

HANDS ON LAB

Adobe Experience Manager

Commerce Integration Framework

Omni Channel Experience

Student Workbook

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1 Lesson 1 – Understand PIM (Product Information Management)

1.1 Overview

Task	Analyze and observe AEM Commerce PIM for WeTelco
Time	10 minutes
Objective	Understand PIM with WeTelco example

1.2 Setup

1. Open terminal.
2. Navigate to **/Users/1322/Desktop/AEM-Commerce-Lab-WS/aem-commerce-omni-channel**. Execute following command

```
cd Desktop/AEM-Commerce-Lab-WS/aem-commerce-omni-channel
```

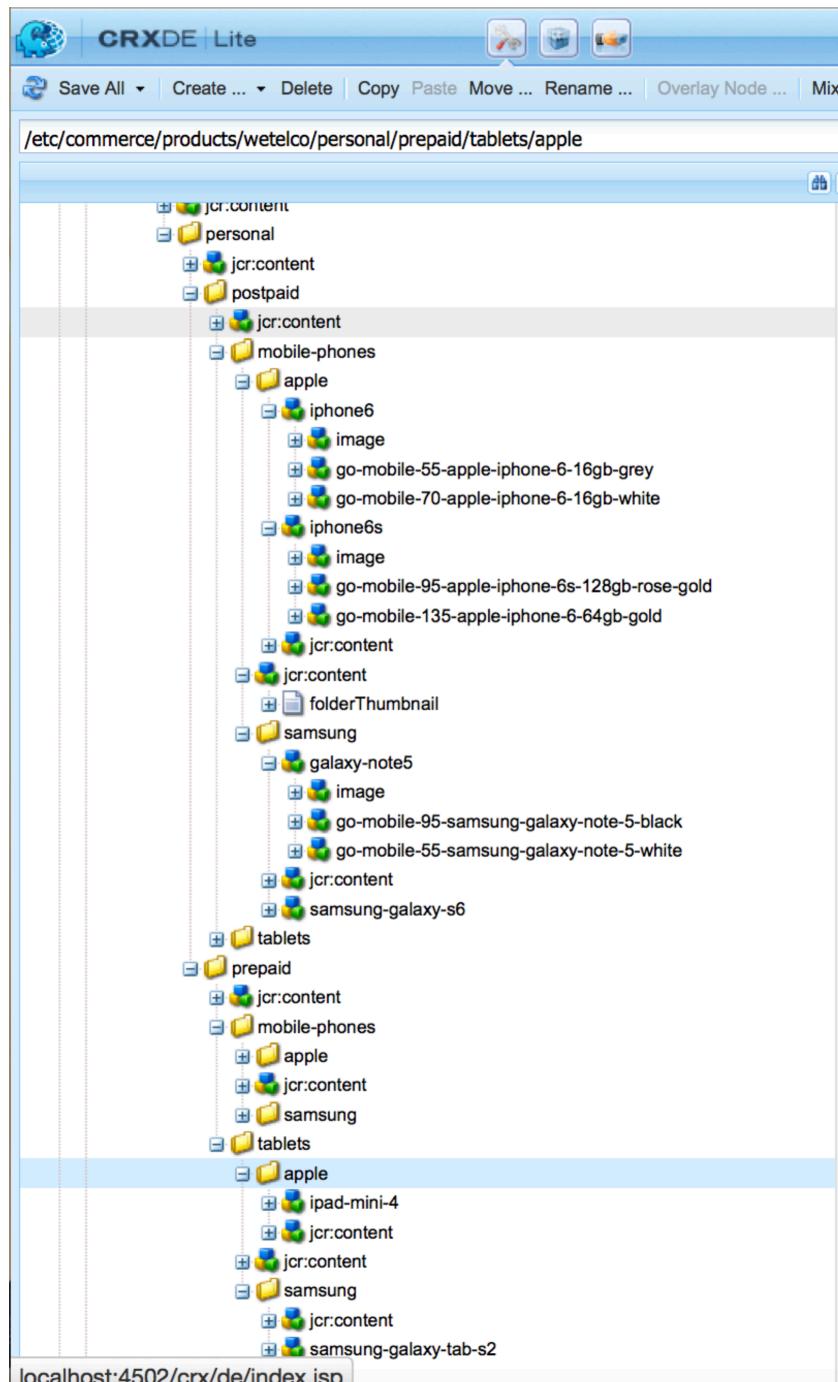
3. Execute following command (to switch to lab0, maven install package from lab0)

```
sh init.sh
```

1.3 Observations

1.3.1 Observation-1 : AEM PIM Data Cache of WeTelco

1. Navigate to <http://localhost:4502/crx/de/index.jsp#/etc/commerce/products/wetelco>





2. Take note of all the **categories** (reference to some below)

- a. <http://localhost:4502/crx/de/index.jsp#/etc/commerce/products/wetelco/business>
- b. <http://localhost:4502/crx/de/index.jsp#/etc/commerce/products/wetelco/personal>
- c. http://localhost:4502/crx/de/index.jsp#/etc/commerce/products/wetelco/personal/pos_tpaid
- d. http://localhost:4502/crx/de/index.jsp#/etc/commerce/products/wetelco/personal/pos_tpaid/mobile-phones
- e. http://localhost:4502/crx/de/index.jsp#/etc/commerce/products/wetelco/personal/pos_tpaid/mobile-phones/apple
- f. http://localhost:4502/crx/de/index.jsp#/etc/commerce/products/wetelco/personal/pos_tpaid/mobile-phones/samsung
- g. http://localhost:4502/crx/de/index.jsp#/etc/commerce/products/wetelco/personal/pre_paid

3. Take note of all the **products** (reference to some below)

- a. http://localhost:4502/crx/de/index.jsp#/etc/commerce/products/wetelco/personal/pos_tpaid/mobile-phones/apple/iphone6
- b. http://localhost:4502/crx/de/index.jsp#/etc/commerce/products/wetelco/personal/pos_tpaid/mobile-phones/apple/iphone6s
http://localhost:4502/crx/de/index.jsp#/etc/commerce/products/wetelco/personal/pos_tpaid/mobile-phones/samsung/galaxy-note5

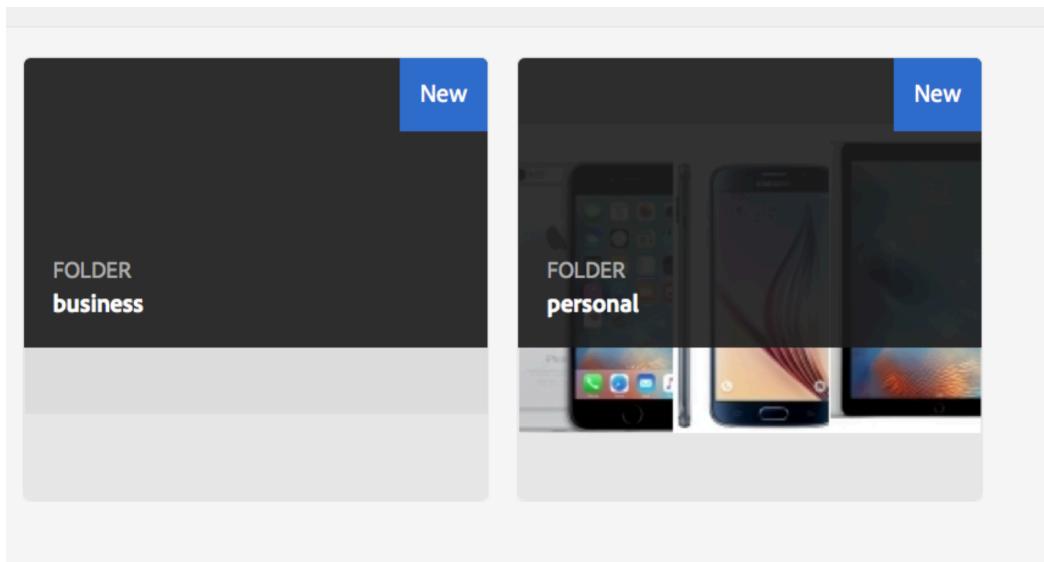
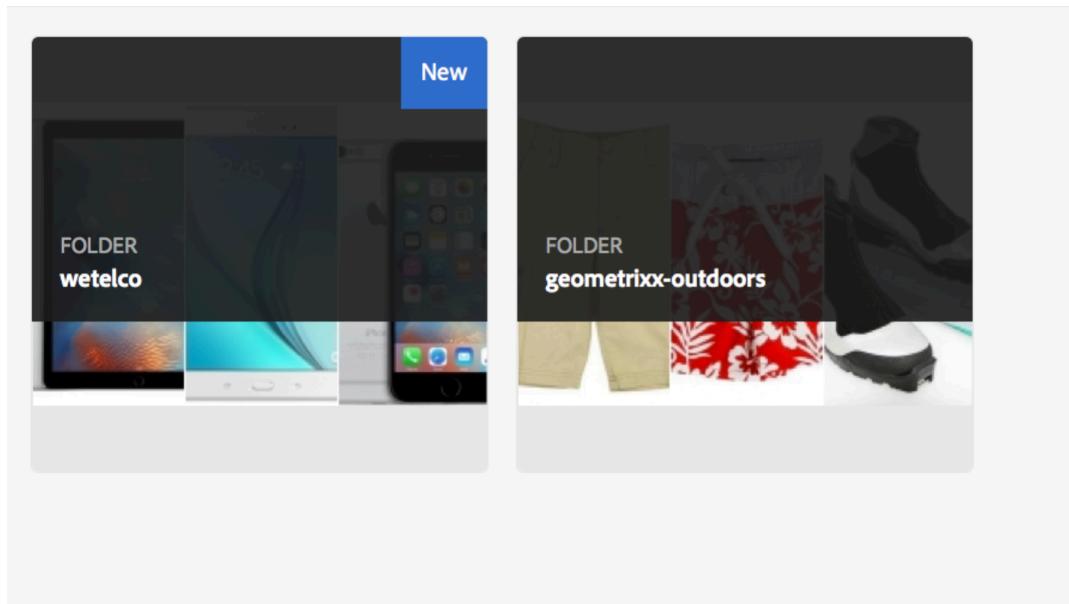
4. Take note of all the **variants** (reference to some below)

- a. http://localhost:4502/crx/de/index.jsp#/etc/commerce/products/wetelco/personal/pos_tpaid/mobile-phones/apple/iphone6/go-mobile-55-apple-iphone-6-16gb-grey
- b. http://localhost:4502/crx/de/index.jsp#/etc/commerce/products/wetelco/personal/pos_tpaid/mobile-phones/apple/iphone6/go-mobile-70-apple-iphone-6-16gb-white

5. Please also note the properties of the products and variants.

6. Note the Commerce PIM imported from an external source at

<http://localhost:4502/libs/commerce/gui/content/products.html/etc/commerce/products/wetelco>





Apple iPad Pro



Apple iPad Pro
From \$84 per month (24 month minimum term. Minim...

Asset Category

Asset Path

RemoveAdd Asset

Apple iPhone 6s



Apple iPhone 6s
From \$84 per month (24 month minimum term. Minim...

Asset Category

Asset Path

RemoveAdd Asset

BASICPRODUCT TABS

CloseSave

Apple iPad Pro



Apple iPad Pro
From \$84 per month (24 month minimum term. Minim...

Asset Category

Asset Path

RemoveAdd Asset

Samsung Galaxy Note5



Samsung Galaxy Note5
From \$60 per month (24 month minimum term. Minim...

Asset Category

Asset Path

Remove

BASICPRODUCT TABS

CloseSave

1.4 Tasks: Create marketing field for WeTelco AEM PIM Data Cache

1. Go to

<http://localhost:4502/crx/de/index.jsp#/etc/scaffolding/wetelco/product/jcr%3Acontent/cq%3Adialog/content/items/columns/items/column2/items/tabs/items/basic/items/titles/items>

2. Copy Node from CRXDE

</etc/scaffolding/wetelco/product/jcr:content/cq:dialog/content/items/columns/items/column2/items/tabs/items/basic/items/titles/items/description>

3. Paste Node copied to

</etc/scaffolding/wetelco/product/jcr:content/cq:dialog/content/items/columns/items/column2/items/tabs/items/basic/items/titles/items/>

4. Rename the newly copied node to **terms-and-conditions**.

5. Press SaveAll

6. Click on Node

</etc/scaffolding/wetelco/product/jcr:content/cq:dialog/content/items/columns/items/column2/items/tabs/items/basic/items/titles>

7. Press Referesh

8. Click on Node

</etc/scaffolding/wetelco/product/jcr:content/cq:dialog/content/items/columns/items/column2/items/tabs/items/basic/items/titles/items/terms-and-conditions>

9. Enrich the newly copied node with following properties

- a. **fieldLabel:** Terms and Conditions
- b. **name:** .terms_and_conditions
- c. **sling:resourceType:** granite/ui/components/foundation/form/textarea
- d. Right click and delete property **renderReadOnly**



Properties							
	Name	Type	Value	Protected	Mandatory	Multiple	Auto Created
1	fieldLabel	String	Terms and Conditions	false	false	false	false
2	jcr:primaryType	Name	nt:unstructured	true	true	false	true
3	name	String	/terms_and_conditions	false	false	false	false
4	sling:resourceType	String	granite/ui/components/foundation/form/textarea	false	false	false	false

10. Press SaveAll

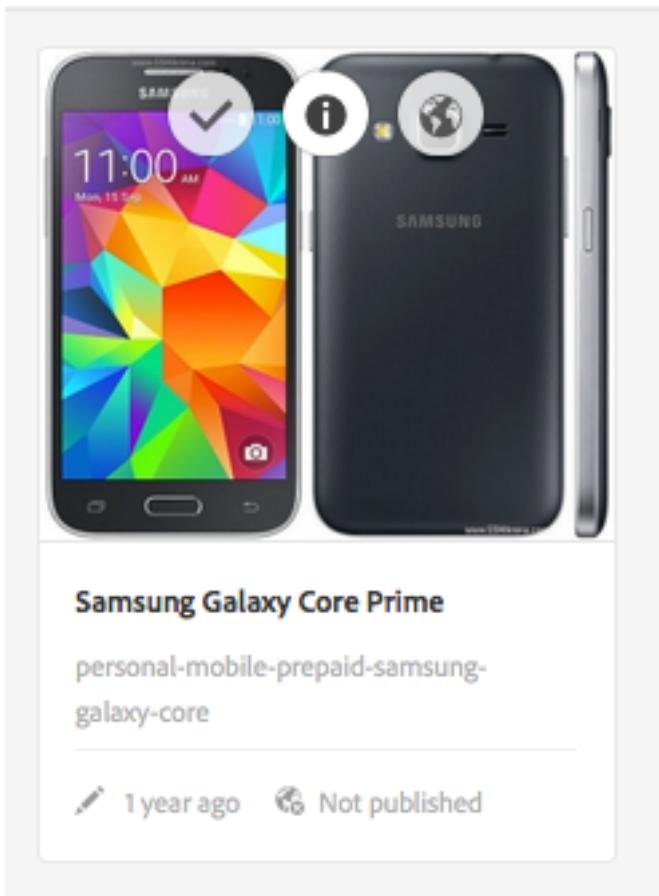
1.5 Observations

1.5.1 Observation 2 : Note the Marketing Content in AEM PIM Data Cache

1. Navigate to

<http://localhost:4502/libs/commerce/gui/content/products.html/etc/commerce/products/wetelco/personal/prepaid/mobile-phones/samsung>

2. Now click on **View Product Data** icon



3. You will now notice that a new field is created to enter terms and conditions.

1.6 Solution

1. In Terminal make sure you are under **/users/1322/Desktop/AEM-Commerce-Lab-WS/aem-commerce-omni-channel** and Execute following command

```
sh lab1-solution.sh
```



2 Lesson 2 – AEM Commerce Integration Framework – Catalog Management

2.1 Overview

Task	Understand catalog management in AEM CIF
Time	20 minutes

2.2 Setup

1. **Optional (If not already in Terminal):** Open terminal (if not already open)
2. **Optional (If not already in directory mentioned):** Navigate to `/Users/1322/Desktop/AEM-Commerce-Lab-WS/aem-commerce-omni-channel`. Execute following command

```
cd Desktop/AEM-Commerce-Lab-WS/aem-commerce-omni-channel
```

3. Execute following command (to switch to lab2 branch in GitHub)

```
sh switch.sh
```

4. Execute following command (to switch to install lab2 material on AEM6.2)

```
sh init.sh
```

2.3 Observations

2.3.1 Observation 1: WeTelco Site Structure setup and templates

1. Go to <http://localhost:4502/editor.html/content/wetelco-sites/en/personal.html>. Observer how the website looks and feels (in Edit and Preview mode in AEM Author).

Notice the following

1. Site structure as Business, Personal as top sections.
2. Shop is empty at the moment.
3. Website is responsive.

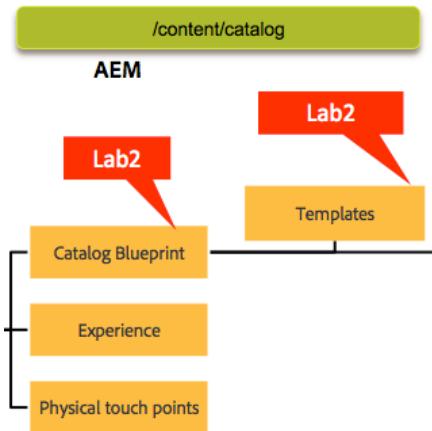
1. Go to <http://localhost:4502/aem/catalogs.html/content/catalogs>

2. Navigate to

- a. WeTelco > English

3. Observe the following

Folder	Comments
WeTelco Sites Template Pages	Template pages which constitute the page used for Blueprints created in Catalog.
WeTelco Sites AEM Base Catalog	The Catalog Blueprint setup used for setting up how the rollout pages will look like



Snapshot from Presentation and what this represents.

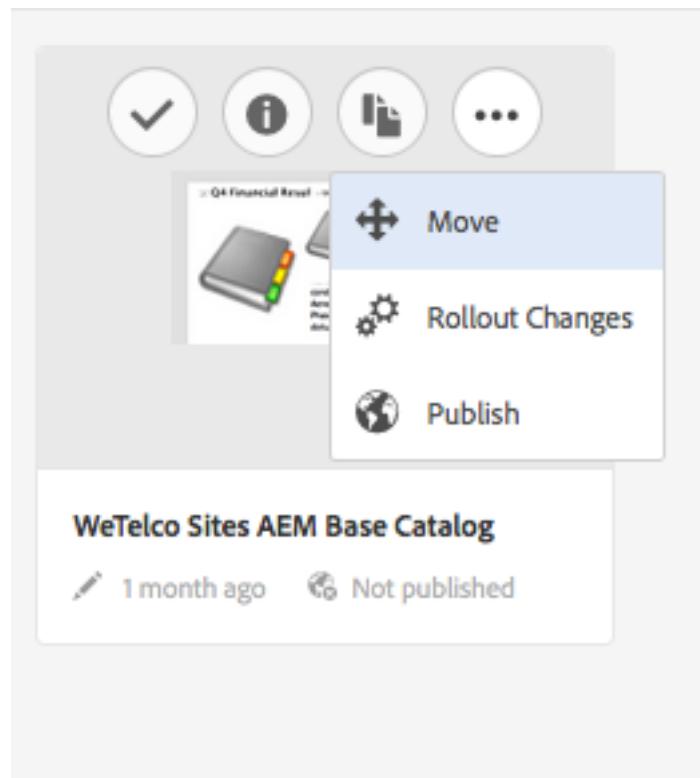
4. Navigate into WeTelco Sites Template Pages

(<http://localhost:4502/aem/catalogs.html/content/catalogs/wetelco/en/aem-sites-template-pages>) and note the following. Also navigate into the properties to notice where the location of the template pages come from.

Folder	Comments	Template Reference in WeTelco
Catalog Page Template	Template used for the top level catalog page – Example: Shop	wetelco-sites/components/structure/landingpage
Section Page Template	Template used for category section of the page – Example: Tables, Mobiles pages.	/apps/wetelco-sites/templates/categorypage
Product Page Template	Template used for product pages. Example: iPhone 5S	/apps/wetelco-sites/templates/productpage

2.4 Tasks

1. Go to <http://localhost:4502/aem/catalogs.html/content/catalogs/wetelco/en>
2. Hover over **WeTelco Sites AEM Base Catalog**, click on **More Actions** represented by circle with (...) and select **Rollout Changes**.



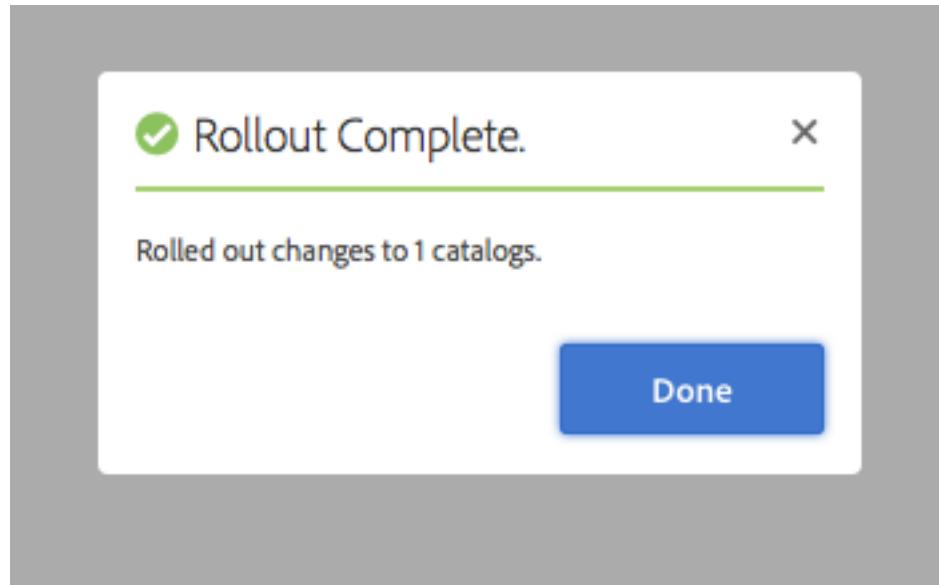
3. On next page for Rollout Changes, select **Remove Local edits during rollout**

The screenshot shows a configuration dialog for "Rollout Changes". At the top, it says "Rollout changes to:" followed by a dropdown menu containing the path "/content/wetelco-sites/en/personal/shop". Below the dropdown, there is a checkbox labeled "Remove local edits during rollout" which is checked.

4. Press Rollout Changes.



- Now you will get a prompt saying rollout complete. This completes the rollout of the blueprint using product catalog to specific location in /content/wetelco/en/personal/shop location



- View the rolled out pages here - <http://localhost:4502/crx/de/index.jsp#/content/wetelco-sites/en/personal/shop> (which was previously empty)

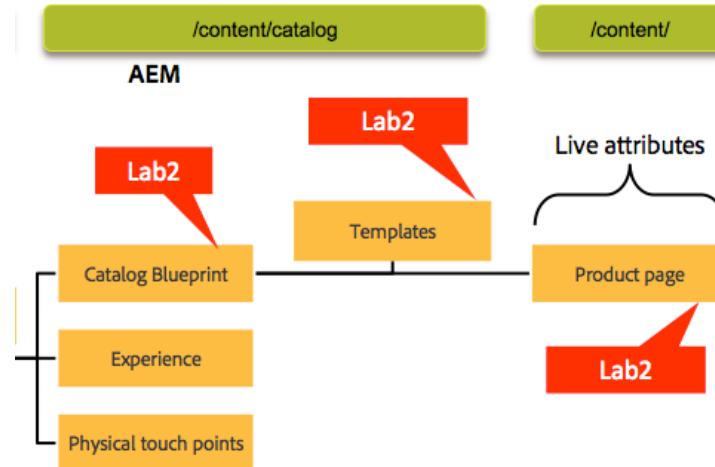


Figure 1 : Checkpoint

2.5 Observations

2.5.1 Observation 2: WeTelco Shop

1. Click on <http://localhost:4502/editor.html/content/wetelco-sites/en/personal/shop.html>.
2. We can see shop and rolled out pages. But, the devices are missing!!! 😞

2.6 Advanced Tasks: Setting up WeTelco Commerce Entry Point – Using Commerce API

INFO: This task is advanced, will involve some code and solution will be provided at end of task if you are unable to complete task. To skip in terminal enter following

sh lab2-solution.sh

1. **Optional (If not already in Terminal):** Open terminal (if not already open)
2. **Optional (If not already in directory mentioned):** Navigate to `/Users/1322/Desktop/AEM-Commerce-Lab-WS/aem-commerce-omni-channel`. Execute following command

```
cd Desktop/AEM-Commerce-Lab-WS/aem-commerce-omni-channel
```

3. Execute following command (to switch to **lab2-task2** branch in GitHub)

```
sh switch.sh
```



4. Go into Eclipse

5. Navigate to and open `WeTelcoCommerceServiceFactory` (Hot Key in Eclipse Command + Shift + R)
6. Replace any section between `// TODO LAB2 : START` and `// TODO LAB2 : END` with

```
return new WeTelcoCommerceServiceImpl(getServiceContext(), res);
```

Figure below indicates how the change should reflect.

```
1 / *  
2 @Component(metatype = true, label = "WeTelco Product Catalog Commerce factory")  
3 @Service  
4 @Properties(value = {  
5     @Property(name = "service.description", value = "Factory for WeTelco Pr  
6     @Property(name = "commerceProvider", value = "wetelco") })  
7 public class WeTelcoCommerceServiceFactory extends  
8     AbstractJcrCommerceServiceFactory implements CommerceServiceFactory {  
9  
10    @Override  
11    public CommerceService getCommerceService(Resource arg0) {  
12        // TODO LAB2 : START  
13        return null;  
14        // TODO LAB2 : END  
15    }  
16  
17    /* Implementation for the weTelco CommerceServicefactory interface for WeTe  
18     * Product Catalog.  
19 */  
20    @Component(metatype = true, label = "WeTelco Product Catalog Commerce factor  
21    @Service  
22    @Properties(value = {  
23        @Property(name = "service.description", value = "Factory for WeTelco Pr  
24        @Property(name = "commerceProvider", value = "wetelco") })  
25    public class WeTelcoCommerceServiceFactory extends  
26        AbstractJcrCommerceServiceFactory implements CommerceServiceFactory  
27  
28        public CommerceService getCommerceService(Resource res) {  
29            return new WeTelcoCommerceServiceImpl(getServiceContext(), res);  
30        }  
31  
32    }  
33  
34
```

The above step has just introduced a entry point for WeTelco commerce provider used for this demo.

7. Navigate to and open `WeTelcoCommerceServiceImpl` (Hot Key in Eclipse Command + Shift + R)
8. Replace any section between `// TODO LAB2 : START` and `// TODO LAB2 : END` with

```
return new WeTelcoCommerceSessionImpl(this, request, response,
```

Figure below indicates how the change should reflect.

Local: <code>WeTelcoCommerceServiceImpl.java</code> <pre> 36 @Override 37 public CommerceSession login(SlingHttpServletRequest request, 38 SlingHttpServletResponse response) throws CommerceException { 39 // TODO LAB2 : START 40 return null; 41 42 // TODO LAB2 : END 43 } 44 45 @Override 46 public boolean isAvailable(String serviceType) { 47 if (CommerceConstants.SERVICE_COMMERCE.equals(serviceType)) { 48 return true; 49 } else { 50 return false; 51 } 52 }</pre>	Local history: <code>WeTelcoCommerceServiceImpl.java</code> 13 Mar 2016 12:57:53 pm <pre> 35 36 @Override 37 public CommerceSession login(SlingHttpServletRequest request, 38 SlingHttpServletResponse response) throws CommerceException { 39 return new WeTelcoCommerceSessionImpl(this, request, response, resource); 40 } 41 42 @Override 43 public boolean isAvailable(String serviceType) { 44 if (CommerceConstants.SERVICE_COMMERCE.equals(serviceType)) { 45 return true; 46 } else { 47 return false; 48 } 49 } 50 51 @Override</pre>
--	---

The above step has just introduced a entry point for WeTelco commerce provider used for this demo.

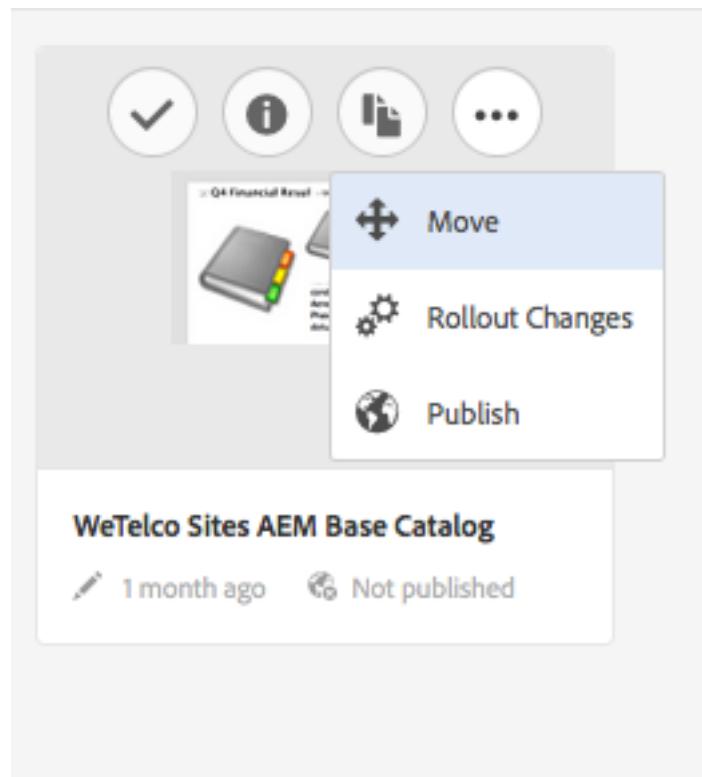
9. Go to Terminal

10. Execute following command (to switch to **deploy** change to local AEM)

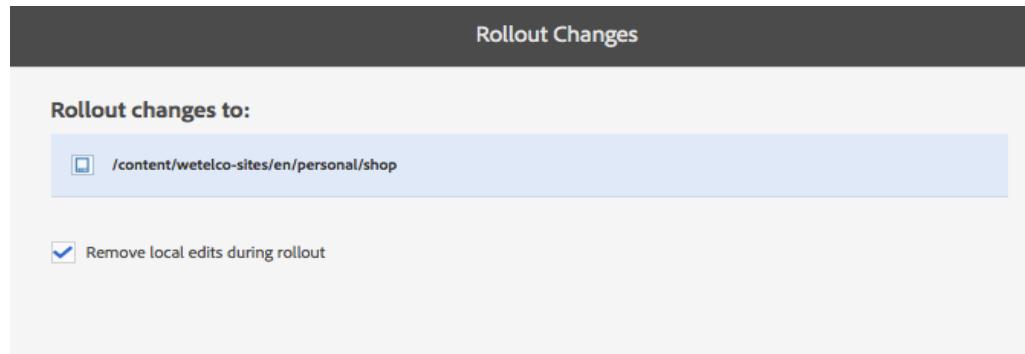
```
sh init.sh
```

11. Go to <http://localhost:4502/aem/catalogs.html/content/catalogs/wetelco/en>

12. Hover over **WeTelco Sites AEM Base Catalog**, click on **More Actions** represented by circle with (...) and select **Rollout Changes**.

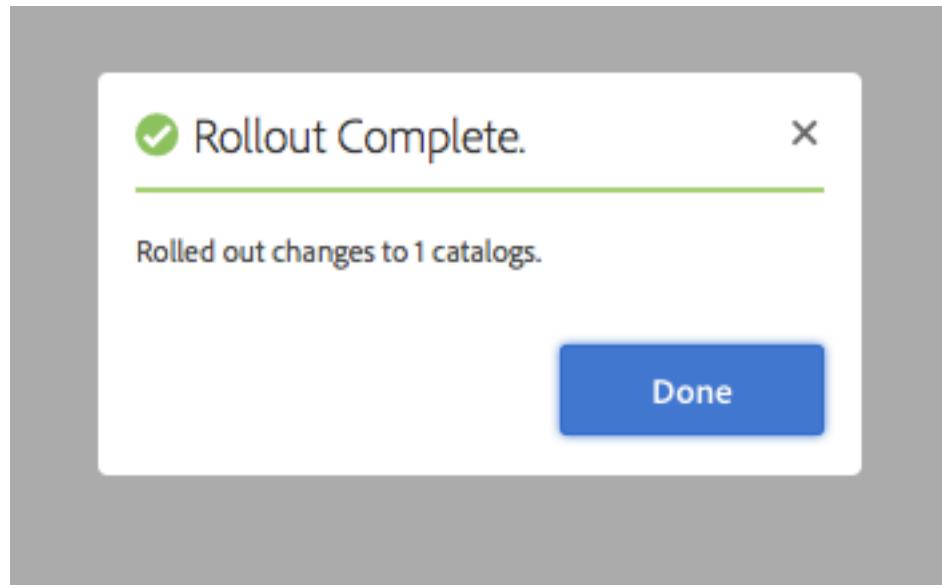


13. On next page for Rollout Changes, select **Remove Local edits during rollout**



14. Press Rollout Changes.

15. Now you will get a prompt saying rollout complete. This completes the rollout of the blueprint using product catalog to specific location in /content/wetelco/en/personal/shop location



16. View the rolled out pages here - <http://localhost:4502/crx/de/index.jsp#/content/wetelco-sites/en/personal/shop> (which was previously empty)

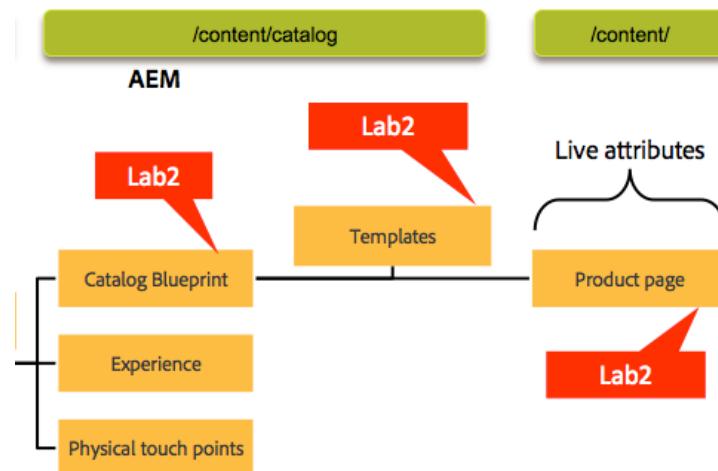


Figure 2 : Checkpoint



2.7 Observations

2.7.1 Observation 2: WeTelco Shop is full populated with all the devices

1. Go to <http://localhost:4502/content/wetelco-sites/en/personal/shop/mobile-phones.html>
2. You can now see all the devices rolled out and appearing

Screenshot of the WeTELCO mobile phones shop page:

The page header includes navigation links: Business, Personal (underlined), About, Test.

The main menu features the WeTELCO logo, My Account, Shop (underlined), and Support.

The "Mobile Phones" section displays a grid of devices:

Category	Device	Price Information
Mobile on Plans	Apple iPhone 5s	From \$600 (Outright) Terms and Conditions apply
Prepaid Mobile Phones	Apple iPhone 6	From \$77 per month (24 month minimum term. Minimum total cost \$1848)
	Apple iPhone 6s	From \$84 per month (24 month minimum term. Minimum total cost \$1944)
	Samsung Galaxy Core Prime	From \$400 (Outright) Terms and Conditions apply
	Samsung Galaxy Note5	From \$60 per month (24 month minimum term. Minimum total cost \$1600)
	Samsung Galaxy S6	From \$50 per month (24 month minimum term. Minimum total cost \$1500)

2.8 Solution

2. In Terminal make sure you are under **/Users/1322/Desktop/AEM-Commerce-Lab-ws/aem-commerce-omni-channel** and Execute following command

```
sh lab2-solution.sh
```



3 Lesson 3 – Creating a In-Store Experience using AEM Screens leveraging AEM CIF

3.1 Overview

Task	Understand how to leverage an In-Store experience with AEM Screens using AEM CIF
Time	30 minutes

3.2 Setup

1. **Optional (If not already in Terminal):** Open terminal (if not already open)
2. **Optional (If not already in directory mentioned):** Navigate to `/Users/1322/Desktop/AEM-Commerce-Lab-WS/aem-commerce-omni-channel`. Execute following command

```
cd Desktop/AEM-Commerce-Lab-WS/aem-commerce-omni-channel
```

3. Execute following command (to switch to lab3 branch in GitHub)

```
sh switch.sh
```

4. Execute following command (to install lab3 material on AEM6.2)

```
sh init.sh
```

3.3 Observations

3.3.1 Observation 1: AEM Screens

1. Go to <http://localhost:4502/content/wetelco-sites/en/personal/shop/mobile-phones.html>
2. You can now see all the devices rolled out and appearing



4 Lesson 4 – Creating a Mobile Experience using AEM Mobile leveraging AEM CIF

4.1 Overview

Task	Understand how to leverage an mobile experience with AEM Mobile using AEM CIF and creating a mobile touch point
Time	45 minutes

4.2 Setup: Setup for AEM Mobile PhoneGap Page rollout using AEM CIF

1. **Optional (If not already in Terminal):** Open terminal (if not already open)
2. **Optional (If not already in directory mentioned):** Navigate to `/Users/1322/Desktop/AEM-Commerce-Lab-WS/aem-commerce-omni-channel`. Execute following command

```
cd Desktop/AEM-Commerce-Lab-WS/aem-commerce-omni-channel
```

3. Execute following command (to switch to lab4 branch in GitHub)

```
sh switch.sh
```

4. Execute following command (to install lab4 material on AEM6.2)

```
sh init.sh
```

4.3 Observations: AEM Mobile and PhoneGap Framework

4.3.1 Observation 1: AEM Mobile – Interface

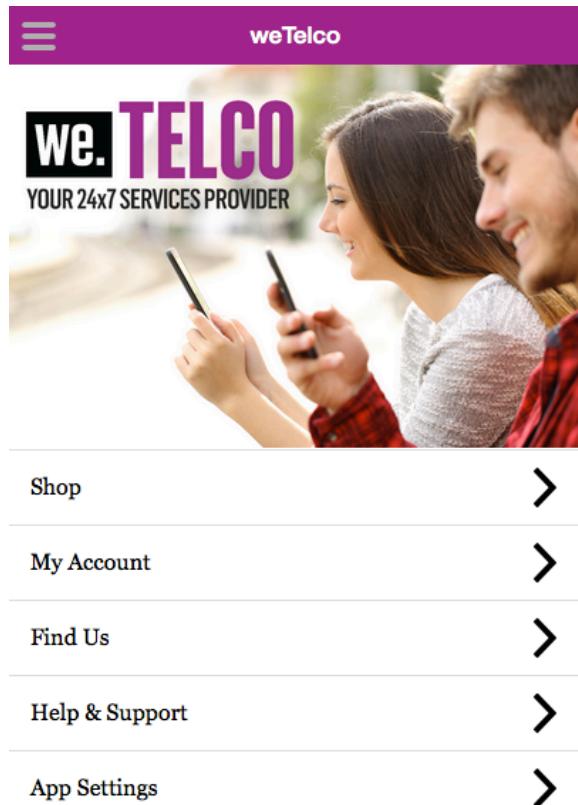
1. Go to Appendix 6.1

4.3.2 Observation 2: AEM Mobile – Brief Anatomy of a Mobile Apps

1. Go to Appendix 6.2

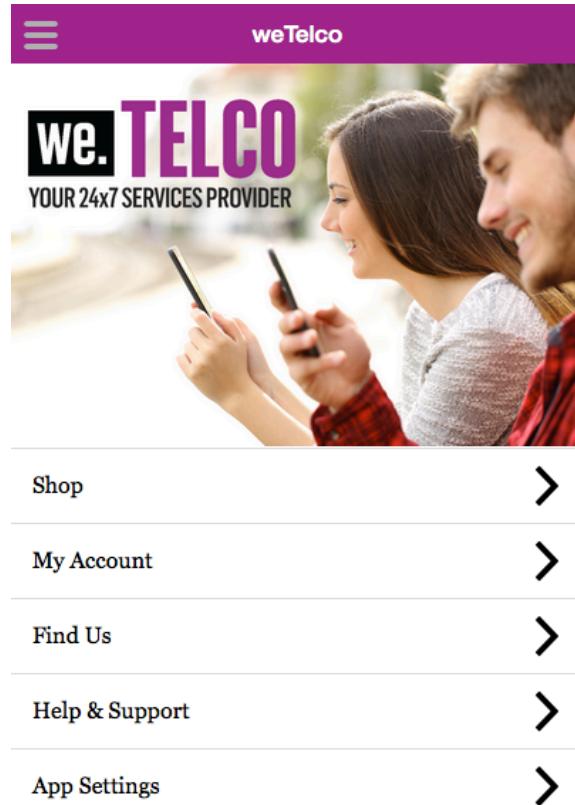
4.3.3 Observation 3: AEM Mobile – WeTelco App Structure (Built using PhoneGap)

1. Go to <http://localhost:4502/editor.html/content/phonegap/weTelco/en/home.html>



4.3.4 Observation 4: AEM Mobile – WeTelco App Structure (Built using PhoneGap)

1. Go to <http://localhost:4502/editor.html/content/phonegap/weTelco/en/home.html>



2. Click on Shop.
3. Shop is empty!!!!

4.4 Observations: AEM Mobile On Demand (AEM MoD)

4.4.1 Observation 5: AEM MoD – Web Interface

1. Go to Appendix 6.3

4.4.2 Observation 6: AEM MoD - Setup in AEM Mobile

1. Go to Appendix 6.4

4.4.3 Observation 5: AEM MoD - Service Configuration in AEM

INFO: This task is all done in AEM. Please just check in AEM for configuration done .

1. Go to Appendix 6.5 for steps on how this is done.



4.5 Setup: Setup for AEM MoD Page rollout using AEM CIF

1. **Optional (If not already in Terminal):** Open terminal (if not already open)
2. **Optional (If not already in directory mentioned):** Navigate to /Users/1322/Desktop/AEM-Commerce-Lab-WS/aem-commerce-omni-channel. Execute following command

```
cd Desktop/AEM-Commerce-Lab-WS/aem-commerce-omni-channel
```

3. Execute following command (to switch to lab4-task2 branch in GitHub)

```
sh switch.sh
```

4. Execute following command (to install lab4-task2 material on AEM6.2)

```
sh init.sh
```

4.6 Advanced Tasks: Hooking up Commerce API Rollout Hook and AEM MoD Service through AEM Mobile API

INFO: This task is advanced, will involve some code and solution will be provided at end of task if you are unable to complete task. To skip in terminal enter following

sh lab4-solution.sh

1. Go into Eclipse
2. Navigate to and open `WeTelcoCommerceServiceImpl` (Hot Key in Eclipse Command + Shift + R)
3. Search and go to method `catalogRolloutHook(Page blueprint, Page catalog)`
4. Uncomment code section between `// TODO - Lab 4 : Uncomment Start` and `// TODO - Lab 4 : Uncomment End`
5. Comparison with result of above action

Before	After
<pre>// TODO - Lab 4 : Uncomment Start /* try { aemModService.importOnDemandContent(catalog); } catch (ServletException e) { LOGGER.error("Error during AEM MoD Service Import"); e.printStackTrace(); } catch (IOException e) { LOGGER.error("Error during AEM MoD Service Import"); e.printStackTrace(); } catch (RequestException e) { LOGGER.error("Error during AEM MoD Service Import"); e.printStackTrace(); } catch (RepositoryException e) { LOGGER.error("Error during AEM MoD Service Import"); e.printStackTrace(); } */ // TODO - Lab 4 : Uncomment End</pre>	<pre>// TODO - Lab 4 : Uncomment Start try { aemModService.importOnDemandContent(catalog); } catch (ServletException e) { LOGGER.error("Error during AEM MoD Service Import"); e.printStackTrace(); } catch (IOException e) { LOGGER.error("Error during AEM MoD Service Import"); e.printStackTrace(); } catch (RequestException e) { LOGGER.error("Error during AEM MoD Service Import"); e.printStackTrace(); } catch (RepositoryException e) { LOGGER.error("Error during AEM MoD Service Import"); e.printStackTrace(); } // TODO - Lab 4 : Uncomment End</pre>



6. Search and go to method `sectionRolloutHook` (Page `blueprint`, Page `catalog`)

7. Uncomment code section between `// TODO - Lab 4 : Uncomment Start` and `// TODO - Lab 4 : Uncomment End`

8. Comparison with result of above action

Before	After
<pre>// TODO - Lab 4 : Uncomment Start /* // 1. Check if the blueprint is having a property for DPS Rollout ValueMap listOfProperties = section.getProperties(); Object dpsResourceType = listOfProperties.get("dps-isRolloutout"); // 2. If the rollout is for DPS Rollout, then make sure that the section // goes in as category if (dpsResourceType != null) { // Then this is a article and we need to create a Collection try { LOGGER.debug("START - COLLECTION TO BE CREATED !!!!"); aemModService.createCollection(section); LOGGER.debug("END - COLLECTION TO BE CREATED !!!"); } catch (RepositoryException e) { LOGGER.error("Error during AEM MoD Service Upload of Collection"); e.printStackTrace(); } catch (Exception e) { LOGGER.error("Error during AEM MoD Service Upload of Collection"); e.printStackTrace(); } } */ // TODO - Lab 4 : Uncomment End</pre>	<pre>// TODO - Lab 4 : Uncomment Start /* // 1. Check if the blueprint is having a property for DPS Rollout ValueMap listOfProperties = section.getProperties(); Object dpsResourceType = listOfProperties.get("dps-isRolloutout"); // 2. If the rollout is for DPS Rollout, then make sure that the section // goes in as category if (dpsResourceType != null) { // Then this is a article and we need to create a Collection try { LOGGER.debug("START - COLLECTION TO BE CREATED !!!!"); aemModService.createCollection(section); LOGGER.debug("END - COLLECTION TO BE CREATED !!!"); } catch (RepositoryException e) { LOGGER.error("Error during AEM MoD Service Upload of Collections"); e.printStackTrace(); } catch (Exception e) { LOGGER.error("Error during AEM MoD Service Upload of Collections"); e.printStackTrace(); } } */ // TODO - Lab 4 : Uncomment End</pre>

9. Search and go to method `productRolloutHook` (Page `blueprint`, Page `catalog`)
10. Uncomment code section between `// TODO - Lab 4 : Uncomment Start` and `// TODO - Lab 4 : Uncomment End`
11. Comparison with result of above action

Before	After
<pre>LOGGER.debug("THIS IS A ARTICLE TO BE CREATED!!!!"); // TODO - Lab 4 : Uncomment Start /* try { // Then this is a article and we need to create a Collection aemModService.createArticle(productPage); } catch (RepositoryException e) { LOGGER.error("Error during AEM MoD Service Upload of Articles"); e.printStackTrace(); } catch (Exception e) { LOGGER.error("Error during AEM MoD Service Upload of Articles"); e.printStackTrace(); } */ // TODO - Lab 4 : Uncomment End</pre>	<pre>// TODO - Lab 4 : Uncomment Start try { // Then this is a article and we need to create a Collection aemModService.createArticle(productPage); } catch (RepositoryException e) { LOGGER.error("Error during AEM MoD Service Upload of Articles"); e.printStackTrace(); } catch (Exception e) { LOGGER.error("Error during AEM MoD Service Upload of Articles"); e.printStackTrace(); } } // TODO - Lab 4 : Uncomment End</pre>

12. Code walkthrough (In lab exercise – To understand, what the code is doing).
13. Install to local AEM instance

```
sh init.sh
```

14. Connect AEM Mobile to AEM MoD Service project
 - a. Go to
<http://localhost:4502/libs/mobileapps/admin/content/dashboard.html/content/mobileapps/wetelco-aem-mobile-app>



- b. Click on Settings for Manage Connection as highlighted in figure below

WeTelco AEM Mobile On Demand App

Manage App

WeTelco AEM Mobile On Demand App
Last Modified 21 days ago by Administrator

Manage Connection

Please select a Project Id

Cloud Config: Summit 2016 - Welco AEM MoD

Project: Not Set

1. Configure AEM MoD Project ID

- c. **IMPORTANT STEP:** From Select an Experience Manager Mobile Project, select only the project assigned to you

WeTelco AEM Mobile On Demand App

Configure Experience Manager Mobile

Select an Experience Manager Mobile Cloud Config *
Summit 2016 - Welco AEM MoD

Select an Experience Manager Mobile Project
Select an existing Experience Manager Mobile Project

L322-INS
L322-01
WeTelco-Trial

WARNING : ONLY
SELECT PROJECT
ASSIGNED TO YOU.

- d. Press Update. This should now connect your project to AEM MoD Service and Project.

The screenshot shows the Adobe Experience Manager (AEM) interface for managing mobile applications. The top navigation bar includes the AEM logo, search, help, and user icons. The main title is "WeTelco AEM Mobile On Demand App".

Manage App:

- Icon: Smartphone displaying the app logo.
- Name: WeTelco AEM Mobile On Demand App
- Last Modified: 21 days ago by Administrator

Manage Connection:

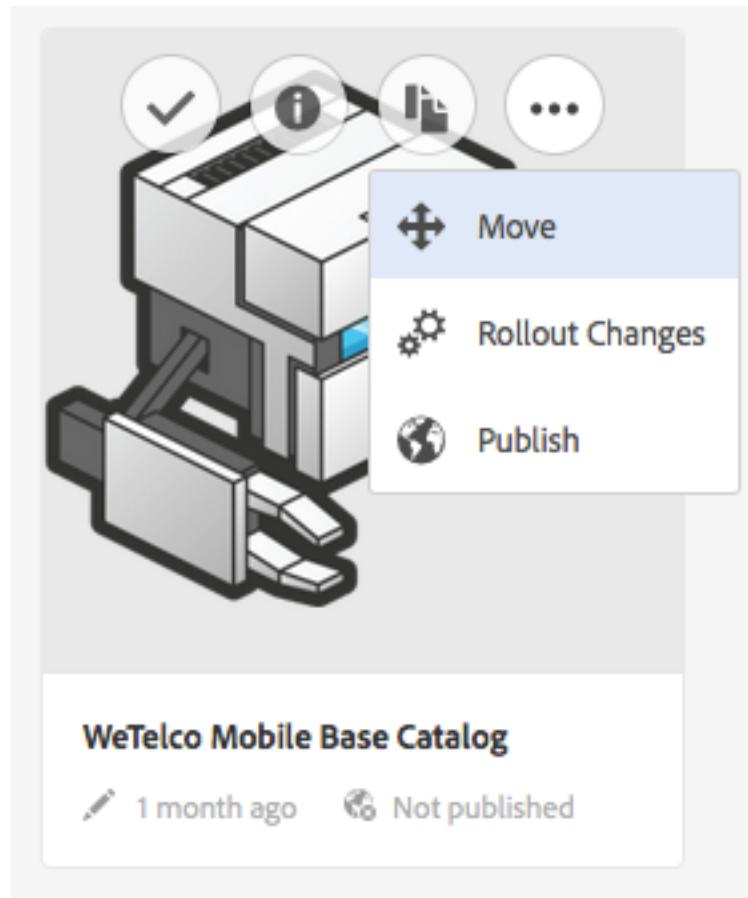
- Cloud Config: Summit 2016 - Welco AEM MoD
- Project: L322-INS
- Connection: ✓ (Collection Extraction Time: Cached)

Success Message !!

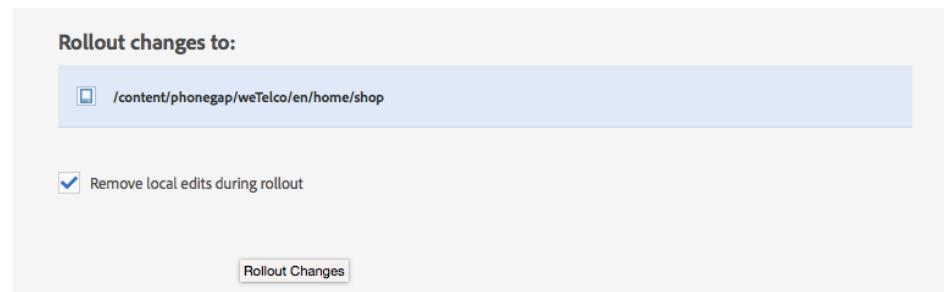


4.7 Tasks – Use AEM MoD Service API and AEM CIF API to generate and create AEM MoD Service Experience

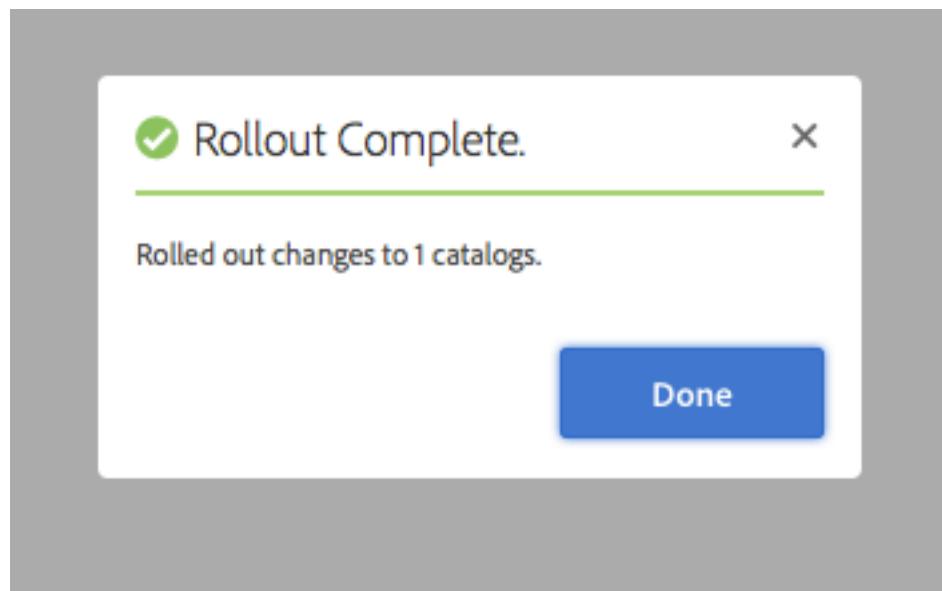
1. Go to <http://localhost:4502/aem/catalogs.html/content/catalogs/wetelco/en>
2. Hover over **WeTelco Mobile AEM Base Catalog**, click on **More Actions** represented by circle with (...) and select **Rollout Changes**.



3. On next page for Rollout Changes, select **Remove Local edits during rollout**



4. Press Rollout Changes.
- 5. WAIT 10 min.**
6. Now you will get a prompt saying rollout complete. This completes the rollout of the blueprint using product catalog to specific location in /content/wetelco/en/personal/shop location

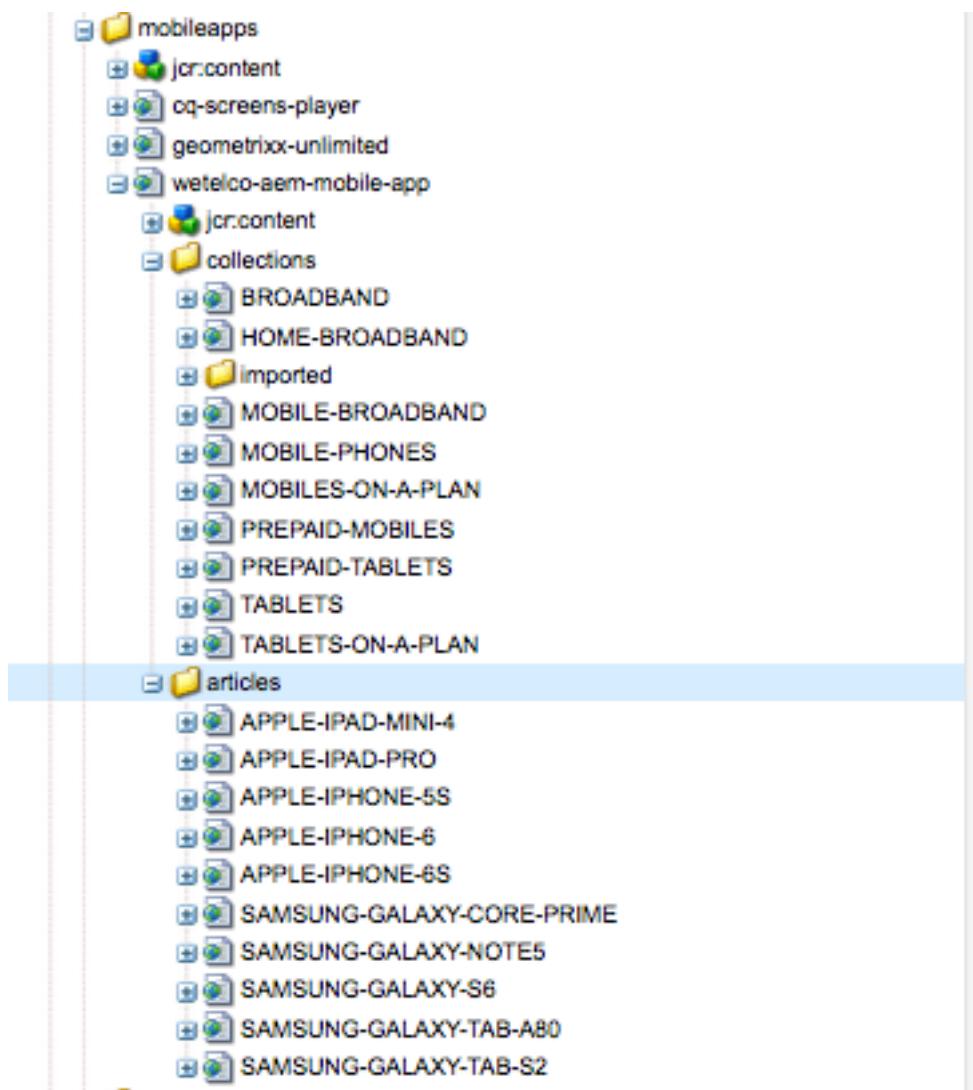




4.8 Observations: AEM Mobile and AEM Mobile On Demand (AEM MoD) Results of Task2

4.8.1 Observation 7: AEM Mobile Rollout Results

1. View all articles (products) and collections (sections) rolled out under here
 - a. Articles – <http://localhost:4502/crx/de/index.jsp#/content/mobileapps/wetelco-aem-mobile-app/articles>
 - b. Collections - <http://localhost:4502/crx/de/index.jsp#/content/mobileapps/wetelco-aem-mobile-app/collections>



2. View all rolled out articles and collections for the project in AEM here
- <http://localhost:4502/libs/mobileapps/admin/content/dashboard.html/content/mobileapps/wetelco-aem-mobile-app>

The screenshot shows the AEM Mobile On Demand App dashboard. It includes the following sections:

- Manage App:** Shows a preview of the app with the title "WeTelco AEM Mobile On Demand App".
- Manage Connection:** Displays Cloud Config: Summit 2016 - Welco AEM MoD, Project: L322-NS, and Connection status (Collection Extraction Time: Cached).
- Manage Banners:** Shows a table with columns: TITLE, MODIFIED, UPLOADED, PUBLISHED, and SOURCE. It displays the message "No Banners found for this Project."
- Manage Collections:** Shows a table with columns: TITLE, MODIFIED, UPLOADED, PUBLISHED, CONTENT, COLLECTIONS, and SOURCE. It lists two items: "topLevelContent" (modified 4 minutes ago) and "Launch we.Healthcare" (modified 4 minutes ago).
- Manage Articles:** Shows a table with columns: TITLE, MODIFIED, UPLOADED, PUBLISHED, and SOURCE. It lists five articles:

TITLE	MODIFIED	UPLOADED	PUBLISHED	SOURCE
APPLE-IPHONE-5S APPLE IPHONE 5S	22 seconds ago Administrator	21 seconds ago Administrator	Never	(empty)
SAMSUNG-GALAXY-NOTES SAMSUNG GALAXY NOTES	1 minute ago Administrator	45 seconds ago Administrator	Never	(empty)
SAMSUNG-GALAXY-S6 SAMSUNG GALAXY S6	1 minute ago Administrator	1 minute ago Administrator	Never	(empty)
APPLE-IPHONE-6 APPLE IPHONE 6	2 minutes ago Administrator	2 minutes ago Administrator	Never	(empty)
APPLE-IPHONE-6S APPLE IPHONE 6S	2 minutes ago Administrator	2 minutes ago Administrator	Never	(empty)

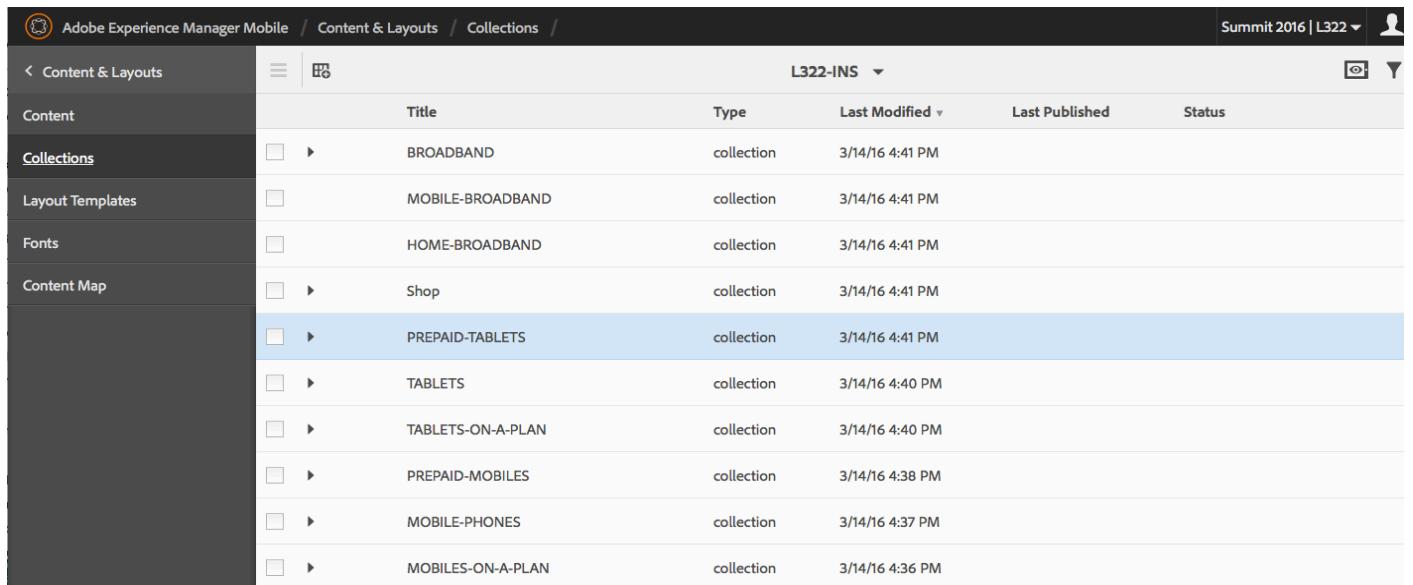


4.8.2 Observation 7: AEM MoD – Rollout results in the MoD

1. Go to <https://aemmobile.adobe.com/welcome/index.html#/>
2. Click on **Content & Layouts**
3. All Articles as shown below

Content & Layouts		L322-INS ▾			
	Content	Title	Type	Last Modified ▾	Last Published
Collections		<input type="checkbox"/> SAMSUNG GALAXY TAB S2	article	3/14/16 4:41 PM	
Layout Templates		<input type="checkbox"/> APPLE IPAD MINI 4	article	3/14/16 4:40 PM	
Fonts		<input type="checkbox"/> SAMSUNG GALAXY TAB A80	article	3/14/16 4:39 PM	
Content Map		<input type="checkbox"/> APPLE IPAD PRO	article	3/14/16 4:39 PM	
		<input type="checkbox"/> SAMSUNG GALAXY CORE PRIME	article	3/14/16 4:38 PM	
		<input type="checkbox"/> APPLE IPHONE 5S	article	3/14/16 4:37 PM	
		<input type="checkbox"/> SAMSUNG GALAXY NOTES	article	3/14/16 4:36 PM	
		<input type="checkbox"/> SAMSUNG GALAXY S6	article	3/14/16 4:35 PM	
		<input type="checkbox"/> APPLE IPHONE 6	article	3/14/16 4:35 PM	
		<input type="checkbox"/> APPLE IPHONE 6S	article	3/14/16 4:35 PM	

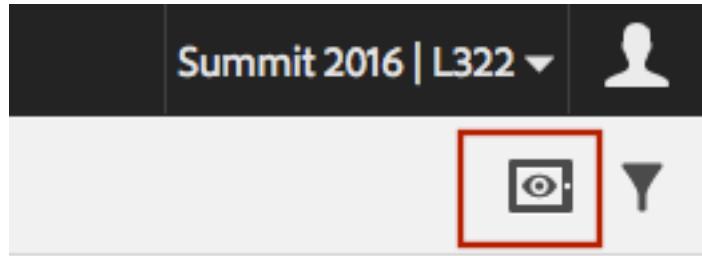
4. All Collections as shown below



The screenshot shows the 'Content & Layouts / Collections' page in Adobe Experience Manager Mobile. The left sidebar has 'Content' selected. The main area lists collections with columns for Title, Type, Last Modified, Last Published, and Status. A blue highlight is on the row for 'PREPAID-TABLETS'. The header shows 'L322-INS' and the footer shows 'Summit 2016 | L322'.

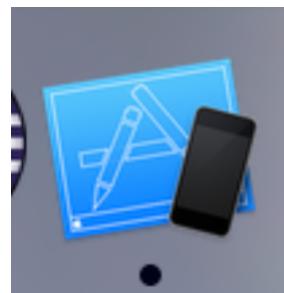
Content	Title	Type	Last Modified	Last Published	Status
Collections	BROADBAND	collection	3/14/16 4:41 PM		
Layout Templates	MOBILE-BROADBAND	collection	3/14/16 4:41 PM		
Fonts	HOME-BROADBAND	collection	3/14/16 4:41 PM		
Content Map	Shop	collection	3/14/16 4:41 PM		
	PREPAID-TABLETS	collection	3/14/16 4:41 PM		
	TABLETS	collection	3/14/16 4:40 PM		
	TABLETS-ON-A-PLAN	collection	3/14/16 4:40 PM		
	PREPAID-MOBILES	collection	3/14/16 4:38 PM		
	MOBILE-PHONES	collection	3/14/16 4:37 PM		
	MOBILES-ON-A-PLAN	collection	3/14/16 4:36 PM		

5. Now click on the Preflight to view the result of the rollout in Emulator.



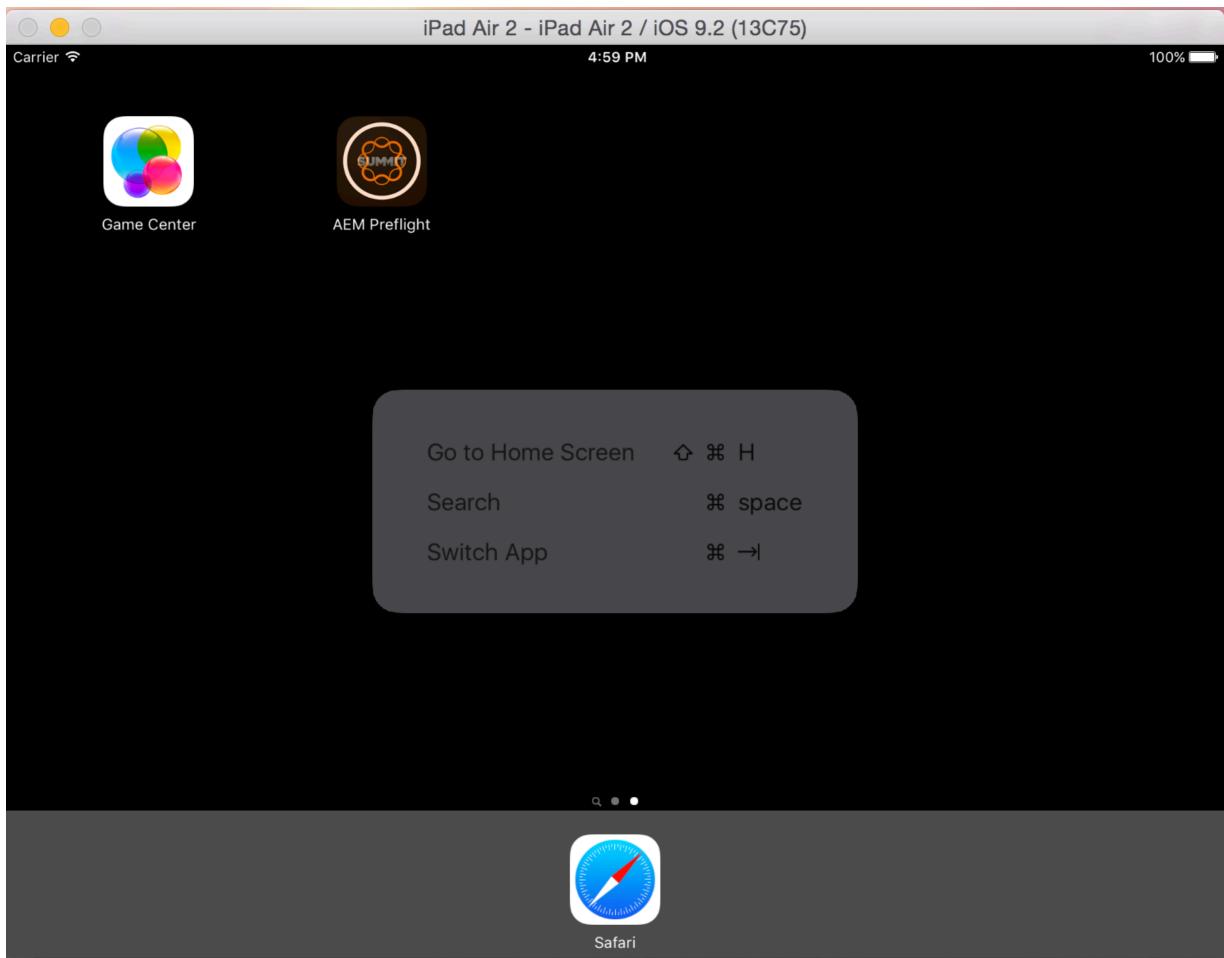
6. Once Preflight is ready, the progress of the launch will end.

7. Now launch the Emulator from Machine Doc



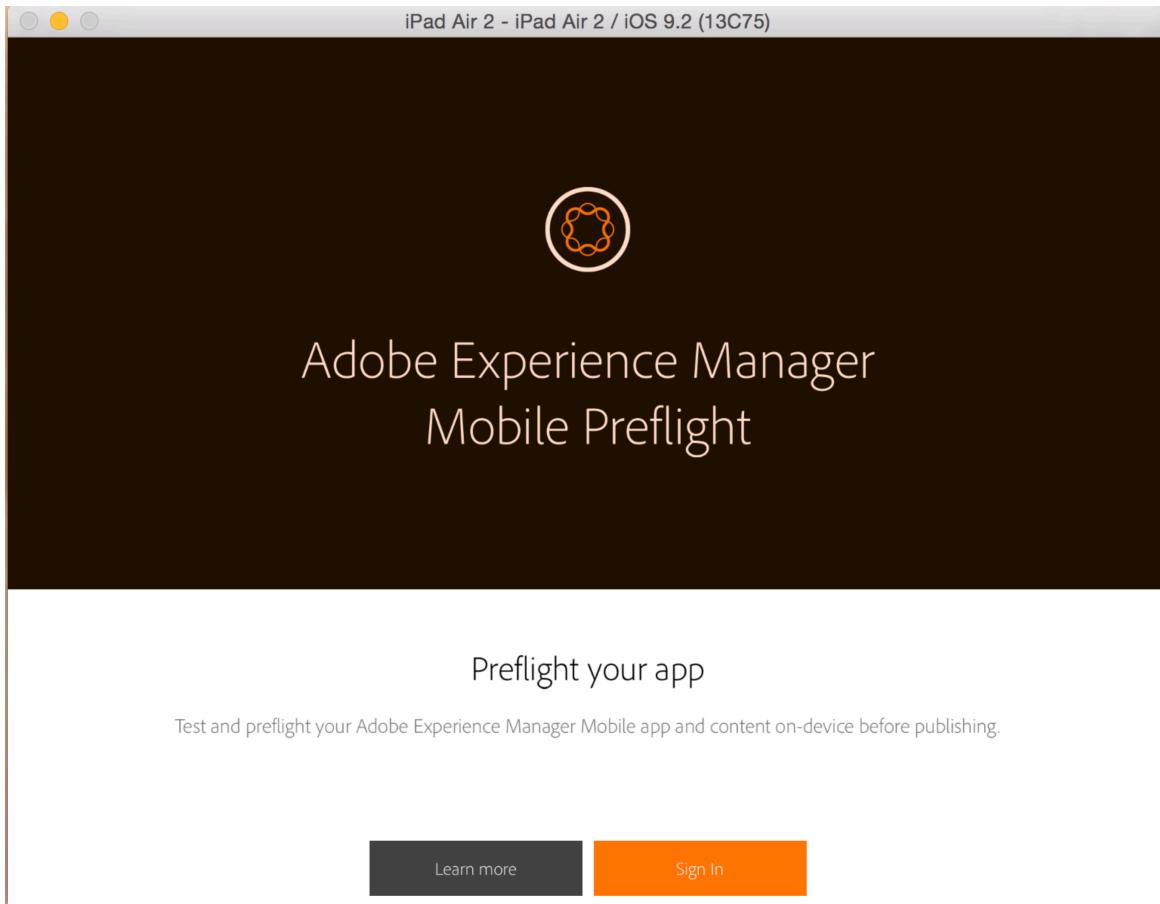


8. Emulator will launch. Now make sure that the emulator display is rotates
 - a. Command + Left Arrow
9. The display is as shown below



10. Now launch the AEM Preflight

11. You will be presented with screen as below



12. Now authenticate into AEM Preflight using the exact details as used for the Web AEM MoD Service.
13. Now, select the project you are allocated to (This is very important)
14. You will be prompted for Updates. Please press update. Upon update, all information is downloaded to your local devices and displayed as below.



15. Some Screenshot of what is expected is below

Page Screenshot	Page Name
	WeTelco Home Page
	Shop Page

APPLE IPHONE 6

Apple iPhone 6 \$0.00



From \$77 per month (24 month minimum term. Minimum total cost \$1848)

© WeTelco

Device Page (Product)

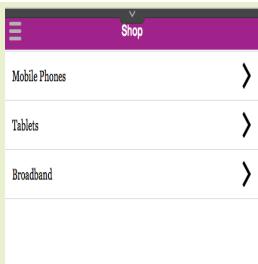
16. View the rolled out pages for PhoneGap framework here -

<http://localhost:4502/content/phonegap/weTelco/en/home/shop.html> (which was previously empty)

17. Some Screenshot of what is expected is below

Page Screenshot

Page Name



Shop Home Page



Mobile Phones

we.TELCO YOUR 24x7 SERVICES PROVIDER

Mobile on Plans >

Prepaid Mobile Phones >

Mobile Phones Page

we.TELCO YOUR 24x7 SERVICES PROVIDER

Apple iPhone 6s >

Apple iPhone 6 >

Samsung Galaxy S6 >

Samsung Galaxy Note5 >

All Mobile on Plans Page

Apple iPhone 6s

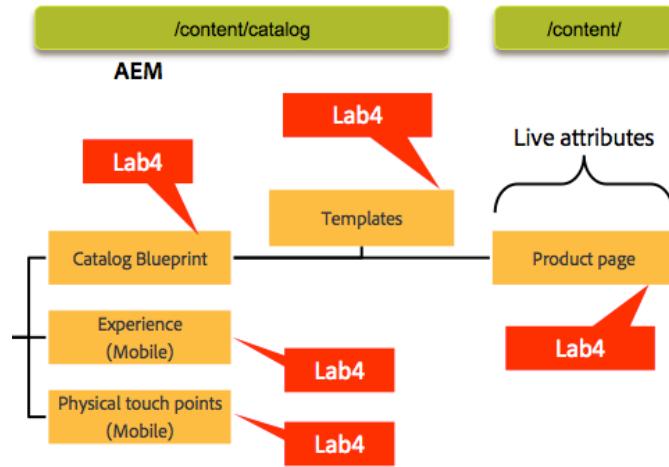
Apple iPhone 6s \$80.00



From \$84 per month (24 month minimum term.
Minimum total cost \$1944)

Mobile Product Page

18. Congratulations!!!! You have now used Commerce API along with AEM MoD service API to Rollout pages to create a mobile experience for users.



5 Appendix

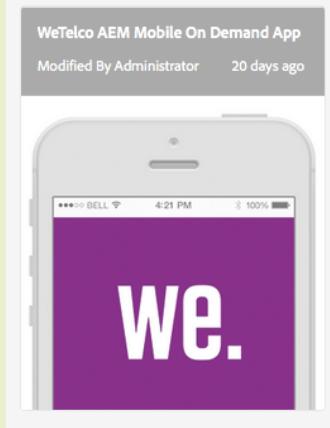
5.1 AEM Mobile – Interface

1. Go to <http://localhost:4502/aem/apps.html/content/mobileapps>
2. Get familiar with the AEM 6.2 AEM Mobile interface

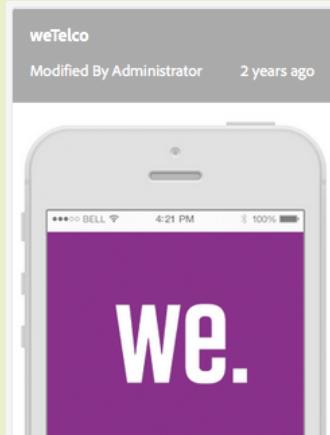
NAME	Image



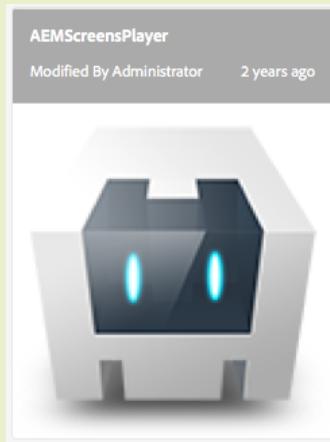
WeTelco AEM Mobile On Demand App



WeTelco AEM Mobile App Built using PhoneGap and IONIC framework



Default AEM Screens Player



Geometrixx Unlimited App
(Built using AEM Mobile On Demand Service)

Geometrixx Unlimited App

Modified By Administrator 9 months ago



Gemetrixx
(Built using PhoneGap development framework)

Geometrixx

Modified By Administrator 2 years ago





5.2 AEM Mobile – Brief Anatomy of a Mobile App built using Adobe PhoneGap framework in AEM

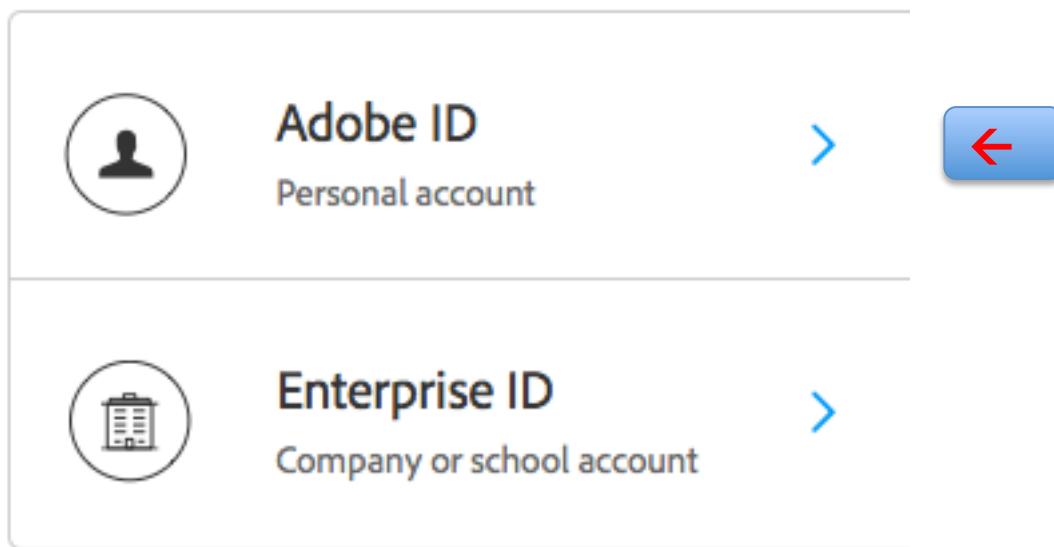
1. Go to <http://localhost:4502/aem/apps.html/content/mobileapps>
2. Get familiar with the AEM 6.2 AEM Mobile interface

Location	Description
/content/phonegap	Location for all PhoneGap Apps
/content/phonegap/weTelco	WeTelco Adobe PhoneGap App Managed from AEM
/content/phonegap/weTelco/shell	WeTelco PhoneGap App Shell with all Configuration to create a PhoneGap App
/content/phonegap/weTelco/en	WeTelco PhoneGap Content managed from AEM
/content/mobileapps	Location for all AEM Mobile On Demand Apps
/content/mobileapps/wetelco-aem-mobile-app	WeTelco AEM Mobile On Demand App
/content/mobileapps/wetelco-aem-mobile-app/collections	WeTelco AEM Mobile On Demand Collections
/content/mobileapps/wetelco-aem-mobile-app/articles	WeTelco AEM Mobile On Demand Articles

5.3 AEM Mobile On Demand Service – UI Brief Overview

1. Go to <https://aemmobile.adobe.com/signin/index.html>
2. Click on Sign in
3. Authenticate using username provided.
4. When prompted for Choose an Account, choose Adobe ID

Choose an account for
vvenkata@adobe.com



5. Enter password supplied and press enter.

6. Go into **Content & Layouts**

7. This section has all the



- a. Content - Articles, Banners
 - b. Collection - Grouping of Content into Collections and Collections into Collections).
 - c. Layout Templates – Creating how the UI should look in the end.
 - d. Fonts – Fonts for content management
 - e. Content Map – Map of content
8. Click on Content – You will notice there are no articles in here.
9. Click on Collection – You will notice the following setup in the Service WeTelco.

<input type="checkbox"/>	<input type="button" value="▼"/>		WeTelco	collection	3/2/16 11:57 AM
			Shop	collection	3/14/16 1:40 PM
			My Account	collection	3/2/16 11:57 AM
			Find Us	collection	3/2/16 11:57 AM
			Help	collection	3/2/16 11:57 AM

5.4 WeTelco - AEM Mobile On Demand Service – UI Brief Overview

1. Go to Appendix 6.5 to get an understanding of the WeTelco Mobile on Demand Service managed in AEM
<http://localhost:4502/libs/mobileapps/admin/content/dashboard.html/content/mobileapps/wetelco-aem-mobile-app>

Manage App**WeTelco AEM Mobile On Demand App**

Last Modified 21 days ago by Administrator

1. AEM MoD Service App information.**Manage Connection****Please select a Project Id**

Cloud Config: Summit 2016 - Welco AEM MoD

Project: Not Set

2. AEM MoD Service configuration.**Manage Banners**

TITLE

MODIFIED

UPLOADED

PUBLISHED

SOURCE

3. All Banners for AEM MoD Service.

No Banners found for this Project.

**Manage Articles**

TITLE

MODIFIED

UPLOADED

PUBLISHED

SOURCE

4. All Articles for AEM MoD Service.

No Articles found for this Project.

**Manage Collections****5. All Collections for AEM MoD Service.**

No Collections found for this Project.





5.5 Connecting AEM On Premise with AEM Mobile On Demand Service

5.5.1 Setup AEM Mobile on Demand Publishing Solution Client on OSGI

1. Go to <http://localhost:4502/system/console/configMgr>
2. Scroll down to “Experience Manager Mobile On-demand Services Client” and click the edit icon (pencil).
3. Enter Client ID and Client Secret obtained to connect to Adobe Mobile on Demand Service.

The screenshot shows the 'Experience Manager Mobile On-demand Services Client' configuration dialog. It has two main sections: 'Configuration for the Experience Manager Mobile On-demand Services Client' and 'Configuration Information'.

Configuration for the Experience Manager Mobile On-demand Services Client:

- Client Id:** [REDACTED] Identifies your AEM installation as a client to Experience Manager Mobile On-demand Services (clientId)
- Client Secret:** [REDACTED] Used to authenticate and authorise the AEM installation as a client to Experience Manager Mobile On-demand Services (clientSecret)
- Minimum thread pool size:** 10 Minimum thread pool size for AEM to Experience Manager Mobile On-demand Services requests (minThreadPoolSize)
- Maximum thread pool size:** 20 Maximum thread pool size for AEM to Experience Manager Mobile On-demand Services requests (maxThreadPoolSize)
- Access token cache expiry:** 30 Minutes to keep an access token (accessTokenExpiryInMinutes)
- Environment:** [REDACTED] Experience Manager Mobile On-demand Services Cloud Environment, leave blank unless access was granted in other environments (environment)

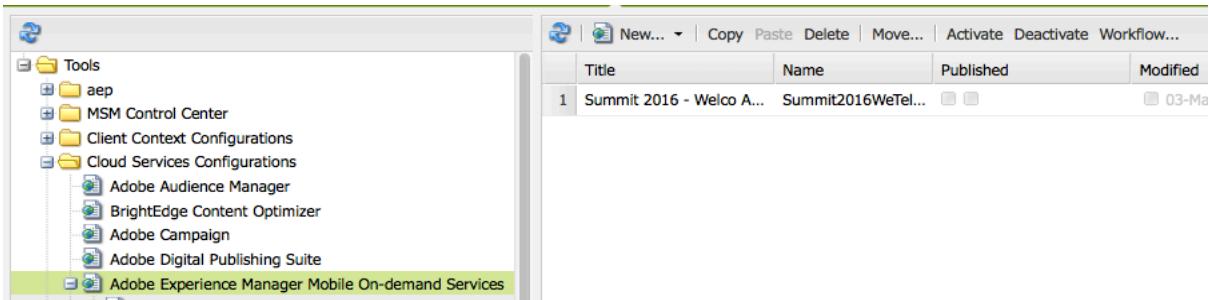
Configuration Information:

- Persistent Identity (PID):** com.adobe.cq.mobile.dps.impl.service.AdobeDPSClient
- Configuration Binding:** [REDACTED] Inbound or new configuration

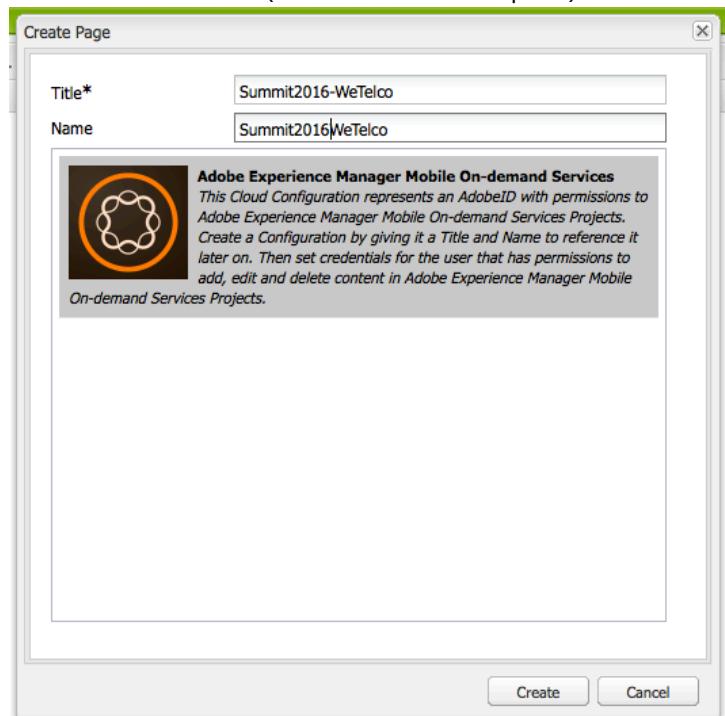
Buttons at the bottom right: Cancel, Reset, Delete, Unbind, Save.

5.5.2 Setup AEM Mobile on Demand Publishing Solution Client:

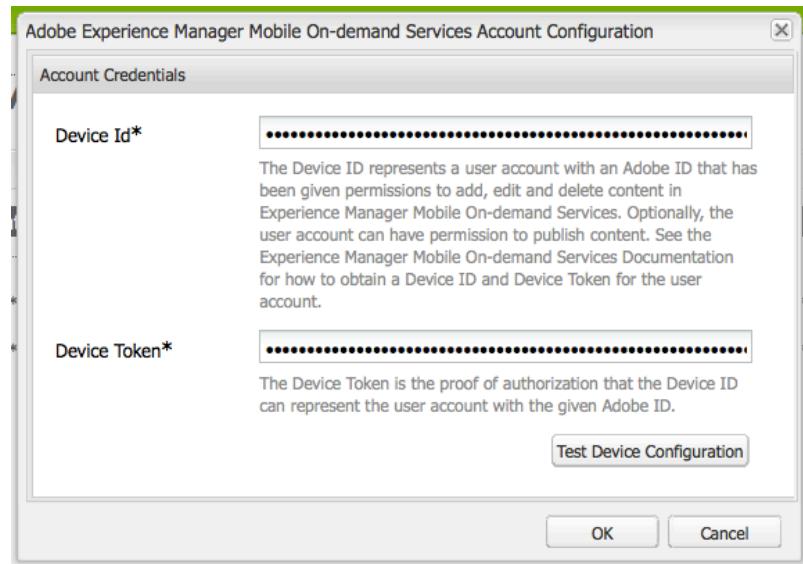
1. Go to <http://localhost:4502/miscaadmin>
2. Go to <http://localhost:4502/miscaadmin#/etc/cloudservices>
3. Click on **Adobe Experience Manager Mobile On-demand service**
4. Click **New**



5. This should open up create configuration window for Adobe Mobile On Demand Service. Enter **Title** and **Name** and click **Create** (Name should have no spaces)



6. Now, in the **Adobe Experience Manager Mobile On-demand Service Account Configuration**, enter the Device Id and Device Token and Test Device Configuration to validate the ID and Token.



6 References

- 6.1 Create your sample maven multi module project - <https://github.com/Adobe-Marketing-Cloud/aem-project-archetype>

<https://helpx.adobe.com/digital-publishing-solution/how-to/get-started-digital-publishing.html?set=digital-publishing-solution--get-started--ready-to-use>