

**ORACLE®**

---

**ENDECA**

Oracle Endeca for Mobile and  
Oracle Endeca for Social  
Installation Guide

# Copyright and Disclaimer

Copyright © 2003, 2012, Oracle and/or its affiliates. All rights reserved.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners. UNIX is a registered trademark of The Open Group.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

This software or hardware and documentation may provide access to or information on content, products and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.

Rosette® Linguistics Platform Copyright © 2000-2011 Basis Technology Corp. All rights reserved.

Teragram Language Identification Software Copyright © 1997-2005 Teragram Corporation. All rights reserved.

## Installation Guide

The Oracle Endeca for Mobile product is packaged as a ZIP archive that includes the following packages:

Package	Description
oracle-endeca-mobile-xmgr-extensions-<version>.zip	Set of web applications and swf files that make up the Mobile Editors and Cartridges. Installed on the Oracle Endeca Workbench server
endeca-mobile-api-<version>.zip	Java Web application, packaged as a WAR file. Installed in a Java Web application server
endeca-ios-application-<version>.zip	iPhone and iPad Universal refapp XCode project, core and Three20 library XCode projects. Installed in a Mac development environment Xcode+iPhone SDK
endeca-mobile-web-application-<version>.zip	Set of JSPs/CSS/HTML/images/JavaScript/etc and JAR files for Mobile Web. Installed on top of the endeca-mobile-api
endeca-camerastore-data-<version>.zip	Sample dataset used by the reference apps. Installed on a server running the MDEX Engine and Platform Services

The Oracle Endeca for Social product includes the package below:

Package	Description
oracle-endeca-social-<version>.zip	Includes 3 components: Facebook App, Insights CAS adapter, and Experience Manager Templates. The Facebook App is a set of JSPs/CSS/HTML/images/JavaScript/etc and JAR files for the Oracle Endeca for Social Facebook Canvas application, and is installed on top of endeca-mobile-api. The Insights CAS adapter will add Facebook Insights data to the records in an Endeca pipeline.

## Supported Devices

While the Oracle Endeca for Mobile product is built to work on a wide variety of devices and expected to work on other devices than those listed below, the following are the devices that are officially supported and tested on:

iPhone/iPad – iOS 4.0 and greater

MobileWeb – iPhone, Android, and BlackBerry (Pearl, Curve, Bold, Storm, Tour, Torch)

Social - Facebook application canvas for application width of 760px.

## Installing the Endeca Camera Store Dataset

The camerastore dgraph should be installed in an environment with the Endeca MDEX Engine, Platform Services, Workbench, and the Deployment Template. It is shipped as a Deployment Template project. To get the dataset up and running, follow these steps:

1. Unzip endeca-camerastore-data-<version>.zip.
2. Run the Deployment Template “deploy” command from command line from the

endeca\Mobile\*<version>*\camerastore directory, specifying deploy.xml as the app file. For example, on Windows, this might look like

```
camerastore>\endeca\Solutions\deploymentTemplate-3.2\bin\deploy.bat --app deploy.xml
```

If you are prompted to “Select a deployment type: 1. Dgraph deployment 2. Distributed (agraph) deployment”, you have gone too far. Check your command again (i.e. make sure there’s 2 dashes in the --app flag)

Otherwise, you should enter the following into the prompts:

- a. Y
  - b. camerastore
  - c. C:\Endeca\Apps
  - d. 8888
  - e. Y
  - f. 8006
  - g. 13000
  - h. 13001
  - i. 13010
3. Run the Deployment Template scripts by running the following commands:
- a. cd \Endeca\Apps\camerastore\control
  - b. initialize\_services
  - c. load\_baseline\_test\_data
  - d. baseline\_update
  - e. update\_web\_studio\_config
  - f. set\_templates

## Installing the Endeca Mobile API

1. Unzip endeca-mobile-api-*<version>*.zip.
2. Install mobile.war in a Java Application server. You will need to explode (unzip) the WAR file in order to edit the configuration.

NOTE if you are importing the war into Eclipse, you will need to add a Server Runtime library to the Build Path

You will need to first setup a Server Runtime like Apache Tomcat 6.0. Then right click on the project and select Properties. Go to the “Java Build Path” section, click on the “Libraries” tab, and then select “Add Library”. Choose “Server Runtime”, and then you should see the list of Server Runtimes (e.g. Apache Tomcat 6.0).

3. Edit /WEB-INF/spring/app-config.xml, and update the host and port in the mdexConfig bean:  

```
<bean id="mdexConfig" class="com.endeca.b2creference.config.MdexConfig">  
  <property name="host" value="[host]"/>  
  <property name="port" value="[port]"/>  
</bean>
```
4. If you are not using a 6.1.4 MDEX Engine, you will need to replace /WEB-INF/lib/endeca\_navigation-6.1.4.jar with the 6.1.0 endeca\_navigation.jar (which you can find in /Endeca/PlatformServices/6.1.0/lib/java/endeca\_navigation.jar)
5. Start/restart the Application server

6. If everything is setup correctly, you should be able to access the /mobile/search/api.json URL.

For example: `http://[app_server_host]:[port]/mobile/search/api.json`

This URL should return a response that looks like this:

```
ci: {
  templateId: "MobileFeaturedPage"
  templateType: "PageTemplate",
  name: "Categories",
  props: [
    ...
  ]
}
```

## Installing the Oracle Endeca for Mobile Web Application

The Oracle Endeca for Mobile Web Application is a patch that gets installed into the existing Mobile API java application.

1. Unzip `endeca-mobile-web-application-<version>.zip`.
2. Copy the files in the WEB-INF folder into the WEB-INF folder of the Endeca Mobile API.
3. Edit WEB-INF/spring/app-config.xml file, and uncomment the deviceDetector configuration.

```
<!-- To enable device detection, the device detector below -->
<!--
<bean id="deviceDetector"
class="com.endeca.mobile.services.detection.impl.DefaultDeviceDetector" />
-->
```

If you are doing development, you are done after this step. To use the yuicompressor for production, you can follow the steps below:

1. Copy the yuicompressor folder somewhere **outside** the web application. This is only needed for compressing Javascript and CSS files for production.
2. Edit `yuicompressor/script.properties`, and update the absolute location of the **WEB-INF\views\_m\components\shared** folder that you copied in step 2. See the Mobile Web Getting Started guide for more detail on using the compression scripts.

## Installing the Oracle Endeca for Social Facebook Canvas Application

The Oracle Endeca for Social Facebook Canvas Application is a patch that gets installed into the existing Endeca Mobile API java application.

1. Unzip `oracle-endeca-social-<version>.zip`.
2. Copy the files in the `endeca/Social/<version>/web/WEB-INF` folder you just unzipped into the WEB-INF folder of the Endeca Mobile API.

3. Open the WEB-INF/spring/app-config.xml file, and uncomment the import line:

```
<import resource="endeca-social-config.xml" />
```

4. Open the WEB-INF/spring/endeca-social-config.xml file, and edit the facebookStoreConfig properties

- appId: The Facebook application ID listed on the developer home page of your Facebook application.
  - appSecret: The Facebook application secret listed on the developer home page of your Facebook application.
  - appURL: The home page URL of your application. This is the home page that will be used within the Facebook canvas.
  - pageAdmin: A numeric ID that refers to the Facebook administrator's user account.
  - productDetailDimValID: The dimension value id for the dimension "trigger.page\_type>Record Detail Page" (see notes on adding page type triggers in the section Installing Oracle Endeca for Social with an Existing Dgraph)
  - pageSearchDimValID: The dimension value id for the dimension "trigger.page\_type>Navigation Page>Search Page" (see notes on adding page type triggers in the section Installing Oracle Endeca for Social with an Existing Dgraph)
  - pageNavigationDimValID: The dimension value id for the dimension "trigger.page\_type>Navigation Page" (see notes on adding page type triggers in the section Installing Oracle Endeca for Social with an Existing Dgraph)
  - firstPageDimValID: The dimension value id for the dimension "trigger.paging\_offset>First Page" (see notes on adding page type triggers in the section Installing Oracle Endeca for Social with an Existing Dgraph)
  - secondPlusPageDimValID: The dimension value id for the dimension "trigger.paging\_offset>Second Page+" (see notes on adding page type triggers in the section Installing Oracle Endeca for Social with an Existing Dgraph)
  - birthdayStoreDetailDimValID: The dimension value id for the dimension "trigger.fb\_page\_type>birthday store" (see notes on adding page type triggers in the section Installing Oracle Endeca for Social with an Existing Dgraph)
  - friendStoreDetailDimValID: The dimension value id for the dimension "trigger.fb\_page\_type>friend store" (see notes on adding page type triggers in the section Installing Oracle Endeca for Social with an Existing Dgraph)
  - personalStoreDetailDimValID: The dimension value id for the dimension "trigger.fb\_page\_type>personal store" (see notes on adding page type triggers in the section Installing Oracle Endeca for Social with an Existing Dgraph)
  - host: Your sites web host.
  - cachedQueries: A list of Facebook Query Language (FQL) queries that will be executed with each new session and cached for greater performance throughout the shopping experience. The key values are a unique identifier that can be used later to get access to the results of the query.
5. In Experience Manager, in the FaceBook landing page group, update the following cartridges on the Home Page, Default Search Results Page, and Default Page to reflect your application settings:
    - In the right column, the Facebook Like Box cartridge: The "Facebook Page URL" property should be set to reflect your application id, e.g. <http://www.facebook.com/apps/application.php?id=123456789>
    - In the right column, the Facebook Activity Feed cartridge: The "Domain" property should be set to reflect your site domain name, e.g. <http://www.example.com/>

If you are doing development, you are done after this step. To use the yuicompressor for production, you can follow the steps below:

- Copy the yuicompressor folder somewhere **outside** the web application. This is only needed for compressing Javascript and CSS files for production.
- Edit yuicompressor/script.properties, and update the absolute location of the **WEB-INF\views\_fb\components\shared** folder that you copied in step 2. See the Oracle Endeca for Social Getting Started Guide for more detail on using the compression scripts.

## Installing the Oracle Endeca for Mobile iPhone/iPad Application

Pre-installed Software Requirements:

- Mac OS 10.6.X (Snow Leopard)
- Xcode 3.x
- iOS SDK 4.0.1 or later

1. Unzip the endeca-ios-application.zip on a Mac development machine.
2. Open Endeca/Mobile/[version]/ios/refapp/refapp.xcodeproj. In the top left, set the drop down menu to the 4.X SDK and the iPhone Simulator.
3. Edit the Classes/Configuration/GlobalConfiguration.m and replace the endpoint properties to point to your Mobile API server. By default, all the endpoints are setup to use the ENDPOINT variable at the top of the file:

```
#define ENDPOINT @"http://[host]:[port]/mobile/
```

4. Hit "command - enter" or in the menu select Build > Build and Debug (or Build > Build and Run)

## Installing the Oracle Endeca for Mobile Experience Manager Extensions

Note: Experience Manager support for Mobile is currently only available for the Featured tab and the Browse tab in the Reference Applications for Mobile Web and iPhone. Additionally, the browse tab does not allow for sub-pages triggered off of a node in your taxonomy whereas the featured page does support this capability.

Additionally the iPad Reference Application requires that the iPad Featured Page is active in Experience Manager for the homepage to display correctly or else it tries to fall back to the general mobile Featured Page which does not render correctly on iPad.

There are four web apps that need to be setup on the server running Oracle Endeca Workbench for the mobile Experience Manager Extensions to work.

If you are using default Endeca installation paths on Windows you can skip step 2. The context XML files in step 1 are pre-configured to point to C:\Endeca\Mobile\[VERSION]\xmgr\webapps.

1. Copy the four Context XML files in the Endeca/Mobile/<version>/xmgr/context\_xml\_files directory to

```
%ENDECA_TOOLS_CONF%/conf/Standalone/localhost
```

2. Edit the docBase attribute of the four Context XML files to point to the location of the webapps under Mobile/[VERSION]/xmgr/webapps.

3. Update host and port values in mobile\_editors/mobile\_editors.xml to the ones installed in the previous steps:
  - a. RecordBrowserServer's URL property
  - b. ImageProxyService's URL property
  - c. EditorModule's URL attribute
4. Edit %ENDECA\_TOOLS\_CONF%/conf/webstudio.properties and uncomment the com.endeca.webstudio.pagebuilder.editors.config line at the end of the file and set it to the URL for the mobile\_editors.xml file in the mobile\_editors webapp

For example:

```
com.endeca.webstudio.pagebuilder.editors.config=http://[workbench_host]:8006/mobile_
editors/mobile_editors.xml
```

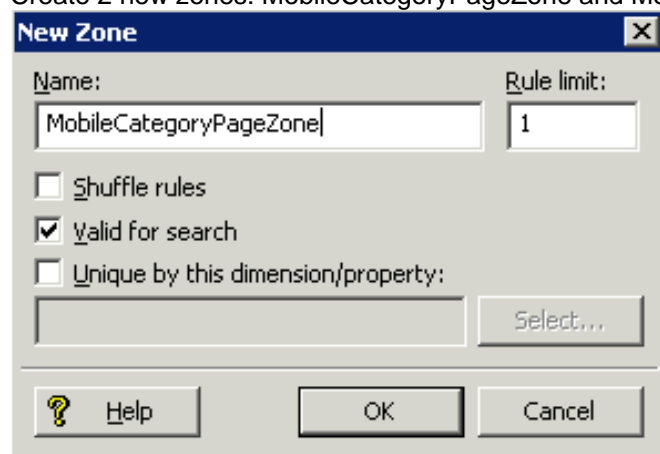
If this line is already commented out, you will need to merge the mobile\_editors.xml file with the existing editor configuration file.

5. Restart the Workbench server for these changes to take effect.

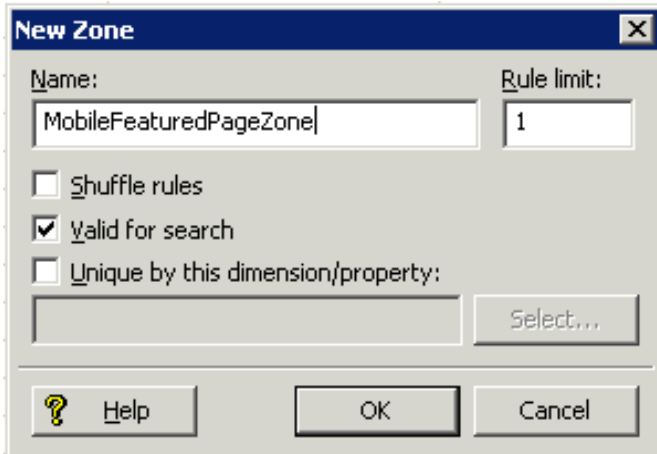
Once you have followed the installation instructions above, you should be able to view the Camera Store reference application and manipulate mobile landing pages. To use the Endeca Mobile API with an existing Dgraph, follow the instructions below.

## Installing Oracle Endeca for Mobile with an Existing Dgraph

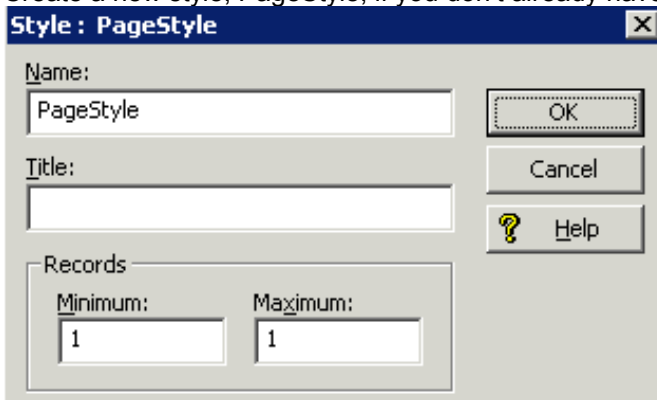
1. Create 2 new zones: MobileCategoryPageZone and MobileFeaturedPageZone



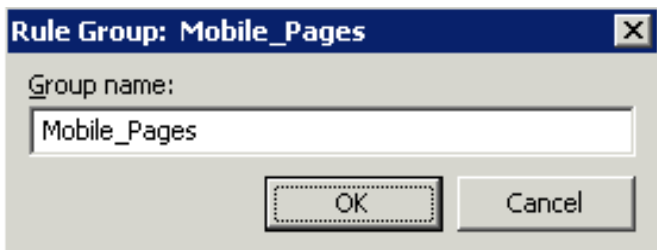




2. Create a new style, PageStyle, if you don't already have this style



3. Create a new rule group, Mobile\_Pages



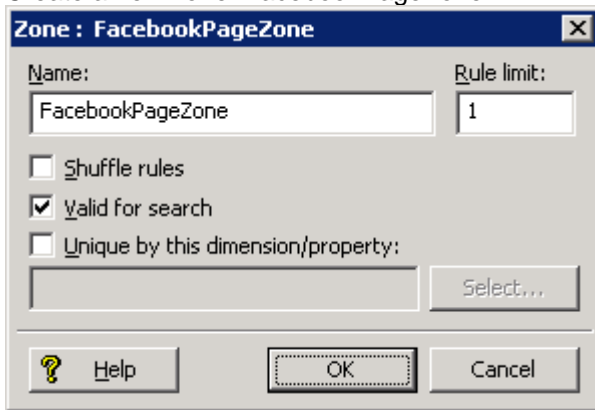
4. Copy the files in the Endeca/Mobile/[version]/xmgr/templates directory into the app directory where you store your Experience Manager templates. If you are using the deployment templates, this is likely a config/templates folder.

These templates use the MobileCategoryPageZone and MobileFeaturedPageZone and a style of PageStyle. Note that this should match up with the zone and style you created in steps 1 and 2.

5. Run the script that you use to upload the Experience Manager templates to Workbench. This is usually either a set\_templates script, or the emgr\_update script. There is a sample\_set\_templates.bat in the Endeca/Mobile/xmgr folder.

## Installing Oracle Endeca for Social with an Existing Dgraph

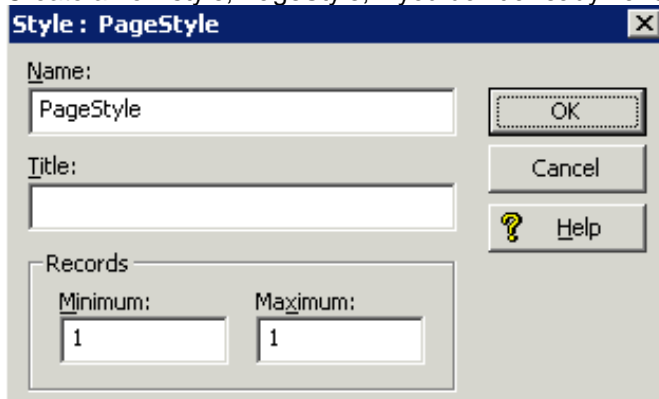
1. Create a new zone: FacebookPageZone



The screenshot shows a dialog box titled "Zone : FacebookPageZone". It contains the following fields and controls:

- Name:** A text box containing "FacebookPageZone".
- Rule limit:** A text box containing "1".
- Shuffle rules**
- Valid for search**
- Unique by this dimension/property:** Below this is an empty text box and a "Select..." button.
- Buttons at the bottom: "Help" (with a question mark icon), "OK", and "Cancel".

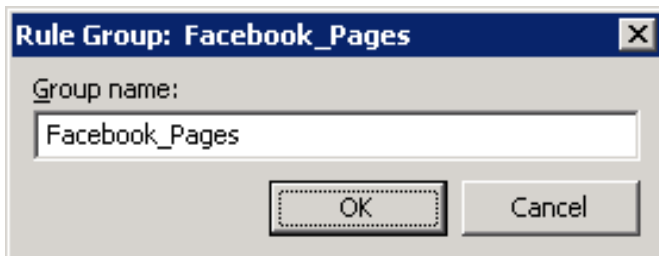
2. Create a new style, PageStyle, if you don't already have this style



The screenshot shows a dialog box titled "Style : PageStyle". It contains the following fields and controls:

- Name:** A text box containing "PageStyle".
- Title:** An empty text box.
- Records:** A section containing two text boxes: "Minimum:" with "1" and "Maximum:" with "1".
- Buttons on the right: "OK", "Cancel", and "Help" (with a question mark icon).

3. Create a new rule group, Facebook\_Pages



The screenshot shows a dialog box titled "Rule Group: Facebook\_Pages". It contains the following fields and controls:

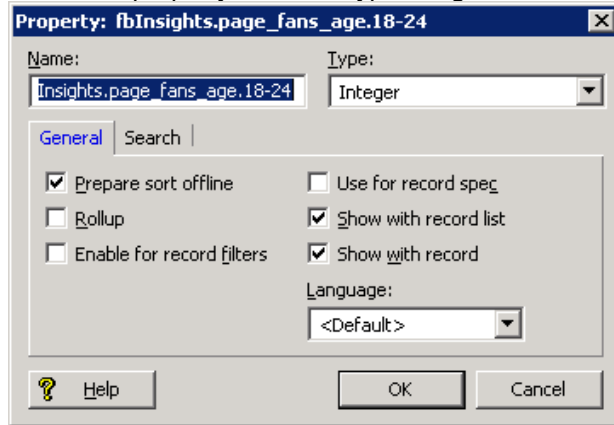
- Group name:** A text box containing "Facebook\_Pages".
- Buttons at the bottom: "OK" and "Cancel".

4. Load Facebook Insights data retrieved with the Endeca Content Acquisition System (CAS) Facebook Insights Connector by adding a new record adapter to the pipeline for that data.
5. Left join the Facebook Insights data to the product master. The product data will be the left side of the join and Facebook Insights the right side. In many cases, the join key can be extracted from the Facebook Insights property "fbInsights.url". Typically a manipulator will need to be

executed within the Pipeline to extract the key identifier. In the provided reference Pipeline please see the manipulator “Extract\_Product\_ID” for an example.

6. Add new properties to the Pipeline from the Facebook Insights data that will be used for sorting to personalized the spotlights

Each new property will be of type Integer and have “Prepare sort offline” enabled.



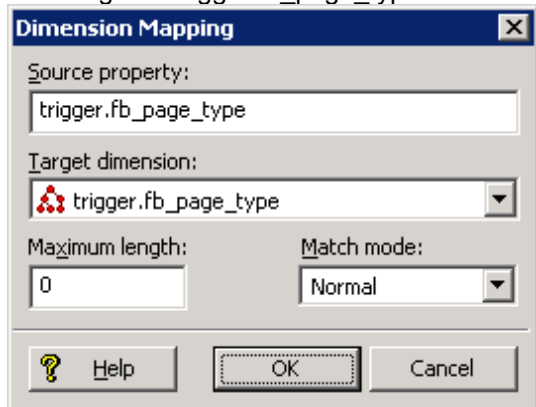
- fbInsights.page\_fans
- fbInsights.page\_fans\_age.13-17
- fbInsights.page\_fans\_age.18-24
- fbInsights.page\_fans\_age.25-34
- fbInsights.page\_fans\_age.35-44
- fbInsights.page\_fans\_age.45-54
- fbInsights.page\_fans\_age.55+
- fbInsights.page\_fans\_gender.F
- fbInsights.page\_fans\_gender.M

7. For each new property add a new mapping in the Property Mapper. The “Source property” will have the same value as the property names provided above.
8. Add a manipulator to the Pipeline to add a default value for the above properties if one does not exist on the record. This is required because the CAS Insights crawler will not deliver a value for “page\_fans” properties that are 0. For example if no one over the age of 55 has liked a page, then the Insights CAS crawler will not provide an entry for the property “fbInsights.page\_fans\_age.55+”. You can simply copy the manipulator titled “Add missing fb properties” from the reference application pipeline to take care of this.
9. Add a new dimension to the Pipeline for Experience Manager triggering named “trigger.fb\_page\_type” with “Multiselect” set to ‘or’. This dimension will have 3 predefined values “birthday store”, “friend store” & “personal store”. For each of these new dimension values note the value of the corresponding “DVAL\_ID” tag in dimensions.xml located in your Pipeline folder. You will need these values when configuring on the application (see Installing the Oracle Endeca for Mobile Web Application).

```
Ex:< DIMENSION_NODE>
  <DVAL TYPE="EXACT">
    <DVAL_ID ID="101922"/>
    <SYN CLASSIFY="TRUE" DISPLAY="TRUE" SEARCH="TRUE">birthday store</SYN>
  </DVAL>
</DIMENSION_NODE>
```

10. Add a new dimension to the Pipeline for Experience Manager triggering named “trigger.page\_type” with “Multiselect” set to ‘or’. This dimension will have 3 predefined values “Record Detail Page”, “Navigation Page” & “Search Page”. For each of these new dimension values note the value of the corresponding “DVAL\_ID” tag in dimensions.xml located in your Pipeline folder. You will need these values when configuration the application (see Installing the Oracle Endeca for Mobile Web Application).
11. For each of these new dimension values you will then need to add a property to each record in your dataset. This is a process known as record striping, and is an often used technique for driving Experience Manager configuration on non-navigable pages. You can use the manipulator found in the reference application Pipeline named “FB Triggers”  
Example Expression:  

```
<EXPRESSION LABEL="" NAME="CREATE" TYPE="VOID" URL="">
  <EXPRNODE NAME="PROP_NAME" VALUE="trigger.fb_page_type"/>
  <EXPRESSION LABEL="" NAME="CONST" TYPE="STRING" URL="">
    <EXPRNODE NAME="VALUE" VALUE="birthday store"/>
  </EXPRESSION>
</EXPRESSION>
```
12. Add a new dimension mapping (Match mode: Normal) within the “Property Mapper” with Source and Target = “trigger.fb\_page\_type” and another with Source and Target = “trigger.page\_type”.



13. Copy the files in the Endeca/Social/[version]/xmgr/templates directory into the app directory where you store your Experience Manager templates. If you are using the deployment templates, this is likely a config/templates folder.

These templates use the FacebookPageZone and a style of PageStyle. Note that this should match up with the zone and style you created in steps 1 and 2.

14. Run the script that you use to upload the Experience Manager templates to Workbench. This is usually either a set\_templates script, or the emgr\_update script. There is a sample\_set\_templates.bat in the Endeca/Mobile/xmgr folder.