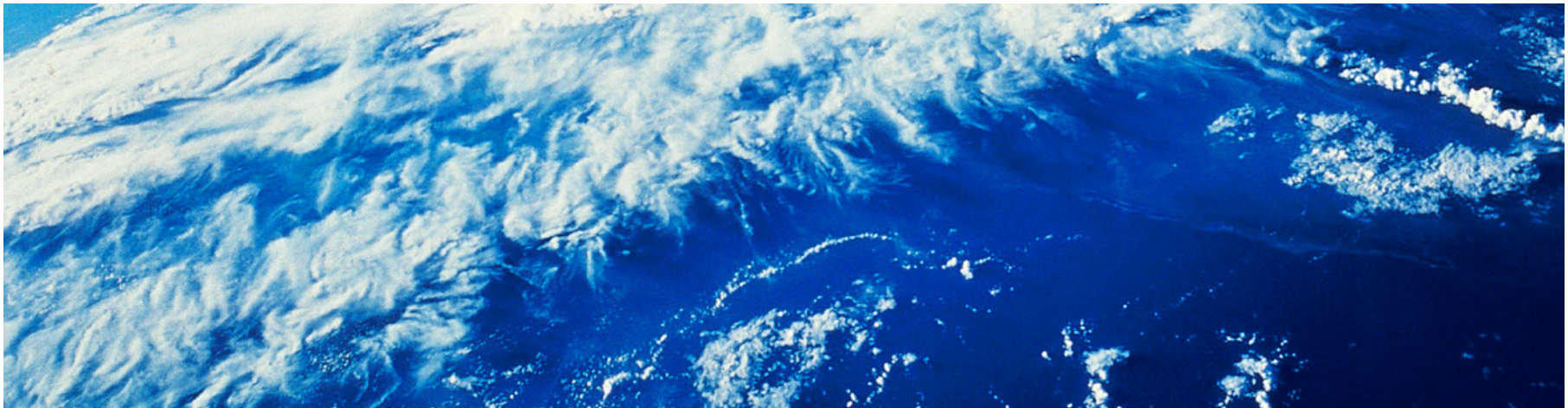


# IBM WebSphere Commerce V7 FEP8

Customer Segment Import, Export, and Download



Addy Leung

# Agenda

- Introduction
- Customer Segment Export and Download
  - Assumption and Design
  - Demo
  - Customization
  - Performance
  - Troubleshooting and Links
- Customer Segment Import
  - Assumption and Design
  - Troubleshooting and Links

# Introduction

- Customer Segment Export and Download
  - No access to customers information through Staging.
    - Who are my registered customers ?
    - Who spent \$1000 in my site over the last month ?
    - How many customers will be eligible for my promotion ?
    - I want to send out promotion emails, how do I get the list of customer email addresses
  - Canada's Anti-Spam Legislation (CASL) came into effect on July 1, 2014
- Customer Segment Import
  - I have a .csv of customers email addresses from internal and/or external source, how do I quickly import it to create new segment in my production site ?
  - V7 VEP3 added member data load support that included loading a list of users into a member group, but there was no resolve user ID by email address. Logon ID or user's distinguished name (DN) were needed.

# Customer Segment Export and Download

# Assumption

- Staging and production servers must be in sync with each other
  - For example, same customer segment (member group) with same ID on both
- Workspace changes will have no effect on export, committed staging data is used
- Quick Publish DataSource is used to establish production database connection
- Registered users only, guest shoppers not supported.
- SQL is constructed using customer segment information from staging server
- SQL is ran in production database
- Result is saved in the staging database (UPLOADFILE) as binary data

# Design

- New CMC Marketing UI to export Customer Segment
- Options to include:
  - logon ID;
  - customer's personal title, first name, last name;
  - Customers who opt out for receiving emails;
    - `EMLUSRRECV.RECEIVEEML = 0`
- New **Marketing Director** role for download
- CMC shows download history.
- Export and download captured for business audit purpose.
- Configurable .csv or .zip file format
- Developer/Toolkit default to use local database connection for easier customization
- Customization tutorial available

# Design

- Configuration file location:
  - /components/foundation/wc.ear/xml/config/com.ibm.commerce.marketing-fep/wc-admin-component.xml

```
<_config:configgrouping name="CustomerSegmentExport">  
  <_config:property name="HostForCustomerSegmentExportScheduledJob" value=""/>  
  <_config:property name="CompressCustomerSegmentExportFile" value="false"/>  
  <_config:property name="CustomerSegmentExtractFetchSize" value="64"/>  
  <_config:property  
name="CustomerSegmentExtractUseProductionConnectionInDeveloperEnv"  
value="false"/>  
</_config:configgrouping>
```

# Design

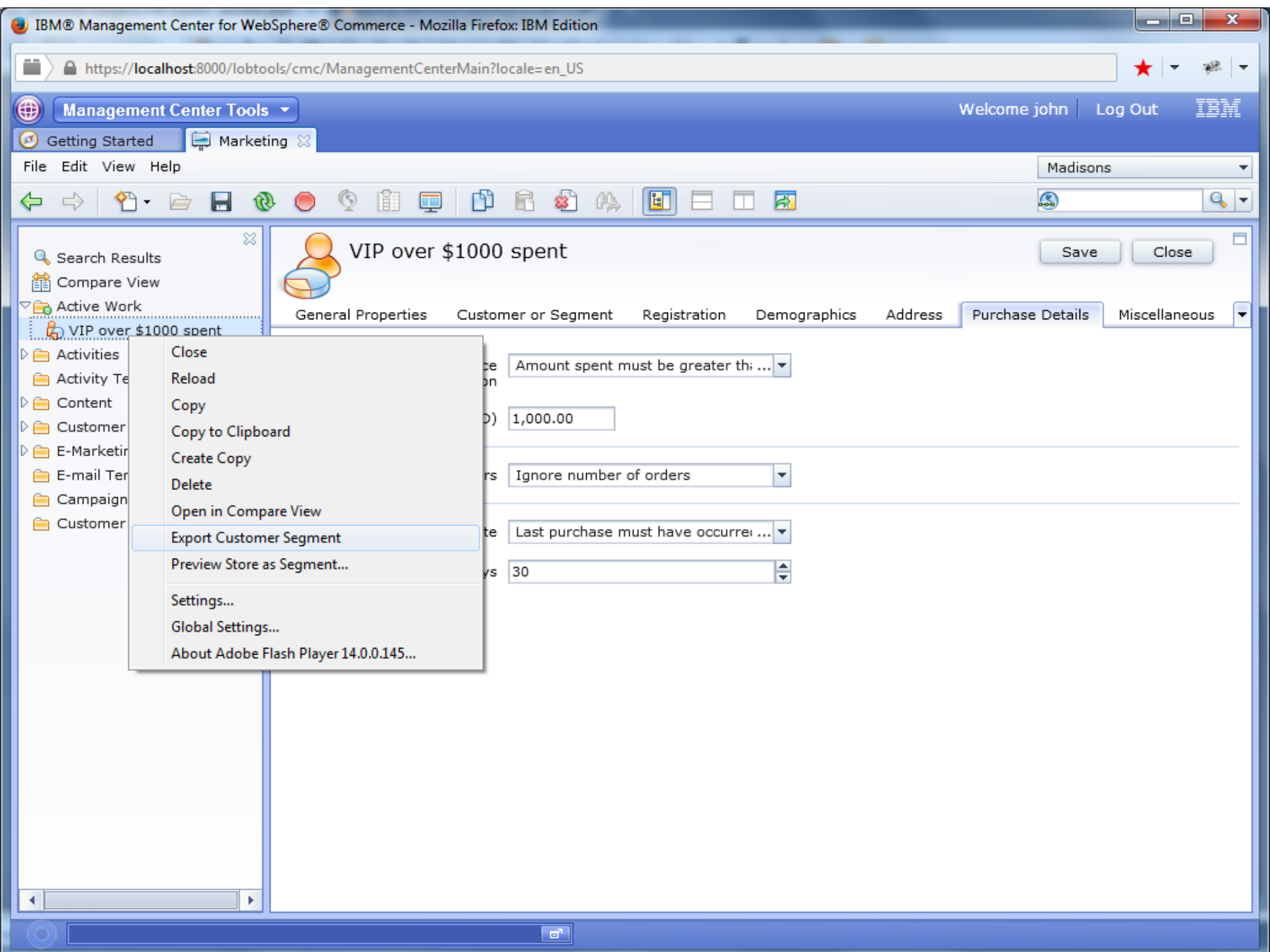
Sample SQL:

```
SELECT
    LOWER(T1.EMAIL1) AS LOWER_EMAIL1,
    T1.PERSONTITLE, T1.FIRSTNAME, T1.LASTNAME,
    T2.LOGONID
FROM
    ADDRESS T1,
    USERREG T2
WHERE
    T1.MEMBER_ID=T2.USERS_ID AND
    T1.STATUS='P' AND T1.SELFADDRESS=1 AND
    T1.MEMBER_ID IN (<QUERY>)
ORDER BY
    LOWER_EMAIL1 ASC
```



# Demo

## Customer Segment Export and Download



IBM® Management Center for WebSphere® Commerce - Mozilla Firefox: IBM Edition

https://localhost:8000/lobtools/cmc/ManagementCenterMain?locale=en\_US

Management Center Tools

Welcome john | Log Out

IBM

Getting Started

Marketing

File Edit View Help

Madisons

Search Results

Compare View

Active Work

VIP over \$1000 spent

VIP\_All

Activities

Activity Templates

Content

Customer Segments

E-Marketing Spots

E-mail Templates

Campaigns

Customer Segment Exports

VIP\_All (Read-Only)

Export Customer Segment

Download History

Customer Segment Export Properties

\*Name

VIP\_All

Customer segment name

VIP over \$1000 spent

Include customer names

☒

Include customer logon ID

☒

Include customers who did not opt in to receive marketing email messages

☒

Customer segment unique ID

80000000000000000801

Summary

Processing

Save

Close

Save action completed for Customer Segment Export VIP\_All.

[https://localhost:8000/lobtools/cmc/ManagementCenterMain?locale=en\\_US](https://localhost:8000/lobtools/cmc/ManagementCenterMain?locale=en_US)

Management Center Tools ▾

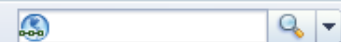
Welcome lisa | Log Out



Getting Started Marketing

File Edit View Help

Madisons ▾



- Search Results
- Compare View
- Active Work
- Activities
- Activity Templates
- Content
- Customer Segments
- E-Marketing Spots
- E-mail Templates
- Campaigns
- Customer Segment Exports



## Customer Segment Exports - List

Type	Status	Name	Records	Customer Segment Name	Start Time
	Complete	VIP_All	8	VIP over \$1000 spent	2014/07/1

- Open
- Copy
- Copy to Clipboard
- Delete
- Open in Compare View
- Select All
- Deselect All
- Download Customer Segment
- Settings...
- Global Settings...
- About Adobe Flash Player 14.0.0.145...

1 of 1 selected



Paste



Cut



Copy

Clipboard

Courier New

11

A A

**B***I*U

abc

x<sub>2</sub>x<sup>2</sup>

Font



Paragraph



Picture

Paint  
drawingDate and  
timeInsert  
object

Insert



Find



Replace



Select all

Editing

EMAIL, TITLE, FIRSTNAME, LASTNAME, LOGONID  
addyl@hotmail.com, , Addy, Leung, addyl  
albertl@yahoo.com, , Albert, Lui, albertl  
alvins@yahoo.com, , Alvin, So, alvins  
curtc@hotmail.com, , Curt, Crane, curtc  
jackf@hotmail.com, , Jack, Fong, jackf  
jasonz@gmail.com, , Jason, Zhang, jasonz  
justinal@hotmail.com, , Justina, Li, justinal  
patricial@hotmail.com, , Patricia, Lai, patricial

https://localhost:8000/lobtools/cmc/ManagementCenterMain?locale=en\_US

Management Center Tools

Welcome lisa | Log Out

Getting Started Marketing

File Edit View Help

Madisons

Search Results

Compare View

Active Work

VIP\_All

Activities

Activity Templates

Content

Customer Segments

E-Marketing Spots

E-mail Templates

Campaigns

Customer Segment Exports

VIP\_All (Read-Only)

Export Customer Segment Download History

User download history

User	Download Time
lisa	2014/07/15 04:15 PM
0 of 1 selected	

Save Close

# Customization

More customers information can be added into the export through customization.

Example: City, Fax, Gender

Adding new checkbox in CMC is as simple as any other CMC customization

Command customization is easy with a few overridable methods:

`setInclude1stAdditionalADDRESScolumns ()`

`setInclude2ndAdditionalUSERDEMOcolumns ()`

`setIncludeLastAdditionalCustomTableColumns ()`

`setSQLSelect ()`

`setSQLOrderBy ()`

`setFileHeader ()`

`getSQLSelect ()`

`getSQLOrderBy ()`

`getFileHeader ()`

# Performance

The Export SQL needs to be run against the production database. During an export, is it expecting hundreds, thousands, millions, or billions of customers emails to be returned ?

Expected export time should be in the minutes, and the download time should be in the seconds. The SQL operation is run as an immediate scheduler job so the impact to the production site should be minimal.

SQL performance can be slightly adjusted through this configuration:

```
<_config:property name="CustomerSegmentExtractFetchSize" value="64"/>
```



# Troubleshooting

## Trace

- `com.ibm.commerce.marketing.segment.*`
- `com.ibm.commerce.membergroup.commands.*`

## Links:

[Exporting customer segment information](#)

[Adding a customer segment attribute to the customer segment export file](#)

[Exporting customer segments from the production database in a development environment](#)

# Customer Segment Import

# Assumption

- This data load should be run against production database, the new customer segment will be in production database only. Use the segment copy utility available since V7 FEP 3
- Support only registered users, guest users are ignored.
- Scope users by store as data load environment file requires the store ID.
  - Users must have a registered customer role in the store organization
    - Check include all parents in the organization hierarchy

# Design

- It uses data load to load a CSV file with a list of users into a new or existing customer segment in the commerce database.
- Existing member group member dataload now support the email column
- New customer segment dataload samples in directory
  - <WCS>\components\foundation\samples\DataLoad\Member\CustomerSegment

# Design – MemberGroupMember Data Load

The **MemberGroupMemberValueHandler** is enhanced with

- email – for the user which can be used to resolve to a user ID
- emailCaseSensitive – flag to indicate if email is case sensitive, default is false
- checkEmailFlag - a flag to indicate how to resolve the user ID from an email address
  - 0 = use user's self address to resolve user ID, default.
  - -1 = use user's all email addresses in address book.

In <WCS>\components\foundation\samples\DataLoad\Member\MemberGroup\wc-loader-member-group-member.xml

```
<_config:ValueHandler  
className="com.ibm.commerce.member.dataload.config.MemberGroupMemberValueHandler">
```

```
...
```

```
<_config:Parameter name="logonId" value="logonId" />
```

```
<_config:Parameter name="email" value="email" />
```

```
<_config:Parameter name="checkEmailFlag" value="0" valueFrom="Fixed" />
```

```
<_config:Parameter name="emailCaseSensitive" value="false" valueFrom="Fixed" />
```

```
</_config:ValueHandler>
```

# Design – MemberGroupMember Data Load

The **MemberGroupMemberMediator** is enhanced with

- IgnoreNonExistUsers = default false will throw exception when email cannot be resolved to a user ID.
- ReplaceAllExistingMembers = when set to true, all existing users in the member group will be deleted before loading; default false.

In <WCS>\components\foundation\samples\DataLoad\Member\MemberGroup\wc-loader-member-group-member.xml

```
<_config:BusinessObjectMediator  
  className="com.ibm.commerce.member.dataload.mediator.MemberGroupMemberMediator"  
  componentId="com.ibm.commerce.member" >  
  <_config:property name="replaceAllExistingMembers" value="true" />  
  <_config:property name="ignoreNonExistUsers" value="true" />  
</_config:BusinessObjectMediator>
```

# Design – MemberGroupMember Data Load

Sample CSV, note that loginId is gone, replaced by email

```
MemberGroupMember,,,,  
memberGroupName,email,excluded,memberType,delete  
TestMemberGroup,jacobsmith@email.com,false,user  
TestMemberGroup,ryanjohnson@email.com,true,user  
AccessGroup1,olivialeee@email.com,false,user
```

# Design – Customer Segment Data Load

The MemberGroupMemberMediator is enhanced with

- CustomerSegmentNamelsFileName = If true, the filename is the customer segment name, if segment does not exists it will be created, default is false.

In <WCS>\components\foundation\samples\DataLoad\Member\CustomerSegment\wc-loader-customer-segment-email.xml

```
<_config:BusinessObjectMediator
  className="com.ibm.commerce.member.dataload.mediator.MemberGroupMemberMediator"
  componentId="com.ibm.commerce.member" >
  <_config:property name="replaceAllExistingMembers" value="true" />
  <_config:property name="ignoreNonExistUsers" value="true" />
  <_config:property name="customerSegmentNamelsFileName" value="true" />
</_config:BusinessObjectMediator>
```



# Design – Customer Segment Data Load

```
<_config:DataReader className="com.ibm.commerce.foundation.dataload.datareader.CSVReader"  
firstLineIsHeader="false" useHeaderAsColumnName="false" >  
  <_config:property name="firstTwoLinesAreHeader" value="false" />  
  <_config:Data>  
    <_config:column number="1" name="email" />  
  </_config:Data>  
</_config:DataReader>
```

# Design – Customer Segment Data Load

Sample CSV, TestCustomerSegment.csv

jacobsmith@uk.com

ryanjohnson@yahoo.com.cn

olivia.lee@gmail.com

# Customization

If the customer wants to customize to have their own logic to resolve user ID by email, they need to overwrite the protected method in the class

**MemberGroupMemberValueHandler:**

```
protected Long[] resolveUserIdByEmail(String email, String checkEmailFlag) throws  
DataLoadException;
```

# Troubleshooting

## Trace:

Same as always, update the dataload logging.properties,

-Dcom.ibm.commerce.foundation.level=ALL

-Dcom.ibm.commerce.member.level=ALL

## Links:

[Creating a customer segment that is populated by an external process](#)

[Loading customer segment members by email address with the Data Load utility](#)

[Copying customer segments from the production server to the staging server](#)

[Loading member group members by email address with the Data Load utility](#)

Thank You!

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