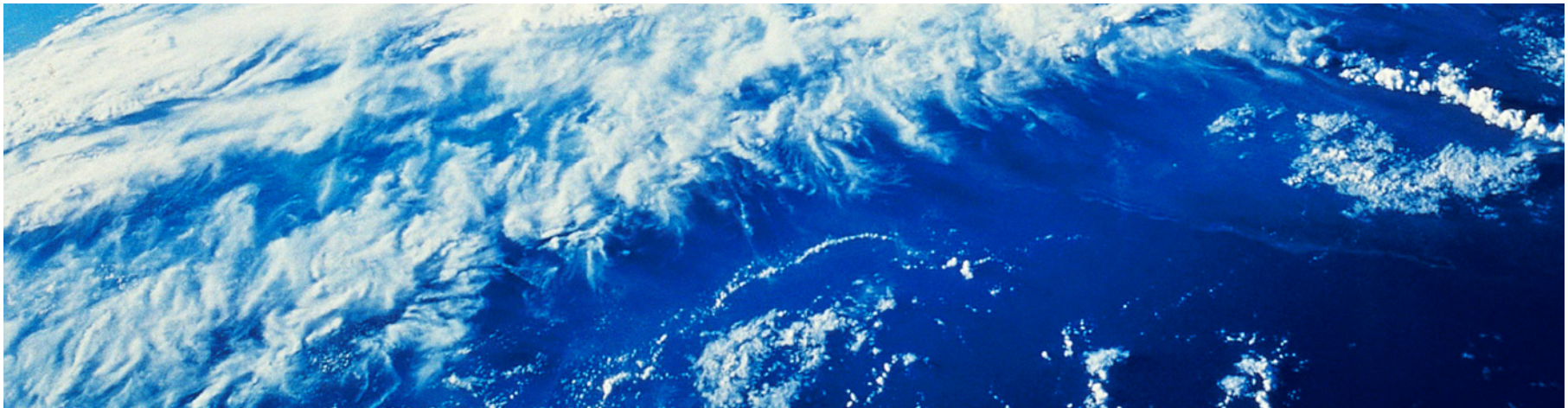


IBM WebSphere Commerce V7 FEP8

Sales Catalog Enhancements

- Sales Category Enhancements
- Rule-Based Sales Category



Agenda

- Introduction
- Demo
- Assumptions/Limitations
 - How are we envisioning the feature to be used and maintained by the client?
 - Are there any non-obvious limitations?
 - This includes functionality that was not scoped
 - Functions that have to be done by IT vs. LOB user, etc.
- Design/Adoption
 - how to adopt this new feature for existing implementations
- Customization
 - What are typical customization scenarios
- Troubleshooting
 - Common issues and how to PD, trace strings, what to look out for, etc.

Introduction

Category & Product Managers are having a difficult time *defining* their sales catalogs


- They need a more efficient method of *finding* catalog entries and *assigning* them to a sales category
- In some cases, they do not want to statically assign catalog entries but have them *discovered* through their properties & attributes and *automatically* assigned to a sales category

Integrated WebSphere Commerce Search into the Management Center

Demo

The sales category has a new "Assign" tab




- Define criteria to perform searches to find the catalog entries you wish to assign to this category
- Multiple searches can be performed to assign catalog entries to this category.


Sales Category
Save and Preview Save Close




Manage Category **Assign** Search Engine Optimization Associated Assets Versions References

Search conditions






Use attribute dictionary attributes, catalog entry properties, and categories to define search filters for finding catalog entries to assign to this category. Click **Find catalog entries** to display the search results in the Utilities view. Drag the catalog entries from the Utilities view into the **Assigned catalog entries** table to assign the catalog entries to this category. You can perform multiple searches to find catalog entries.


Search filters ⓘ

* Type	* Name	* Matching rule	* Value
	Manufacturer Name	Matches one of the follc ...	Gusso
	Category	Matches the following v ...	Dresses
	swatchcolor	Matches the following v ...	Beige, Black, Blue, Brown, Dark Blue, Gold, Gray, Light Blue

1 of 3 selected

Sort criteria ⓘ

* Type	* Order by	* Sequence
	Manufacturer Name	Descending

1 of 1 selected

Exclude already assigned catalog entries from results ⓘ

☐

Find catalog entries

Sales Category: Assign Tab

- Enter the criteria and click the "Find catalog entries" button to see the search results. The list will be ordered by sort criteria if defined.
- Search results are displayed in the utility pane on the "Find" tab. You can view more columns on the utility pane by right clicking on the table header.

Sales Category [Save and Preview] [Save] [Close]

Manage Category | **Assign** | Search Engine Optimization | Associated Assets | Versions | References

Search conditions

Use attribute dictionary attributes, catalog entry properties, and categories to define search filters for finding catalog entries to assign to this category. Click **Find catalog entries** to display the search results in the Utilities view. Drag the catalog entries from the Utilities view into the **Assigned catalog entries** table to assign the catalog entries to this category. You can perform multiple searches to find catalog entries.

Search filters

Type	Name	Matching rule	Value
	Manufacturer Name	Matches one of the folk ...	Gusso
	Category	Matches the following v ...	Dresses
	swatchcolor	Matches the following v ...	Beige, Black, Blue, Brown, Dark Blue, Gold, Gray, Light Blue

1 of 3 selected

Sort criteria

Type	Order by	Sequence
	Manufacturer Name	Descending

1 of 1 selected

Exclude already assigned catalog entries from results ☐

Find catalog entries

Assign catalog entries to category

Find | Browse | Clipboard

All Catalog Entries including SKUs

The system found 8 objects.

Type	Manufacturer Name	Thumbnail	Name
	Gusso		Gusso Cat Dress
	Gusso		Gusso Ple Dress
	Gusso		Gusso Silk
	Gusso		Gusso Sle Dress
	Gusso		Gusso Cat Dress

Sales Category: Assign Tab

- Drag catalog entries you wish to assign to this category from the utility pane to the "Assigned Catalog Entries" grid.
- The sequence can be defined in this grid.

The screenshot displays the 'Assign' tab in the IBM Sales Category interface. The main window shows a table of assigned catalog entries. A utility pane on the right lists available catalog entries. A red arrow points from the 'Gusso Pleated Sleeveless Dress' entry in the utility pane to the 'Gusso Pleated Sleeveless Dress' entry in the assigned catalog entries table.

Type	Code	Name	Short Description	Thumbnail	Sequence
<input checked="" type="checkbox"/>	AuroraWMDRS-10	Gusso Casual Strapless Dress	Strapless slip dress with layered skirt		3.0
<input checked="" type="checkbox"/>	AuroraWMDRS-16	Gusso Pleated Sleeveless Dress	Sleeveless slip dress with satin hem and flared body		1.0
<input checked="" type="checkbox"/>	AuroraWMDRS-20	Gusso Silk Evening Dress	Sleeveless evening dress with applique and sequined work		2.0

1 of 3 selected

Utility Pane:

All Catalog Entries including SKUs

The system found 8 objects.

Type	Name	Thumbnail	Man
<input checked="" type="checkbox"/>	Gusso Casual Strapless Dress		Gus
<input checked="" type="checkbox"/>	Gusso Pleated Sleeveless Dress		Gus
<input checked="" type="checkbox"/>	Gusso Silk Evening Dress		Gus
<input checked="" type="checkbox"/>	Gusso Sleeveless Sequined Dress		Gus

- Catalog entries can still be assigned the same ways as before using this new "Assigned Catalog Entries" grid. (ie. from the "Browse" filter & Clipboard)

The screenshot displays the 'Assign' tab in the IBM Commerce Manager interface. The main area shows a table of catalog entries assigned to a category. The table has columns for Type, Code, Name, Short Description, Thumbnail, and Sequence. The entries are as follows:

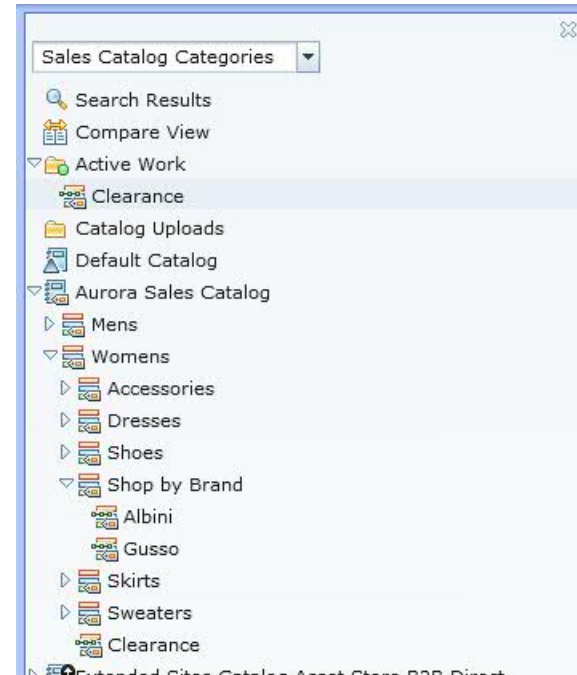
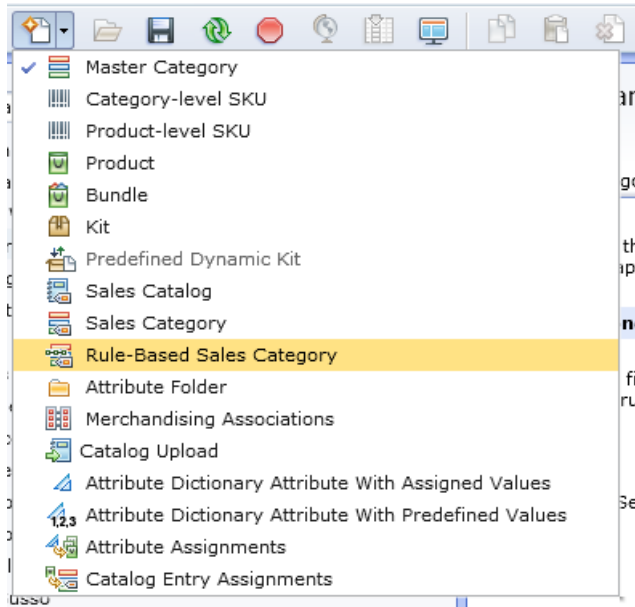
Type	Code	Name	Short Description	Thumbnail	Sequence
<input checked="" type="checkbox"/>	AuroraWMDRS-10	Gusso Casual Strapless Dress	Strapless slip dress with layered skirt		3.0
<input checked="" type="checkbox"/>	AuroraWMDRS-16	Gusso Pleated Sleeveless Dress	Sleeveless slip dress with satin hem and flared body		1.0
<input checked="" type="checkbox"/>	AuroraWMDRS-20	Gusso Silk Evening Dress	Sleeveless evening dress with applique and sequined work		2.0
<input checked="" type="checkbox"/>	WAC007_0701	Luigi Valenti Woollen Fedora Hat	Blue woollen fedora hat		4.0
<input checked="" type="checkbox"/>	WAC007_0705	Versatil Wide-Brimmed Gray Hat	Wide-brimmed gray hat with satin headband		0.0

At the bottom left, it says '1 of 5 selected'. On the right side, there is a pane titled 'Women Accessories' which shows a list of items with thumbnails. The items are:

- Luigi Valenti Woollen Fedora Hat
- Albini Summer Hat
- Versatil Wide-Brimmed Gray Hat
- Hermitage Purple Cloche


At the bottom of this pane, it says '2 of 17 selected'. A red box at the top right of the interface highlights the 'Find', 'Browse', and 'Clipboard' buttons. Red arrows point from the 'Luigi Valenti Woollen Fedora Hat' and 'Versatil Wide-Brimmed Gray Hat' entries in the main grid to the 'Browse' button in the right-hand pane.

- A new category object is introduced to the management center called "Rule-Based Sales Category"
- Exists in the sales catalog hierarchy as a type of sales category
- Leaf-only in V7FEP8



Rule-Based Sales Category: Rule Tab




- A new category object is introduced to the management center called "Rule-Based Sales Category"
- It has a "Rule" tab where you can define catalog entry criteria that will define what catalog entries will automatically get populated into this category
- Sample catalog entries that will result from the rule can be tested by clicking the "Find sample catalog entries" button. This can be useful to test the rule before saving the category






*Clearance
Save and Preview
Save
Close




Manage Category
Rule
Search Engine Optimization
Associated Assets



▼ Search conditions for finding catalog entries to automatically assign to this category


Use search filters, sort criteria, and other options to create a rule for automatically assigning catalog entries to this category. When you click **Save** or the rule is reapplied, the catalog entries that match this rule are automatically assigned to this category. After reloading the properties view, the assigned catalog entries will display in the **Assigned catalog entries** table.

Search filters ⓘ	* Type	* Name	* Matching rule	* Value
		swatchcolor	Matches the following v. ...	Black, Blue, Brown 
		Manufacturer Name	Matches one of the follc ...	Albini, Gusso, Versatil 
0 of 2 selected				

Sort criteria ⓘ	* Type	* Order by	* Sequence
		Manufacturer Name	Ascending
		Offer Price	Ascending
0 of 2 selected			

Maximum number of catalog entries to assign to category ⓘ 

Maximum

Find sample catalog entries ⓘ

Rule-Based Sales Category: Add specific catalog entries

- Optionally add catalog entries to "always show" before or after the rule results.
- These catalog entries can be sequenced by using the arrows in the grid.

*Clearance

Save and Preview Save Close

Manage Category Rule Search Engine Optimization Associated Assets



Search conditions for finding catalog entries to automatically assign to this category

Add specific catalog entries to this category

Display option ☒ Before catalog entries that match the search conditions
☐ After catalog entries that match the search conditions

Find and Add

Catalog entries

* Type	Store	* Code	Name	Short Description	Thumbnail
Extended Sites Catalog Asset Store		GDA035_350	Churned unsalted butter.		
Extended Sites Catalog Asset Store		GDA035_3502	Skim Milk	Fresh and delicious fat free skimmed milk.	



1 of 2 selected

Assigned catalog entries

Master Catalog Categories

- Unassigned Catalog Entries
- Search Term Associations
- Default Catalog
- Extended Sites Catalog Asset Store
 - Apparel
 - Boys
 - Girls
 - Men
 - Women
 - Electronics
 - Grocery
 - Dairy
 - Fruit
 - Meat

Dairy

* Type	Name
	Unsalted Butter
	Skim Milk

Move this row down in the list.

Rule-Based Sales Category: Rule Evaluation Results

- Once the category has been saved, the rule will be used to assign the catalog entries to the category.
 - The relationship will be saved in the CATGPENREL table
 - Search indexing will index the new relationships the next time it is run
- This section of the properties view will show details about the assignment of catalog entries to this category and what was saved to the database









▶ Add specific catalog entries to this category

▼ Assigned catalog entries

The list of catalog entries in the Assigned catalog entries table might not be the current list of catalog entries that match the rule. Check the last time that the rule was applied to determine if you need to reapply the rule. You can reapply the rule to the category by right-clicking the category in the explorer view and selecting **Reapply Rule**.

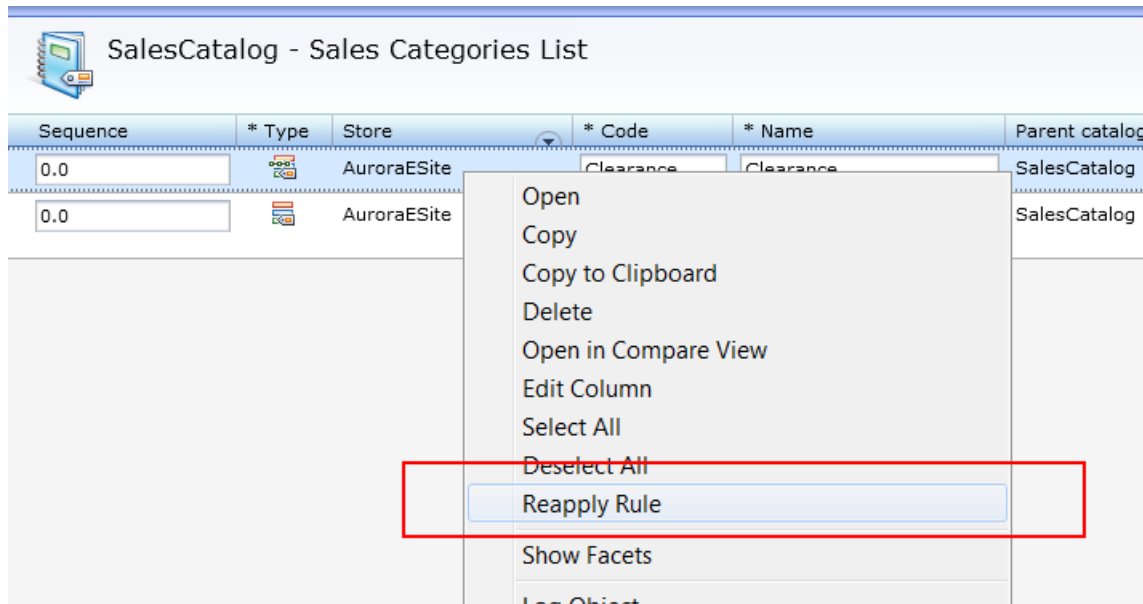
Last time that the rule was applied: 2014-09-18 01:38:17.503

Assigned catalog entries ⓘ

* Type	Store	* Code	Name	Short Description	Thumbnail
 Extended Sites Catalog Asset Store		GDA035_3501	Unsalted Butter	Churned unsalted butter.	
 Extended Sites Catalog Asset Store		GDA035_3502	Skim Milk	Fresh and delicious fat free skimmed milk.	
 Extended Sites Catalog Asset Store		AuroraWMDRS-7	Albini Sleeveless Slip Dress	V-necked casual slip dress with spaghetti straps and flowery print	
 Extended Sites Catalog Asset Store		AuroraWMDRS-9	Albini A-line Cotton Dress	Double-color casual short sleeve dress with soft collar	

- Also provided is the ability to re-apply the rule to one or more categories.

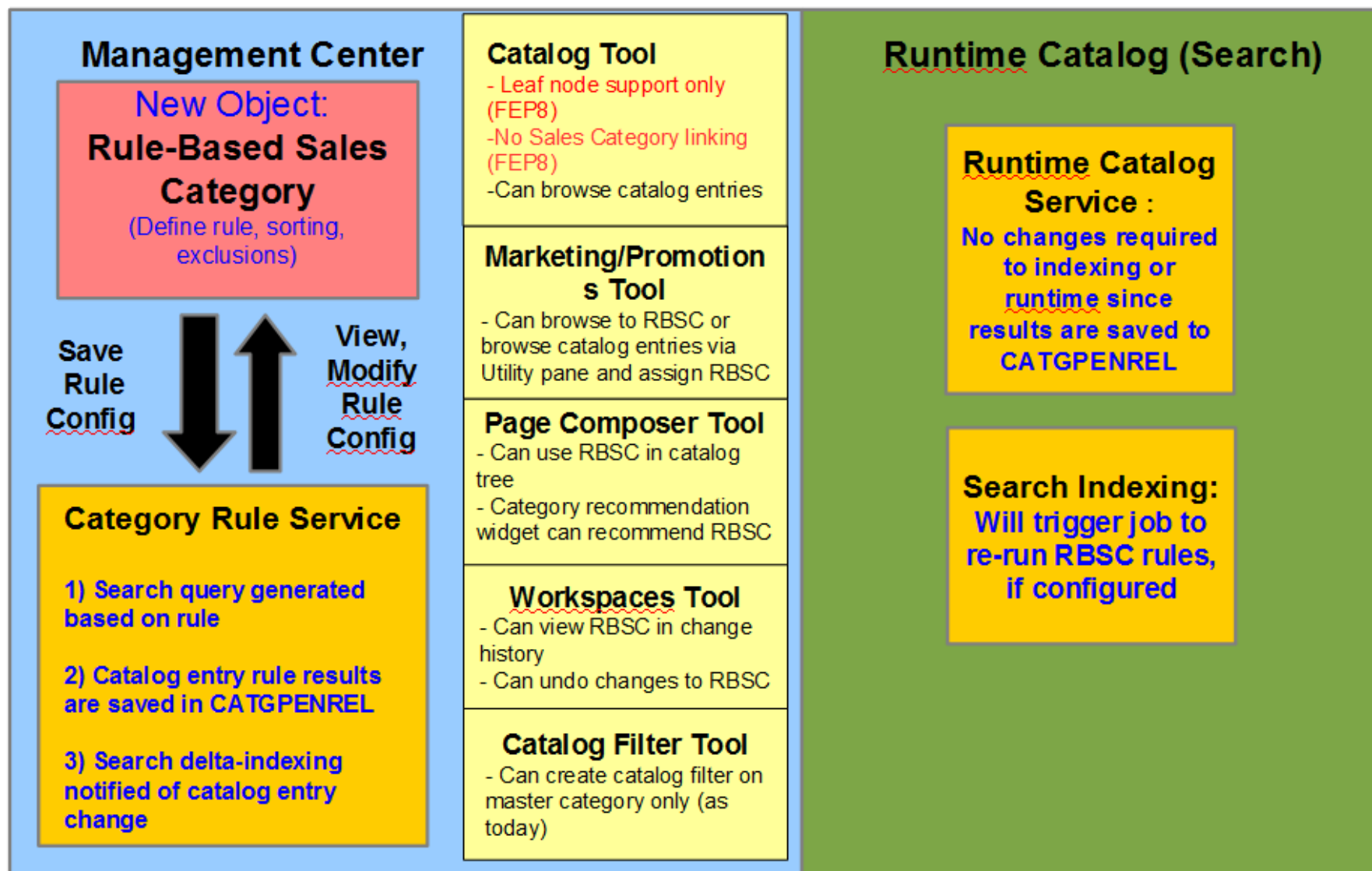
This is provided to allow the business user to see the latest catalog entry assignments



Assumptions/Limitations

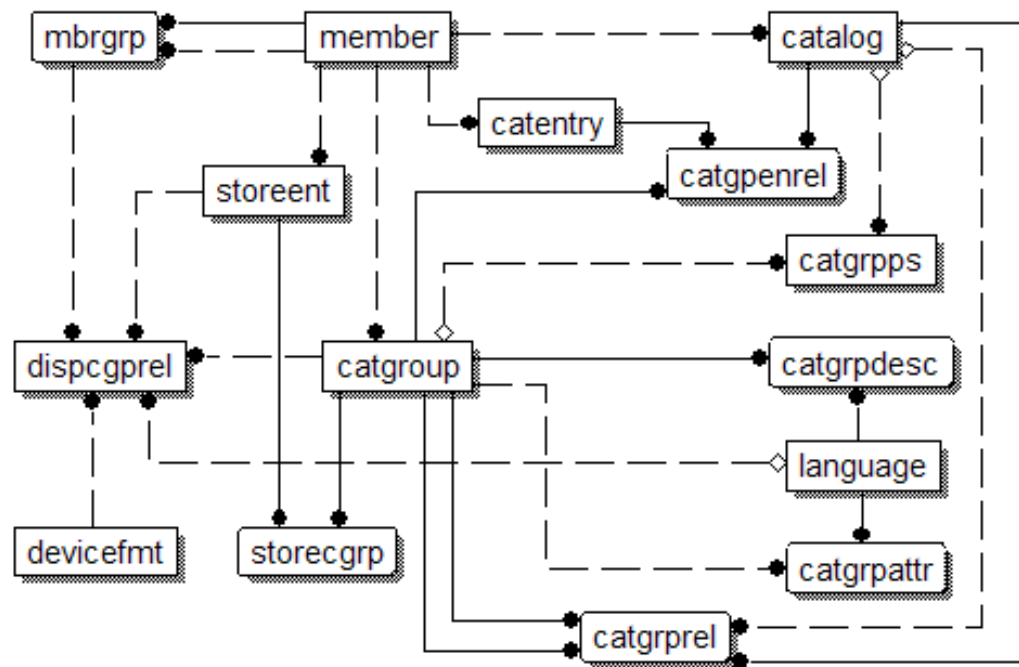
- You cannot create or place a rule-based sales category as a parent category. Rule-based sales categories can exist in a sales catalog hierarchy only as child categories.
- You cannot link a rule-based sales category to another sales category.
- You cannot evaluate and apply a rule to a category in a production environment since this process can affect performance. If you want to update a category that is in the production environment to include catalog entries that are also in your production environment, copy the data into your authoring or staging environment. Then, reapply the rule in the authoring or staging environment and propagate the updated category back to the production environment.
- You cannot use the Catalog Entries List for a rule-based sales category to manually assign catalog entries the category. You can manually assign catalog entries to a rules-based sales category within the Add specific catalog entries to this category section of the properties view Rule tab for the category.
- You must index catalog entries with WebSphere Commerce search before the catalog entries can be found and assigned to any rule-based sales category.
- See [Knowledge Center](#) for more information.

High-Level Design / Adoption



High-Level Design / Adoption

- Catalog group data model not changed.
- Rule-based categories save categories and their children into the existing catalog group schema.



High-Level Design / Adoption

1) CATGROUP table

DYNAMIC	INTEGER DEFAULT 0	This column indicates the type of dynamic category. 0 = Non-Dynamic Category 1 = Rule Based Category
---------	-------------------	------------------------------------------------------------------------------------------------------------

2) CATGRPRULE table:

- A new table is introduced to store information about and evaluate the category rule.

Column Description(s):

Name	Type	Description
CATGROUP_ID	BIGINT NOT NULL	The catalog group ID the rule belongs to.
DMACTIVITY_ID	INTEGER NOT NULL	The web activity ID representing the rule for this category.
EVALTIME	TIMESTAMP	The last time this category had its rule evaluated.
SHOWAFTER	SMALLINT NOT NULL DEFAULT 0	This is a flag indicating that this rule was configured with some information that requires a web activity lookup. This is used for performance. <ul style="list-style-type: none"> 0: Rule requires web activity lookup. 1: Rule does not require web activity lookup.
EVALUATING	SMALLINT NOT NULL DEFAULT 0	The current status of the rule evaluation for this category: <ul style="list-style-type: none"> -1: The rule should never be evaluated for this category. This is used for the non-dynamic category. 0: Rule is currently not being evaluated for this category, and it is ready to be evaluated after the next configured interval. 1: Rule is currently being evaluated for this category 2: Rule is flagged as needing evaluation, and ignore configured time interval. -2: The last evaluation of the rule has failed.
OPTCOUNTER	SMALLINT	The optimistic concurrency control counter for the table.

Customization

Common customization scenarios will be search-based customizations

1) Adding a new SOLR field to use as a search filter in search rules

See existing tutorial from FEP6,FEP7

http://www-01.ibm.com/support/knowledgecenter/SSZLC2_7.0.0/com.ibm.commerce.developer.doc/tutorial/tsd_search6_intro.htm?lang=en

Why can I not drag an attribute dictionary attribute into my rule-based sales category?

- You must use attribute dictionary attributes that are for use in merchandising when you select to use an attribute in a search filter condition

Why can I not “Reapply Rule” on my rule-based sales category?

- By default, rule evaluation is not enabled. Ask an IT administrator to check whether the rule evaluation has been enabled. This is found in the wc-admin-component.xml file. See the configuration topic in the knowledge center.
- IT can update the configuration and refresh the “RuleBasedCategoryConfiguration” in WC Admin Console without restarting the Commerce server.

Why was the catalog entry I expected not assigned to my rule-based sales category?

- First, check the “Assigned catalog entries grid” (see slide 9) to see if the catalog entry is in the list. This list is the calculated results that were saved to the database. If the catalog entry is in this list, but not displaying in your store, then request search indexing to be run and check again later.
- If the catalog entry is not present in the “Assigned catalog entries grid”, observe the last time the rule was applied above, and then right-click on the category and “Reapply” the rule. This will re-run the category rule and if there are new catalog entries discovered, they will be added to the category.

Reload the rule-based sales category to see the latest results, or if the rule is still running. Observe the last time the rule was evaluated to see if it has been updated. If your catalog entry now displays in the list, you can launch store preview to view the catalog entry (after search indexing completes)

Why can I not create a category under my rule-based sales category?

- In FEP8, rule-based sales categories can have no child categories. If you would like to request the feature or other enhancements open an RFE (request for enhancement) through the IBM site.

Business users are reporting they “Reapply Rule” on their rule-based sales category but see nothing in their category in management center.

- Refer to the business user slide to attempt a resolution
- Ensure this is not a production instance. I.e. StagingEnable=true or WorkspaceTaskList=true is set in the file wc-server.xml. The rule evaluation is only supported on the authoring/staging instance.
- If you enabled the rule evaluation and business users are still reporting that nothing is displaying in the “assigned catalog entries list”, collect the must gather information and contact IBM.

We enabled the configuration, but the Management Center is still displaying a message saying rule evaluation is not enabled to the business users?

- Ask the business users to close Management Center and log in again. The old configuration setting was cached.

Business users are reporting they see their catalog entry in the “Assigned catalog entries grid” but do not see the catalog entries when browsing their store?

- Refer to the business user slide to attempt a resolution
- If you have re-run search indexing and business users are still reporting the issue, collect the must gather information and contact IBM.

Business users are reporting they do not see their rule-based categories often, but then they claim it shows up later?

- The rule evaluation will generate the child catalog entries for the category, and register them for indexing (ie. They get added to TI_DELTA_CATENTRY) but search indexing is not requested. The solution relies on the search indexing getting triggered by either the launching of store preview (business users should use the indexing status button on the header), requesting to “Show Facets” on the rule-based category, or waiting for the background job 'UpdateSearchIndex' to run. The 'UpdateSearchIndex' job is configured to run every 5 minutes out of the box. Consider increasing the frequency of this job for more immediate results for business users.
- Another possibility is a full search-indexing was run which rebuilt the search index to include the catalog entries for the rule-based category.

Must Gather/PD Information:

- wc-server.xml
- WC Developer or Runtime instance?
- <WC.ear>\xml\config\com.ibm.commerce.catalog-fep\wc-admin-component.xml (OOB)
- <WC.ear>\xml\config\com.ibm.commerce.catalog-ext\wc-admin-component.xml (Customer Extended)
- Table dumps of CATGRPRULE,CATGPENREL for the rule-based category with the problem
ie.
 - select * from CATGRPRULE
 - This is the table storing the rule to category association
 - select * from CATGPENREL where CATGROUP_ID=<rule-based category ID>
 - The Unique ID of the category can be seen in properties view in CMC
- Anything sitting in search indexing table waiting to be indexed?
ie.
 - select * from ti_delta_catentry
- Any errors in the Commerce Search logs?
- NIFStack

Tracing with com.ibm.commerce.catalog.*	Catalog rule evaluation service and WebSphere Commerce search
Tracing with com.ibm.commerce.marketing.commands.elements.*	Rule evaluation – Search query generation
Search must gather	The usual search must gather on the authoring server and also the search server.

References

- See [Knowledge Center](#) for more information.

http://www-01.ibm.com/support/knowledgecenter/SSZLC2_7.0.0/com.ibm.commerce.admin.doc/tasks/tpnrulebasedsalescatadmin.htm?lang=en

Thank You!

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Backup

