



What's New in IBM WebSphere Commerce Version 5.5



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Note!

Before using this information and the product it supports, be sure to read the general information in the Notices section.

First Edition, First Revision (June 2003).

This edition applies to IBM WebSphere Commerce Business Edition Version 5.5, IBM WebSphere Commerce Professional Edition Version 5.5, and to all subsequent releases and modifications until otherwise indicated in new editions. Make sure you are using the correct edition for the level of the product.

IBM welcomes your comments. You can send your comments by using the online IBM WebSphere Commerce documentation feedback form, available at the following URL:

<http://www.ibm.com/software/webservers/commerce/rcf.html>

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Contents

Chapter 1. Introduction	1	Distributor integration messages (Business Edition)	15
Chapter 2. Product offerings	3	Documentation	16
Chapter 3. WebSphere Commerce Studio (Windows)	5	Dynamic caching	16
Chapter 4. New and changed components in WebSphere Commerce 5.5	7	E-mail activities	16
Access control	7	E-mail notification	17
Adapter for CrossWorlds®	7	Installation	17
Advanced discounts and promotions	8	Loader package	17
Analytics and business intelligence	8	Logging	17
Closed-loop analytics	9	Messaging.	18
Attachment support	9	Organization Administration Console (Business Edition)	18
Business models	10	Product Advisor	19
Store types	10	Product Management tools	19
Sample stores.	11	QShell commands (OS/400 for iSeries)	20
Catalog Comma Separated Value (CSV) data (Business Edition)	13	Request for Quote (RFQ) (Business Edition)	21
Catalog filtering (Business Edition)	13	Store development	21
Collaboration	14	Store resources (Business Edition)	21
Configuration Manager	14	Publishing.	22
Contracts (Business Edition).	14	Subsystems	22
Coupon promotions	15	Systems management	23
		+ Tivoli Web Site Analyzer	23
		Web services	23
		WebSphere Commerce Payments	24
		WebSphere Commerce roles	24
		WebSphere MQ	25
		Notices	27

Chapter 1. Introduction

This document describes new features and changes found in WebSphere® Commerce 5.5. Intended for users experienced with previous versions of either WebSphere Commerce Suite or WebSphere Commerce, *What's New* is designed as a quick reference to new features in this release.

In this document, all editions of WebSphere Commerce — Business and Professional — are referred to as *WebSphere Commerce*. Furthermore, WebSphere Commerce Studio, Professional Developer Edition, and WebSphere Commerce Studio, Business Developer Edition are both referred to as *WebSphere Commerce Studio*. Where differentiation is required, images denote the information specific to a particular edition or platform.

For information and instructions on migrating to WebSphere Commerce 5.5 from a previous version of WebSphere Commerce Suite or WebSphere Commerce, refer to the *WebSphere Commerce Migration Guide* for your platform and edition, available from the Technical Library Web site (<http://www.ibm.com/software/commerce/library/>).

The Technical Library Web site also contains the latest information for WebSphere Commerce:

- Updates made to WebSphere Commerce guides and online help after the product release.
- WebSphere Commerce tutorials
- WebSphere Commerce READMEs
- A link to WebSphere Commerce technical notes, also known as *technotes*.

Updates from the last version of this document are identified by the "+" character contained in the margin.








Chapter 2. Product offerings

WebSphere Commerce 5.5 is available in a Professional Edition and a Business Edition, on the following platforms:

- ▶ **AIX** AIX®
- ▶ **400** OS/400® for iSeries™
- ▶ **Linux** Linux
 - Linux for xSeries™
 - **Business** Linux for IBM® @server iSeries
 - **Business** Linux for IBM @server pSeries™
 - **Business** Linux for IBM @server zSeries™ and S/390®
- ▶ **Solaris** Solaris Operating Environment
- ▶ **Windows** Microsoft® Windows® 2000

WebSphere Commerce includes the following:

- WebSphere Commerce components:
 - WebSphere Commerce Server
 - WebSphere Commerce Accelerator
 - WebSphere Commerce Administration Console
 - Loader package
 - Product Advisor
 - WebSphere Commerce Analyzer Version 5.5
 - WebSphere Commerce Payments 3.1.3, which includes:
 - Payments Cassette for Paymentech
 - Payments Cassette for VisaNet
 - Payments Cassette for BankServACH
 - CustomOffline Cassette
 - OfflineCard Cassette
 - Blaze Rules Server and Blaze Innovator Runtime Version 4.5.5
- IBM DB2 Universal Database™ Version 8.1 fix pack 1
- ▶ **Linux** IBM DB2 Universal Database Version 8.1 fix pack 2
- IBM DB2 Extenders™ 8.1 fix pack 1 (▶ **400** Not supported for OS/400 for iSeries.)
- ▶ **Linux** IBM DB2 Extenders 8.1 fix pack 2
- Intelligent Miner™ Version 8.1
- IBM HTTP Server 1.3.26 (▶ **400** Not included for OS/400 for iSeries. Refer to the *WebSphere Commerce Installation Guide for iSeries* for details.)
- ▶ **Linux** IBM HTTP Server 1.3.26.2
- WebSphere Application Server Network Deployment, Version 5.0 which includes:
 - WebSphere Application Server base product

- WebSphere Application Server Edge Server component
- WebSphere Application Server Toolkit
-  WebSphere Application Server Network Deployment, Version 5.0.2 which includes:
 - WebSphere Application Server base product
 - WebSphere Application Server Edge Server component
 - WebSphere Application Server Toolkit
-  IBM Developer Kit, Java™ Technology Edition 1.3.1 SR3W
-  IBM Developer Kit, Java Technology Edition 1.3.1 SR5W
-  Java 2 SDK, Enterprise Edition 1.3.1 fix pack 5
-  IBM Developer Kit, Java Technology Edition 1.3.1 SR3W
- IBM Directory Server 4.1.1 ( Not included for OS/400 for iSeries. Refer to the *WebSphere Commerce Installation Guide for iSeries* for details.)
- WebSphere Commerce Recommendation Engine powered by LikeMinds 5.5
- Lotus® SameTime 3.0
-  Lotus QuickPlace™ 3.0
- Tivoli® Web Site Analyzer 4.2

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For additional information about hardware and software requirements, refer to the appropriate *WebSphere Commerce Installation Guide* for your platform and edition.

Chapter 3. WebSphere Commerce Studio (Windows)

WebSphere Commerce Studio 5.5 is available in a Professional Developer Edition and a Business Developer Edition. It consolidates all store development tools in a single environment. In addition to the development tools, WebSphere Commerce Studio includes a development license for WebSphere Commerce. As a result, WebSphere Commerce Studio provides everything required to create and test a store in a development environment. WebSphere Commerce Studio is available on the Windows 2000 platform only.

WebSphere Commerce Studio now includes WebSphere Studio Application Developer, a configuration of WebSphere Studio, which provides an open, comprehensive development environment for building dynamic e-business applications. WebSphere Studio Application Developer replaces WebSphere Studio, VisualAge® for Java, Page Detailer, Applet Designer, and the IBM Distributed Debugger that shipped with previous releases. Also, WebSphere Commerce Studio includes the Commerce Toolkit for WebSphere Studio.

The online help applicable to application developers, such as API and command reference information, is fully integrated with WebSphere Commerce Studio. The help system includes new features, such as the ability to bookmark topics and advanced search capabilities.

For additional information about hardware and software requirements, including prerequisites, refer to the *WebSphere Commerce Studio Installation Guide*.

Chapter 4. New and changed components in WebSphere Commerce 5.5

Access control

Access control uses policies to protect WebSphere Commerce resources. An access control policy authorizes a group of users to perform particular actions on a group of WebSphere Commerce resources. Unless authorized through one or more access control policies, users have no access to any functions.

In WebSphere Commerce 5.5 (Business Edition), policy group subscription has been added to the access control infrastructure. In WebSphere Commerce 5.4, a policy was applied to resources owned by descendants of the policy owner. If different organizations in the same organization hierarchy wanted different levels of access control, achieving the different levels could be difficult. Furthermore, if the organization hierarchy was very deep, understanding all the policies that applied to an organization close to the bottom of the hierarchy could be confusing. In order to make things simpler and more explicit in WebSphere Commerce 5.5, policies are first grouped into policy groups, based on business and access control requirements.

For example, one policy group could have the policies needed to support contracts, while another could allow only registered users to shop. Then, depending on an organization's business and access control requirements, the organization would explicitly subscribe to the appropriate policy groups. When an organization subscribes to policy groups, only the policies in those policy groups will apply to the organization's resources. Its ancestor organization's policies will not apply. However, if an organization does not explicitly subscribe to policy groups, it will inherit the policy subscription of its closest ancestor that is subscribing.

For more information on access control, refer to the authorization section in the *WebSphere Commerce Security Guide*.

Adapter for CrossWorlds[®]

The Adapter for CrossWorlds Version 4.1.1 offers a new mechanism to extend WebSphere Commerce business integration with the InterChange Server (ICS). This new adapter uses the Access Interface, an application programming interface (API) that allows an external process to execute a collaboration inside the ICS. With this adapter, WebSphere Commerce can integrate with external systems by sending synchronous messages to these systems through ICS. This adapter allows WebSphere Commerce to send a message to ICS and wait for a reply. After receiving the response, the invocation command can proceed with other business logic.

The ICS system is a suite of software integration products that includes prebuilt business logic templates, called collaborations, for common business integration requirements, and various development and management tools. Collaborations define and automate common industry-specific business process steps, such as order management and manufacturing bill of materials management. Collaborations are also used to coordinate and extend the business processes of disparate enterprise software products and to facilitate meaningful data exchange between them.

▶ 400 The Adapter for CrossWorlds is not supported on the OS/400 for iSeries platform.

The Adapter for CrossWorlds was originally provided in the Commerce Enhancement Pack (October 2002). For more information on the Adapter for CrossWorlds, refer to the *WebSphere Commerce Administration Guide*.

Advanced discounts and promotions

Rule-based discounts are created using the WebSphere Commerce Accelerator, and are stored as rules in the rule server in the WebSphere Commerce Server. New capabilities include a more flexible and easily customizable framework for both simple and complex discount and promotion models.

Rule-based discounts support the following new discount models:

- Order level shipping discount.
- Buy X of item A, give another A for free.
- Buy product or item A, or B, or C, and give D as a gift.

Advanced discounts and promotions were originally provided in the Commerce Enhancement Pack (October 2002). For more information on advanced discounts and promotions, refer to the WebSphere Commerce Production online help.

Analytics and business intelligence

WebSphere Commerce Analyzer is a comprehensive set of tools for analyzing e-commerce results. In particular, the WebSphere Commerce Analyzer data mart contains extractions from the WebSphere Commerce operational data, resulting in extensive information about the business. Using the delivered reports for analysis, business users can gain insight into trends and customer characteristics, make better decisions, form strategies, and learn how to improve their business.

In the previous release of WebSphere Commerce, analytical reporting was accomplished with WebSphere Commerce Analyzer, Entry Edition. You need deeper insight to your data, and a better understanding of trends. Since data mining and business intelligence are essential components of WebSphere Commerce, the WebSphere Commerce Analyzer from previous releases was greatly enhanced with both on board data analysis tools and reporting technology. Enhanced features are:

- A data mart, installed on a separate server, where you can run detailed data analysis and reporting without affecting the performance of the WebSphere Commerce operational systems. The data mart is designed with predefined and expandable reporting tables to provide historical data for comparison purposes.
- A set of tools to extract, transform, and load data from the WebSphere Commerce operational database into the data mart. These extraction tools come with predefined extractions that are easily expanded to address your custom data requirements.
- A set of data mining tools for business intelligence analysis against the data mart. This data mining technology delivers the ability to look for trends and characteristics in data that might not be otherwise apparent, resulting in insights that deliver great business value.
- The Reporting Framework delivers an extensive list of analytical reports to the user. Over 250 reports in 15 categories ensure the user will have the data needed specific to the area of interest. This framework is delivered with the WebSphere

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Commerce Analyzer, so companies can expand the reports delivered with the system by changing existing reports, or creating new ones. This Reporting Framework replaces the Brio Broadcast Server included in previous releases. If you want more robust reporting capability, reporting integration kits will be available for several of the commercial reporting vendors.

- Marketing Managers can use the sophisticated data mining technology to identify trends in the data and identify customer profiles that fit these trends. For example, look for customer segments that ordered more than a single item from a previous promotion, and used express shipping. The data mining is capable of dynamically looking for results that meet the characteristics you specify in the model. There are 26 predefined models delivered and you can add as many as you like. The customer profiles can drive the creation of a list of users in the promotions or campaigns function of the WebSphere Commerce Accelerator, resulting in *closed-loop* analytics.

Closed-loop analytics

Closed-loop analytics provide rapid 'analytics to actions' technology. Closed-loop analytics integrate advanced data mining analysis results so that a Marketing Manager can create an explicit customer profile based on the segments generated from WebSphere Commerce Analyzer's data mining function.

This closed-loop function eliminates the manual steps between WebSphere Commerce Analyzer and WebSphere Commerce by automating the creation of an explicitly targeted customer list. More accurate customer profiles are created by using the segment (member list) generated by WebSphere Commerce Analyzer (explicit profile).

For more information on WebSphere Commerce Analyzer, business intelligence, and data mining, refer to the WebSphere Commerce Production online help or the *IBM WebSphere Commerce Analyzer Installation and Configuration Guide*.

Attachment support

Attachments are widely used in all areas of Web applications. An attachment can be any extra material that a user can send in an e-mail, a request, or detailed product specifications. Attachments can be images files, text files, audio or video files, programs or documents. The range of formats provides users with greater flexibility as to the usage of attachments.

You can use attachments for the following WebSphere Commerce components:

- **Business Contracts.** You can include additional information about the contract and any general remarks about the contract. For example, lawyers can attach legal terminologies or by-laws into their contract using XML files.
- **Business RFQs and RFQ personalized attributes.** A buyer can create an RFQ for unique variations of goods and services that are offered in the catalog. If buyers cannot find a product matching their needs in the catalog, they can select attributes from the personalized attributes dictionary to precisely define the product specifications. An RFQ may need to include a description, requirement, blueprint, or specification of the required product. During RFQ creation, personalized attributes can include an attachment, and the buyer can upload the attribute attachment file. For example, a buyer orders a shirt but can personalize it by adding a picture on the shirt. The buyer can then attach an image file.
- **Store front assets.** Store front assets, the portion of an online store that displays to customers, contains Web assets such as HTML pages, JSP files, style sheets,

images, graphics, and other multimedia file types. For example, a merchant can upload new store logos or banner images for the store.

For more information on attachments, refer to the WebSphere Commerce Production online help.

Business models

WebSphere Commerce supports the following types of commerce interactions:

- **Business Value chains**

New to WebSphere Commerce 5.5 is the ability to support value chains. Value chains support transactions involving multiple enterprises or parties. Products, goods, services, or information are delivered through the parties of the value chain from producers to end users. A value chain also has relationship and administrative aspects, that is, you can manage the relationship of the partners or enterprises in your value chain, as well as offer some administrative services to those parties.

WebSphere Commerce supports the transactions through, and relationship management of the following two types of value chains:

- **Demand chains:** Demand chains support both indirect sales channels and direct sales channels.
- **Supply chains:** Supply chains support procurement and sourcing of goods. WebSphere Commerce supports sourcing of goods through private marketplaces. A private marketplace provides a forum for vendors to offer their products and services for sale to buyers with whom they have contractual relationships. WebSphere Commerce also provide the capability for you to host enterprises in your value chain.

- **Business Hosting**

As well as supporting hosting of business partners in the value chain model, WebSphere Commerce also supports hosting of merchants or other businesses by an Internet Service Provider or other hosting provider.

- **Direct sales**

WebSphere Commerce continues to support the direct sales business model. Using WebSphere Commerce you can create sites or stores that supports commerce transactions involving products, services, or information directly between businesses and consumers or between two businesses or parties.

Store types

In order to support the new business models in WebSphere Commerce 5.5, several new store types have been introduced. WebSphere Commerce supports the following store types:

- **Customer facing store**

An online site where users may obtain information regarding products, and conduct business transactions over these products. Business transactions may include retail purchases, transactions between businesses and transactions between a government organization and citizens or businesses. WebSphere Commerce uses the generic term 'store' to describe the online space where all of these business transactions take place.

- **Business Hub store**

A store that enables partners or clients.

- **Direct sales store**

A store that supports the exchange of products, services, or information directly between businesses and consumers, or between two businesses or parties.

– **Business Hosted store**

A store that is hosted by the site operator for the owner of the store. The store owner may have the option of administering the store.

• **Business Asset store**

A store that contains a collection of file or data assets that can be used as resources by other types of stores. For example, a catalog asset store is a collection of data assets that represents the content of a catalog. A storefront asset store is a collection of JSP files, commands, and other assets that create a storefront. Asset stores do not perform or record business transactions. They are simply holders of assets that can be used by other stores.

• **Business Proxy store**

A store that represents a business partner's operational assets. This store also handles the business logic that allows a WebSphere Commerce site to interact with an external business partner. For example, a proxy store may capture the orders transferred to a remote order capture system, as well as capturing the suppliers' inventory information or the information sent to a supplier's fulfillment centers. A proxy store does not include a storefront and can not be accessed by users. Administrators working on behalf of the external business may have administrative access to the proxy store through the WebSphere Commerce Accelerator.

Sample stores

WebSphere Commerce provides several sample stores on which you can base your own store. Each store is designed to display the features found in today's top retail sites and is customizable. The following sample stores are provided with WebSphere Commerce:

The consumer direct sample (FashionFlow) includes an online fashion store, which supports direct selling to consumers. FashionFlow merges the features of all previous sample B2C stores (InFashion, WebFashion, WebAuction, and NewFashion), as well as adding some new enhancements:

- Registered customers can apply coupons towards their purchases.
- Using Product Advisor (Product Exploration and Product Comparison metaphors), customers can narrow down and compare products from a resulting search list.
- Using advanced search techniques, customers can search on size, color, and price range.
- Four rule-based discounts have been included:
 - Free shipping.
 - Buy X, get the next for Y% off.
 - Spend X, get the next Y at Z% off.
 - Buy X, get a free gift.
- Using cross-sell prompts customers to mix and match, or add additional products to their original purchase.
- Using up-sell prompts customers to buy a more expensive product than originally planned.

- Using e-mail interest items, customers receive promotional e-mails based on their interests.

There is a new basic sample store that provides a minimal set of assets needed to make a store work. This is offered as an alternative to deleting large amounts of information. Instead, you can use the basic store sample as a foundation for a store, and then build on it, to suit your needs.

Business The B2B direct sample (ToolTech) includes an online hardware store, which supports direct selling to other businesses. ToolTech highlights the tasks a buyer can perform at a seller's e-commerce site. Newly included are RFQ request tools, which have been moved from the WebSphere Commerce Accelerator to ToolTech. It now supports the buyer creating an RFQ on a made to order item, and allows the substitution of products. The interest list has been removed and replaced with a requisition list.

Business The demand chain business model sample includes the Commerce Plaza site, the catalog asset store, the reseller asset store, and the distributor proxy store. Commerce Plaza allows resellers to purchase products directly from their distributors. In the process of purchasing, this site also allows resellers to request prices and availability from distributors on any products of interest. Commerce Plaza site features include:

- Registering with the marketplace.
- Editing account information.
- Searching for products.
- Creating a favorites list by adding products to that list.
- Placing an order (adding products to the shopping cart, requesting price and availability, assigning orders to distributors, transferring carts to distributor sites, and checking out on distributor sites).
- Saving a shopping cart's contents (adding products to the shopping cart, requesting prices and availability).
- Reviewing the status of a fully transferred order.
- Creating and managing a reseller store with the Store Creation wizard.

Business The hosting business model sample includes the Commerce Hosting Hub site, the store directory, a sample catalog, and the assets required to make a store. Merchants can use this model if they want a store, but want someone else to host it. Once the merchant is approved, the store can be created through the Store Creation wizard, and the merchant can manage it. The store will be added to a store directory, which functions like a mall. Customers can search this directory, find the store of interest, and shop there. Commerce Hosting Hub features include:

- Registering with the hosting hub.
- Requesting to host a store.
- Creating a hosted store with Store Creation wizard, then changing the look and feel.
- Choosing the shared master catalog, or using your own.
- Managing a store.
- Allowing customers to search for products once the store is added to the store directory.

Business The supplier business model sample includes the Commerce Supplier Hub site, an aggregate or master catalog, and the assets required to make a store. The Hub is a place where merchants or suppliers, and customers or buyers, come together. One reason suppliers would use this model is if they want a store, but want someone else to host it; in the larger sense, suppliers can benefit from being part of a hub and the increased buyer traffic. The buyers benefit from being able to look for products and compare prices from different merchants in one location. The buyers can also shop in the hosted store, if desired. Commerce Supplier Hub features include:

- Registering with the supplier hub
- Requesting to host a store
- Creating a supplier store with Store Creation wizard, then changing the look and feel.
- Consolidating your catalog with the master catalog
- Managing a store
- Creating auctions
- Creating RFQs

For more information on the sample stores, refer to the *WebSphere Commerce Sample Store Guide*.

Catalog Comma Separated Value (CSV) data (Business Edition)

After creating a hosted store, a merchant needs to load the catalog data into the database. However, in a hosting scenario, a merchant is outside of the Internet Service Provider's (ISP) firewall and cannot connect to the database machine directly.

You can create a simple catalog file in CSV format, which allows a merchant to upload the catalog data through the WebSphere Commerce Accelerator. WebSphere Commerce provides sample catalog CSV worksheets, which you can use as a guide when creating your own catalog CSV data.

For more information on creating or loading catalog CSV data, refer to the WebSphere Commerce Production online help.

Catalog filtering (Business Edition)


Use the Catalog Filter to exclude any of the products or categories in a master catalog that you do not want to sell at your specific store. The Catalog Filter presents the master catalog as an aggregated tree view of all products and categories available for sale from the store. The Catalog Filter consists of three parts:

- The catalog tree, which you can use to include the catalog, categories, and products; exclude categories and products; apply percentage price adjustments to the entire catalog; and view the actual price (using the Calculate Price option) that customers will see for a product.
- The Include dialog, which displays when you include either the entire catalog, category, or product. The Include dialog allows you to set the percentage price adjustment for the catalog, category, or product that you are including for sale in the store.
- The Set Price Adjustment dialog, which displays when you choose to change the percentage price adjustment for the catalog, a category, or a product.

For more information on the Catalog Filter, refer to the WebSphere Commerce Production online help.

Collaboration

WebSphere Commerce supports e-commerce collaboration functionality by offering two Web-based features within the WebSphere Commerce Accelerator: collaborative workspaces and customer care.

 The following enhancements have been made to the collaborative workspaces feature:




- Support for QuickPlace 3.0.
- Non-member data elements have been moved from LDAP into the database. This will keep the LDAP directory structure clean and exclusive to member type data.
- Support for more LDAP directories.

The following enhancements have been made to the customer care feature:

- Support for multiple queues and the ability for Customer Service Representatives to route or prioritize the customers waiting for assistance. You can now create, change, delete, and assign Customer Service Representatives to the queues, using the WebSphere Commerce Accelerator. Customer Service Representatives can select to serve any customer assigned to their queues.
- Allow Customer Service Representatives to monitor customized customer attributes in a store.
- Allow customer requests to be routed into queues.

For more information on collaboration, refer to the WebSphere Commerce Production online help.

Configuration Manager

   The Configuration Manager now contains tools to create Oracle tablespaces and users, and to configure remote Web servers.

Also new in this release is the Configuration Password Manager tool, which allows users to manage their WebSphere Commerce passwords from a single location.

For more information on the Configuration Manager, refer to the WebSphere Commerce Production online help and the appropriate *WebSphere Commerce Installation Guide* for your platform and edition.

Contracts (Business Edition)

A contract can refer to another contract to share its terms and conditions. For example, contract A can refer to contract B. Thus, a buyer who is entitled to contract A will be entitled to all the terms and conditions from contract A, as well as to all the terms and conditions in contract B.

For more information on contracts, refer to the WebSphere Commerce Production online help.

Coupon promotions

Coupon promotions allow you to offer customers incentives to purchase. A coupon is an instance of a coupon promotion. The coupons functionality now includes the following features and enhancements:

- Support for guest customers to capture and redeem coupons. A guest customer can accept coupons from banner advertisements, manage coupons using a Wallet, and redeem them. Since a guest customer is only active for a given session, guest customers can e-mail the coupons to their Wallet for later use.
- Allow the Marketing Manager to create coupon promotions at the product level, with or without the SKU. For example, the purchase condition can be 'Buy 1 unit of product A'.
- Allow the Marketing Manager to create coupon promotions at the category level. For example, the purchase condition can be 'Buy 2 units of any product in category B'.
- Provide summary information for an existing coupon promotion. The Marketing Manager can select a specific coupon promotion and view the summary such as promotion names, descriptions, number of coupons offered so far, total number of coupons which can be offered, purchase conditions, discount value, and validity period.
- Allow the Marketing Manager to modify an existing coupon promotion. The Marketing Manager can modify all elements except the promotion name.
- Offer coupons over e-mail using e-Marketing Spots to both registered and guest customers.

For more information on coupon promotions and coupons, refer to the WebSphere Commerce Production online help.

Distributor integration messages (Business Edition)

Distributor integration messages represent the business flows between the reseller marketplace and the distributors for the business indirect models.

Available messages from the Reseller marketplace to the distributors:

- Request price and availability
 - Request: List of manufacturer part numbers, quantity requested and reseller user ID and password.
 - Response: List of manufacturer part numbers, quantity available, price, and entitlement check.
- Shopping cart transfer
 - Request: List of manufacturer part numbers, quantity requested and reseller user ID and password.
 - Response: URL redirection to Reseller marketplace to the shopping cart on the distributor Web site.
- Request batch availability
 - Request: List of manufacturer part numbers.
 - Response: List of manufacturer part numbers and quantity available.

Messages from distributors to Reseller marketplace:

- Order acknowledgment
 - Request: List of items purchased from a standard manufacturer shopping cart, shopping cart ID, distributor order ID, and quantity of products purchased.

- Order status
 - Request: Distributor order ID/manufacture shopping cart ID, and order-ship status.
- Schedule batch availability
 - Request: Distributor sends list of manufacturer part numbers and quantity available at a predefined schedule.

Documentation

Two new guides have been introduced for WebSphere Commerce 5.5: the *Administration Guide* and the *Sample Store Guide*. The *Administration Guide* is a concise guide for the Site Administrator. The *Sample Store Guide*, intended to be used by an application developer, describes the sample stores provided with WebSphere Commerce.

The contents of the *WebSphere Commerce Access Control Guide*, which was available in WebSphere Commerce 5.4, have now been merged into the *Security Guide*. In addition, most security authentication information has been moved from the online help to the authentication section of the *Security Guide*.

The online help applicable to developers, such as API and command reference information, is fully integrated with WebSphere Commerce Studio. The online help system included in WebSphere Commerce Studio includes several enhancements, including the ability to bookmark topics and advanced search capabilities. Optionally, you may run this online help system as an Infocenter, that is you can serve the WebSphere Commerce Studio help without running WebSphere Commerce Studio.

The WebSphere Commerce help system has been tailored for Site Administrators and business users. API and command reference information has been moved to the online help that ships with WebSphere Commerce Studio.

Dynamic caching

The WebSphere Commerce servlet and page caching is now part of the WebSphere Application Server dynamic caching infrastructure.

For information on setting up dynamic caching for WebSphere Commerce, refer to the dynamic caching chapter in the *WebSphere Commerce Administration Guide*.

E-mail activities

E-mail activities allow you to deliver news and promotions to customers using e-mail. In this way, you can reach out to customers who may not have visited your site in some time, or keep regular customers up to date regarding upcoming events or new products. E-mail activities are created using the e-mail activity dialog in the WebSphere Commerce Accelerator. Enhancements to e-mail activities include:

- Opt out from e-mail at a store level rather than site level.
- View statistics on e-mail activities.

For more information on e-mail activities, refer to the WebSphere Commerce Production online help.

E-mail notification

E-mail notification allows you to monitor which messages have been sent or not sent. From the site or store levels of the Administration Console, you can:

- View a summary report indicating if an e-mail message has been sent or not.
- Set the number of times the system will attempt to resend an e-mail based on the SMTP server connection history.
- Set the number of times the system will attempt to resend an e-mail.
- Select the SMTP port (▶ 400 Not supported on the OS/400 for iSeries platform).
- Configure a transport method for a site or a store.
- Set an e-mail's content type object (such as MimeMultipart) using the SendMsgCmd command.
- Set the optional Reply-To field in the e-mail header.
- Customize the subject for supported National languages.
- Use the standard internet address specification defined in the RFC2822 Internet Message Format.

Note that the JavaMail plug-in has been upgraded from Version 1.1 to Version 1.2. You can access the e-mail notification functionality under the new **Monitoring** menu from the Administration Console.

For more information on e-mail notification, refer to the WebSphere Commerce Development online help.

Installation

WebSphere Commerce 5.5 and all its associated software can now be installed through the WebSphere Commerce installation wizard. In addition to the previously existing typical and custom installation methods, quick installation is a new feature that allows you to quickly install WebSphere Commerce and create a WebSphere Commerce instance with minimal user interaction.

For more information on installing WebSphere Commerce, refer to the appropriate *WebSphere Commerce Installation Guide* for your platform and edition.

Loader package

Formerly known as WebSphere Commerce Catalog Manager, the Loader package no longer includes the Web Editor.

For more information on the Loader package, refer to the WebSphere Commerce Development online help and the *WebSphere Commerce Store Development Guide*.

Logging

Logging in WebSphere Commerce now uses the WebSphere Application Server logging facility, the JRas Logging Toolkit. JRas consists of multiple Java packages that provide message logging and diagnostic trace primitives, and includes:

- Loggers, primary objects that interact with user code. Message loggers create message records and trace loggers create trace records.
- Handlers, which provide an abstraction over an output device or event consumer.

- Formatters, which configure handlers, and can format events of a certain type.
- Event types, messages and traces with their own predefined event types.
- Event classes, JRas defines both message and trace event classes.

To integrate JRas into the WebSphere Application Server run time or to use in a J2EE environment, use the WebSphere JRas extensions, which provide a better correlation of WebSphere messages and traces.

For more information on logging, refer to the *WebSphere Commerce Administration Guide*.

Messaging

The WebSphere Commerce messaging system allows WebSphere Commerce to communicate with its external environment. This communication includes sending messages to and receiving messages from back-end systems or external systems, as well as sending notification to customers and administrators that events have occurred within WebSphere Commerce. Past releases of WebSphere Commerce used the IBM Common Connector Framework (CCF) for the messaging system. WebSphere Commerce 5.5 has migrated to the Java 2 Enterprise Edition Connector Architecture (J2EE/CA) standard though the message system functionality remains the same.

In addition, messaging enhancements include the following:

- You can keep all sent messages, with a summary report indicating if an e-mail has been sent or not.
- You can resend previously sent messages which are stored in the database.
- A new trace component, WC_SENSITIVE_INFO, logs all user sensitive information, including incoming XML messages through WebSphere MQ or HTTP request and content.
- The SOAP message mapper has been added for Web services.
- The XML parser plug has been upgraded from Version 2.0 to Version 4.0.

For more information on messaging, refer to the WebSphere Commerce Production online help.

Organization Administration Console (Business Edition)

The Organization Administration Console allows you and the buyer's administrators to control the organizations that access your site or store. This buyer-side interface enables the buyer administrator to approve the customers within their organization, and the orders made by those customers. The buyer administrator also has the ability to assign access levels to their members.

In WebSphere Commerce 5.4, all functionality relating to organization administration was moved from the Administration Console to the Organization Administration Console. Now, in WebSphere Commerce 5.5, new functionality includes:

- Search for organizations under the **Organization Management** menu. The organization list appears with the list of organizations that meet the search criteria, such as name or parent organization.
- Include or exclude members from a group that they implicitly belong to using the **Member Management** menu.

- Lock or unlock an organization under the **Member Management** menu. Locking an organization prevents descendant users of this organization from logging on.

For more information on the Organization Administration Console, refer to the WebSphere Commerce Production online help and the *WebSphere Commerce Administration Guide*.

Product Advisor

The Product Advisor creates an interactive online product catalog that provides customers with different ways of finding what they want, using shopping metaphors. New to Product Advisor is the Product Advisor Administration user interface, which includes the following tasks:

- Creating a search space. There are two search methods available with the Product Advisor:
 - The *separate search space* requires additional database tables to reformat existing product data and enable optimized parametric searches, which are focused on individual categories. The category and attribute information is separated from the base database tables.
 - The *base search space* searches the WebSphere Commerce database that is created during instance configuration.

Both search spaces require additional attribute metadata in the Product Advisor tables in the database.

- Creating a Product Exploration metaphor. This metaphor is intended for customers who are familiar with the features of a given category of products. The customer selects the feature values that they want, which initiates a parametric search of the product data. A resulting list of the appropriate products matching the parameter values displays.
- Creating a Product Comparison metaphor. The Product Comparison metaphor displays related products side by side, so that customers can identify the similarities and differences between them.
- Creating a Guided Sell metaphor. Intended for customers who are not sure where to start, the Guided Sell metaphor presents them with a series of multiple-choice questions, where each answer determines the next question and eventually refines their search to a smaller list of products. The Guided Sell Administration Tool provides an easy-to-use user interface for the Merchandiser to set up the Guided Sell.

The new Product Advisor Administration user interface was originally provided in the Commerce Enhancement Pack (July 2002). The new Guided Sell Administration Tool was originally provided in the Commerce Enhancement Pack (February 2003). For more information, refer to the WebSphere Commerce Production online help.

Product Management tools

The Product Management tools in the WebSphere Commerce Accelerator allow you to manage the products in your store's master catalog using various wizards and notebooks. Enhancements to the Product Management tools include:

- The Product Management dynamic table, which allows you to update your catalog merchandise information directly. Using the dynamic table, it is easier to make large product updates using the copy and paste functions, and direct editing.

- A new wizard and notebook to create bundles and kits (dynamic kits and prebuilt kits, formerly known as packages).
- A new wizard and notebook to create merchandising associations between the different types of supported catalog entries.
- Refined search techniques to locate:
 - A particular catalog entry
 - Multiple catalog entries sharing the same information or features
 - Catalog entries used in merchandising associations
 - Bundles and kits

The updates to the Product Management tools were originally provided in the Commerce Enhancement Pack (October 2002). For more information on product management, refer to the WebSphere Commerce Production online help or the *Product Management Tools for Catalogs Guide*.

QShell commands (OS/400 for iSeries)

In previous versions of WebSphere Commerce, OS/400 for iSeries command line utilities were provided by CL commands, or native commands. Now all command line utilities are run from the QShell. To run the commands, you need to enter the QShell through the STRQSH command. Use the following table to locate the new QShell commands:

Table 1. Command name changes

Original CL Command Name	New QShell Command Name
CHGWCSPWD	chgwcpwd.sh
CHKWCSSTG	stagingcopy.sh
CLNWCSDB	dbclean.sh
CPYWCSSTG	stagingcheck.sh
CRTWCSINST	CreateInstance.sh
CRTWCSPMP	wcs_pmpassword.sh
ENDWCSSVR	stopServer (provided by WebSphere Application Server)
EXPWCSSTS	ExportStats.sh
EXTWCSAC	acpextract.sh
EXTWCSDTA	massextract.sh
GENWCSDTD	dtdgen.sh
IMPWCSSTS	ImportStats.sh
LODWCSAC	acpload.sh
LODWCSACD	acpnload.sh
LODWCSDTA	massload.sh
LODWCSUG	acugload.sh
MIGWCSINST	wcim.sh
MIGWCSSCH	migratedb51.sh or migratedb54.sh
PREWCSMIG	premigratedb51.sh or premigratedb54.sh
PRPWCSSTG	stagingprop.sh
PUBWCSSTO	publishstore.sh

Table 1. Command name changes (continued)

RESWCSID	idResGen.sh
STRWCSCFG	config_server.sh
STRWCSSVR	startServer (provided by WebSphere Application Server)
TRNWCSTXT	txttransform.sh
TRNWCXML	xmltransform.sh

For more information on QShell, refer to the OS/400 for iSeries documentation.

Request for Quote (RFQ) (Business Edition)

Request for Quote (RFQ) is one of the trading mechanisms available in WebSphere Commerce. A buyer can create an RFQ for unique variations of goods and services that are offered in the catalog.

The RFQ request tools have been enhanced to allow a buyer to create an RFQ on a made to order product, by specifying the required attributes. If the seller cannot find an existing product in the catalog to substitute the requested made to order item, the seller will then generate a new SKU and a new catalog product will be created to respond to the buyer's needs. The new SKU will be generated using the Product Management tools in the WebSphere Commerce Accelerator. The seller can refer to the new product in their RFQ response, the same way as an existing catalog entry is referenced.

For more information on creating a made to order RFQ, refer to the WebSphere Commerce Production online help and the *WebSphere Commerce Sample Stores Guide*.

Store development

Store resources (Business Edition)

In order to support multiple stores in a site having the same storefront, back office or store data, WebSphere Commerce now allows you to share many store resources across all stores in the site. To facilitate sharing of store resources, the WebSphere Commerce architecture includes the following concepts:

- **Sharable resources**

Several resources in WebSphere Commerce are designated as sharable resources. These resources can be shared across stores in a site. For a list of resources, refer to the *WebSphere Commerce Store Development Guide*.

- **Asset stores**

Asset stores are collections of sharable resources (business artifacts, business processes, and store front assets) that can be leveraged in other stores. For example, in WebSphere Commerce, the value chain samples include sample catalog asset stores, as well as sample storefront asset stores. The sample catalog asset store contains all of the necessary catalog artifacts to create a virtual catalog. The store front asset stores (for resellers, hosting, and suppliers) contain all the necessary assets to create a virtual store, including storefront assets (such as JSP files), business processes (for example, order processing), business policies, and access control policies.

- **Store relationship:**

In order to facilitate sharing resources, including asset stores, WebSphere Commerce introduces the concept of store relationship. The concept of store relationship covers the following relationships:

– **Relationships between stores**

WebSphere Commerce supports several different types of relationships between stores in a site. For example, in a demand chain businesses, a store may host other stores, creating a hosted store relationship between the stores. Also within demand chain businesses, a store may refer customers to a distributor's store, creating a referral relationship between the stores.

– **Relationships between stores and asset stores or shared resources**

The relationship between a store and an asset store or shared resource, determines which asset store or shared resource the store will use. Stores can have relationships with multiple asset stores or shared resources. That is, you may want to associate more than one catalog asset store, or storefront asset store to your store.

Publishing

The publishing functionality is much more flexible, allowing you to define what you publish and the location to where you publish. The Publish utility has moved from Store Services to the Administration Console. The Store Profile, Tax and Shipping notebooks have now moved to the WebSphere Commerce Accelerator, allowing you to edit live data in the database, rather than the store archive. As a result, Store Services no longer exists.

The development environment has moved to WebSphere Studio Application Developer.

For more information on store development, refer to the *WebSphere Commerce Store Development Guide*.

Subsystems

WebSphere Commerce subsystems are components of the WebSphere Commerce Server. In this release of WebSphere Commerce, the subsystems have been reorganized to include the following functionality:

- The Catalog subsystem provides online catalog navigation, merchandising features, interest lists, and search capabilities on products, categories, and pricing.
- The Marketing subsystem provides numerous marketing functions to your site: customer profiles and marketing campaigns, featuring sales initiatives like advertising, electronic coupons, personalization, and business intelligence.
- The Member subsystem provides user, organization, and member group management. It manages registration, authentication, access control, and session and profile management services. The Member subsystem defines the users, organizations, and members of the system, their roles, and their access control.
- A new subsystem, Merchandising, includes discounts, cross-sell and up-sell suggestions, and promotions.
- Formerly known as the Order subsystem, the Order Management subsystem now includes order capture, order fulfillment, inventory, and payments.
- The Trading subsystem provides the logic, function and data relevant for negotiating the price and quantity of a product or set of products between the buyer and seller organization. This includes auctions, contracts, and Request for Quote (RFQ) components.

The former Inventory, Messaging, Negotiation, and Server subsystems have been merged in the new structure.

For more information on the WebSphere Commerce subsystems, refer to the WebSphere Commerce Development online help.

Systems management

The following enhancements have been made to systems management in WebSphere Commerce:

- Administration enhancements:
 - Systems management options can be separately installed by way of the WebSphere Commerce Custom installation.
- Problem determination enhancements:
 - JRas, the WebSphere Commerce logging infrastructure consolidated with WebSphere Application Server to allow for use of common tooling and to correlate logging data throughout the system.
 - Extended message information, which is a consolidated library of explanations and suggested actions for each of over 1300 commerce messages. This information has been integrated with and can be retrieved from the online help, the WebSphere Application Server Log Analyzer, WebSphere Studio Application Developer and AST help, or WebSphere Application Server Administrator's Console. All extended messages are available in the WebSphere Commerce and WebSphere Commerce Studio online help.
- Performance Monitoring Enhancements:
 - Integrated use of WebSphere Application Server PMI (Performance Monitoring Interface) enables WebSphere Commerce data to be viewed through the Tivoli Performance Viewer.

For more information on the systems management, refer to the *WebSphere Commerce Administration Guide*.

+ Tivoli Web Site Analyzer

+ IBM Tivoli Web Site Analyzer Version 4.2 turns Web data into valuable intelligence
+ that supports successful business operations. It provides a clear picture of the
+ overall health and integrity of an e-business infrastructure. By capturing,
+ analyzing, storing, and reporting on Web site usage, integrity, and content, Tivoli
+ Web Site Analyzer provides essential information on visitor interactions with the
+ site and the site's performance.

+ Tivoli Web Site Analyzer provides the following features:

- + • Web page information is captured dynamically
- + • Detailed reports and views are created on Web server activity, visitor statistics,
+ and behavior
- + • A multichannel data collection consolidates globally-distributed Web server logs
+ into a single open data warehouse.

Web services

Web services are a new breed of Web applications. They are self-contained, self-describing, modular applications that can be published, located, and invoked across the Web. Web services perform functions that can be invoked ranging from a simple request to complicated business processes. Once a Web service is

deployed and registered, other applications can discover and invoke the deployed service. The foundation for Web services are standards such as simple object access protocol (SOAP), the Web services description language (WSDL), and the Universal Description, Discovery, and Integration (UDDI) registry.

You can allow WebSphere Commerce to be the service provider by enabling its business functions as Web services that can be accessed by external systems. You can also allow WebSphere Commerce to be the service requestor by enabling it to invoke Web services hosted by external systems.

The functionality to enable the WebSphere Commerce business functions as Web services was originally provided in the Commerce Enhancement Pack (October 2002). For more information on Web Services, refer to the *WebSphere Commerce Web Services Implementation Guide*.

WebSphere Commerce Payments

Formerly known as Payment Manager, the latest version of WebSphere Commerce Payments is now integrated with WebSphere Commerce to facilitate and automate online payment processing. As such, Payments is part of the WebSphere Commerce installation and configuration. New features include:

- Support for the new Cassette for Paymentech.
- Cassette for VisaNet supports the use of SSL gateways to process credit card transactions through the Internet. It also enables transactions to be processed through the First Horizon Merchant Services financial network in addition to the Vital Processing Services financial network.

In WebSphere Commerce Payments, the SET™ and CyberCash payment methods are no longer supported.

For more information, refer to the WebSphere Commerce Payments Web site (<http://www.ibm.com/software/webservers/commerce/payment/>).

WebSphere Commerce roles

A role in WebSphere Commerce defines what access levels a given user has and the specific resources they can modify at those levels. There are two new roles introduced in this release of WebSphere Commerce: Channel Manager and Registered Customer.

- A Channel Manager, for the business indirect site, manages the hub site, as well as the associated distributors and resellers, including creating and importing distributor and reseller contracts. A Channel Manager can create individual reseller organizations.
- A Registered Customer who can shop in the marketplace. Users must first register in the marketplace and be approved by the Seller Administrator in order to attain the Registered Customer role.

Three roles will no longer be supported in this release: Store Developer, Procurement Manager, and Store Administrator.

For more information on WebSphere Commerce roles, refer to the WebSphere Commerce Production online help.

WebSphere MQ

This release of WebSphere Commerce migrates the existing Adapter for WebSphere MQ to use the new Java 2 Enterprise Edition Connector Architecture (J2EE/CA) infrastructure, and integrate with JMS/MQ.

Connection pooling can be enabled, which connects to the WebSphere MQ Server. Connection pooling allows you to reestablish a connection to the JMS Server using the previous JMS connection if it has not expired. Note that WebSphere Commerce 5.5 only supports WebSphere MQ Version 5.3.

For more information on WebSphere MQ (formerly MQSeries®), refer to the *WebSphere Commerce Administration Guide*.

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