IBM

WebSphere Commerce V7 Feature Pack 2

Search tools overview

WebSphere software

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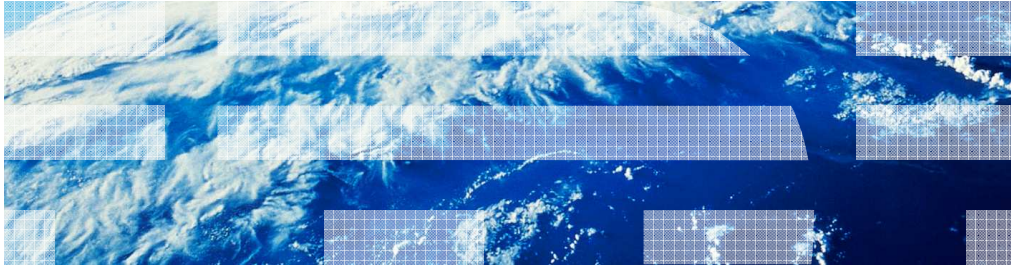
This presentation provides an overview of the business user tools for the WebSphere Commerce search solution in Version 7 Feature Pack 2.

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- Overview
- Search term associations
- Search rules
- Search-based marketing

Search tools overview

This presentation begins with an overview of the WebSphere Commerce search tools and then examines each area in more detail. The tools discussed in this presentation allow you to define search term associations, search rules and search-based marketing activities. This presentation concludes with some tips on testing your changes.

Search management tools

- Search Term Association Tool
  - Synonym terms
  - Replacement terms
  - Landing Pages

- Search Marketing Tool
  - Product Promotions
  - Cross Sell and Up Sell
  - Search Results Ranking and Sorting

Catalog Manager

Marketing Manager

Shoppers

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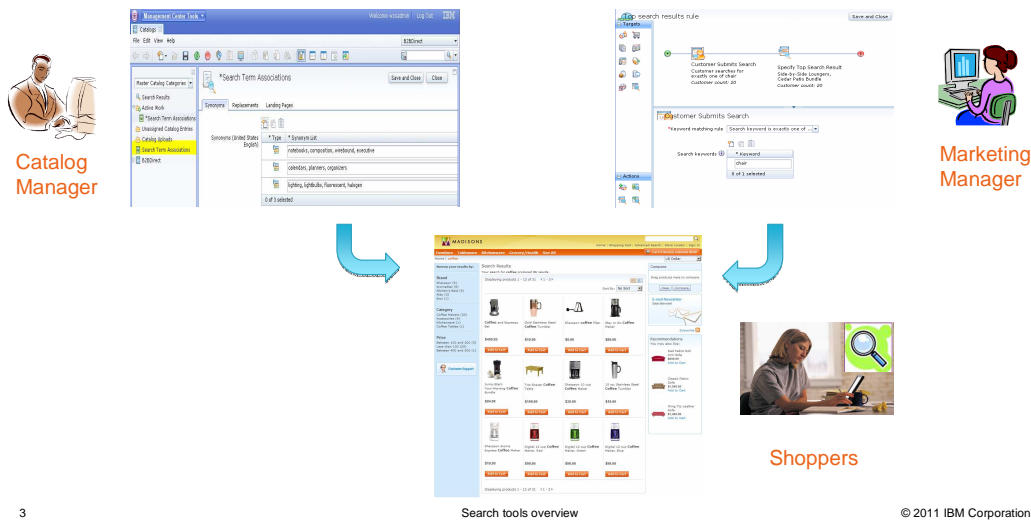
The WebSphere Commerce integrated search solution provides control over search results through a new set of search management tools. The search management tools are split into two groups. The search term association tool is part of the Management Center Catalogs tool. This tool allows catalog managers to define synonyms and replacement terms for common search terms. By adjusting search terms in this way, you help to ensure shoppers find the products they are looking for even if they use different terms to describe a product than your store catalog does. Landing pages allow you to bypass the search results page and redirect shoppers to a specific store page based on their search term. Landing pages can be used to direct shoppers to store information such as address or shipping information. They can also be used to redirect to brand or category specific pages within the store.

The second group of integrated search tools are part of the Management Center Marketing tool. Using these tools, Marketing Managers can define business rules that influence the content and ranking of search results within the store. For example, you can define rules that rank products from certain categories or manufacturers higher in the search results. You can also set specific products to always be the top results. Beyond impacting the search results themselves, you can also use search results and behavior to drive other marketing activities such as displaying cross sell recommendations based on current search results.

The combination of search term associations and search marketing rules determine the final search results displayed to the shopper.

Section

Search term associations

Search tools overview

This section covers the search term association tools for defining synonyms, replacement terms and landing pages.

Search term associations

- Defined in Catalogs tool
- Allow business users to modify search query and impact results set
- Association types
  – Synonyms (bidirectional)
  – Replacements (unidirectional)
  – Landing pages

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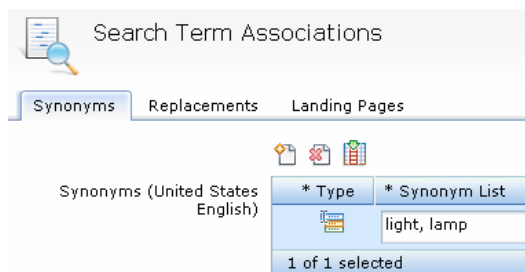
Search term associations are simple rules you can define to assist shoppers in finding the products they are looking for. These rules are created using the Management Center Catalogs tool. A screen capture of the search term association properties pane is shown on the slide. There are three types of search term associations. Synonyms are bidirectional associations. You can define two or more words that have the same meaning in your catalog and a search on any individual term will show the shopper results for all the terms. Replacement terms are similar but are unidirectional. With replacement terms you have the option to include the original term in the search along with the additional terms you define. Alternatively, the original term can be dropped from the search and only the replacing terms are used. Landing pages work differently than the other types of associations. With a landing page, no search query is ever run. If the shopper searches on a term you have defined a landing page for, they are automatically redirected to that specific page. For example, searches for a brand name can be redirected to a page just for that brand.

Search landing page

Video to learn more about products

Related information

Shop by brands

Product recommendation

Shop by features

Promotional sales

Search tools overview

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This screen capture shows a sample category landing page. When a shopper searches for coffeemakers they are redirected to this page instead of being shown the search results page. From here, shoppers can access videos and related information about coffeemakers. They are also offered multiple ways to browse for products to find what they are looking for. The search term coffeemaker is linked to this landing page using the search term association tool.

Section

Search rules

Search tools overview

This section covers how to create search rules to control the search results displayed in the storefront.

Search rule builder overview

- Addition to Management Center Marketing tool
- Define business rules to control search results
  - Change result ordering and ranking
  - Define top search results
  - Modify search criteria
  - Apply precision marketing targets
- Graphical builder similar to web and dialog activities

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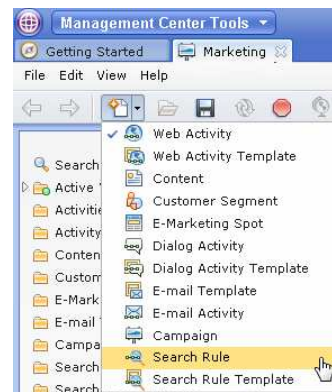
Search rules are a new concept in feature pack 2. These business rules allow you to tailor the search results displayed in the storefront based on a variety of different criteria. Search rules are defined using the Management Center Marketing tool. They are composed using a graphical builder similar to the existing web and dialog activity builders. Search rules also borrow the concept of precision marketing targets from web and dialog activities. Many of the same targeting criteria, such as membership in a customer segment, can be used in building search rules. The output of a search rule is a modification to the search results the shopper sees in the store.

Search rule builder tool

Reuse existing targets

Search-specific trigger

*New Search Rule
Specify a value for the **Name** field.

Targets

Customer Submits Search

Search-specific actions

Search Rule

General Properties

*Name

Description   Influence search resul

Actions

Branching

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This slide shows a screen capture of the search rule builder. The next few slides examine the elements of a search rule in more detail. The Customer Submits Search trigger is covered first followed by the targets and search-specific actions.

Customer Submits Search trigger

- Matching rule
  - Search keyword or phrase can be anything
  - Search keyword or phrase is exactly one of the following values
  - Search phrase starts with one of the following words
  - Search phrase contains one of the following words
  - Search phrase ends with one of the following words

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Search rules have a single trigger called Customer Submits Search. You use this trigger to define which search keywords will cause the search rule to be applied. There are five options for defining the matching rule and they are listed in the slide. The first option is the search keyword or phrase can be anything. When this option is selected no keywords are supplied and the rule is applied to all customer searches within the store. The remaining four options allow you to define where in the shopper's search phrase the keyword must occur. These options are exact match, starts with, contains and ends with.

Search rule targets

- Customer Segment
- Shopping Cart
- Purchase History
- Catalog Browsing Behavior
- Online Behavior
- External Site Referral
- Social Commerce Participation
- Day and Time
- Search Criteria and Result

Search tools overview

Search rules can include many of the same precision marketing targets as web activities. The available targets are included in the palette in the activity builder and listed on this slide. Search Criteria and Result is a new target in feature pack 2 and is discussed in the next section. Examples and guidelines for using each target can be found in the WebSphere Commerce Information Center.

Search rule actions

- Add To or Remove From Customer Segment
- Change Search Result Order
  - Adjust how results are ranked or sorted
  - Apply one or more search criteria with ranking boost factor
- Specify Top Search Result
  - Select one or more products to display at the top of the result set
- Add or Replace Search Criteria
  - Add one or more filters to the search
  - Replace the search term with a new term
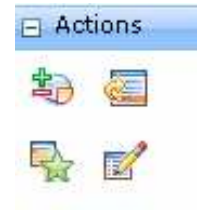
Options for ranking or adding search criteria
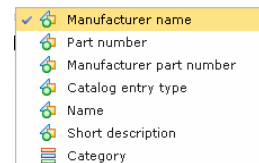
The search rule actions are the part of the search rule that specify how the results will change. One exception to this is the first action listed on this slide which uses a search rule to modify customer segment membership.

The Add To or Remove From Customer Segment does not impact search results directly but can be used to group shoppers into customer segments based on their searching behavior.

The Change Search Result Order action allows you to rank or order results according to criteria you define such as manufacturer name or category. The ranking criteria options are shown on this slide. Rankings criteria have an associated boost factor where you define how much extra emphasis that filter should have on the overall results.

Next is the Specify Top Search Result action. This option allows you to set one or more products to always display at the top. The products do not have to be naturally occurring in the result set to be displayed.

The Add or Replace Search Criteria action shares the same criteria options as the Change Search Result Order action. In this case you can add the criteria as additional constraints on a shopper's search. For example, instead of ranking results from one category higher than another, you can set a search criteria so only results from that category are returned.

The three search rule actions for adjusting results are shown in more detail on the next three slides.

The Change Search Result Order action has two options, 'change how initial search results are ranked' and 'change how initial search results are sorted'. Changing the ranking allows you to boost search results with certain criteria higher in the overall rankings. The available criteria options were shown on the previous slide. Ranking adjusts only the search results that match the specified criteria. There is no impact to the ordering of other search results. To order the full set of results, you can select the second option, change how initial search results are sorted. You can order results by manufacturer name, product name or price as shown in the screen capture on the slide.
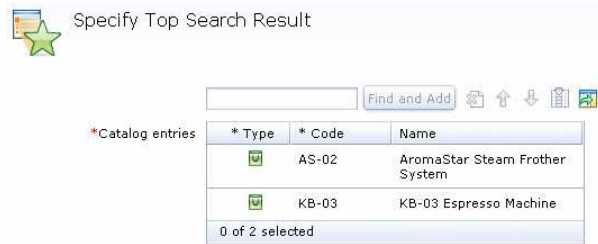
The Specify Top Search Result action allows you to add one or more catalog entries to the top of the search results. These catalog entries do not need to be present in the result set.

Add or Replace Search Criteria

The Add or Replace Search Criteria action also has two options. If you select the 'Add search criteria' option, you can define one or more filters to be added on to the existing search query. This allows you to narrow the final result set. The search filters were shown on an earlier slide. If you select the 'Replace search criteria' option, you can replace the search keyword entered by the shopper with a keyword you specify.
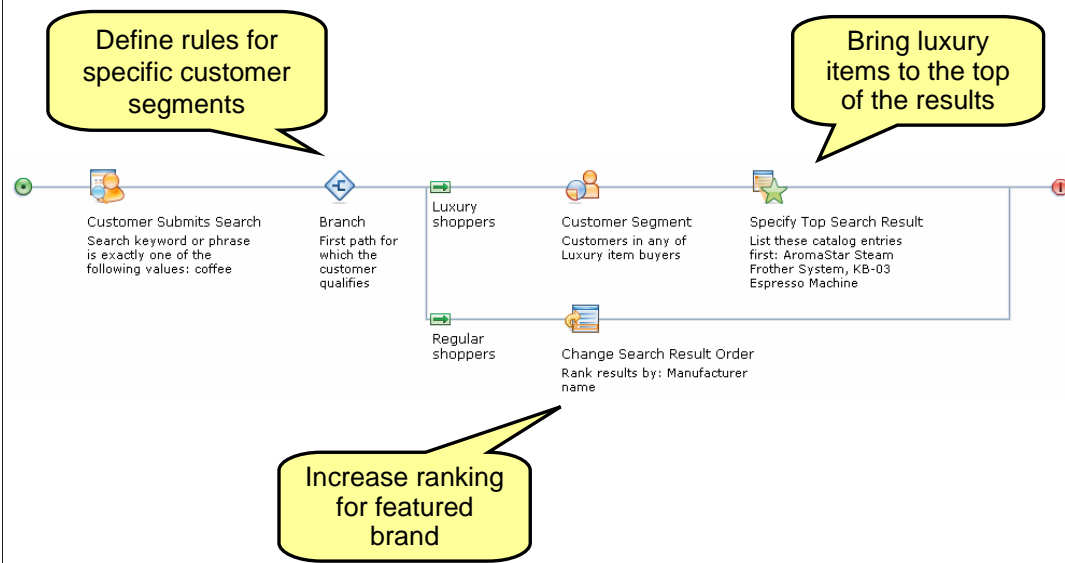
On this slide, you see an example of a complete search rule. In this example, the search rankings are adjusted based on customer group. When shoppers search for the term 'coffee', this search rule is triggered. Shoppers who are members of the luxury item buyers group will have deluxe coffee makers displayed at the top of their search results. For all other shoppers, products for the currently featured brand are ranked higher than other results. You can watch the search rules demonstration to see how this rule is built.

Section

Search-based marketing

Search tools overview

This section covers enhancements to precision marketing to support search-based marketing activities.

Precision marketing enhancements

- New dialog activity trigger
  – Customer Searches

- New web activity / search rule target
  – Search Criteria and Result

- Updated targets
  – Current Page
  – Online Behavior

- Updated action
  – Recommend Catalog Entry

Search tools overview

Feature pack 2 includes some enhancements to precision marketing capabilities to take advantage of the WebSphere Commerce search features. The new 'Customer Searches' trigger can match one or more shopper search terms including synonyms to trigger a dialog activity. The Search Criteria and Result target is a new web activity and search rule target that allows you to define either specific criteria in a shopper's search query or specific products in their search results. The existing Current Page and Online Behavior targets have been updated to support synonyms. You can set the target using one search term and any synonyms defined for that term will also match the target. The final precision marketing enhancement is to the Recommend Catalog Entry action. This action now allows you to choose between static recommendations you define or recommendations based on running a search query. You can apply search filters and sort options to the query to produce specific results. The next few slides will look at these enhancements in more detail.

To trigger a dialog activity based on customer search behavior, specify a keyword matching rule and one or more keywords. There are five options for the keyword matching rule. They are: any keyword, exact match, starts with, contains and ends with. You can also match any synonyms of the specified keywords. Similar to other dialog activity triggers, you can define how often a keyword much be searched and over what period of time in order to activate the trigger.

Search Criteria and Result target

Search Criteria And Result

Target customers ⓘ ⦿ Whose search results contain the following catalog entries
○ Whose search results do not contain the following catalog entries
○ Who used the following search criteria
○ Who did not use the following search criteria

AS-02 [Find and Add]

*Catalog entries

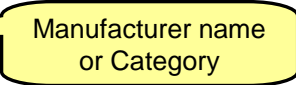| * Type	* Code	Name
☑	AS-02	AromaStar Steam Frother System
0 of 1 selected		

At the top of search result ⓘ ☐

Target customers ⓘ ○ Whose search results contain the following catalog entries
○ Whose search results do not contain the following catalog entries
⦿ Who used the following search criteria
○ Who did not use the following search criteria

Manufacturer name or Category

*Search criteria ⓘ

* Name	* Matching rule	* Value
Category	Matches ▾	Outdoor
0 of 1 selected		

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The Search Criteria and Result target has four options, two for search criteria and two for search results. The top of the slide shows an example of a search result target. You specify one or more catalog entries that must exist in the search results for the target to evaluate to true. Alternatively, you can specify catalog entries that do not exist in the result set.

The bottom of the slide shows an example of a search criteria target. You select this option to target search requests that specify a particular manufacturer name or category. The other search criteria option is to target search requests that do not specify a manufacturer name or category.

Current Page and Online Behavior targets

Current Page

*Customer behavior ⓘ [Customer is viewing search results ▼]

Target customers ⓘ ⦿ Who are searching for any of the following keywords
○ Who are not searching for any of the following keywords

*Keyword matching rule [Search keyword is exactly one of ... ▼]

*Search keywords ⓘ
* Keyword
light
1 of 1 selected

Use synonyms ⓘ ☑

New option **New option**

Online Behavior

Online behavior criteria ⓘ [Searched keywords ▼]

Target customers ⓘ ⦿ Who searched for any of the following keywo
○ Who searched for all of the following keywor
○ Who did not search for any of the following k

Keyword matching rule [Search keyword is exactly one of ... ▼]

Use synonyms ⓘ ☑

*Search keywords ⓘ
* Keyword
light
0 of 1 selected

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The Current Page and Online Behavior targets have been updated with a 'Use synonyms' option. When this check box is selected, the target will match the specified search keyword and any synonyms defined for that keyword.

The Recommend Catalog Entry action has three new recommendation methods that use WebSphere Commerce search to recommend products. You can use search to recommend products based on a keyword you specify, the keyword specified by the shopper or just search filters. The screen capture on this slide shows the "User search to recommend catalog entries found using a specified keyword". All three options allow you to create one or more search filters and one or more sort criteria to produce very precise recommendations. The available search filters and sort criteria are shown in the call outs on the slide. You can also set a maximum number of search results to return to the e-Marketing Spot.

Section

Testing your changes

Search tools overview

This section covers tips for testing your changes using the store preview tool.

Launch store preview

Store preview

Store Preview Options

What store URL do you want to preview? (Default is store home page)

Store Address
http://localhost/webapp/wcs/stores/servlet/StoreView?storeId=10051

Store Alias
Madisons

▷ **Options**

Select store and options

Launch Store Preview   Cancel

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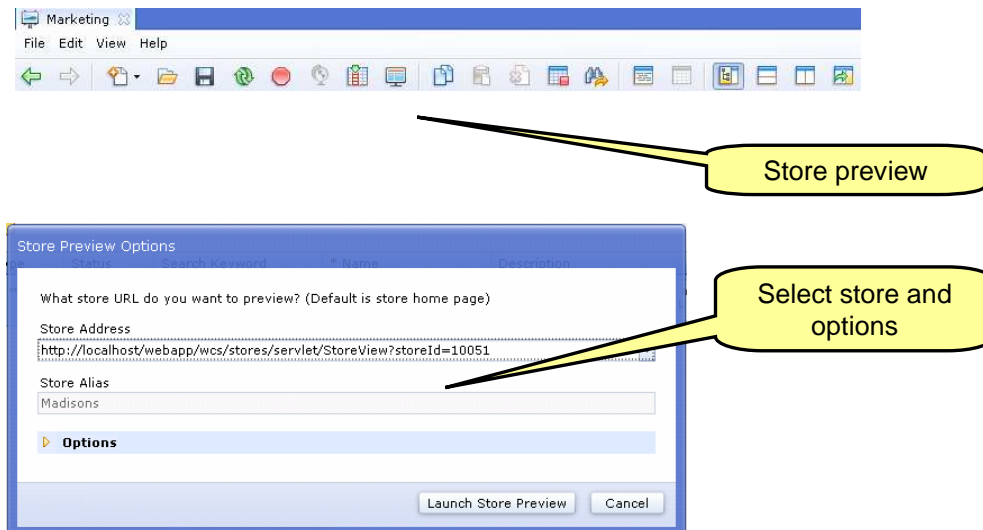
You can test your new search term associations, search rules and search-based marketing activities using the Management Center store preview tool. Select the store preview button from the toolbar. The store you are currently working in is selected by default although you can choose to preview any store you have access to. You can also select a variety of store preview options such as start date and time. A description of the store preview options can be found in the WebSphere Commerce Information Center.

Check index status

If you, or another team member, have made changes in Management Center that affect the product catalog, the search index needs to be updated before the change is visible in the store. When you perform a search in store preview, you see a status message informing you about the current status of the search index. The three possible status messages are shown on the slide. When search indexing is idle the index is up to date. If search indexing is in progress, small changes were made to the catalog and they are currently being applied to the index. When this re-indexing is complete the status will return to idle and the index is up to date. If you see the full re-indexing has been scheduled message then significant changes were made to the catalog or a workspace task was committed to the production ready schema. In this case it might be some time before the full index is rebuilt. You can proceed with testing your changes however the results might change after the index is rebuilt. This depends on what changes were made to the catalog.

Preview e-Marketing Spots

Using store preview, you can access additional information about your search rules and web activities by turning on e-Marketing Spot highlighting. You turn this option on by clicking the Show Marketing Spots button in the store preview details area at the top of your browser window. Once e-Marketing Spot highlighting is enabled, you see boxes drawn around all the search results and all e-Marketing Spots on the page. The search results are highlighted in green and the e-Marketing Spots are highlighted in red. Select the information icon to view the details of the search rule or web activity that produced the results.

This slide shows an example of the details page for the search results area. The top half of the screen provides information about each path of the search rule that was evaluated. The center section contains a reminder of the current state of the index. At the bottom, you can view the search query expression. This area is collapsed by default but can be expanded if you want to view the exact search query that was run.

Summary

- Overview
- Search term associations
- Search rules
- Search-based marketing

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This presentation began with an overview of the WebSphere Commerce search tools and then examined each area in more detail. The tools discussed in this presentation allow you to define search term associations, search rules and search-based marketing activities. This presentation concluded with some tips on testing your changes.

References

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  – http://publib.boulder.ibm.com/infocenter/wchelp/v7r0m0/topic/com.ibm.commerce.management-center.doc/tasks/tsbsearchsupert.htm
- Trigger: Customer Searches
  – http://publib.boulder.ibm.com/infocenter/wchelp/v7r0m0/topic/com.ibm.commerce.management-center.doc/concepts/csbtricustsearch.htm
- Target: Search Criteria and Result
  – http://publib.boulder.ibm.com/infocenter/wchelp/v7r0m0/topic/com.ibm.commerce.management-center.doc/concepts/csbsearchtarcriteria.htm
- Action: Recommend Catalog Entry
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