



## WCS & Omnifind Discovery Edition Integration

### Introduction

"If people can't find what they're looking for very quickly, they leave the site with the impression that we can't meet their needs," says Alisa Keimel, marketing and public relations manager for Johnny's Selected Seeds.

#### **IBM WebSphere Commerce**

IBM WebSphere® Commerce is a powerful and flexible solution for running business-to-business (B2B) and advanced business-to-consumer (B2C) e-commerce sites for businesses. It is the single, unified platform which offers the ability to do business directly with consumers (B2C), with businesses (B2B), and indirectly through channel partners (indirect business models), or all of this simultaneously.

#### **IBM® OmniFind™ Discovery Edition V8.4**

IBM® OmniFind™ Discovery Edition (ODE) V8.4 is a search engine. It contains many features that allow the administrator to improve the results from end user queries. IBM® OmniFind™ Discovery Edition (ODE) V8.4 is a set of line-of-business focused search solutions targeting key industries and horizontal applications delivering:

- Increased revenues for eCommerce
- Decreased costs for call centers
- Decreased costs and increased up-sells for online customer service

Note: Formerly called iPhrase OneStep, or WebSphere Content Discovery Server

#### **IBM Commerce Module for OmniFind Discovery Edition**

The Commerce Module for OmniFind Discovery Edition helps online retail and catalog companies convert shoppers into buyers by making it easier for people to find the products and services that best match their specific needs. With IBM® OmniFind™ Discovery Edition (ODE) V8.4, IBM Commerce customers can now rapidly upgrade their commerce search capabilities with a low total cost of ownership. By leveraging the new packaged integration between the two products, advanced search can be running on your site with half the typical integration effort. Continued maintenance of the commerce search user experience is eased with the new layout editor.

Commerce Module has the following functions and capabilities:

- Use the same WebSphere Commerce user interface.
- Support WebSphere Commerce's standard store headers and footers, e-marketing spots, and shopping cart displays within the search results user interface.
- Support WebSphere Commerce's extended sites and multiple stores hosted in the WebSphere Commerce instance in a single OmniFind Discovery Edition index.





- Support WebSphere Commerce's contract entitlements in a single OmniFind Discovery Edition index. The integration provides advanced search with a single index for all e-sites or contracts, without special configuration.
- Provide OmniFind Discovery Edition's rich search capabilities including spell correction and natural language support.
- Provide OmniFind Discovery Edition's navigational refinement capabilities for seamless browse and search.
- Provide OmniFind Discovery Edition's business rules merchandising capabilities to prioritize or highlight products that can be combined with store location (the last page the user is on) from WebSphere Commerce. For example, when a user searches pants while on women's clothing page, OmniFind Discovery Edition search engine can take advantage of this information to prioritize women's pants for the search result.
- Provide full OmniFind Discovery Edition analytics.
- Provide OmniFind Discovery Edition Layout Editor for rapid user interface prototyping.

The Commerce Module provides the following solutions:

#### **Integration for WebSphere Commerce**

Enables you to easily add advanced search and navigation functionality to your IBM WebSphere Commerce store.

#### **Commerce User Interface Templates and Best Practice Configurations**

Enables you to quickly set up a commerce project by using OmniFind Discovery Edition.

#### **Integration for WebSphere Commerce**

The OmniFind Discovery Edition integration for WebSphere Commerce enables you to easily add advanced search and navigation to your WebSphere Commerce store. By enhancing the shopping experience, the integration for WebSphere Commerce helps reduce site abandonment and increase online conversion.

#### **Key features**

The integration for WebSphere Commerce provides:

- Automatic re-spelling, stemming, and vocabulary relationships such as synonyms and related terms to help the system understand the shopper's intent v Navigation controls that allow users to narrow down the search results by using faceted navigation.
- Automatic updating of the navigation options when new product categories are added to the product catalog.
- Ability to perform search-based merchandising to provide targeted offers and information based on the shopper's specific interests and profile.
- Business user analytics for monitoring shopper behavior and effectiveness of promotions.
- User interfaces that provide an intuitive user experience.
- Pre-packaged connector to acquire product catalog information and rapidly create rich





search indexes

- Extracts product attributes such as size, color, brand, and price from the WebSphere Commerce catalog and uses these attributes to filter the search results
- Supports WebSphere Commerce data modeling such as Product bundling.
- Support for WebSphere Commerce e-Sites and contracts.

**Note:** The integration is done automatically when you install Commerce Module for OmniFind Discovery Edition. After you install WebSphere Commerce and OmniFind Discovery Edition, you install Commerce Module.

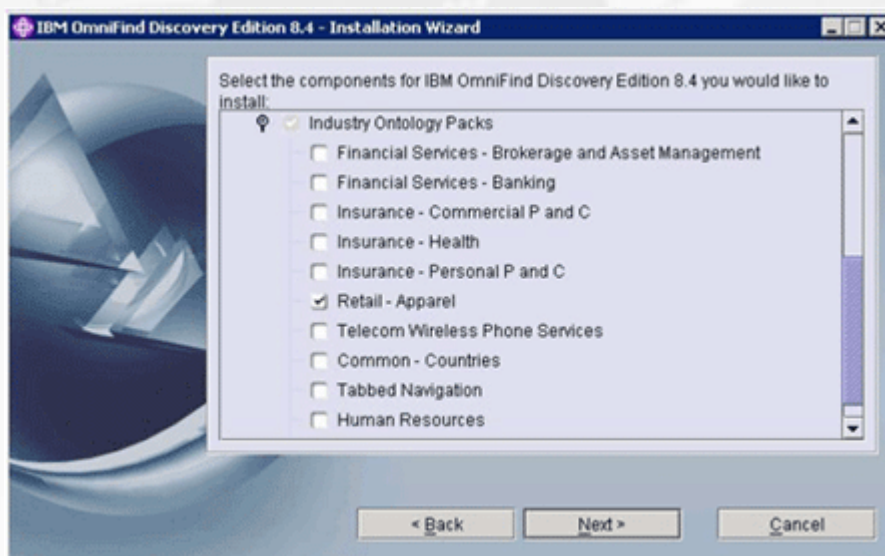
### Commerce user interface templates

The Commerce Module provides you with several layouts for the user interface, as well as business rules and a default set of features designed for commerce sites. It allows you to make use of industry best practices and reduce your deployment time.

The Commerce Module includes the following user interface templates and best practice configurations components:

- User interface layouts (available in ASP.NET and JSP versions)
- A pre-defined collection (named "id")
- A pre-defined content source (named "Database tables")
- Pre-defined portlets (each containing one business rule)

**Note:** To further enhance your commerce site, the Apparel and Consumer Electronics Industry Ontology Packs provide out-of-the-box understanding of industry-specific terms and acronyms used in the apparel and consumer electronics industries. The ontologies improve system understanding of user terminology by adding lists of terms with synonyms and other related terms. For example, if a user enters a query for "Bathing Suit", the system will also search for "Swim Trunks" and "Swimsuit." For the Industry Ontology Packs you select the Retail-Apparel during Installation, see the following figure.





## User interface layouts

The Commerce Module provides four layouts that can be used on your commerce site:

- I. **Flat List** The Flat List layout displays a list of products, each displayed in a separate row. The image, brand, name, and price features, as well as an "Add to Cart" icon, are displayed by default for each product.
- II. **Three-Across** The Three-Across layout displays three products in each row. The image, brand, name, and price features, as well as an "Add to Cart" icon, are displayed by default for each product.
- III. **Departmental Preview** The Departmental Preview layout displays a list of products grouped by department. The brand, name, and price features, as well as an "Add to Cart" icon, are displayed by default for each product.
- IV. **Departmental Preview with Thumbnails** The Departmental Preview with Thumbnail layout displays three products in a row, grouped by department. The image, brand, name, and price features, as well as an "Add to Cart" icon, are displayed by default for each product.

## Commerce business rules

The Commerce Module includes the following business rules:

- **Featured Products** This business rule is triggered each time a query is run. It runs a query that searches within the main results for items designated as "Featured Products". For each search, up to four featured products are displayed in the sidebar with small images.
- **New Products** This business rule is triggered each time a query is run. It runs a query that searches within the main results for items designated as "New Products". For each search, up to two new products are displayed in the sidebar with small images.
- **Need More Help?** This business rule is triggered each time a query is run. It causes links to be displayed for users to get more information, such as the store locations, return policy, and contact information.

Note: The Need More Help business rule needs to be configured with the desired URLs for store locations, return policy, and contact information.

The OmniFind Discovery Edition search engine has a unique ability to understand Web site users' intent and the application context of user requests. It helps Web site users move beyond ordinary searching to find the products or information that they want.

By understanding what users mean as opposed to what they say, OmniFind Discovery Edition respond to user requests with more relevant information. It understands users intent in a variety of manners. Some simple examples are by its ability to automatically correct for poor spelling and incorporating concepts such as synonyms and broader or narrower relationships. You can choose to let the system automatically correct the misspelled word and then performs the search for the users, or you can choose a Did you mean mode and let the user choose to render or not to render the interrupted meaning. You can also add your own dictionary.





OmniFind Discovery Edition leverage numeric data associated with products to augment this understanding of user intent. One such method is by understanding product traits.

### **For example**

"You can associate a price trait with the price information from your product catalog."

**OmniFind Discovery Edition** can automatically associate higher prices with user-entered search word expensive and lower prices with cheap. If user enters a search word, inexpensive,

**OmniFind Discovery Edition** understands the concept of inexpensive as a constraint on the price range and filters the results to display cheap products.

**OmniFind Discovery Edition's** ability to understand natural language offers users intuitive search experiences.

**For example**, a user can enter the following sentence in the search box:

"Do you have black boots in size 7?"

The user may ask a question regarding a service issue, "How much is the shipping and handling?" Users are free to express themselves as they normally would with other people, without the need for conforming to technical conventions or understanding Boolean operators. Users do not need to include AND or OR in their searches. If users choose to do so, it does not affect their results.

**For example**, to search for handbags of a particular brand, a shopper can enter

**"IBM handbag" instead of "IBM and handbag".**

Users can also enter punctuations and a mixture of upper and lower cases.

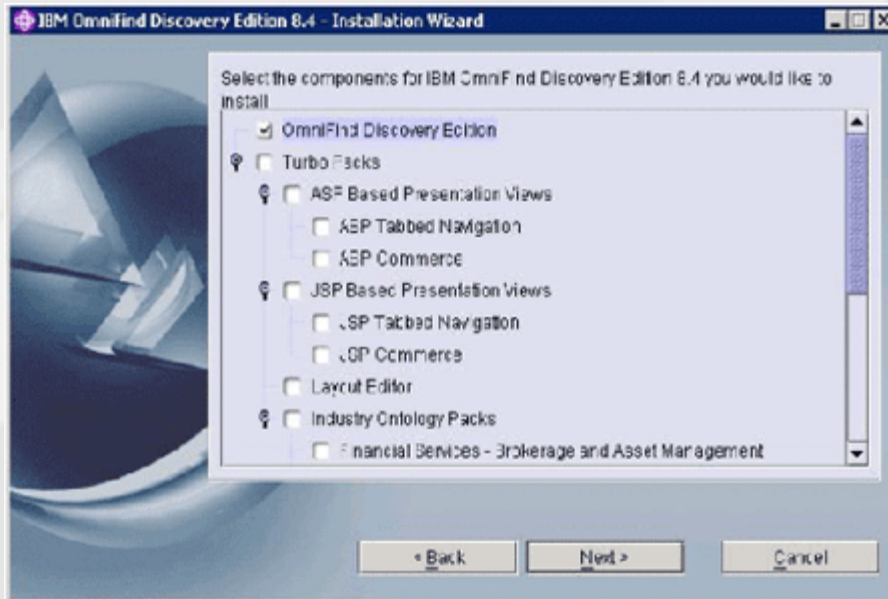
You can choose to use the rich set of OmniFind Discovery Edition's features such as voiceover, stop words, and breadcrumbs to tailor dynamic and interactive search experience.

### **Installation Steps**

**Step1:** Installing OmniFind Discovery Edition

OmniFind Enterprise Edition V8.4 for Windows Multilingual (C95GAML)





Note: Only select OmniFind Discovery Edition if you are planning to install if for commerce module of OmniFind Discovery Edition.

**Step 2:** Install the following Fixpack  
ODE8.4 Fixpac 1

[http://www-1.ibm.com/support/docview.wss?rs=3035&context=SSPLDL&dc=D400&uid=swg24015039&loc=en\\_US&cs=UTF-8&lang=en](http://www-1.ibm.com/support/docview.wss?rs=3035&context=SSPLDL&dc=D400&uid=swg24015039&loc=en_US&cs=UTF-8&lang=en)

**Step 3:** Installing Commerce Module for OmniFind Discovery Edition

Commerce Module for Omnifind Discovery V8.4 AIX 5LV5 (Sun Microsystems) Windows 2000 Windows Server 2003 Red Hat Linux Suse Linux English (C96I2EN)

**Step 4:** Change the default.prp file from deployment\wcs\wcs\ as follows

- a) Change WCS\_HOME as Commerce Application Server Installation Path.
- b) Change WCS\_CONNECT.
- c) Change WCS\_STORES\_TO\_INDEX ['StoreName']
- d) Change Language.

NOTE: Set up the following Environment Variables before running the script.

PATH = jvm.dll path of websphere commerce application.

IPHRASE\_UNICODE = 1

IPHRASE\_HOME = Path of ODE 8.4 Installed Directory.

**Step 5:** Test to ensure your database connection strings are configured properly:

```
python\python -O deployment\wcs\wcs\lib\wcs\tools\TestDB.py -p deployment\wcs\wcs\default.prp
```

**Step 6:** Generate the initial OmniFind Discovery Edition search indexes.

```
a) bin\iphrase build -p deployment\wcs\wcs\default.prp -setProperty
```





"BUILD\_MODE generateFeatures"

b) bin\iphrase build -p deployment\wcs\wcs\default.prp -clean

NOTE: if above script does not work, type it instead of copy and past.

**Step 7:** Install the OmniFind Discovery Edition layouts.

```
python\python deployment\wcs\wcs\lib\wcs\tools\InstallSearchUI.py -p
```

```
deployment\wcs\wcs\default.prp
```

**Step 8:** Test the integration.

#### Resources

<http://www.redbooks.ibm.com/redpieces/pdfs/sg247358.pdf>

<http://www-306.ibm.com/software/data/enterprise-search/omnifind-discovery/>

<http://www.wikipedia.org>

