



Technical Training

# Experience Manager Sites and Context Hub Integration

## Hands-on Lab Guide

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# Lab Overview

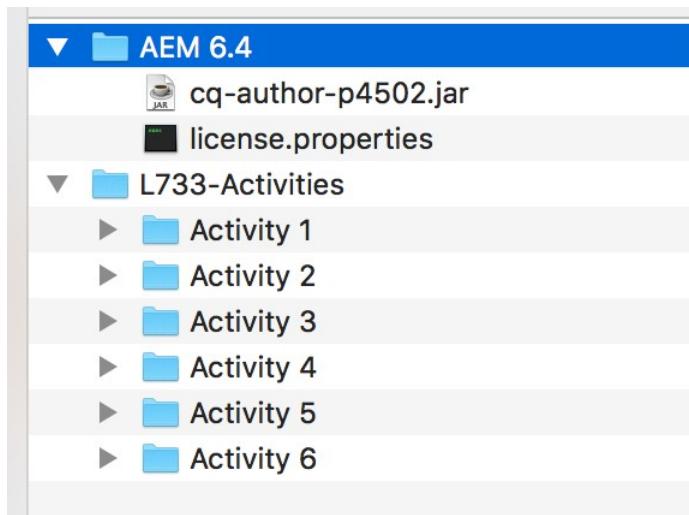
## Scope

In this training you will learn the process for leveraging Context Hub. We will configure our AEM Author instance to target components using the OOTB Targeting Engine and discover

- How to create Audiences
- How to create Activities
- Understanding the Configuration Approach to CH next generation

## Preparation: Locate the L733 folder

1. Locate the L733 folder on your desktop.



## Preparation: Start and login to AEM

2. Double-click on the aem-author-p4502.jar file to start AEM.



- Once AEM has started, it will open a browser. Login as admin/admin



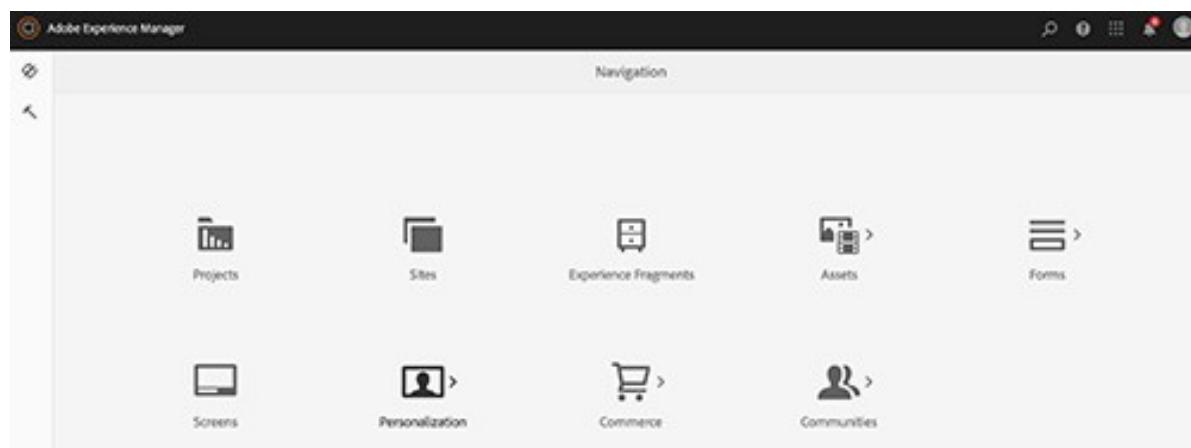
# Pre Requisite to Activity 1 and Beyond

Let's do a quick tutorial on the Site Admin, CRX Package Manager and CRXDE-Lite. These are the essential tools for the Workshop.

The Site Admin Console in the Touch UI is where we will create our pages for our working copy of the Summit Getaways Site.

Go to <http://localhost:4502> and navigate to Sites

The Site Admin Console is reached from the Touch UI



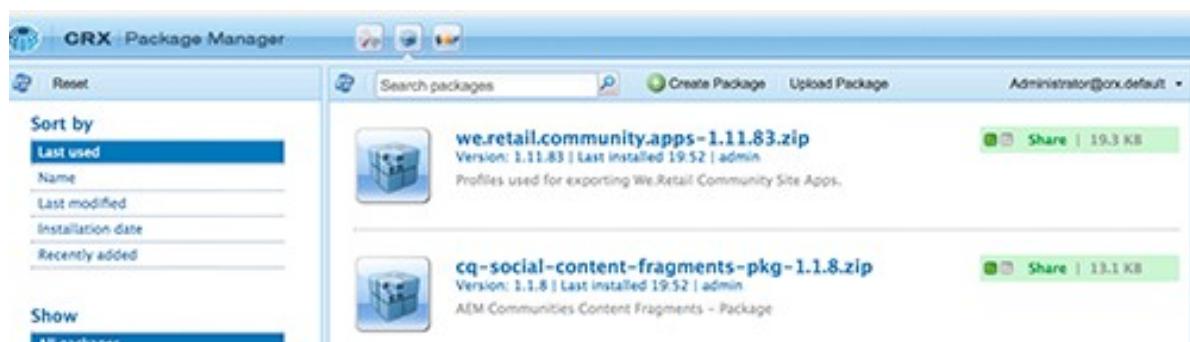
You will use the CRX Package Manager to upload the Activity Packages.

<http://localhost:4502/crx/packmgr>

Users more familiar with AEM Development will have the opportunity to utilize CRXDE-Lite as an IDE but all users will at least use it to view the code we will upload.

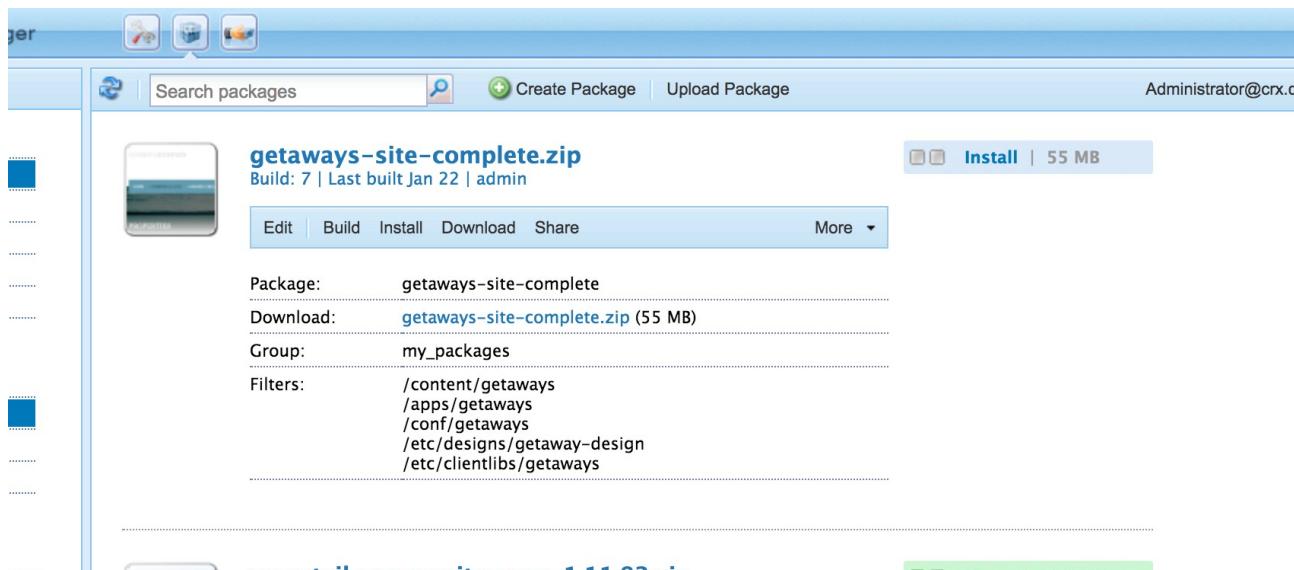
<http://localhost:4502/crx/de>

The CRX Package Manager and CRXDE-Lite links are located side by side and are available atop the CRX itself.

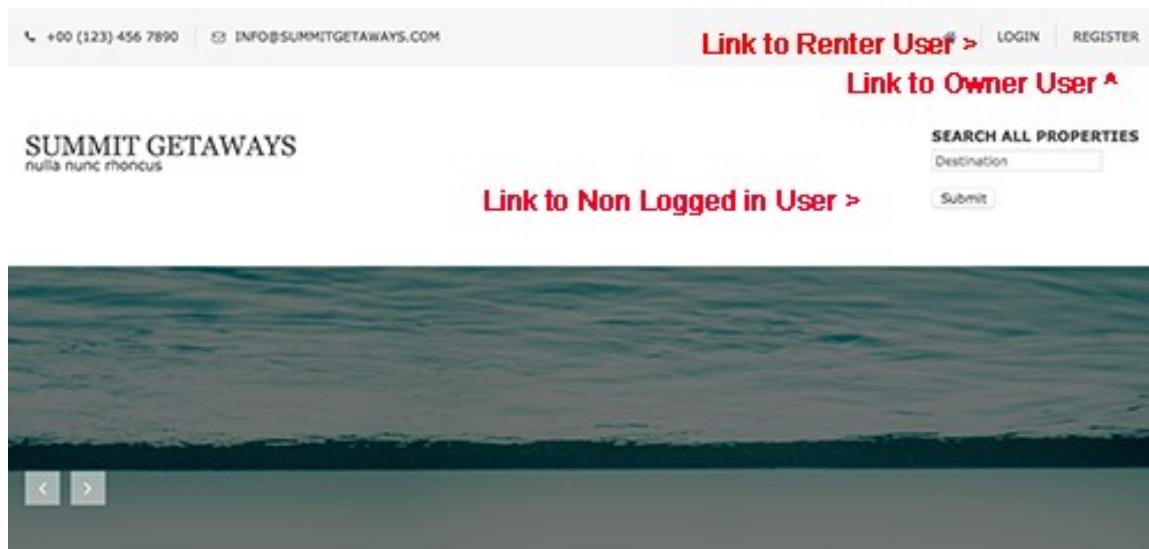


# Activity 1: Upload and Install the Getaways Site Complete

1. From your browser, navigate to the Package Manager via the navigation:  
**Tools > Deployment > Packages.**
2. Click the **Upload** button and locate the Activity One folder to select the getaways-site-complete package to upload and install.



3. Navigate to the Sites Admin to view the site we've just installed. Open the English page in Edit Mode then switch to Preview mode to navigate through the site.



Our next step is to examine the site to determine the audiences:

### The audiences are:

1. Anonymous users looking for Vacation Getaways. Because we cater to shorter rental times we will try to geo target our anonymous users based on their location.
2. Registered Renters who have created accounts to manage their Getaways. They will have their own UI for logged in header and footer (L732) that will be personalized using CH (L733)
3. Registered Owners who want to manage their rentals using the website. Summit provides tools to enable owners to handle the fulfillment (deposit, contract, terms etc) They will also have their own template for logged in header and footer (L732) personalized using CH (L733)

### Target Objectives:

- The Logged in Header will be shared for Renters and Owners so we will use the Profile Store to manage the experience and customize page level content based on that audience.
- The Anonymous users will be targeted using four segments we will define based on Geolocation with default experiences provided for surfers who choose not to share their information

## Activity 2: Start to integrate Context Hub into the Getaways Site

AEM 6.4 has begun to shift the Context Hub configuration from the /etc (global) area to the /libs (foundation) area. Customers upgrading from AEM 6.3 to 6.4 need not worry about making any changes to their existing code. An in-place upgrade of AEM will automatically maintain and re-establish the connections. In this Lab we will identify the changes as we go and connect code created with 6.3 directly into 6.4. There are folders for both versions where needed inside of your L733 Activity folders.

To begin the process, upload the two CRX Packages in the Activity 2 folder and note the migration to "conf" level configuration:

The screenshot shows the AEM CRX Declarative Services interface. At the top, there's a toolbar with various icons and a menu bar with items like Google, Apple, Yahoo!, AEM Forms Links, Google Maps, AEM 6.2, AEM 6.3, Adobe Summit 2018, and Other Books. Below the toolbar, there's a search bar labeled 'Search packages' and buttons for 'Create Package' and 'Upload Package'. On the right, it shows the user 'Administrator@crx.de'. The main area displays a package named 'Getaways CH Connection.zip' with a build number of 2, last built on Feb 15 by admin. It has options to 'Edit', 'Build', 'Install', 'Download', and 'Share'. The 'Install' button is highlighted. Below the package details, there's a section for 'Package' settings with fields for 'Download', 'Group', and 'Filters'. The 'Download' field shows 'Getaways CH Connection.zip (516.4 KB)'. The 'Group' field is set to 'my\_packages'. The 'Filters' field contains '/apps/getaways/client-libs' and '/apps/getaways/components/structure/page/customheaderlibs.html'.

The first package supplies the pieces to connect CH to your site for both 6.3 and 6.4. The client library simply creates a local version of core dependencies to provide a layer of abstraction between the foundation and local.

The second package below introduces a conf level configuration that allows us to support different segments for different applications as well as custom testing tools.

The screenshot shows the AEM Package Manager interface. At the top, there are icons for Home, Packages, and Help. Below the header, there is a search bar labeled 'Search packages' and buttons for 'Create Package' and 'Upload Package'. On the right, the user is identified as 'Administrator@crx.default'. The main content area displays a package named 'Getaways CH Config.zip'. The package details are as follows:

- Package: Getaways CH Config
- Build: 1 | Last built Feb 20 | admin
- Download: [Getaways CH Config.zip \(541.9 KB\)](#)
- Group: my\_packages
- Filters: /conf/getaways/settings/cloudsettings

Below the details, there are buttons for 'Edit', 'Build', 'Install', 'Download', and 'Share'. A 'More' dropdown menu is also present. To the right of the package details, there is an 'Install' button with a file icon and the text '541.9 KB'.

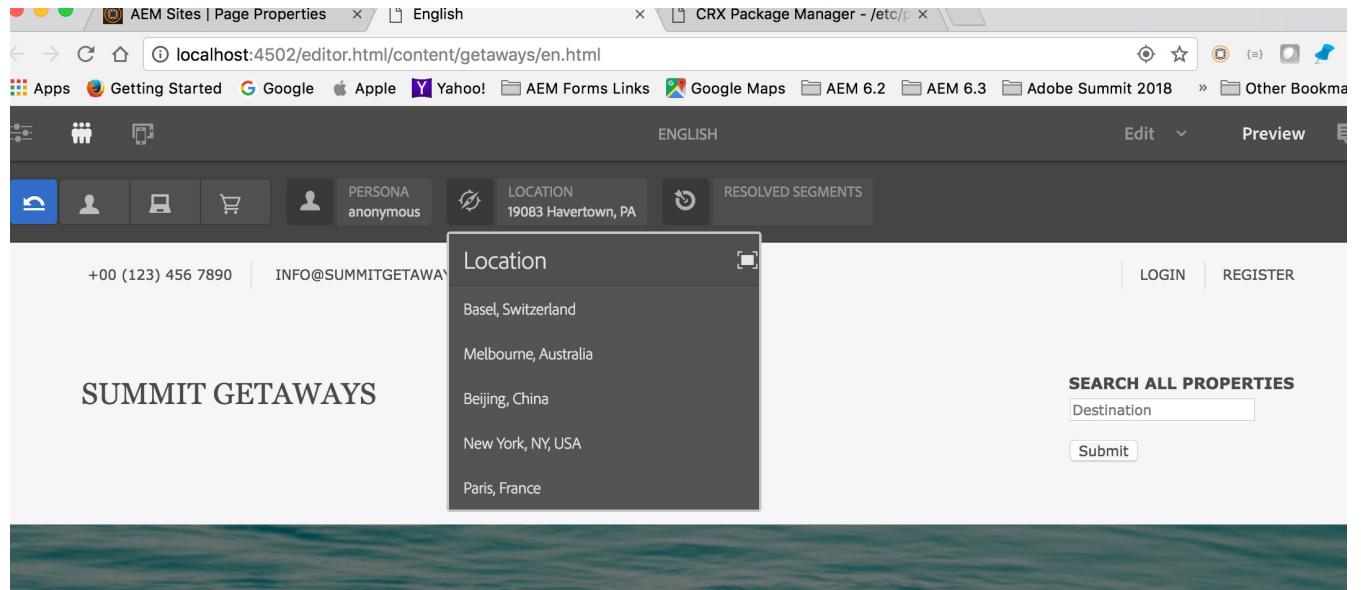
The next step is to set the Root Personalization Page Properties. At first, replace the default configuration from 6.3 with the new path in 6.4. Copy/paste /libs/settings/cloudsettings/legacy/contexthub as below:

The screenshot shows the 'Personalization' tab of the AEM dialog. The tab navigation includes 'Thumbnail', 'Social Media', 'Cloud Services', 'Personalization' (which is selected), and 'Permissions'. The 'Personalization' tab has several configuration fields:

- ContextHub Path:** A text input field containing '/libs/settings/cloudsettings/legacy/contexthub' with a checked checkbox to its right.
- Segments Path:** A text input field containing '/etc/segmentation/contexthub' with a checked checkbox to its right.
- Brand:** A section with a 'Add Brand' button and a '+' button to its right.

Save the configuration

Go to the Summit Getaways English Page and verify the Context Hub testing tool is now visible:



Now go back and connect to the /conf/getaways/settings/cloudsettings/default/contexthub

A screenshot of the configuration page for "/conf/getaways/settings/cloudsettings/default/contexthub". The top navigation bar has tabs for Social Media, Cloud Services, Personalization (which is selected), and Permissions. The "ContextHub Path" field contains the path "/conf/getaways/settings/cloudsettings/default/contexthub" with a checked checkbox. The "Segments Path" field contains the path "/etc/segmentation/contexthub" with a checked checkbox. The "Brand" section has a "Add Brand" button and an "i" icon. The entire configuration page has a light gray background.

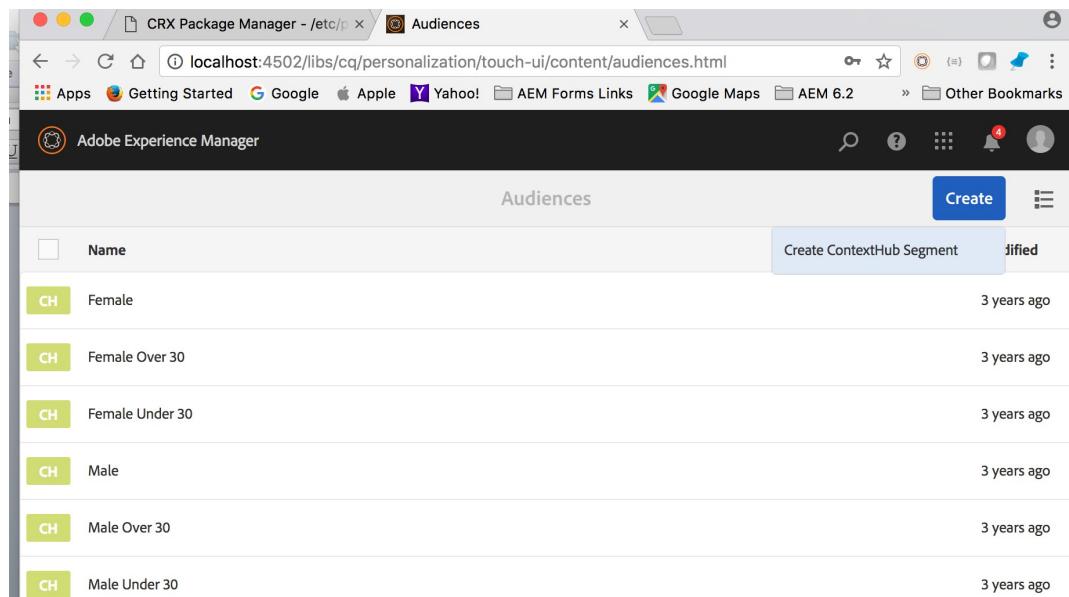
This configuration appears to not be passed down via inheritance. This may be an issue currently being worked. I will check back with the team before 6.4 is officially released. For now, we'll deal.

# Activity 3: Create Audiences

At present, this is a User Interface gap where the differences between AEM 6.3 and AEM 6.4 require somebody with documentation and a CRXDE-Lite skill set to create the segment-listing node required.

An in-place upgrade would allow segments to remain in the legacy /etc/segmentation location. I have created the node as a "bridge" so we can simply install the Audiences with a CRX Package and keep moving. See below:

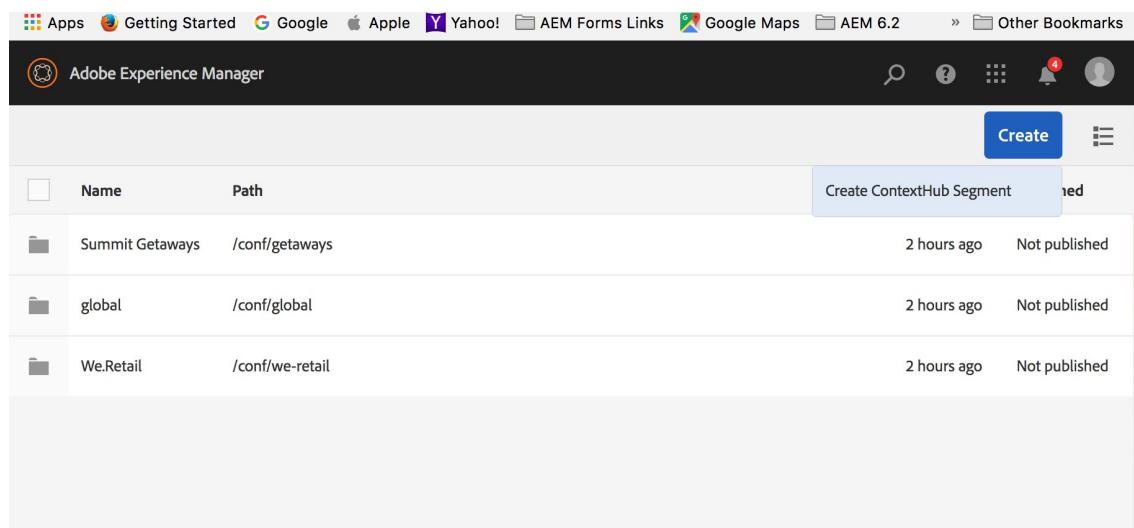
## AEM 6.3



The screenshot shows the 'Audiences' list view in AEM 6.3. The interface includes a header with tabs for 'Audiences' and 'Create'. Below the header is a search bar and a toolbar with icons for search, help, and navigation. The main area displays a table of audience segments. The columns are 'Name', 'Path', 'Created', and 'Published'. The segments listed are: Female, Female Over 30, Female Under 30, Male, Male Over 30, and Male Under 30. All segments were created 3 years ago and are not published.

Name	Path	Created	Published
Female	/etc/segmentation/audiences/Female	3 years ago	
Female Over 30	/etc/segmentation/audiences/Female%20Over%2030	3 years ago	
Female Under 30	/etc/segmentation/audiences/Female%20Under%2030	3 years ago	
Male	/etc/segmentation/audiences/Male	3 years ago	
Male Over 30	/etc/segmentation/audiences/Male%20Over%2030	3 years ago	
Male Under 30	/etc/segmentation/audiences/Male%20Under%2030	3 years ago	

## AEM 6.4

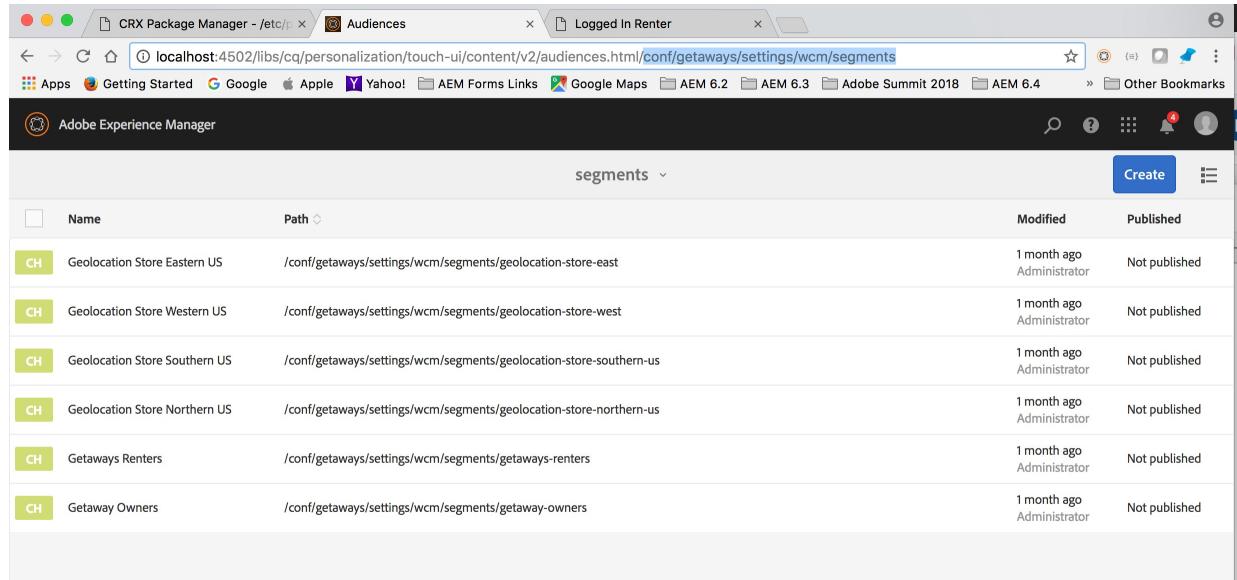


The screenshot shows the 'Audiences' list view in AEM 6.4. The interface is similar to AEM 6.3, with a header, search bar, and toolbar. The main area displays a table of audience segments. The columns are 'Name', 'Path', 'Created', and 'Published'. The segments listed are: Summit Getaways, global, and We.Retail. All segments were created 2 hours ago and are not published.

Name	Path	Created	Published
Summit Getaways	/conf/getaways	2 hours ago	Not published
global	/conf/global	2 hours ago	Not published
We.Retail	/conf/we-retail	2 hours ago	Not published

Use the Package Manager to install the Audiences in the 6.4 versions folder within Activity 3. I have left the other 6.3 versions Packages in there for those still on 6.3

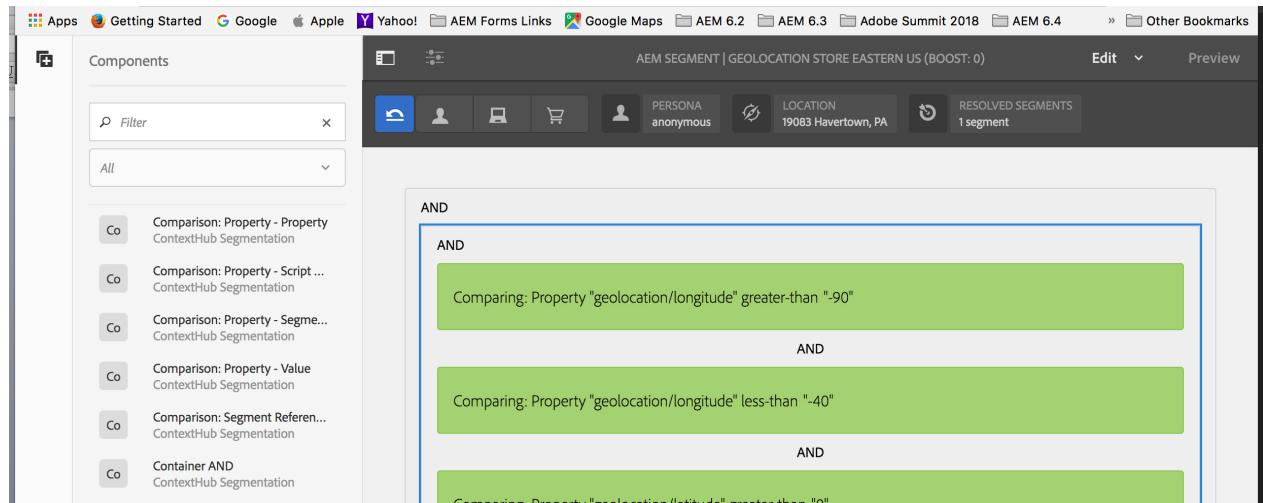
Navigate to conf/getaways/settings/wcm/segments after installation and observe:



The screenshot shows the Adobe Experience Manager (AEM) CRX Package Manager interface. The title bar says 'CRX Package Manager - /etc/... x Audiences x Logged In Renter'. The address bar shows the URL: 'localhost:4502/libs/cq/personalization/touch-ui/content/v2/audiences.html?conf/getaways/settings/wcm/segments'. Below the address bar is a toolbar with various icons. The main content area is titled 'segments' with a 'Create' button. A table lists six audience segments:

Name	Path	Modified	Published
Geolocation Store Eastern US	/conf/getaways/settings/wcm/segments/geolocation-store-east	1 month ago Administrator	Not published
Geolocation Store Western US	/conf/getaways/settings/wcm/segments/geolocation-store-west	1 month ago Administrator	Not published
Geolocation Store Southern US	/conf/getaways/settings/wcm/segments/geolocation-store-southern-us	1 month ago Administrator	Not published
Geolocation Store Northern US	/conf/getaways/settings/wcm/segments/geolocation-store-northern-us	1 month ago Administrator	Not published
Getaways Renters	/conf/getaways/settings/wcm/segments/getaways-renters	1 month ago Administrator	Not published
Getaway Owners	/conf/getaways/settings/wcm/segments/getaway-owners	1 month ago Administrator	Not published

Our Audiences have been installed. Let's walk through and observe the configuration value using selection mode, edit and properties:



The screenshot shows the AEM Segment configuration interface. The title bar says 'Components' and 'AEM SEGMENT | GEOLOCATION STORE EASTERN US (BOOST: 0)'. The right side shows the segment details: 'PERSONA anonymous', 'LOCATION 19083 Havertown, PA', and 'RESOLVED SEGMENTS 1 segment'. On the left, there is a sidebar with a 'Filter' input and a list of components: 'Comparison: Property - Property ContextHub Segmentation', 'Comparison: Property - Script ... ContextHub Segmentation', 'Comparison: Property - Segme... ContextHub Segmentation', 'Comparison: Property - Value ContextHub Segmentation', 'Comparison: Segment Referenc... ContextHub Segmentation', and 'Container AND ContextHub Segmentation'. The main panel shows the configuration logic for the segment:

AND

Comparing: Property "geolocation/longitude" greater-than "-90"

AND

Comparing: Property "geolocation/longitude" less-than "-40"

AND

Comparing: Property "geolocation/latitude" greater-than "0"

These audiences can still be created manually as we will observe in the lab. We can also look into the drag and drop, configure properties pattern that is prevalent throughout AEM content authoring. Now that we have Audiences we can start to create activities using these audiences.

Go back to look at a page in edit mode, select a component and then switch to targeting mode. You'll see we have a brand now but no Activities.

Before we create Activities let's create the test users and map our geo-location segments to match the list of Audiences we've created. They are:

- Getaways Owners
- Getaways Renters
- US East Coast Visitors
- US West Coast Visitors
- North Central Visitors
- South Central Visitors

The Anonymous users will simply be managed by their geo-location (should they agree to share it). However the logged in users will be tied to a Business Segment that will identify them as either Owners or Renters. Let's create a test user for each.

Before we do that, we will overlay the user creation form to add a "business segment" dropdown to collect the value we'll use to do that.

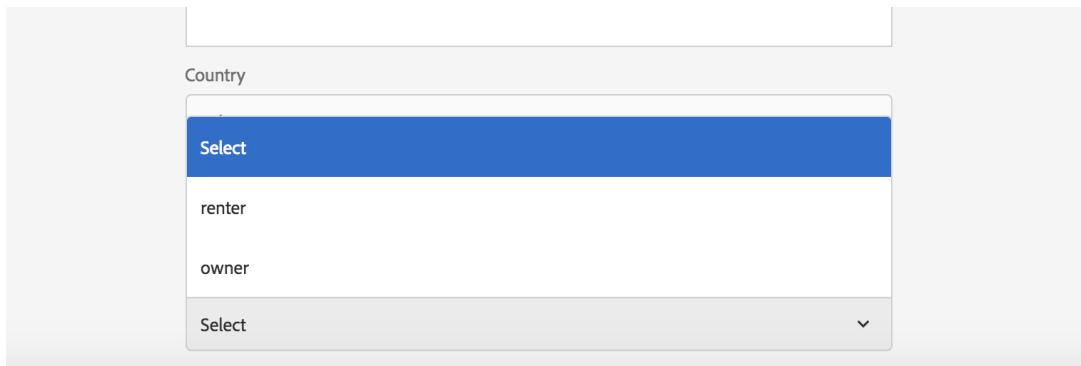
## Activity Four: Overlay the User Form and the Geo-location test map

### Upload and Install the overlay Packages

1. Go to Package Manager
2. Upload and install Getaways Profile Testing Overlay.zip from Activity 4/6.4 versions folder
3. Upload and install Getaways Location Testing Overlay.zip from Activity 4 folder

We will now create the test users to apply our business segment and clear the last hour of browser cache to allow the overlay of the Location Map to update.

1. Navigate to **Tools > Security > Users**
2. Scroll to the bottom of the page and you'll see an additional input:



Now return to the Logged In Renter page, confirm the Locations have changed to:

The screenshot shows the 'Logged In Renter' interface in AEM 6.4. At the top, there are several navigation links: 'Getting Started', 'Google', 'Apple', 'Yahoo!', 'AEM Forms Links', 'Google Maps', 'AEM 6.2', and 'AEM 6.4'. Below the header, there are icons for 'Mobile', 'Cart', and 'User'. The 'PERSONA' dropdown is set to 'anonymous'. The 'LOCATION' field shows '55126 Shoreview, MN'. To the right of the location is a 'Refresh' icon and the 'RESOLVED SEGMENTS' button. A modal window titled 'Location' is open, listing four options: 'Eastern USA', 'Northern USA and Canada', 'Western USA', and 'Southern USA and Mexico'. The 'Western USA' option is highlighted.

If you don't see these values, make sure you clear the past hour of history. The overlay location in 6.4 is the same as in 6.3 but this part is cached by the browser hence the need to "force" AEM to let go of the default so we can go right to work.

AEM will allow us to create Client Libraries at the conf level to support multiple geo-location test beds in the future but this approach will suffice for now. Next we will configure our Brand and Segments at the Page Level.

The screenshot shows the 'Personalization' configuration page for the 'Logged In Renter' component. The top navigation bar includes 'Media', 'Cloud Services', 'Personalization' (which is underlined), and 'Permissions'. Under 'Personalization', there are two sections: 'ContextHub Path' and 'Segments Path', both with checked checkboxes. The 'ContextHub Path' is set to '/conf/getaways/settings/cloudsettings/default/contexthub'. The 'Segments Path' is set to '/conf/getaways/settings/wcm/segments'. Below these sections is a 'Getaways' configuration area. It includes an 'Area Reference' dropdown set to 'Master Area' with a plus sign and minus sign next to it, and a 'Brand' section with a 'Add Brand' button and a plus sign.

# Activity 5: Create the Users and Activities

In the last activity we added the layovers to configure a test environment to allow our authors to target our Summit Getaways audiences. Time for sample users and activities.

**Certain values will “trigger” your test users to appear in the CH Tool dropdown.**

Navigate to Tools > Security > Users

Create 2 users with the following values:

**ID:** jrenter

**PW:** jrenter

**Email:** jrenter@getaways.com

**FN/LN:** Joe Renter

**Gender:** Male

**Business Segment:** renter

**Upload the “dude.jpg” avatar from the Activity/User\_Avatars folder**

**ID:** mowner

**PW:** mowner

**Email:** mowner @getaways.com

**FN/LN:** Mary Owner

**Gender:** Female

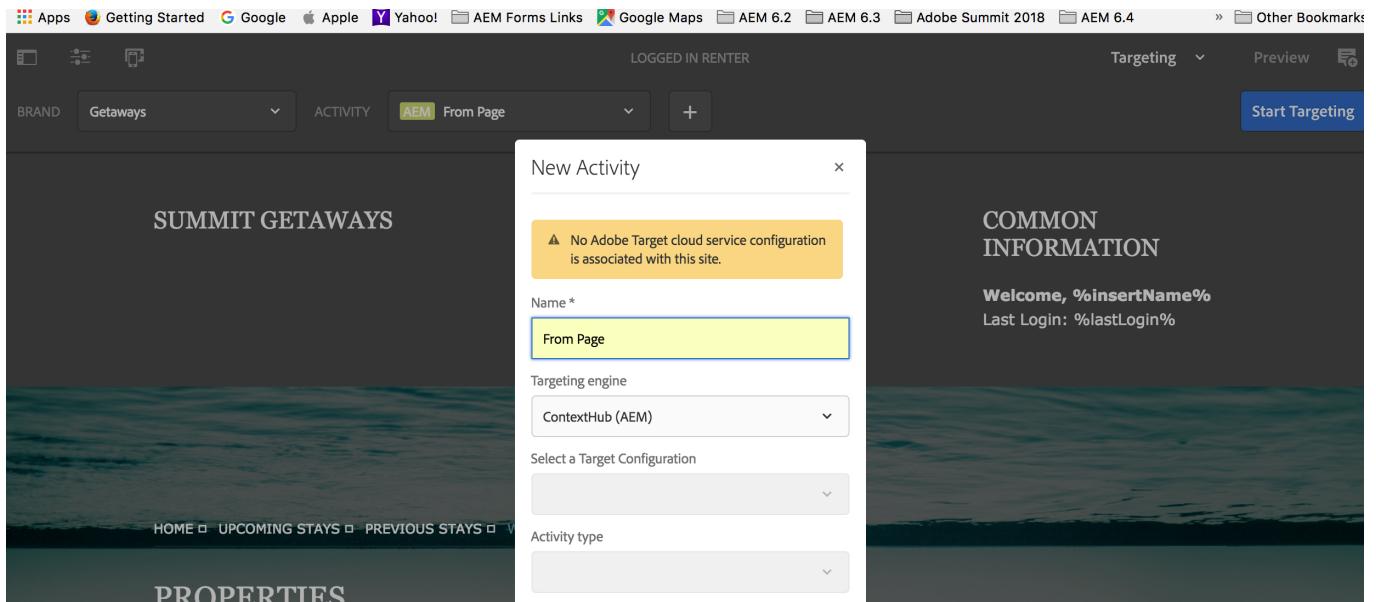
**Business Segment:** owner

**Upload the “chick.jpg” avatar from the Activity/User\_Avatars folder**

Return to the Logged In Renter Page and you'll see our users and segments begin to be resolved

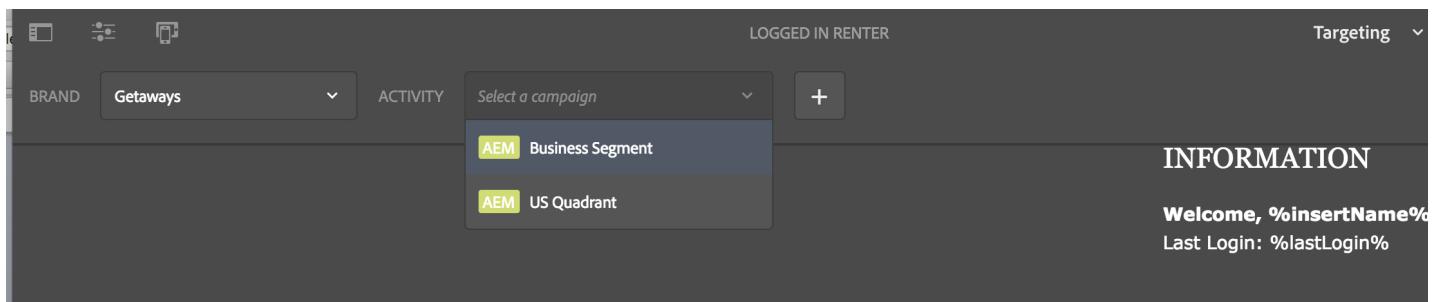
The screenshot shows the 'LOGGED IN RENTER' interface. At the top, there's a navigation bar with icons for a shopping cart, persona (showing 'PERSONA Joe Renter'), location (showing 'LOCATION 70065 Kenner, LA'), and resolved segments (showing 'RESOLVED SEGMENTS 2 segments'). Below this, the main content area features the text 'MMIT GETAWAYS'. To the right, a box titled 'Resolved Segments' lists 'geolocation-store-southern-us' and 'getaways-renters'.

Activities group together audiences to target components.  
These can be created at the page level or the personalization level, even allowing us to dynamically add experiences as we go.  
The key difference is the audiences available.  
From the Console level I see all segments across app configs  
The page level will just show the ones associated with our Brand.



There is a package with pre-created activities we can install to keep moving:

Upload and Install Getaways Activities.zip from the Activity 5 folder



# Activity 6: Upload images and components and start targeting

Find and inspect the two CRX Packages in the Activity 6 folder.

This will introduce AEM components and Image Assets for page building.

Now we can begin to play "author" and configure our content for creation.

1. Open the edit tab and view the content finder Assets Tab
2. Install the "Getaways Images.zip" Package
3. Refresh your page
4. View the Content Finder again and see the Assets for Summit Getaways are now available
5. Install the "Getaways Targetable Components.zip" Package
6. Navigate to the Home Page
7. Notice the pages have "baked in" components in them.

Explore the different audiences and target components: Have fun

***Thank you for attending Adobe Summit and the L733 Hands on Lab!***

***If you have any questions, feel free to contact me by email:***

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***Also I'd like to thank Mark at OS Templates for allowing me to use his responsive Devenna Design template as the basis for this workshop.***

***More information on OS can be found at***

**<http://www.os-templates.com/>**