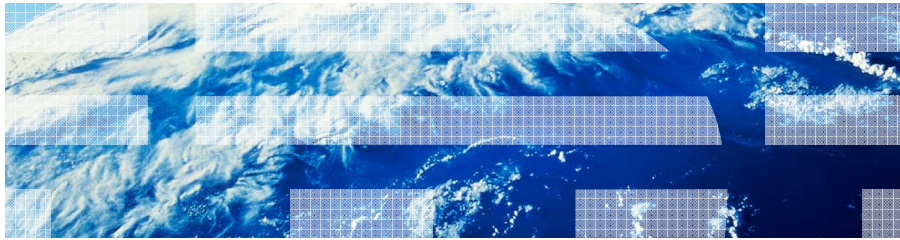WebSphere Commerce V7 Feature pack 1

Management Center updates - Promotions

This presentation provides an overview of the updates to the Management Center Promotions tool in WebSphere® Commerce V7.0 feature pack 1.

Goals

- To understand the new features available in the Management Center Promotions tool

The goal of this presentation is to introduce the Promotions features that have been added in feature pack 1. If you are not familiar with Management Center or the Promotions tool you should review that material before viewing the presentation.

Table of contents

- General promotion updates
- Unique promotion code support
- Troubleshooting

Management Center updates - Promotions

This presentation begins with a look at some general updates to the Promotions tool. An overview of the unique promotion code support follows and is the main focus of this presentation. Some troubleshooting suggestions are covered in the last section.

General promotion updates

- New exclusivity option

Combination with other ⓘ | Exclusive within the same group ▾
promotions
  - Combine with other promotions
  - Combine with other promotions - stackable
  - Exclusive within the same group
  - Exclusive within an order

*Priority ⓘ

Purchase Condition and

- 'manufacturer' added as predefined attribute name for filtering

Attributes for catalog ⓘ
entries

* Attribute Name	* Data Type	* Matching Rule	* Value
manufacturer	Text ▾	Attribute value car ... ▾	MyCompany

0 of 1 selected

When defining a promotion in Management Center, there is a new option for how a promotion can be combined with other promotions. The stackable option allows you to override certain promotion policies that otherwise limit shoppers to one promotion per item or one order-level promotion per order. When a promotion is identified as stackable, additional promotions from the same promotion group can still be applied.

The promotion attribute filter allows you to use descriptive, defining attributes and values to reduce the scope of catalog entries offered for a promotion. In feature pack 1, you can also use the manufacturer information associated with a catalog entry as an attribute filter. You use the attribute name 'manufacturer' and provide the value or values you want to include or exclude from the promotion.

Payment based promotion update

- Introduced in Management Center in V7.0
  - No sample implementation in Madisons
- Sample 'unbound payment' implementation included with Brazil starter store
  - Recalculates cart based on promotions applicable to payment method selected

Management Center updates - Promotions

Support for payment based promotions, such as 5% off when you pay with a store credit card, was added in version 7. At the time, there was no sample implementation for this feature provided in the Madisons starter store. Instructions are provided in the Information Center.

In feature pack 1, you can find a sample implementation of payment based promotions in the Brazil starter store. When a payment method is selected or changed, the order is recalculated to determine whether any promotions apply to the newly selected payment method.

Unique promotion codes

Management Center updates - Promotions

This section covers the new unique promotion code feature.

Unique promotion codes

- Multiple codes defined for a single promotion
  - Generated based on simple pattern
  - Generated based on advanced pattern
  - Imported from CSV file
- Each code can be redeemed exactly once
- Codes can be distributed using e-mail activities
  - Codes are not assigned to a specific customer

A unique promotion code is a value that can be redeemed exactly once. It cannot be shared or passed between friends or family members. Setting up a promotion with unique codes requires a much larger number of codes then when public codes are used. For this reason, unique codes are either generated or imported. Management Center supports the creation of either simple or advanced system-generated codes. If you have an external system that generates promotion codes, you can import them into Management Center as a comma separated value file. A promotion can then be created using the unique imported codes. Promotion codes can be distributed using e-mail activities but are not tied to a specific customer.

Defining a simple promotion code

Redemption method	Requires promotion codes

Promotion code ⓘ ○ Create public promotion codes
specification ● Simple system-generated unique promotion codes
 ○ Advanced system-generated unique promotion codes
 ○ Using imported promotion codes

Prefix ⓘ abc-

*Unique system-generated ⓘ 5
code length

Suffix ⓘ -10

Example codes abc-PKAWP-10
 abc-M0BJ8-10
 abc-NQJQE-10

Number of unique codes to ⓘ 10
be generated

Maximum number of ⓘ 60466176
possible unique codes

Code generation status ⓘ Promotion codes have not yet been populated

A simple promotion code is composed of a fixed prefix, a specified number of generated characters and a fixed suffix. The number of possible codes is shown along with an example of what a complete promotion code will look like.

Advanced system-generated unique promotion codes are defined using a single string that combines fixed characters and generated characters. You can find a reference of the different types of generated characters in the Information Center.

Importing codes

*codes.csv

▽ **Promotion Code Import Properties**

*CSV file ⓘ codes.csv

*Name ⓘ codes.csv

File size ⓘ 1 KB

Summary ⓘ

Promotion Code Imports - List

* Type	* Name	CSV File	File Size
📇	codes.csv	codes.csv	1 KB

Comma-separated value files of promotion codes can be imported for use in a promotion. Each code is entered on a new line in the file.

Using imported promotion codes

Redemption method: Requires promotion codes

Promotion code specification ⓘ
- ○ Create public promotion codes
- ○ Simple system-generated unique promotion codes
- ○ Advanced system-generated unique promotion codes
- ● Using imported promotion codes

codes*   [Find and Add]

*Promotion code import name

* Type	* Name	CSV File
	codes.csv	codes.csv
0 of 1 selected		

Code population status ⓘ Promotion codes have not yet been populated

Once the file containing the promotion codes has been imported, you can use it to define a new promotion.

Distributing unique promotion codes

*E-mail content

B *I* U | T ᴛT 🔴 | ▤ ▤ ▤ | ⬅ ⬅ ⋮≣ | abc | ◫

`<e-mail:PromotionCode promotionId="10001251" name="Unique order discount"/>`

Insert content   Promotion code   ▼

Promotion   Unique   [Find and Add] 📇 ⚙

* Type	* Administrative Name
🏷	Unique order discount
0 of 1 selected	

[Insert]

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A new e-mail template option has been added for distributing unique promotion codes to shoppers. Choose 'Promotion code' from the Insert content drop down and select the promotion you want to send codes for. The promotion must be active before it can be added to the e-mail template. Each customer on the distribution list for the e-mail receives a unique code to use in the store. The codes are not assigned to a specific shopper though. If there are more customers on the distribution list than available codes, those customers will not receive the e-mail.

Promotion code generation

- Promotion codes are generated on promotion activation
  - New promotion state during code generation / import
    - Activating
  - Active promotion means codes generated successfully
  - A code generation error will cause promotion activation to fail
- Performance is impacted by the percentage of available codes to be generated
  - Performance decreases as percentage use increases

The set of unique codes for a promotion are generated when the promotion is activated. The length of time it takes to generate the codes depends on the number of codes to be generated and the total number of possible codes for a given pattern. As the number of codes to be generated approaches the total number of possible codes, performance can decrease. This occurs when the generator has to retry several times to find a remaining unused code. Where possible, you should define a code pattern that has at least twice as many available options as the number of promotion codes you need to generate.

Configuration

- xml/config/com.ibm.commerce.promotion-fep/wc-admin-component.xml
  - Definitions for code generation
  - Number of codes to import/generate at a time
    - <_config:property name=*"CodePopulateBatchSize"* value=*"1000"*/>
  - Length of time to wait before releasing a unique code
    - <_config:property name=*"WaitingPeriodForUniqueCodeRelease"* value=*"1440"*/>

　　Management Center updates - Promotions　　

There is a separate promotion configuration file for feature pack 1. This file contains the definitions of which characters represent which code generation patterns.

The CodePopulateBatchSize property specifies the number of promotion code to generate or import in a single scheduler job. The default is 1000 but this can be changed to minimize the database locking on the code table.

The WaitingPeriodForUniqueCodeRelease property specifies the number of minutes to wait before a unique promotion code applied to an order by a guest shopper is considered abandoned and can be assigned by another shopper.

New tables

- PX_CDSPEC
  – Promotion code information
- PX_CDPOOL
  – Generated promotion codes
- PX_CDPROMO
  – Code to promotion mapping table
- PX_CDUSAGE
  – Promotion code usage information

Management Center updates - Promotions

Four new database tables have been created to support unique promotion codes.

Table management

- Use Dbclean to manage number of entries in
  - PX_CDPOOL
  - PX_CDPROMO
  - PX_CDUSAGE

Management Center updates - Promotions

The tables listed here have one row added for each unique promotion code generated or imported. If you create a large number of promotions that use unique code, you should periodically clean up expired codes using the Dbclean utility.

Troubleshooting

This section covers some possible error conditions with unique promotion codes and how to identify them.

Error condition examples

- Invalid code
- Attempt to generate more codes than the number available
- Imported code is a duplicate
- Imported codes are too long
- Unique code has already been used
- Code doesn't exist

Management Center updates - Promotions

The next five slides show some examples of error conditions related to unique promotion codes.

Invalid code or too many to generate

ProcessUniquePromotionCodeActivateActionCmdImpl - validatePromotionSpec

The promotion named "A_CodeTest" cannot be activated because its code pattern definition is invalid. Update the pattern definition and activate the promotion again.

com.ibm.commerce.promotion.facade.server.commands.ProcessUniquePromotionCodeActivateActionCmdImpl performExecute THROW

com.ibm.commerce.promotion.uniquecode.PromotionCodeException

Message Console

Show All

Message

The promotion named "A_CodeTest" cannot be activated because its code pattern definition is invalid. Update the pattern definition and activate the promotion again.
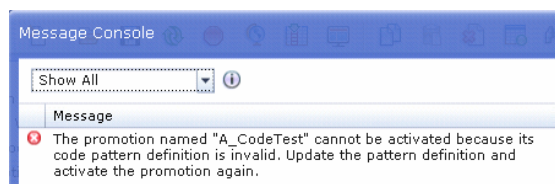
This error condition is prevented by the Management Center interface but is possible if promotion data is loaded. The message is written to the log file and the Management Center message console.

Duplicate code in import

UniquePromotionCodesPopulateCmdImpl - getPromotionCodes

PromoCodeLoaderSource loadPromotionCodesFromCSVContent

com.ibm.commerce.promotion.internal.source.PromoCodeLoaderSource
  loadPromotionCodesFromCSVContent THROW

                 com.ibm.commerce.promotion.uniquecode.PromotionCodeException…

com.ibm.commerce.promotion.uniquecode.commands.UniquePromotionCodesPopulateCmdImpl
  performExecute _ERR_LOAD_PROMOTION_CODE_FAIL

Code population status (i) Promotion codes failed to populate. Check the summary field of the associated Promotion code import for errors

Message in promotion properties

Message in Code Import properties

▽ **Promotion Code Import Properties**

*CSV file (i) codes4.csv

*Name (i) codes4.csv

File size (i) 1 KB

Summary (i) **The CSV file to import contains duplicate coupon promotion codes.**
abc-567

If a file of imported promotion codes contains duplicate values or a duplicate of a code already in the database, an exception is thrown when the promotion is activated. In this case an error message is not shown in the message console. The promotion properties will indicate that the codes failed to populate and the detailed error message is located on the promotion code import properties page.

Imported code is too long

UniquePromotionCodesPopulateCmdImpl - populateCodeToDB

com.ibm.commerce.foundation.internal.server.services.dataaccess.graphbuilderservice.jdbc.JDBCGraphBui
    lderService saveGraph Original exception: A truncation error was encountered trying to shrink VARCHAR
    '012345678901234567890123456789012345678901234567890123456789&' to length 128.

▽ **Promotion Code Import Properties**

*CSV file ⓘ	codes2.csv
*Name ⓘ	codes2.csv
File size ⓘ	1 KB
Summary ⓘ	**Failed to generate codes to the database.**
	012345678901234567890123456789012345678901234567890123456789012345678901234
	567890123456789012345678901234567890123456789012345678901234567890123456789
	01234567890123456789

Management Center updates - Promotions

If a file of imported promotion codes contains a code that is too long, more than 128 characters, it is flagged when the promotion is activated. In Management Center, this error is displayed in the same way as the previous error except with different details on the promotion code import properties page.

Unique code has already been used

com.ibm.commerce.marketing.commands.AddPromotionCodeToOrderCOTaskCmdImpl
addUniquePromotionCodeToOrder Promotion code "a8z" is invalid.

If a unique promotion code exists but has already been used, the code is flagged as invalid in the AddPromotionCodeToOrderCO task command.

Code doesn't exist

com.ibm.commerce.marketing.promotion.AbstractPromotionSessionBeanPersistenceManager
  findActivePromotionByCodePatternAndStoreID() code=%a9z%

com.ibm.commerce.marketing.commands.PromotionCodeAddRemoveControllerCmdImpl
  validatePromotionCode Promotion code "a9z" is invalid.

If a promotion code doesn't exist at all, it is still flagged as invalid but this time in the PromotionCodeAddRemove controller command.

Summary

- General promotion updates
- Unique promotion code support
- Troubleshooting

Management Center updates - Promotions

This presentation began with a look at some general updates to the Promotions tool. An overview of the unique promotion code support followed and the presentation concluded with some troubleshooting suggestions.

References

- Promotions
  - http://publib.boulder.ibm.com/infocenter/wchelp/v7r0m0/index.jsp?topic=/com.ibm.commerce.management-center.doc/concepts/cprover.htm

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This slide contains some useful references for further reading.

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