from the local cache or from Sterling OMS. But in Feature Pack 5 using the local cache is not recommended. Physical stores should get the inventory directly from Sterling.

There are also some changes for online stores in Feature Pack 5. In Feature Pack 3, a WebSphere Commerce online store can only be mapped to one ship node. This means when WebSphere Commerce checks inventory for an online store, it only checks one ship node in Sterling OMS. Now in Feature Pack 5, one online store can be mapped to multiple ship nodes. Online store inventory checking is against multiple ship nodes in Sterling OMS. In Feature Pack 3, WebSphere Commerce calls Sterling findInventory API to get inventory availability. In Feature Pack 5, WebSphere Commerce calls *MonitorItemAvailability* API. This API is able to monitor the item's inventory availability information within all mapped ship nodes.

Changes for inventory reservation and cancelation

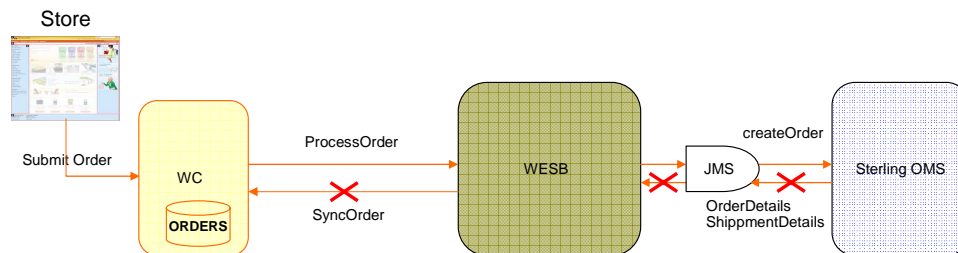
- Feature Pack 3
 - Ship node is passed to Sterling reserveAvailableInventory API with request for online store, or physical store.
- Feature Pack 5
 - For online store organization code is passed to Sterling reserveAvailableInventory API

Several changes have been made in inventory reservation and cancelation flows in Feature Pack 5.

In Feature Pack 3, when WebSphere Commerce needs to reserve the inventory from Sterling OMS, WebSphere Commerce always passes the ship node to Sterling's reserveAvailableInventory API. Sterling reserves the inventory on that ship node.

In Feature Pack 5, since multiple ship nodes are supported for online stores, WebSphere Commerce no longer passes ship node to Sterling, instead WebSphere Commerce passes the organization code. Since Sterling organizations can have multiple ship nodes, the sourcing rule configured in Sterling decides which ship node the item should be reserved from.

Changes and enhancements for order transferring



- Order status synchronization is **NOT** required
- Transfer shopper logon ID information when WC transferring order to Sterling DOM
- New OrderRetransfer scheduled job for re-transferring the failed orders

In Feature Pack 3, after an order is transferred to Sterling, if the order status is changed by Sterling OMS, Sterling will call the WebSphere Commerce SyncOrder service to sync the orders with WebSphere Commerce. When the WebSphere Commerce store needs to get an order's status, WebSphere Commerce gets the status from its local database.

In Feature Pack 5, WebSphere Commerce gets an order status directly from Sterling if that order has been transferred to Sterling, so the order status synchronization is not required.

In Feature Pack 5, when WebSphere Commerce transfers orders to Sterling OMS, the shopper's logon ID is added to the order message and is transferred to Sterling as well. This logon ID is used by WebSphere Commerce to retrieve all orders of a shopper from Sterling.

There might be a situation that an order is created in the WebSphere Commerce database, but fails on order transferring to Sterling. In Feature Pack 5 release, a new scheduled job, OrderRetransfer, has been created. This scheduler job is used to re-transfer orders from WebSphere Commerce database to Sterling in batch mode.

Changes and enhancements for viewing history orders and re-order

The screenshot shows the Aurora web application interface. At the top, there is a navigation bar with the Aurora logo, a 'My Account' link, and links for 'Wish List', 'Language/Currency', 'Sign Out', '1-800-555-1234', 'Contact Us', and 'Store Locator'. A shopping cart icon shows a subtotal of \$0.00 and 0 items. Below the navigation bar is a search bar and a 'Departments' dropdown menu. The main content area is titled 'My Account | Order History'. On the left, there is a sidebar with sections for 'SETTINGS' (Personal Information, My Address Book, Quick Checkout Profile), 'WISH LISTS' (Personal Wish List), and 'MY ORDERS' (Order History, Recurring Orders, Subscriptions). The 'Order History' section is highlighted in red. The main content area displays a table of order history:

Order Number	Order Date	Status	Total Price	
Y100000300	July 3, 2012	Order processing	\$1,835.00	Re-Order
				Details
18502	July 3, 2012	Order processing	\$1,840.00	Re-Order

- In Feature Pack 3, order history and details are get from WebSphere Commerce local database
- In Feature Pack 5, WebSphere Commerce interacts with both Sterling OMS and WebSphere Commerce
 - View history orders
 - View order details
 - Re-order

In Feature Pack 3, WebSphere Commerce always gets the order information from its local database. This has been changed in Feature Pack 5.

In Feature Pack 5, after an order is transferred to Sterling, WebSphere Commerce will not maintain the order status. When WebSphere Commerce stores need to display order history, order detail, or re-order, WebSphere Commerce calls Sterling OMS to get the order information to verify if the order has been transferred to Sterling OMS. For the orders that have not been transferred to Sterling, WebSphere Commerce gets the order details from its local database.

Pricing integration

- WebSphere Commerce **GetEntitledPrice** service is enhanced so that Sterling can call it to get catalog entry prices
 - Changed contract ID from mandatory parameter to optional parameter
 - Added **pricing date time** as optional parameter
 - Return range prices

In Feature Pack 5, shoppers are not only able to submit orders from the WebSphere Commerce store, they can also call Sterling Call Center CSR to place orders. To achieve this goal, WebSphere Commerce has provided several services for Sterling to call.

WebSphere Commerce **GetEntitledPrice** service is enhanced in this release so that Sterling can call it to get catalog entry prices:

The first contract ID parameter is changed from mandatory to optional parameter because Sterling does not recognize WebSphere Commerce contract. This enhancement enables Sterling to get the catalog entry price without passing a contract ID.

The second enhancement is that this service is able to take pricing date as an optional parameter. This parameter allows Sterling to get item price on a certain time in the past.

The last enhancement is that before Feature Pack 5, **GetEntitledPrice** service can only return unit price, but now it can return catalog entry's range prices.

Create or change orders from Sterling

- Two new scenarios are supported
 - Create orders from Sterling Call Center
 - Changes/cancels orders from Sterling OMS

- Order calculation service
 - Sterling calls OrderCalculate service to calculate order's price, discount and shipping discount

- Promotion engine is enhanced to provide following service
 - Calculate and return applicable promotions
 - Get details of a promotion
 - Update promotion statistics

In Feature Pack 5, two new scenarios, submit order and update order from Sterling, are supported.

To support these two new scenarios, Feature Pack 5 provides a new service, OrderCalculate service. This service is used by Sterling to do order calculation from WebSphere Commerce. This service returns order price, discount, and shipping discount, but not the shipping charge and tax. Because of this, WebSphere Commerce and Sterling must have the same shipping and tax configuration, otherwise the prices displayed on WebSphere Commerce store page, and the prices displayed in Call Center are inconsistent.

To support the integration with Sterling Commerce, WebSphere Commerce promotion engine is also enhanced on several services. These services are called by Sterling to calculate and return applicable promotions, to validate the promotion code and to update promotion statistics.

Components not integrated

- Customer / User
 - Customer and user information are not integrated or synchronized between WebSphere Commerce and Sterling OMS
 - Sterling Call Center can submit orders for “guest” shoppers and shoppers registered in WebSphere Commerce
- Catalog
 - Products must exist in both WebSphere Commerce and Sterling OMS
 - Sterling’s item ID must match Commerce catalog entry **part number**
- Tax / Shipping
 - Commerce and Sterling must have **same** shipping and tax configuration
- Madisons store
 - Madisons does not support the new integration features of Feature Pack 5

This slide lists the components that are not integrated in Feature Pack 5.

Customer and user information are not integrated or synchronized between WebSphere Commerce and Sterling. Sterling Call Center supports creating an order for guest shoppers and register shoppers. If an order is submitted from Sterling without providing a shopper’s ID, the prices WebSphere Commerce returns are guest shopper prices. After the order is submitted, the shopper is not able to view the order from the WebSphere Commerce store. If an order is submitted from Sterling by providing a shopper’s ID, the order’s price returned from WebSphere Commerce is for that shopper, and the order is viewable from WebSphere Commerce store. For this case, the shopper ID must be registered in WebSphere Commerce, but does not have to be in Sterling.

Catalog is another component that is not integrated in Feature Pack 5. Feature Pack 5 requires the catalog be loaded on both WebSphere Commerce and Sterling Commerce. When you load the catalog to WebSphere Commerce and Sterling, item IDs in Sterling must match the catalog entry part number in WebSphere Commerce.

Tax and Shipping are not integrated. Due to this reason, Feature pack 5 requires both Commerce and Sterling to have the same shipping and tax configuration, otherwise the prices on the store front and in Sterling Call Center are not the same.

By default, Madisons store does not support the new integration features of Feature Pack 5. In order to support the new features, you need to do the migration and customization. You can find the information on this topic in Sterling’s information center.

Software requirements

- WebSphere Application Server V7.0.0.19.1
- WebSphere Commerce V7 Feature Pack 5
- WebSphere Enterprise Service Bus 7.0.0.4 and WebSphere Integration Developer 7.0.0.3
 - Interim fix IC77580
 - APAR IC77664 and IC78603
- Sterling Selling and Fulfillment Suite (SSFS) version 9.2

This slide lists minimum levels of software required for WebSphere Commerce and Sterling Order Management integration.

WebSphere Application Server must be on 7.0.0.19.1 level.

WebSphere Enterprise Service Bus must be on 7.0.0.4, and WebSphere Integration Developer on 7.0.0.3, plus 3 fixes shown on the slide.

Sterling Selling and Fulfillment Suite must be upgraded to V9.2. Be aware that if you want to use Feature Pack 5 with SSFS version 9.1, it is still supported, but you are not able to use new features provided in Feature Pack 5.

Summary

- Feature Pack 3 supported scenarios
- Feature Pack 5 supported new and enhanced scenarios
- Limitations

This presentation discussed the differences between Feature Pack 3 and Feature Pack 5 on the integration implementation, introduced the new and enhanced scenarios supported in Feature Pack 5. The presentation also discussed the components that are not integrated in Feature Pack 5.

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