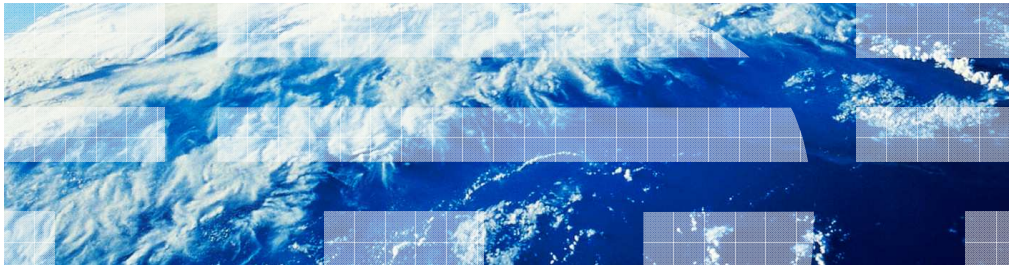

WebSphere Commerce V7 Feature Pack 3

Coremetrics integration enhancements overview



© 2011 IBM Corporation

This presentation provides an overview of the Coremetrics integration enhancements in WebSphere® Commerce Version 7 feature pack 3.

Table of contents

- Solution overview
- Configuration
- Integration of Coremetrics Analytics and WebSphere Commerce Management Center
- Store tagging update
- Coremetrics profile segmentation tool import enhancements

This presentation will first take you through the solution overview in version 7 feature pack 3. Then it will go over the steps necessary to configure and enable the Coremetrics enhancements for you to use. Next, the presentation will take you through the major areas of enhancements in this release. This includes the integration of the Coremetrics Analytics reports in the WebSphere Commerce Management Center, store tagging updates, and updates to the Coremetrics Profile Segmentation tool.

What's new in V7 feature pack 3

- Integration of Coremetrics and WebSphere Commerce Management Center
- Store Tagging Update
 - Coremetrics Store tagging API update
 - Solr search with facet attributes
 - New <cm:element> tag
 - New <cm:conversion> tag
- Coremetrics Profile Segments tool import enhancements

Currently, WebSphere Commerce provides a framework you can configure to integrate your store with external web analytics solutions. This framework includes a tag library that you can use in store JSP files to provide analytics information to the external analytics systems. In version 6 feature packs 1 and 2, Coremetrics enhanced web analytics for WebSphere Commerce was introduced to provide tools that simplify the process of setting up your site to take advantage of the Coremetrics analytics solution.

In feature pack 3, you will see several areas of enhancements. With the recent acquisition of Coremetrics by IBM, WebSphere Commerce is able to better integrate with Coremetrics and provide a better experience for joint customers. You will see better integration between the WebSphere Commerce Management Center and Coremetrics Analytics reports. You will also see the modifications to store tagging such as, WebSphere Commerce search with facet attributes can be passed to Coremetrics. Finally, you will see some enhancements created for the Coremetrics Profile Segments import tool.

Configuration

Before going on to look at the enhancements, you will first see how to configure and enable the features.

Implementing Coremetrics for WebSphere Commerce

- STEP 1: Apply FP3, Install FEP3, Enable store-enhancements, Publish store and enhancements sar files
- STEP 2: Configure site to communicate with Coremetrics
 - Configure biConfig.xml file
- STEP 3: Generate Category Definition File to capture catalog hierarchy
- STEP 4: Enable pre-tagged analytics tags in Madisons/Elite starter stores
- STEP 5: [For new stores only] Tag store JSP files with page view tag
 - Run auto tagging utility
- STEP 6: [For new stores only] Tag store pages for Coremetrics
- Information Center:
http://publib.boulder.ibm.com/infocenter/wchelp/v7r0m0/index.jsp?topic=/com.ibm.commerce.Coremetrics.doc/refs/rmt_integrationfep3_roadmap.htm

Here are the steps you need to configure for your store to communicate with Coremetrics. As prerequisites you must have a store ready to integrate with Coremetrics. The store can be either a WebSphere Commerce starter store, such as Madisons or Elite, or your own custom store. You must install WebSphere Commerce Version 7 feature pack 3. This feature pack installs all software required to integrate your store with Coremetrics. If you are integrating your store for the first time, you must start with Feature Pack 3. This ensures that you are using the standard Coremetrics library version, which supports the latest Coremetrics data tags. You also need to enable starter store enhancements. As a result, the software assets to support Coremetrics integration are activated and ready for use.

The next step is to configure the biConfig.xml with your Coremetrics account id, and store id, and so on. For proper product and content classification, Coremetrics requires a Category Definition File (CDF). This file needs to be sent to Coremetrics before pages are tagged. Then you need to enable the Analytics store function in the Store management tool. The last two steps listed here deal with tagging are for new stores only.

For more details about each of the steps see the information center.

Configuring the biConfig.xml

- ```
<store
 storeId = "10101"
 biprovider = "coremetrics"
 enabled = "true"
 debug = "true"
 useHostedCMHLibraries = "true"
 useEmailForCustomerId = "false"
 segmentExportMode = "append">
```
- New Boolean fields:
  - useHostedCMHLibraries
    - Specifies whether store uses standard Coremetrics Library
  - segmentExportMode
    - Append or replace
- Optional
  - Configure secret key for SSO
- Sample:
  - <WC\_installdir>/components/store-enhancements/samples/Coremetrics/xml/biConfig.xml
  - <WCDE\_installdir>/components/store-enhancements/samples/Coremetrics/xml/biConfig.xml

Currently, the biConfig file contains configuration details including the name of the analytics provider, store IDs, whether tracking is enabled, whether debug mode is enabled, and the Coremetrics client ID. It also includes whether to use an email address instead of a WebSphere Commerce member ID to identify customers in Coremetrics, and any Coremetrics specific JavaScript code required for tracking.

The new fields include whether the store uses the standard or custom Coremetrics library, the key for single sign-on and whether to update Coremetrics based customer segments in append or replace mode.

The locations of where to find the sample file is listed. It represents the default version included with Coremetrics for IBM WebSphere Commerce. The sample applies to WebSphere Commerce Version 7 feature pack 3 and later implementations.

## Configuring single sign-on between Management Center and Coremetrics

- STEP 1: Configure secret key for SSO in biConfig.xml
  - Define key in <ssoKey> </ssoKey>
  - Contains at least one letter and one number
  - Does not contain the same character more than 4 times in a row
  - Example: 2390eabf0795mprs
- STEP 2: Map WebSphere Commerce user name to a Coremetrics user name for single sign-on
  - Gather Commerce user names for business users (LOGONID column of USERREG table)
  - For each Commerce user name, issue SQL
 

```
INSERT into MBRATTRVAL (MBRATTRVAL_ID, MEMBER_ID, ATTRTYPE_ID,
MBRATTR_ID, STRINGVALUE) values (((SELECT MAX(MBRATTRVAL_ID)
from MBRATTRVAL) + 1), (SELECT USERS_ID from USERREG where
LOGONID = 'wcsUsername'), 'STRING', (SELECT MBRATTR_ID from
MBRATTR where NAME = 'CMCAalyticsUsername'),
'coremetricsUsername')
```
- STEP 3: Give the secret key to Coremetrics to configure SSO on their system

You can make the integration between WebSphere Commerce Management Center and Coremetrics Analytics seamless for business users by configuring single sign-on. When single sign-on is in place, business users do not need to log on to Coremetrics separately when launching the Coremetrics Analytics dashboard or viewing Coremetrics reports from Management Center. This procedure is applicable to sites that are integrating with Coremetrics for the first time. It also applies to sites that are already integrated with Coremetrics that want to take advantage of single sign-on after installing WebSphere Commerce Version 7 Feature Pack 3 or later.

To configure single sign-on between Management Center and Coremetrics, your biConfig.xml file must define a secret key. This secret key is used to create a token for single sign-on authentication. You must provide your secret key to your Coremetrics Support representative so that the same key is configured in the Coremetrics system. When you run the enablement script for feature pack 3 or later, the enablement script adds an <ssoKey> element containing a generated unique secret key to the biConfig.xml file.

If you have business users with a WebSphere Commerce user name that is different from their Coremetrics user name you must configure a mapping of these names. Configure this mapping in the WebSphere Commerce database to support single sign-on as shown here. For example, a business user who logs on to Management Center as johndoe but logs on to Coremetrics using a shared user name like ibmanalytics. You can map more than one WebSphere Commerce user name to a single Coremetrics user name.

## Troubleshooting single sign-on

- Problem
  - After configuring single sign-on, users are still prompted to log on to Coremetrics separately
- Possible causes
  - No secret key defined
  - Secret key defined does not match key in Coremetrics system
  - WebSphere Commerce user name used does not match Coremetrics user name
  - Coremetrics client ID in <clientId> element is not valid or empty

If business users are still prompted to log on to Coremetrics separately when launching the Coremetrics dashboard or Coremetrics reports from WebSphere Commerce Management Center after configuring single sign-on it can be due to a few possible issues. Single sign-on issues are often related to incorrect configuration settings in the biConfig.xml file. Be sure there is a secret key defined in the <ssoKey> element in the biConfig.xml file, you need to follow the instructions in configuring the secret key for single sign-on in the biConfig.xml file.

Be sure that the secret key defined in the <ssoKey> element in the biConfig.xml file matches the secret key configured in the Coremetrics system. You also should check that Coremetrics has configured the secret key in their system. Check with your Coremetrics support representative to ensure that a secret key is configured in the Coremetrics system and that it matches the secret key in your biConfig.xml file.

Another reason can be if the business user is using a WebSphere Commerce user name that does not match a Coremetrics user name, and there is no mapping to a valid Coremetrics user name in the MBRATTRVAL table. You need to add the required mappings by following the instructions in Mapping a WebSphere Commerce user name to a Coremetrics user name for single sign-on.

Finally, if the Coremetrics client ID defined in the biConfig.xml file in the <clientId> element is either not valid or empty this can also cause single sign on not to work. You can correct the client ID in the biConfig.xml file and redeploy the file.



## ***Integration of Coremetrics and WebSphere Commerce Management Center***

Next, the presentation will take you through the integration enhancements between Coremetrics and the WebSphere Commerce Management Center.



## Coremetrics dashboard and reports available

| User Role         | Tool      | Launch Point                                                                | Report Name                    | Report URI                       |
|-------------------|-----------|-----------------------------------------------------------------------------|--------------------------------|----------------------------------|
| Marketing Manager | Marketing | campaigns organizational object (folder)                                    | Campaigns                      |                                  |
|                   |           | Activities organizational object (folder)                                   | Campaigns Full List            | /websphere/campaign_fulllist.ftl |
|                   |           | E-Marketing Spots organizational object (folder)                            | E-Marketing Spots              | /websphere/espot.ftl             |
| Catalog Manager   | Catalog   | Promotions organizational object (folder)                                   | Promotions Web                 | /websphere/promotions_web.ftl    |
|                   |           | Categories (any category object)                                            | Product Categories by Category | /merchandising/hierarchy.ftl     |
|                   |           | Search Term Associations (if Search solution is enabled)                    | On-Site Search                 | /onsitesearch/onsitesearch.ftl   |
|                   |           | Product, SKU, Bundle, Kit merchandising association tab of properties view* | Cross Sold Products            | /merchandising/crosssell.ftl     |

- Ability to launch Coremetrics dashboard across WebSphere Commerce Management Center tools

10

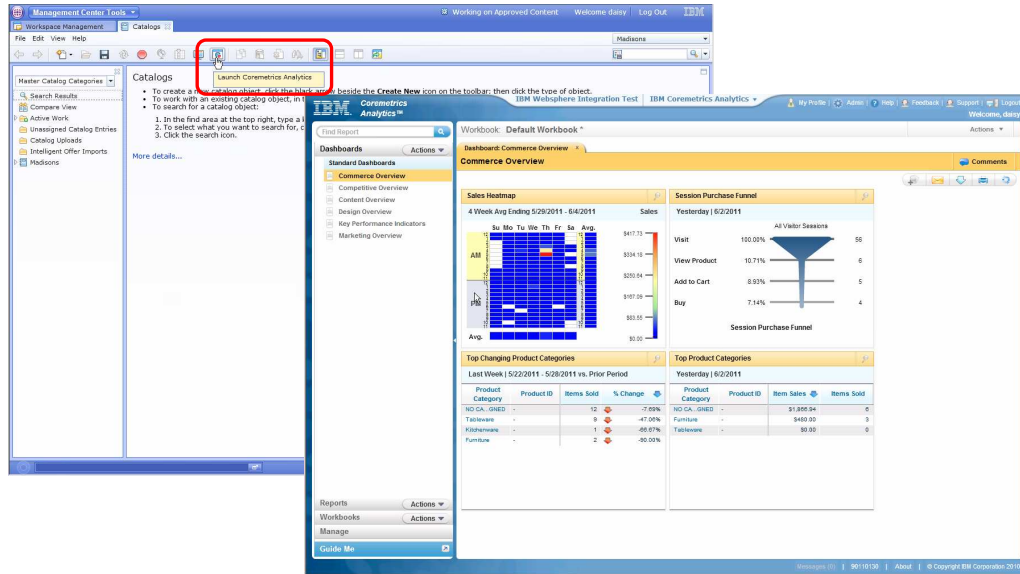
Coremetrics integration enhancements overview

© 2011 IBM Corporation

This slide summarizes the Coremetrics Analytics reports available in the WebSphere Commerce Management Center. Business users can view individual reports through specific launch points in the pop-up menu, where applicable, and the toolbar. For example, the E-Marketing Spot report can be launched either by clicking Show e-Marketing spot report, the report toolbar icon or the View menu. Single sign-on support for Coremetrics Analytics from Management Center provides a seamless transition between tools.

The Launch Point column in this table describes where in the WebSphere Commerce Management Center you can launch a report from. Most reports are launched from the object list view, with a few exceptions. The Product Categories by Category report can be accessed from any category object. The Cross Sold products report can be accessed from the merchandising association tab of the catalog entry properties page.

## Coremetrics Analytics dashboard



11

Coremetrics integration enhancements overview

© 2011 IBM Corporation

Here is a screen capture of launching the Coremetrics Analytics dashboard from the Catalogs tool.

## E-marketing spot report

The screenshot displays the IBM Management Center for WebSphere Commerce interface. The main window shows the 'E-Marketing Spots' report. The report includes a bar chart showing 'Clicks' for various e-marketing spots and a table below it. The table columns are 'ESpot / ESpot Activity', 'Clicks', 'Sales', 'Orders', 'Sales / Click', and 'Sessions'.

| ESpot / ESpot Activity          | Clicks | Sales      | Orders | Sales / Click | Sessions |
|---------------------------------|--------|------------|--------|---------------|----------|
| storeLogoESpot                  | 37     | \$0.00     | 0      | \$105.45      | 26       |
| CategoryPageFeaturedProducts    | 28     | \$2,040.81 | 9      | \$94.48       | 25       |
| HomePageFeaturedProducts        | 28     | \$0.00     | 1      | \$0.00        | 25       |
| HomePageRow2Ad                  | 27     | \$64.77    | 0      | \$2.40        | 24       |
| HomePageGeneralFeaturedProducts | 10     | \$3,754.83 | 4      | \$375.48      | 8        |
| HomePageDealOfTheWeek           | 7      | \$525.87   | 2      | \$95.52       | 6        |

12

Coremetrics integration enhancements overview

© 2011 IBM Corporation

Individual specific reports can be viewed directly by the business user using specific launch points in the pop-up menu where it is applicable, and the toolbar. For example, the e-marketing spot report can be launched either by clicking Show e-Marketing spot report, the report toolbar icon or from the View menu. This behavior is similar for reports like Promotion effectiveness, merchandising associations, and others. For each e-marketing spot on your storefront, the report provides metrics for clicks, sales, orders, and more. Use the e-marketing spots report to understand which e-marketing spots are generating the most value, and to see which web and email activities are generating the best returns for a specific e-marketing spot.

## Promotions web report

The screenshot displays the IBM Management Center for WebSphere Commerce interface. The main window shows the 'Promotions - List' page. A red box highlights the 'Web Promotions Web Report' option in the left-hand navigation pane. The main content area displays the 'Promotions | Web' report, which includes a bar chart showing 'Web Sales' for various promotions and a data table below it. The table provides detailed metrics for each promotion, including sales, orders, and costs.

| Promotion Name / Promotion Code    | Web Sales   | Web Orders | Web Cost Of Promotion | Web Average Order Value | Web Average Cost Of promotion |
|------------------------------------|-------------|------------|-----------------------|-------------------------|-------------------------------|
| Total                              | \$39,889.66 | 77         | -\$8,641.45           | \$506.62                | \$152.20                      |
| * FURNITURE CATEGORY DISCOUNT      | \$21,550.21 | 31         | -\$5,059.30           | \$695.00                | -\$162.89                     |
| * FREE GIFT WITH ORDERS OVER \$100 | \$17,342.16 | 20         | -\$421.88             | \$867.11                | \$21.04                       |
| * FLAT SHIPPING                    | \$17,075.30 | 16         | -\$34.27              | \$665.70                | -\$1.61                       |
| * MY_PROMO1-10000001               | \$9,789.87  | 3          | -\$749.67             | \$3,263.66              | \$240.40                      |
| * MY_PROMO01-10000002              | \$7,190.71  | 1          | -\$20.00              | \$7,190.71              | -\$20.00                      |

13

Coremetrics integration enhancements overview

© 2011 IBM Corporation

Here is an example of launching the Promotions web report from the Promotions tool in the WebSphere Commerce Management Center. Use the Promotions web report to monitor the effectiveness of individual promotions available to customers on your site for a specific time period. For each promotion, the report provides metrics for sales, orders, and costs.

## Cross Sold Products report

The screenshot displays the IBM Management Center for WebSphere Commerce interface. The main window shows the 'Merchandising Associations' tab for product 'FUDEL-01'. A red box highlights the 'View Cross Sold Products Report' button. Below this, a table lists two associations: 'FUDEL-02 Craft Table' and 'FUDEL-03 Student's Desk'. A second red box highlights the 'View Cross Sold Products Report' button in the 'Actions' column of this table.

The report window shows a table of cross-sold products for the period '1/1/2011 - 3/31/2011'. The table includes columns for Product ID, Item, Common Buyers, Buyer Overlap %, and Shopper Cart Overlap. The data is grouped by the parent product.

| Product ID                                                                          | Item                                      | Common Buyers | Buyer Overlap % | Shopper Cart Overlap |
|-------------------------------------------------------------------------------------|-------------------------------------------|---------------|-----------------|----------------------|
| <b>FR_LÉTE-00LD STAINLESS STEEL COFFEE TÖMBLER ( 51 Buyers ) Product ID : AC_17</b> |                                           |               |                 |                      |
| FUDEL-03                                                                            | STUDENT'S DESK                            | 21            | 41.18%          |                      |
| FUDEL-01                                                                            | EXECUTIVE SOUVENIER DESK                  | 18            | 37.25%          |                      |
| FUDEL-01                                                                            | WHITE FABRIC ROLL-ARM CHAISE              | 10            | 19.61%          |                      |
| A0001327                                                                            | THRUST LOAD BEARINGS                      | 9             | 17.65%          |                      |
| FUDEL-02                                                                            | RED LEATHER ROLL-ARM CHAISE               | 8             | 15.69%          |                      |
| <b>THRUST LOAD BEARINGS ( 29 Buyers ) Product ID : A0001327</b>                     |                                           |               |                 |                      |
| AC_17                                                                               | FR_LÉTE-00LD STAINLÉ. TÉEL COFFÉE TÖMBLER | 9             | 31.03%          |                      |
| FUDEL-03                                                                            | STUDENT'S DESK                            | 6             | 20.69%          |                      |
| A0001325                                                                            | STANDARD BATTERY                          | 6             | 20.69%          |                      |
| FUDEL-01                                                                            | WHITE FABRIC ROLL-ARM CHAISE              | 4             | 13.79%          |                      |
| A0000540                                                                            | LOW MAINTENANCE BATTERY                   | 3             | 10.34%          |                      |
| <b>STUDENT'S DESK ( 22 Buyers ) Product ID : FUDEL-03</b>                           |                                           |               |                 |                      |
| AC_17                                                                               | FR_LÉTE-00LD STAINLÉ. TÉEL COFFÉE TÖMBLER | 21            | 95.45%          |                      |
| A0001327                                                                            | THRUST LOAD BEARINGS                      | 6             | 27.27%          |                      |
| FUDEL-01                                                                            | EXECUTIVE SOUVENIER DESK                  | 6             | 27.27%          |                      |

Here is an example of the Cross Sold Products report launched from the merchandising associations tab of a product. The Cross Sold Products report lists the top 20 items purchased on your site by unique buyers, and the top five items that were cross sold with each of these products during the selected time period. For each cross sold item, this report lists the number of common buyers over the time period, and the number of common visitors who purchased the two items during the same visit. Use this information to optimize upcoming cross selling campaigns.

## ***Store tagging update***

Next, the presentation will go over store tagging enhancements in feature pack 3.

## What's new in feature pack 3?

- Update WebSphere Commerce JSTL tag library to support to use of standard hosted Coremetrics library
- Tag changes in FEP3
  - Remove use of <cm:error> and use <cm:pageview> in Madisons and Elite stores
  - Deprecate <cm:contenturl> as content spot is deprecated
  - New output tag <cm:output>
  - New element tag <cm: element>
  - New conversion event tag <cm: conversion>
- Track facet usage with WebSphere Commerce Search
- Refresh Madisons and Elite starter stores with new tag changes

Here is a summary of all the tag library changes you can take advantage of in feature pack 3. The WebSphere Commerce tag libraries have been updated to use the hosted version of the Coremetrics JavaScript libraries. Coremetrics is moving away from the approach of providing custom JavaScript libraries to each Coremetrics customer. A summary of changes to individual tags is shown here. If your store uses WebSphere Commerce search, you can pass search-specific details such as search term and facet selection as extra parameters to your Coremetrics tags. This information is used to build the On-Site Search report listed on the previous slide. The Madisons and Elite starter stores have been updated to demonstrate passing search information and the other tag changes available in feature pack 3.



## Versions of the Coremetrics JavaScript library

- Standard Coremetrics library
  - Uses the hosted `libs.coremetrics.com/eluminate.js` library file version 4.7.4H or later versions that ends with letter *H*
  - Does not require hosting a `cmcustom.js` or `cmdatatagutils.js` file to support WebSphere Commerce customizations
- Custom Coremetrics library
  - Uses an `eluminate.js` library file version that does not end with the letter *H*, for example, version 4.7.4 or 4.7.5
  - Requires site to host a `cmcustom.js` or `cmdatatagutils` file to support WebSphere Commerce customizations

There are two different Coremetrics JavaScript libraries: the standard Coremetrics library and the custom Coremetrics library. It is important to understand which type your site is using because the implementation details differ. Beginning with WebSphere Commerce Version 7 Feature Pack 3, WebSphere Commerce sites can use the standard Coremetrics library. The WebSphere Commerce analytics tags have been updated to support the standard Coremetrics library. When you use the standard Coremetrics library, your site is configured to obtain the latest Coremetrics tag library directly from the Coremetrics site. The standard Coremetrics library supports the collection of all available Explore attributes (50) for all tags, without the need for a custom library update. Also available are the Coremetrics extra fields (15) for all tags to use with the Coremetrics Standard Data Export solution, without the need for a custom library update.

WebSphere Commerce sites can continue to use the custom Coremetrics library. Before switching to the standard Coremetrics library, talk to your Coremetrics Support representative.

## Passing extra parameters in Coremetrics tags

- Pass additional data to Coremetrics not collected automatically by Coremetrics analytics
- Format for setting extraparms values for <cm:cart/>, <cm:order /> tags

*Use the first position to pass a Coremetrics catIDOverride value*  
*Use the second position to pass Coremetrics attributes values*  
*Use the third position to pass a Coremetrics extraFields values*

```
extraparms="categoryID,attr1-_-attr2,exField1-_-exField2"
```

- Format for setting extraparms values for <cm: product />

*Use the first position to pass a Coremetrics catIDOverride value*  
*Use the second position to pass Coremetrics attributes values*  
*Use the third position to pass a Coremetrics cm\_vc value*

```
extraparms="categoryID,attr1-_-attr2,virtualCategory"
```

- Format for setting values for other analytics tags

*Use the first position to pass Coremetrics attributes values*  
*Use the second position to pass Coremetrics extraFields values*

```
extraparms="attr1-_-attr2,exField1-_-exField2"
```

You might want to pass additional data to Coremetrics that is not collected automatically by the WebSphere Commerce analytics tags, such as <cm:pageview /> or <cm:order />. For example, you might want to pass information about the brand of the products customers view for a Coremetrics Explore report, or pass specific registration data for a custom report in Coremetrics Analytics. If so, use the extraparms parameter in the WebSphere Commerce analytics tag when you place the tag in your store page. Most of the WebSphere Commerce analytics tags support the extraparms parameter.

The format you use to pass extraparms values differs depending on the WebSphere Commerce analytics tag. The format rules are listed here. Specify values for the three Coremetrics parameters in the order shown in the examples. For the first example, specify the catIDOverride value in the first position, followed by a comma, then one or more attributes values in the second position, followed by a comma, and then one or more extraFields values in the third position. Use the null value to indicate when no values are being passed for catIDOverride or attributes. To pass multiple values for a given parameter, separate each value with the -\_- delimiter.

## Deprecate <cm:error > and <cm:contenturl>

- **<cm: error /> tag** - deprecated in FEP3
  - Use page view tag with descriptive pageID and categoryID parameters to track server or application error pages
  - Include tag in store page:
    - `<cm:pageview category="ERROR" />`
  - Coremetrics data tag generated:
    - `cmCreatePageviewTag (document.title, "ERROR", null, null);`
- **<cm:contenturl /> tag** - deprecated in FEP3
  - ContentSpot - deprecated in FEP2
  - Use `<cm:campurl />` for e-marketing spots

The tags listed here are deprecated in feature pack 3. Instead of using the error tag that specifically captures the views of system error pages, use the page view data tag. This will pass data about a system error page to Coremetrics. The WebSphere Commerce content URL tag collects information about email activities that contain content spots that customers view. Since content spots are deprecated in feature pack 2, the contenturl tag is deprecated as well.

## New WebSphere Commerce JSTL tag - <cm:output>

- Write Coremetrics JavaScript snippets at required location of store JSP page
- Output tag defined in default sample biConfig.xml
 

```
<output section="header">
 <![CDATA[
 <script language="JavaScript1.1" type="text/JavaScript"
 src="//libs.coremetrics.com/eluminate.js"></script>
 <script language="JavaScript1.1" type="text/JavaScript">
 cmSetClientID("12345", true, "data.coremetrics.com", "localhost");
 </script>]]>
</output>
```
- Stores pre-tagged with <cm: output section="header" />
  - <WCDE\_installdir>/workspace/Stores/WebContent/store\_name/include/CommonJSToInclude.jspf
  - <WC\_eardir>/Stores.war/store\_name/include/CommonJSToInclude.jspf

There are a few new tags that can be used in the store JSP pages. The output tag acts as a marker for the location to write Coremetrics JavaScript snippets each time the page is rendered. These Coremetrics JavaScript snippets are defined in the analytics configuration file, within the <output> element. The default sample biConfig.xml file and the latest WebSphere Commerce starter stores are already set up to use the output tag for its intended purpose. If required, you can change the output tag location in starter store pages, or you can use the <output> tag to write additional content to a location in a store page.

When a store page is rendered, all the content within the <output> element must be written to the page. The purpose of this JavaScript content is to include the Coremetrics library file and call the cmSetClientID function. Coremetrics uses this content when collecting analytics data. The Madisons and Elite starter stores published with WebSphere Commerce Version 7 feature pack 3 enhancements are already tagged with the <cm:output /> tag. This marks the location in the store page where the content within the <output> element must be written.

The CommonJSToInclude.jspf file is a special file included in the <head> element of every starter store page. Its purpose is to include global variables and functions in all starter store pages. By including the <cm:output /> tag in this special file, the Coremetrics JavaScript snippets defined in the <output> element of the biConfig.xml file is written to the <head> element of every store page.

## Changing the default output tag implementation

- **Before:**
  - Coremetrics function placed above `</body>` tag
  - Coremetrics JavaScript snippets in `<instrumentation>` section of `biConfig.xml`
- **FEP3: New output tag**
  - Can be placed at top of `<body>` section or in `<head>` section of JSP
  - Add new child tag `<output>` under `<store>` tag in `biConfig.xml`
- **Reasons to change**
  - Write Coremetrics JavaScript snippets to different location
  - Write multiple Coremetrics JavaScript snippets to different locations
- **Steps to change**
  - Define output tag in analytics configuration file (`biConfig.xml`)
  - Add output tag to store JSP pages

Most `biConfig.xml` files before WebSphere Commerce Version 7 feature pack 3 have an `<instrumentation>` element that contains Coremetrics JavaScript snippets similar to the `<output>` element. When a store page is rendered, the contents of the `<instrumentation>` element are written above the `</body>` tag near the end of the page. In feature pack 3, the `<output>` element is used instead of the `<instrumentation>` element. This means that the Coremetrics JavaScript snippets are now written within the `<head>` element rather than near the end of the page.

There are several reasons to change the default output tag implementation. You might want to write the Coremetrics JavaScript snippets to a different location in your store page, or write additional content to the page. You can change the location of the `<cm:output />` tag in your store pages and change the content within the `<output>` element in your `biConfig.xml` file. You might want to write multiple Coremetrics JavaScript snippets to different locations in your store pages. If so, you can define multiple output tags in your `biConfig.xml` file, each with a different section parameter value.

These procedures provide detailed steps about changing the configuration of the output tag. First you need to define an output tag in your `biConfig.xml` file by adding an `<output>` element. Within the `<output>` element, add the JavaScript snippets, or any other content that you want to write to a specific location in your store pages. After you define the output tag in your `biConfig.xml` file, you must add the output tag to all your store pages. Place the output tag in the location in the page at which you want the Coremetrics JavaScript snippets to be written in the store page.

## New Coremetrics Element tag <cm:element />

- Collects intra-page content, such as
  - Ajax Detail Hovers
    - Product detail hover-overs
    - Customer review hover-overs
  - Dynamic Page Content Filters
    - Price slider bars
    - Brand filter check boxes
    - Feature selectors
- Element Event thrown when shoppers are using price slider bar, brand filter, feature selectors in the product fast finder page

This new WebSphere Commerce element tag tracks customer interactions with intra-page elements. In WebSphere Commerce starter stores, these elements include the product fast finder, and the faceted navigation on category and search result pages. Other examples of elements include search and news portlets, video plays, and Ajax detail hovers (for products or customer reviews).

The element tag does not generate any data on its own. For this tag, you must use the tag parameters to pass in the data you want to collect. This tag can also pass extra parameters for tag customization.

## Using the Element tag

- The `<cm:element />` tag generates the Coremetrics tag:
  - `cmCreateElementTag(elementID, elementCategory, attributes)`
- Usage:
  - To pass basic data about a shopper's interaction with an intra-page element
    - Tag to include in store:
      - `<cm:element elementId="Product Fast Finder" category="Product Tools" />`
    - Data tag generated:
      - `cmCreateElementTag ("Product Fast Finder", "Product Tools")`
  - To pass Explore attributes along with element tag
    - Tag to include in store:
      - `<cm:element elementId="Product Fast Finder" category="Product Tools" extraparms="attr1-_-attr2-_-attr3"/>`
    - Data tag generated:
      - `cmCreateElementTag ("Product Fast Finder", "Product Tools", "attr1-_-attr2-_-attr3")`

If your site is integrated with Coremetrics, you can use the default implementation of the `<cm:element />` tag that WebSphere Commerce provides. The `<cm:element />` tag generates the `cmCreateElementTag` tag. Include the `<cm:element />` tag in the page that loads as a result of the customer interacting with the page element, if there is a page that loads. In that page, place the `<cm:element />` before the `<cm:pageview />` tag.

The slide shows examples of usage. To pass basic data about a shopper's interaction with an intrapage element to Coremetrics, you can include the tag in your store page with the `elementId` and `category`. Then the data tag gets generated. To pass Explore attributes along with the element tag to Coremetrics, use the `extraparms` parameter to specify additional attributes.

## New Coremetrics Conversion event tag

- Collects information about events not directly related to product purchases, such as
  - Using a store locator
  - Using a product comparison tool
  - Adding items to a wish list
  - Signing up for a gift registry
  - Downloading documents
  - Visiting the contact us page
- MadisonsEnhancements.sar and EliteEnhancements.sar are updated to trigger Conversion Event when item is added to wish list

The WebSphere Commerce conversion event tag collects information about events that are not directly related to product purchases. These events might include using a store locator, a product comparison tool, adding items to a wish list, signing up for a gift registry, downloading documents, visiting the contact us page, and so on.

The conversion event tag does not generate any data on its own. For this tag, you must use the tag parameters to pass in the data you want to collect. This tag can also pass extra parameters for tag customization. You can look at information center for details on parameters and usage.



## Using the Conversion Event tag

- The `<cm:conversion />` tag generates the Coremetrics tag:
  - `cmCreateConversionEventTag(eventID, actionType, eventCategoryId, points, attributes, extraFields)`
- Usage:
  - To pass basic conversion event data
    - Tag to include in store:
      - `<cm:conversion eventId="AddToWishlist" category="WISHLIST" actionType="2" points="10"/>`
    - Data tag generated:
      - `cmCreateConversionEventTag ("AddToWishlist", "2", "WISHLIST", "10")`
  - To pass Explore attributes along with conversion event tag
    - Tag to include in store:
      - `<cm:conversion eventId="AddToWishlist" category="WISHLIST" actionType="2" points="10" extraparms="attr1_-_attr2_-_attr3"/>`
    - Data tag generated:
      - `cmCreateConversionEventTag ("AddToWishlist", "2", "WISHLIST", "10", "attr1_-_attr2_-_attr3")`

If your site is integrated with Coremetrics, you can use the default implementation of the `<cm:conversion />` tag that WebSphere Commerce provides. The `<cm:conversion />` tag generates the Coremetrics tag: `cmCreateConversionEventTag`. A conversion event might be a customer subscribing to a newsletter or adding an item to a wish list. Include the `<cm:conversion />` tag in the page that loads when a customer triggers the specific conversion event. You might have a Subscribe button on a store page that shoppers can click to subscribe to a newsletter. To track this conversion event, place the `<cm:conversion />` tag in the page that loads when the customer clicks the button. To track shoppers adding items to a wish list, place the `<cm:conversion />` tag in the page that loads immediately after the shopper adds an item to the wish list. This tag is not necessary on JSP fragments or other included file assets.

## Search Facets Analytics

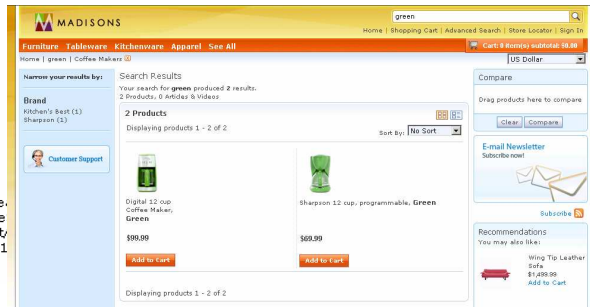
- When WebSphere Commerce search is enabled (Solr implementation from FEP2)
  - Facets are available to user to refine search criteria
  - Search facets passed as Explore attributes to Coremetrics tags to display in Coremetrics Explore Ad-hoc reports
  - Search term and facets extracted in order they are added and removed
  - Passed using session cookies
- Attributes passed to tags using extraparms parameter
  - Page view
    - `<cm:pageview pagename="{WCPParam.pagename}" category="{WCPParam.category}" srchKeyword="{WCPParam.searchTerms}" srchResults="{WCPParam.searchCount}" returnAsJSON="true" extraparms="{WCPParam.attributes}" />`
  - Product
    - `<cm:product databean="{product}" extraparms="null, {cookie.analyticsFacetAttributes.value}" />`
  - Shopping cart
    - `<cm:cart orderType="{orderForAn}" extraparms="null, {cookie.analyticsFacetAttributes.value}" />`
  - Order
    - `<cm:order orderId="{WCPParam.orderId}" extraparms="null, {cookie.analyticsFacetAttributes.value}" />`

When WebSphere Commerce search is enabled, search facets such as Brand, Category, Price range are available to the shopper to refine their search criteria. With Coremetrics integration with Solr, the search facets are passed to the Coremetrics tags so that the report generated can display the combination of search facets used in each search result generated. Along with the search term, the search facets are extracted from Solr in the order that they are added and removed. Since these search facets are passed from page to page using a cookie, they will exist for the entire duration of the search session. When the shopper completes a search, and proceeds to the product display page those search attributes are recorded. The most recent set of search attributes will still be passed to the Coremetrics tags regardless if the search attributes are not related to the product the shopper is currently viewing. The search facet attributes are only cleared once a new search is executed, or a new browser session is created. The facets will remain reset, until new search facets are selected during the newest search.

The affected tags are cm:page, cm:product, cm:order, cm:cart. The attributes are passed to the tags using the extraparms parameter, following the Coremetrics delimiter syntax "-\_-" . The newest search facet is appended to the search attributes. Should a facet be relaxed, the corresponding facet in the attributes list is removed. The order of the search facets selected are preserved in the order of selection during the search, where the newest search facet is appended to the end of the list.

## Coremetrics integration with Solr

Page View tag (Production)  
 Tag Type (tid): "1" (Page View tag)  
 Category ID (cg): "null"  
 Onsite Search Word (se): "green"  
 Search Result Count (sr): "2"  
 Attribute 1 (Explore) (pr\_a1): "Category: Coffee Makers"  
 Library Version (vn1): "4.8.3H"  
 Character Set (ec): "utf-8"  
 Page ID (pi): "Come pick your favorite Coffee Maker! 0"  
 Referral URL (rf): "http://localhost/webapp/wcs/stores/servlet/Search?pageSize=12&beginIndex=0&searchSource=Q&sType=SimpleSearch&metaData=&pageSize=12&beginIndex=0&sType=SimpleSearch&metaData=&pageSize=12"



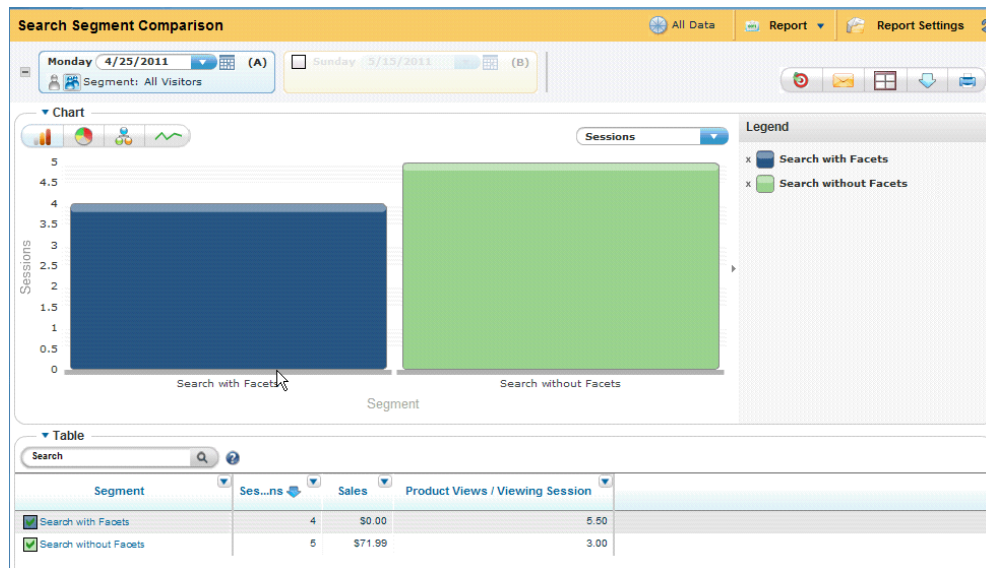
Product View tag (Test)  
 Tag Type (tid): "5" (Product View tag)  
 Library Version (vn1): "4.8.3H"  
 Character Set (ec): "utf-8"  
 Page ID (pi): "Digital 12 cup Coffee Maker, Green | Madisons"  
 Product ID (pr): "KB-04G"  
 Product Name (pm): "Digital 12 cup Coffee Maker, Green"  
 Category ID (cg): "null"  
 Is Page View? (pc): "N"  
 Attribute 1 (Explore) (pr\_a1): "Category: Coffee Makers"  
 Destination URL (ul): "http://localhost/webapp/wcs/stores/servlet/enReferralURL (rf): "http://localhost/webapp/wcs/stores/servlet/Search?pageSize=12&beginIndex=0&sType=SimpleSearch&metaData=&pageSize=12&beginIndex=0&sType=SimpleSearch&metaData=&pageSize=12"



The example here shows the search attributes passed to the page view and product view tags. After performing a search for “green” then selecting the Coffee Makers facet, the search result is 2. The page view tag lists Coffee Maker facet as Attribute 1. You can also see the Onsite Search Word was green and that the search result was 2.

After clicking on the first search result, you can see the facet is passed down to the product view tag. Similarly it will trickle down to the shopping cart and order tags. This allows you to track how effective the facet is impacting shopper conversion rate.

## Sample Search Facet report in Coremetrics Explore



Here is a screen capture of a sample search facet report created in Coremetrics Explore tool. You can see the number of sales, product views, and number of sessions for searching with and without facets.

## ***Profile Segmentation tool import enhancements***

Next, the presentation will take you through the profile segments tool import enhancements.

## Profile segments tool import enhancements

- Currently:
  - Defined Coremetrics customer segment can be imported to Commerce
  - Always create new segments even if it already exists
- Enhanced in FEP3:
  - Update segment if already exist
- Details
  - New attribute added in `<store>` node in `biConfig.xml`
    - `<store storeId = "10101" segmentExportMode = "append">` or
    - `<store storeId = "10101" segmentExportMode = "replace">`

Before feature pack 3, there was no synchronization between the customer segments in WebSphere Commerce and Coremetrics. Importing segments from Coremetrics to WebSphere Commerce always resulted in creation of new segments even if they already existed in WebSphere Commerce.

In feature pack 3, you are able to update existing customer segments instead of creating new ones each time. Before exporting a profile segment from Coremetrics to use as a WebSphere Commerce customer segment, you can configure whether the export process runs in append mode or replace mode. Append mode is the default mode configured in the analytics configuration file, `biConfig.xml`, but you can switch to replace mode at any time.

The export mode applies when you export a profile segment from Coremetrics that has the same name as an existing WebSphere Commerce customer segment. In this case, the export process updates the existing customer segment rather than creating a new one. This prevents storing multiple versions of the same customer segment in WebSphere Commerce.

If the export mode parameter (`segmentExportMode`) is missing from the `biConfig.xml` file, or if you delete the parameter, the export process always creates a new customer segment. To differentiate the customer segment versions, the export process names the customer segment according to this syntax: Name of report - Profile segment name - Date - Timestamp.

## Copying customer segments from production to staging

- Run the customer segment copy utility from staging server
  - Segments copied from Coremetrics to production servers
  - Copy segments from production to staging with segment copy utility

```
- segmentcopy
 -dbType <DB_TYPE>
 -prodDb <PRODUCTION_DB>
 -prodDbUser <PRODUCTION_DB_USER>
 -prodDbPasswd <PRODUCTION_DB_PASSWD>
 -prodSchema <PRODUCTION_SCHEMA>
 -stagDb <STAGING_DB>
 -stagDbUser <STAGING_DB_USER>
 -stagDbPasswd <STAGING_DB_PASSWD>
 -stagSchema <STAGING_SCHEMA>
 -fromDate <FROM_DATE>
```

- Information Center

<http://publib.boulder.ibm.com/infocenter/wchelp/v7r0m0/index.jsp?topic=/com.ibm.commerce.Coremetrics.doc/tasks/tmtcreatingcustsegprod.htm>

When you export a profile segment from Coremetrics, the resulting WebSphere Commerce customer segment is stored in the production server database. These customer segments must be copied to the staging server database so that they are available to business users when creating marketing activities and promotions in Management Center and WebSphere Commerce Accelerator. In feature pack 3, WebSphere Commerce provides a command line utility you can use to copy the customer segments from one server to the other.

## Coremetrics profile segments

The screenshot displays the Coremetrics Analytics interface. The main content area is titled 'Profile Segments - testCustomer'. It features a search bar and a table listing 6 segments. The 'Alumni\_Customer' segment is highlighted in red. A yellow callout box labeled 'Export' points to the 'Export to WebSphere Commerce' icon in the Actions column for this segment. Another yellow callout box labeled 'Segments to export' points to the 'Alumni\_Customer' row in the table.

Profile Segment	Status	Created By	Report Range	Segment Range	Actions
<input type="checkbox"/> Abandoned Shoppers	Active	Test User	Dec 4, 2010 - Dec 25, 2010	Dec 4, 2010 - Dec 25, 2010	[Icons]
<input checked="" type="checkbox"/> Alumni_Customer	Active	Test User	Mar 1, 2011 - Apr 7, 2011	Mar 1, 2011 - Apr 7, 2011	[Icons]
<input type="checkbox"/> Daily_Segment	Active	Test User	Mar 2, 2011 - Apr 7, 2011	Mar 2, 2011 - Apr 7, 2011	[Icons]
<input type="checkbox"/> India_Customer	Active	Test User	Apr 8, 2011 - Apr 11, 2011	Apr 8, 2011 - Apr 11, 2011	[Icons]
<input type="checkbox"/> June First Time Visitor	Active	Test User	Jun 26, 2010 - Jul 5, 2010	Jun 26, 2010 - Jul 5, 2010	[Icons]
<input type="checkbox"/> testCustomer	Active	Test User	Apr 7, 2011 - Apr 11, 2011	Apr 7, 2011 - Apr 11, 2011	[Icons]

This screen capture shows the Coremetrics Analytics tool. To access the segments in Coremetrics, open the Profile Segments list page and find the profile segment to export to WebSphere Commerce. In the Actions column for the profile segment, click the Export to WebSphere Commerce icon. The profile segment is exported to the WebSphere Commerce production server database. A message displays stating that the profile segment has been transmitted to WebSphere Commerce. If the name of the exported profile segment does not match any existing customer segments in WebSphere Commerce, then the export process creates a new customer segment using the profile segment name. If the profile segment name matches an existing customer segment in WebSphere Commerce, then the export process updates the existing customer segment.



## Profile segment imported to WebSphere Commerce

The screenshot shows the IBM Management Center interface for WebSphere Commerce. The browser window title is "IBM® Management Center for WebSphere® Commerce - Windows Internet Explorer". The page displays the "Marketing" workspace and the "Customer Segments - List" view. A table lists various customer segments, with the "Albani customer" segment highlighted in red. A yellow callout bubble with the text "Imported segment" points to this row.

* Type	* Name	Description
	Albani customer	20110407:20110411
	Customers who are 40 years of age or older	Customers who are 40 years of age or older
	Customers who are under 40 years of age	Customers who are under 40 years of age
	Female Customers	Registered customers who have identified themselves as females
	Guest Shoppers	Shoppers who have not registered with the store
	Male Customers	Registered customers who have identified themselves as males
	Registered Customers	Customers who have registered with the store
	Repeat Customers	Customers who have placed at least one order with the store

33 Coremetrics integration enhancements overview © 2011 IBM Corporation

To verify that the new or updated customer segment exists in WebSphere Commerce, you can go to the Marketing tool from the Management Center and click the Customer Segments folder from the explorer view. In the Customer Segments list page, check for the new or updated customer segment.

## Summary

- Solution overview
- Configuration
- Integration of Coremetrics Analytics and WebSphere Commerce Management Center
- Store tagging update
- Coremetrics Profile Segments tool import enhancements

In summary, the presentation went over the various enhancements introduced in feature pack 3 for Coremetrics integration then looked at various configuration scenarios for you to use the different enhancements. The presentation then went over each enhancement in more detail including store tagging updates and the Profile Segments tool import enhancements.

## References

- **Configuring single-sign-on between Management Center and Coremetrics Analytics**
  - <http://publib.boulder.ibm.com/infocenter/wchelp/v7r0m0/index.jsp?topic=/com.ibm.commerce.Coremetrics.doc/tasks/tmtsocont.htm>
- **Working with Coremetrics Analytics product and search reports**
  - <http://publib.boulder.ibm.com/infocenter/wchelp/v7r0m0/index.jsp?topic=/com.ibm.commerce.Coremetrics.doc/tasks/tmtcmcrepatcont.htm>
- **Working with Coremetrics Analytics marketing reports**
  - <http://publib.boulder.ibm.com/infocenter/wchelp/v7r0m0/index.jsp?topic=/com.ibm.commerce.Coremetrics.doc/tasks/tmtcmcreparcont.htm>
- **Working with Coremetrics Analytics promotions reports**
  - <http://publib.boulder.ibm.com/infocenter/wchelp/v7r0m0/index.jsp?topic=/com.ibm.commerce.Coremetrics.doc/tasks/tmtcmcreprocont.htm>
- **Analytics tag library for WebSphere Commerce (top level)**
  - <http://publib.boulder.ibm.com/infocenter/wchelp/v7r0m0/index.jsp?topic=/com.ibm.commerce.Coremetrics.doc/concepts/cmttaglib.htm>

Here are reference links to the Information Center.

## Reference: Troubleshooting – Trace strings and log files

- Intelligent Offer
  - com.ibm.commerce.marketing.commands
- Store Tagging
  - com.ibm.websphere.commerce.WC\_BI
- Customer Segmentation Export
  - com.ibm.websphere.commerce.WC\_MARKETING
- Data extraction utility
  - logging.properties in the wc.ear/xml/config/dataextract folder

For your reference, here are the trace strings associated with the different Coremetrics enhancements.



## Feedback

Your feedback is valuable

You can help improve the quality of IBM Education Assistant content to better meet your needs by providing feedback.

- Did you find this module useful?
- Did it help you solve a problem or answer a question?
- Do you have suggestions for improvements?

Click to send email feedback:

[mailto:iea@us.ibm.com?subject=Feedback\\_about\\_Coremetrics\\_Integration.ppt](mailto:iea@us.ibm.com?subject=Feedback_about_Coremetrics_Integration.ppt)

This module is also available in PDF format at: [../Coremetrics\\_Integration.pdf](../Coremetrics_Integration.pdf)

You can help improve the quality of IBM Education Assistant content by providing feedback.



## Trademarks, disclaimer, and copyright information

IBM, the IBM logo, ibm.com, and WebSphere are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of other IBM trademarks is available on the web at "[Copyright and trademark information](http://www.ibm.com/legal/copytrade.shtml)" at <http://www.ibm.com/legal/copytrade.shtml>

THE INFORMATION CONTAINED IN THIS PRESENTATION IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY. WHILE EFFORTS WERE MADE TO VERIFY THE COMPLETENESS AND ACCURACY OF THE INFORMATION CONTAINED IN THIS PRESENTATION, IT IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. IN ADDITION, THIS INFORMATION IS BASED ON IBM'S CURRENT PRODUCT PLANS AND STRATEGY, WHICH ARE SUBJECT TO CHANGE BY IBM WITHOUT NOTICE. IBM SHALL NOT BE RESPONSIBLE FOR ANY DAMAGES ARISING OUT OF THE USE OF, OR OTHERWISE RELATED TO, THIS PRESENTATION OR ANY OTHER DOCUMENTATION. NOTHING CONTAINED IN THIS PRESENTATION IS INTENDED TO, NOR SHALL HAVE THE EFFECT OF, CREATING ANY WARRANTIES OR REPRESENTATIONS FROM IBM (OR ITS SUPPLIERS OR LICENSORS), OR ALTERING THE TERMS AND CONDITIONS OF ANY AGREEMENT OR LICENSE GOVERNING THE USE OF IBM PRODUCTS OR SOFTWARE.

© Copyright International Business Machines Corporation 2011. All rights reserved.