Technical Training

Deconstructing Wireframes into AEM Templates and Components

Hands-on Lab Guide

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Lab Overview

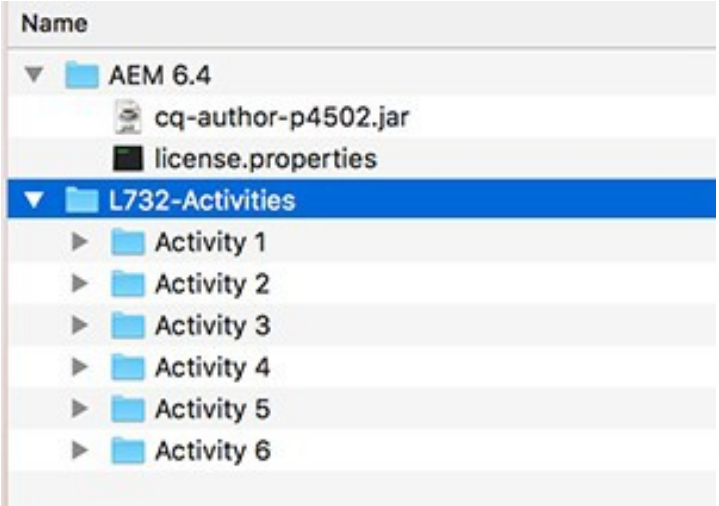
Scope

In this training you will learn the process of starting with HTML creative and identifying how many templates and components are required. You will also learn how to identify audiences and promote reuse by

- Leveraging Editable Template Structures
- Making use of core components
- Understanding Template and Content Policies

Preparation: Locate the L732 folder

1. Locate the L732 folder on your desktop.



Preparation: Start and login to AEM

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

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

Activity 1: Examine the static HTML

Examine the wireframe samples and talk "template". Let's bypass any printed material and click through an HTML prototype to start slicing up the creative. A basic understanding of AEM architecture is essential when it comes to "top down" decomposition.

Designing for AEM

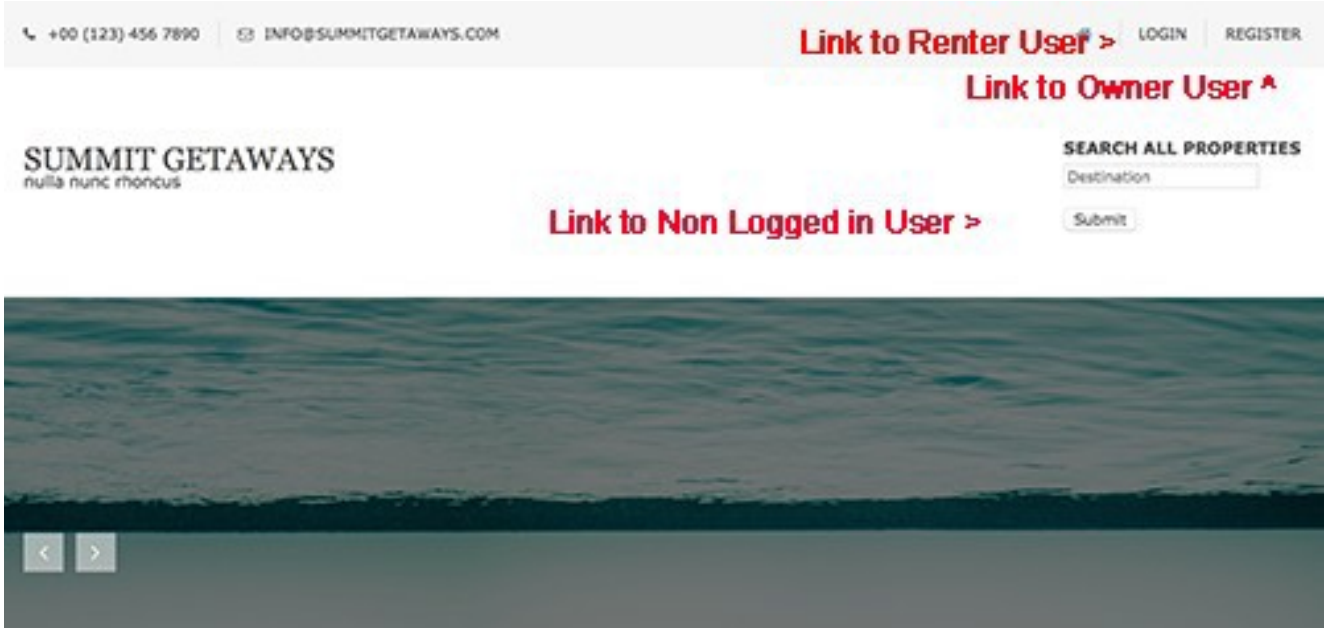
Designers are the beginning of the journey when it comes to the vision. Think "component" from the outset. A component is a snippet of author-able content that can vary with respect to user. This can be achieved in several ways in AEM and the list of options continues to grow.

Targeting Components, Creating Editable Templates and leveraging Content Fragments are all ways to tweak text and images inside of the same content areas to add value to end user experiences.

Divide and Conquer

Implementation can be done in phases to gradually transition content from IT controlled to SME controlled. How the content variations are applied need not be a concern at the design phase, leave that up to the developers. What the design wireframes do is deliver the genesis. Look at the creative and start to analyze for similarities and differences.

a. Navigate to the Activity 1 folder and unzip the file named Getaways_Static_HTML.zip
b. Right click on the index.html page and open with either Chrome or Firefox
c. Our designer has hard-coded the navigation to allow us to walk through the three "roles" they were told to address.
d. Follow the links in the navigation and begin to look for similarities in structure
e. Here is where we will look for a "base" structure and begin the work from there.
f. In this lab we also want to identify reuse among the logged in users and we'll explore how AEM now addresses these at the Configuration Level.

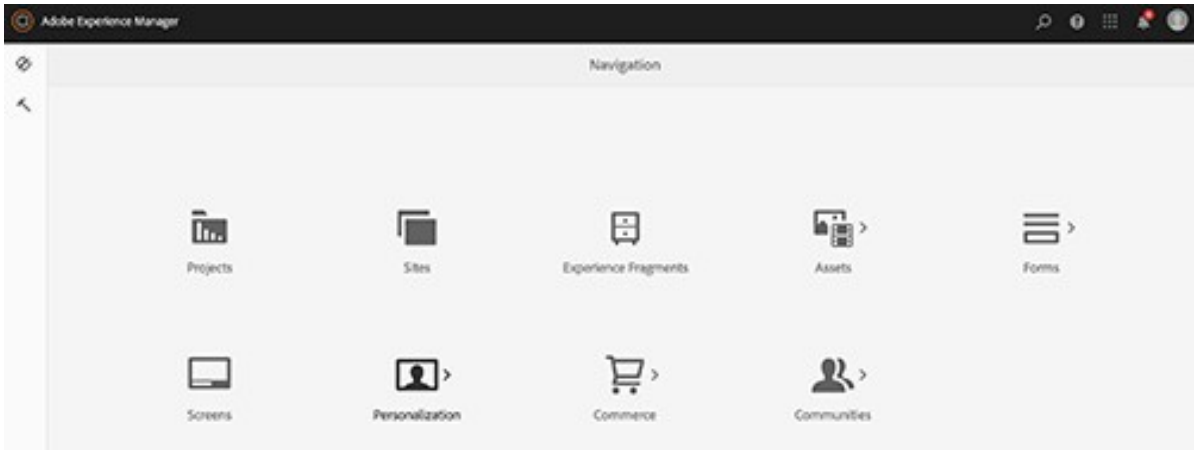


Pre Requisite to Activity 2 and Beyond

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

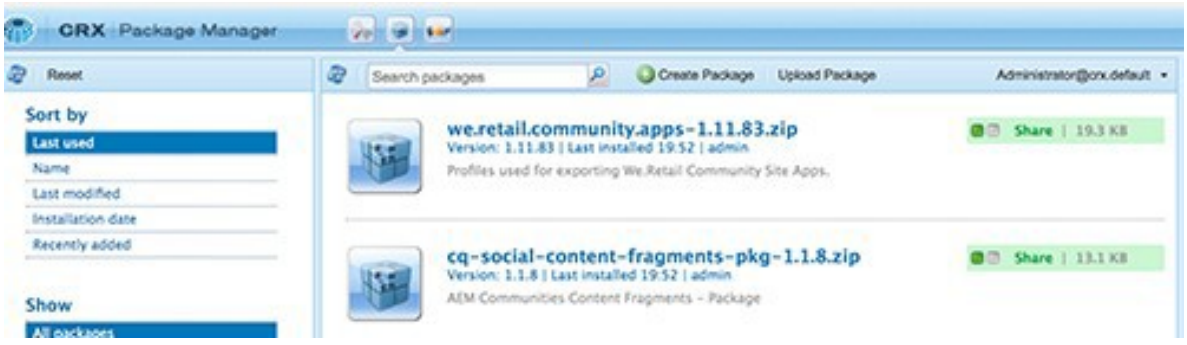
The Site Admin Console is reached from the Touch UI



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

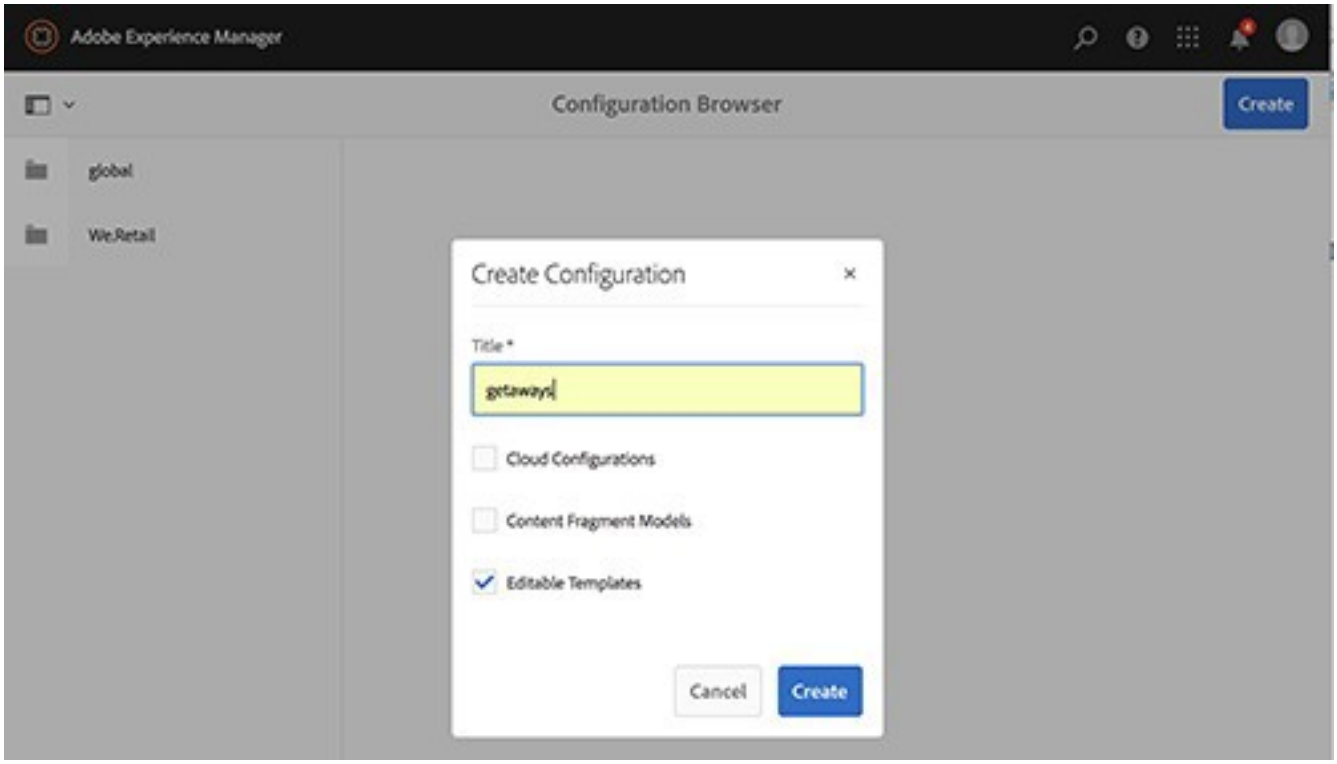
The CRX Package Manager and CRXDE-Lite links are located side by side and are available atop the CRX itself.



Activity 2: Create our Configuration Module and a Template Type

1. From your browser, navigate to the Configuration Browser via the navigation: **Tools** > **General** > **Configuration Browser**.

2. Click the **Create** button and enter the information as seen below.



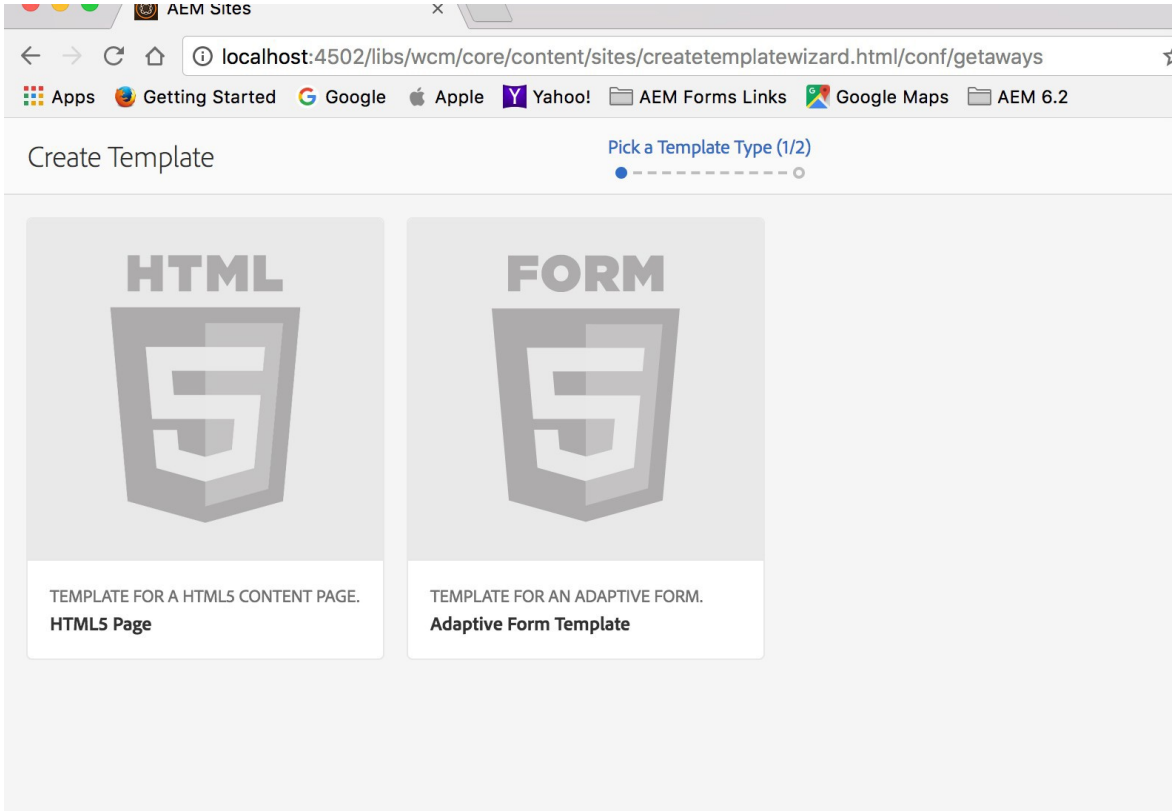
3. Select the folder you create, click properties and adjust the Title value

Adobe now suggests clients creating new sites focus on Configuration Structure and use Editable Templates. The UI continues to mature and new functionality often requires some manipulation in CRXDE-Lite to set things up but this is still a task that should be initiated by Developers.

Our next step is to create a template-type by creating a template from a foundation template-type.

This, our site template type, will be created from a foundation template type and manually moved and configured as the base for our Editable Templates.

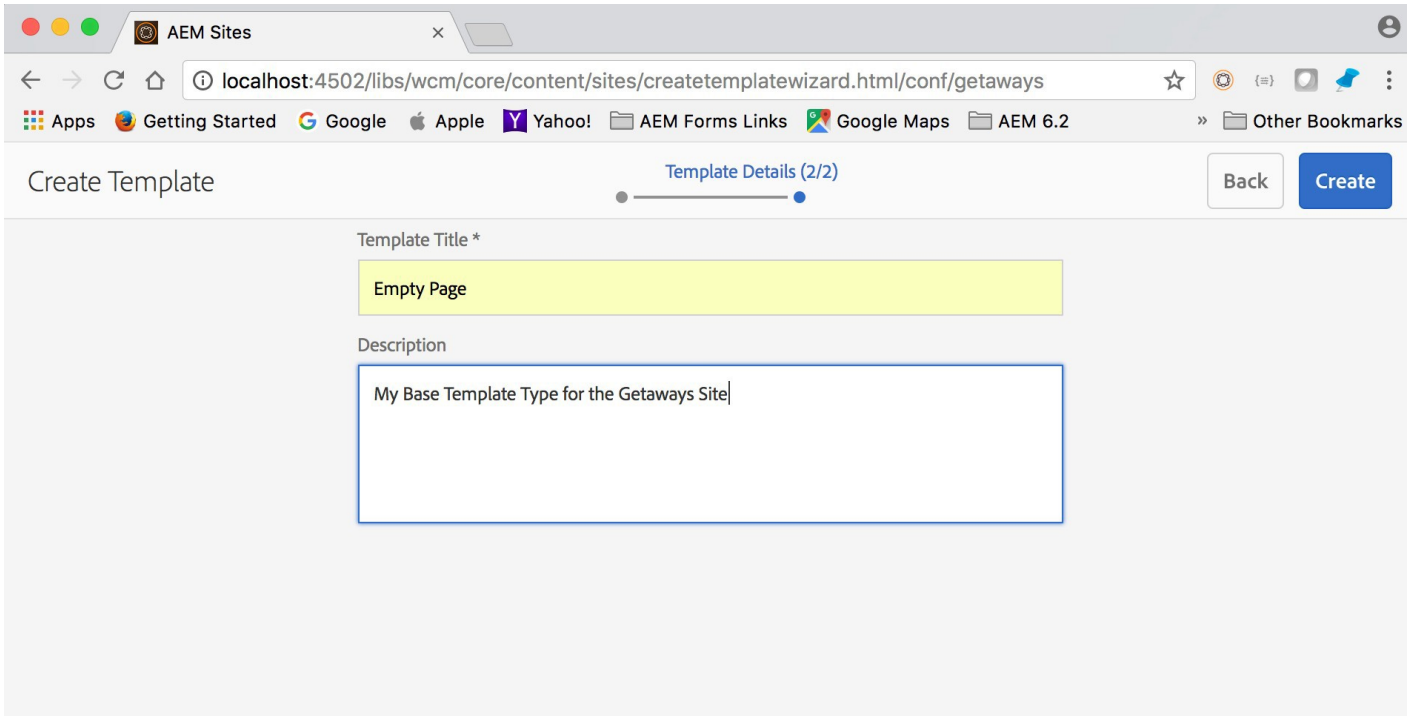
1. Navigate to Tools > Templates
2. Note that you now have Getaways Folder. Go inside.
3. Click Create and you will be presented with Two Template Types



We will select the HTML5 Page as our base. This will take some manual set up to accomplish. Don't worry, there is a CRX Package to help you out but this process is explained step by step in the Adobe AEM Documentation and is how to fashion your template type. Later we will change the resourceType and point this to Getaway Site base page component. This is where we can supertype to a core page component.

https://helpx.adobe.com/experience-manager/6-3/sites/developing/using/page-templates-editable.html

Once you selected the template and clicked next, create a template called "Empty Page". All of the templates required for our Getaways Site will originate from this one Template Type. (See below)

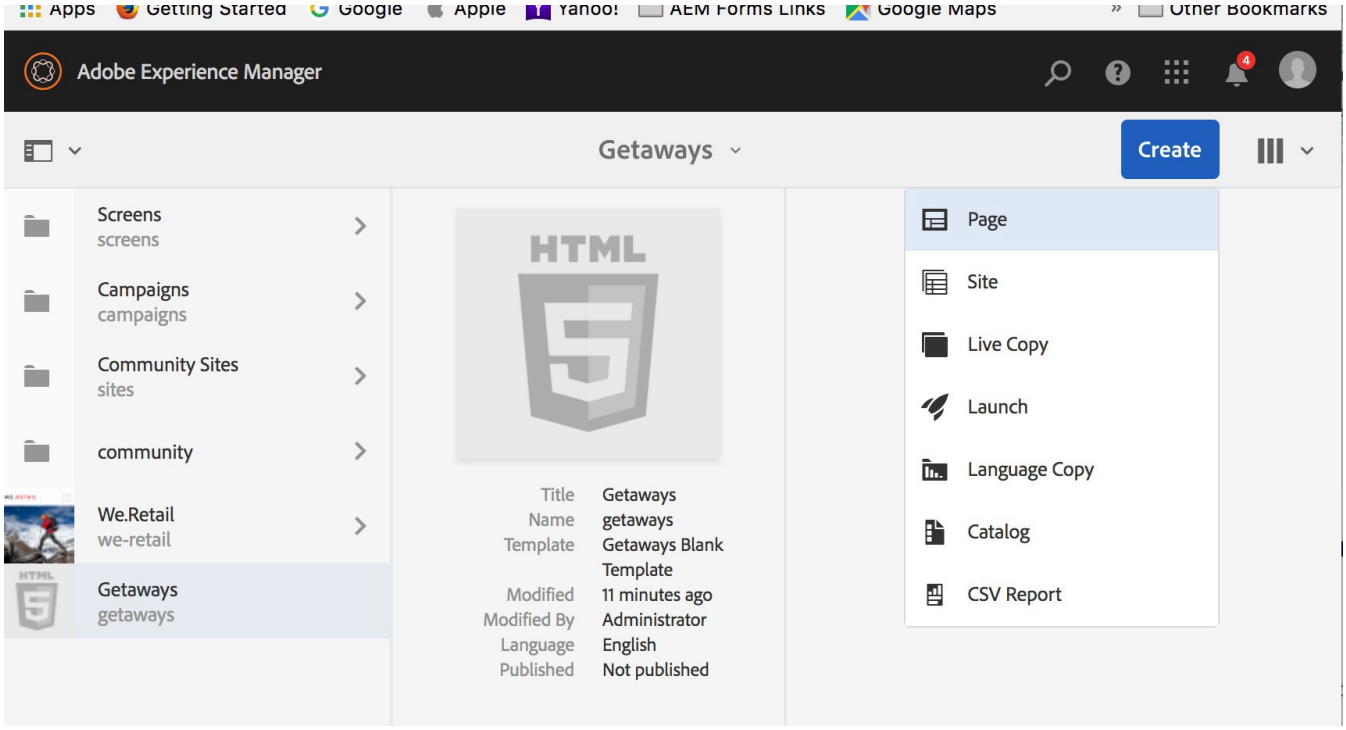


Once this has been created, the template can be moved into the template types node:

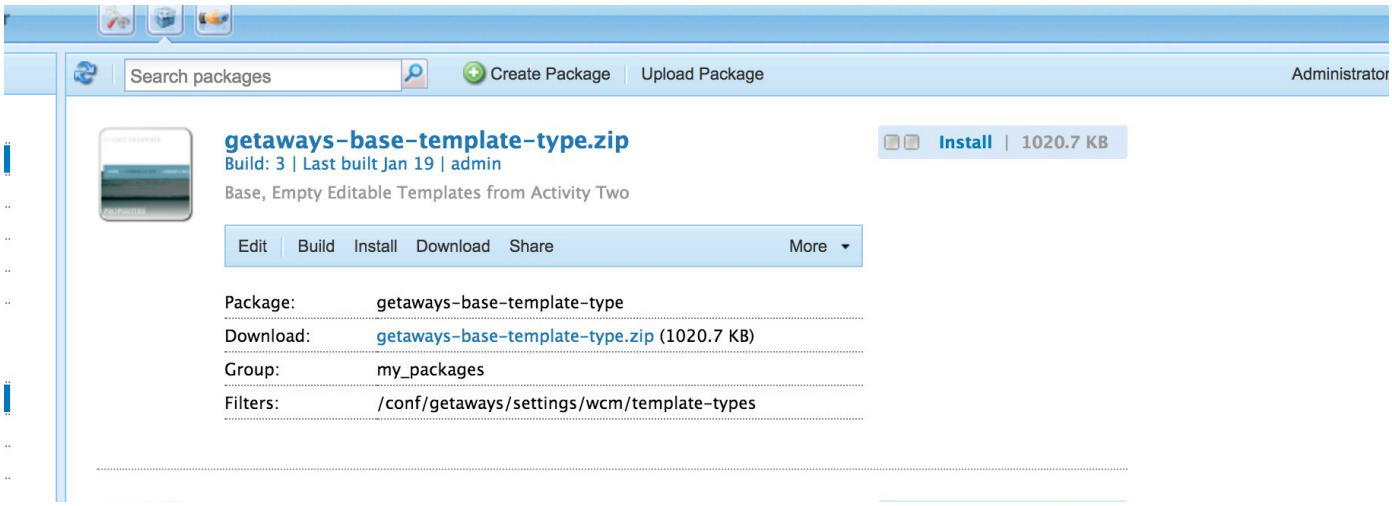
In the template you have moved under the **template-types** node:

- Delete all **cq:template** and **cq:templateType jcr:content** properties.
- The important thing is to start building out our site structure from the root
- Use the Template Type you've created to create a Getaways Blank Page Template
- Add the allowedPaths property of /content(/.*)? to the jcr:content node on the root to get page creation started and establish our site.
- From the Content Root, you should now see Create Page.
- Create the Getaways Root Page and add /conf/getaways/settings/wcm/templates/.* to the page properties. This is something you want to verify by now creating a Home Page Template
- Do this only to get the site root established and then pass on to the templates themselves
- Once the root is created we can remove the allowedPaths property and expose both the Getaways Blank Page and Home Page Templates to our site.

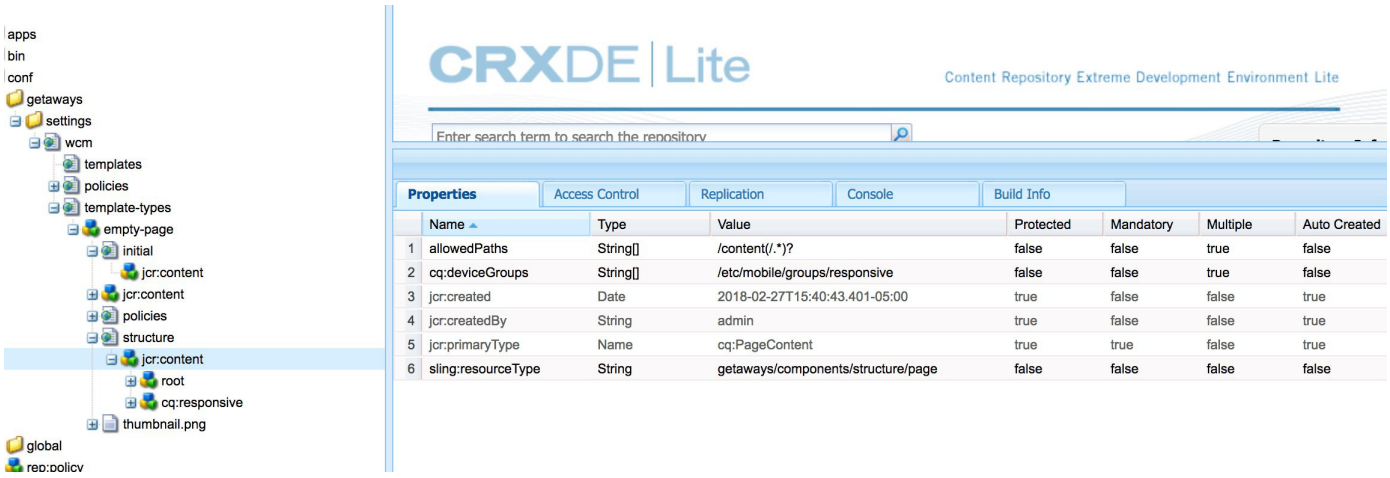
You should now be able to see Create Page at the Content Root and inside of the root page as well



Here you can simply install the CRX Package to keep the lab moving and examine the structure created:



Examine the Template Type Structure Created:



This will now serve as the base Template Type for every page we create in Summit Getaways.
Note: You may also create a Redirect Template or a Forms Template based on your requirements but we'll leave tha for another day so we can focus on building out the Site first.

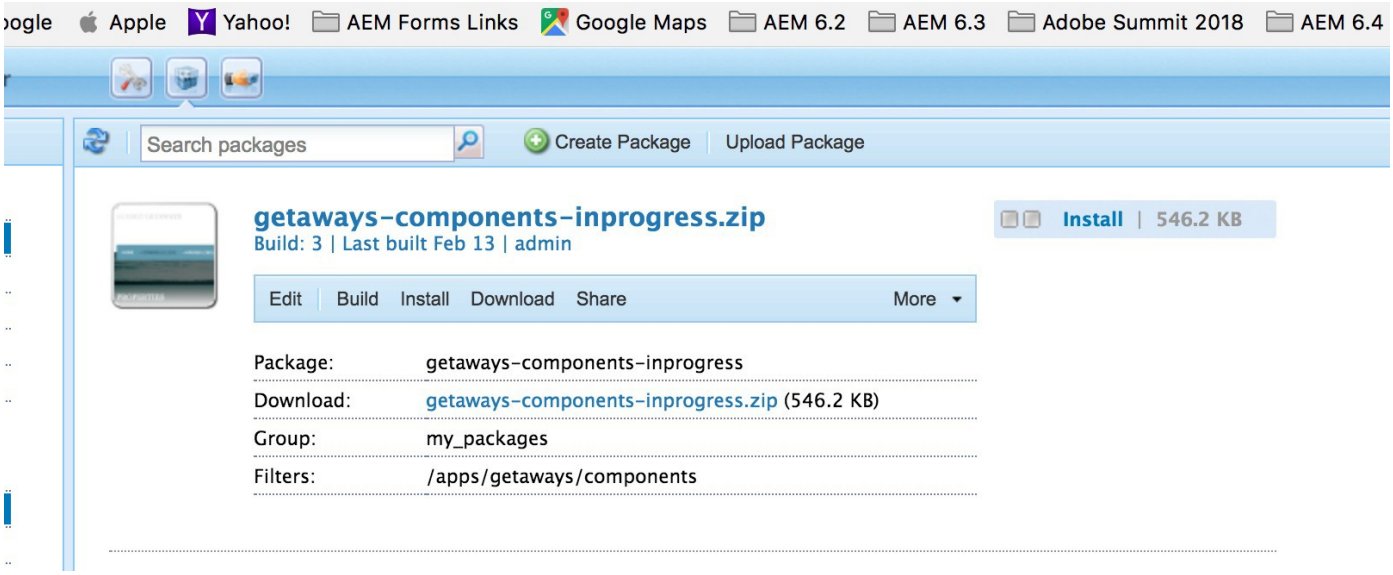
Navigate back to the Templates Folder > Getaways Folder and Click Create to see your Getaways Template Type. Now it's time to add the building blocks for our site. We will upload the components needed so we can move the sling:resourceType from a foundation page to an app level page that will use the core page component as a super type.

Activity 3: Start to integrate static HTML into AEM

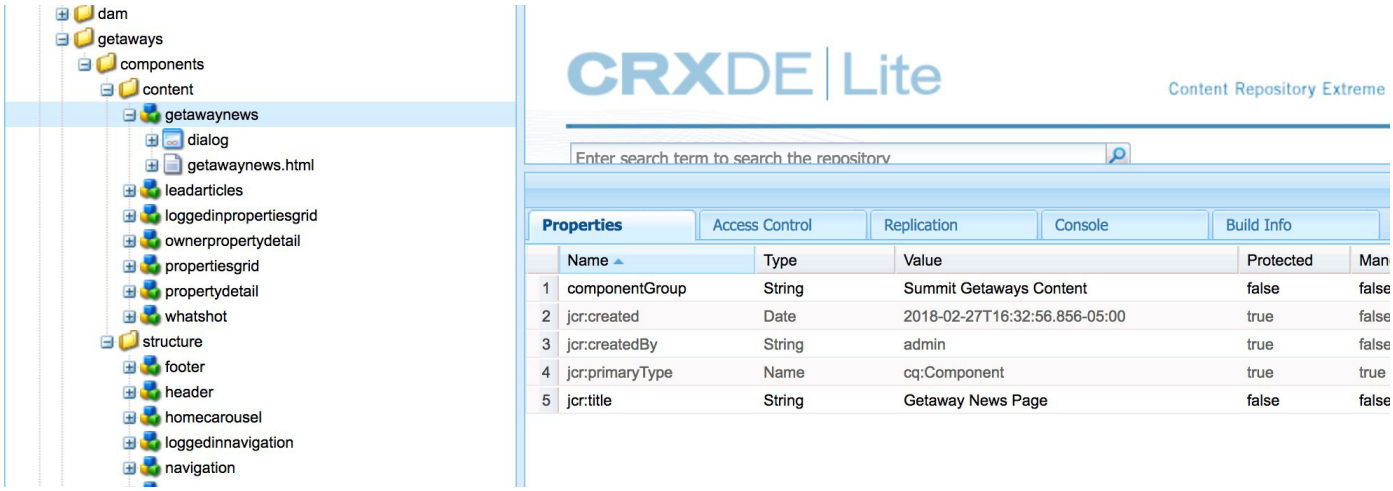
A good starting point for an AEM functional integration (or *any* functional integration for that matter) is to move the static creative into the CMS templates. We can convert values to dynamic content later but get the look and feel right first!

Editable Templates need some more setting up at this point so it's time to upload another package and examine the code.
Here we'll talk about the role of "dialogs" and "componentGroup" properties. These are triggers in AEM to allow Template Authors to grab and group our static creative pieces into "chunks" that can be further divided and governed.

Upload the Activity 3 CRX Package:



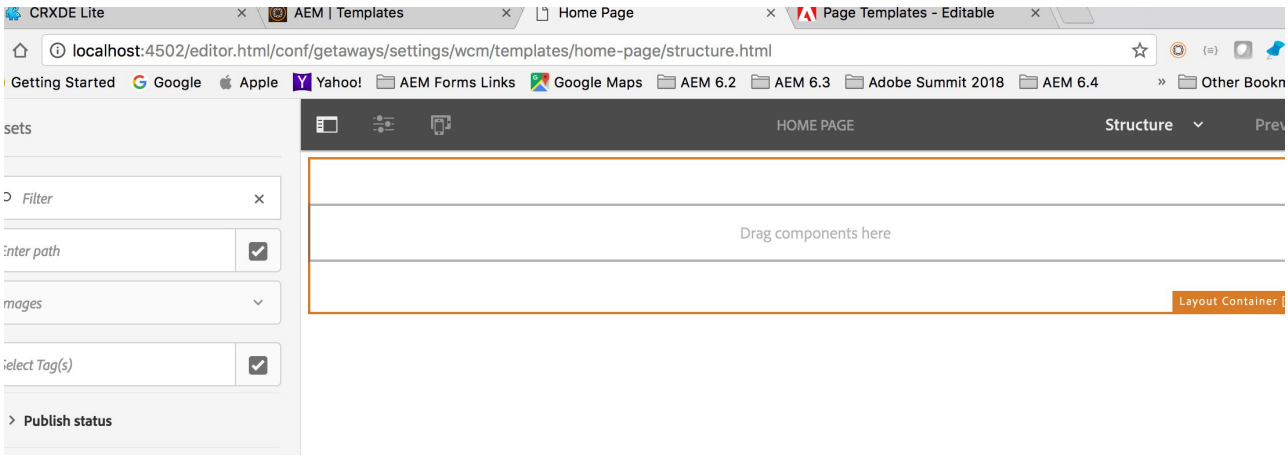
These are already created for you in this exercise:
Examine the structure and content components delivered. Note the dialogs and componentGroup properties. This will allow us to begin building Policies and Pages.



Our Developers have gathered requirements based on the discussions around the static creative and have already created logged in and anonymous components to empower the authors to start constructing pages. It's note worthy to point out that the component pieces themselves can be fleshed out and enhanced in parallel to other development activities.

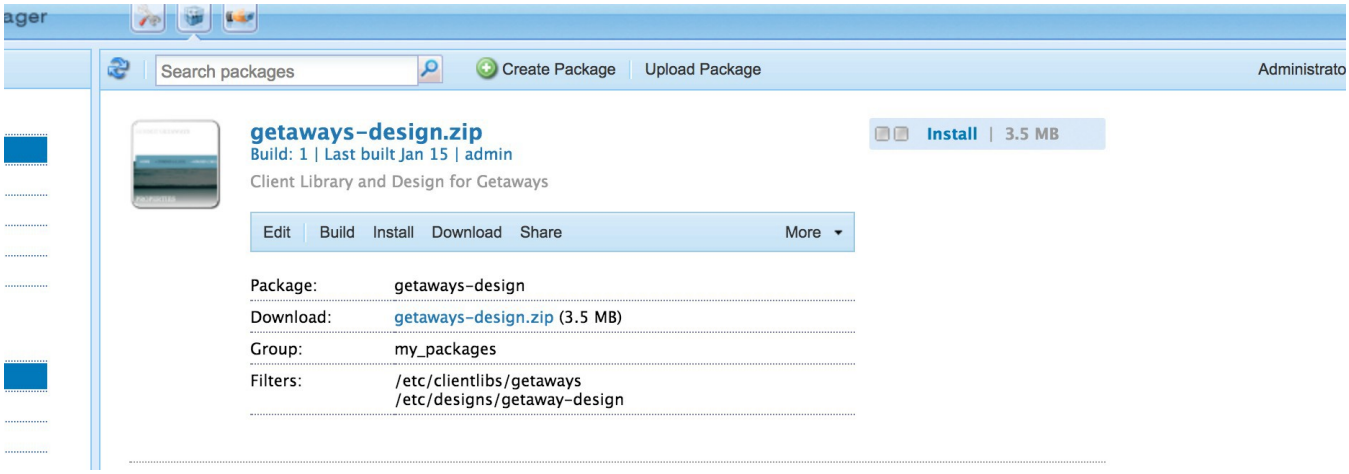
Now that our Getaways Page Component is there, we can point our templates to that and begin to prepare the framework to allow Template Authors to get to work. Examine the page component. See the super type that references the core page component.

Replace the sling:resourceType of "wcm/foundation/components/page" in our templates with "getaways/components/structure/page"



Activity 4: Install getaways- design.zip Package

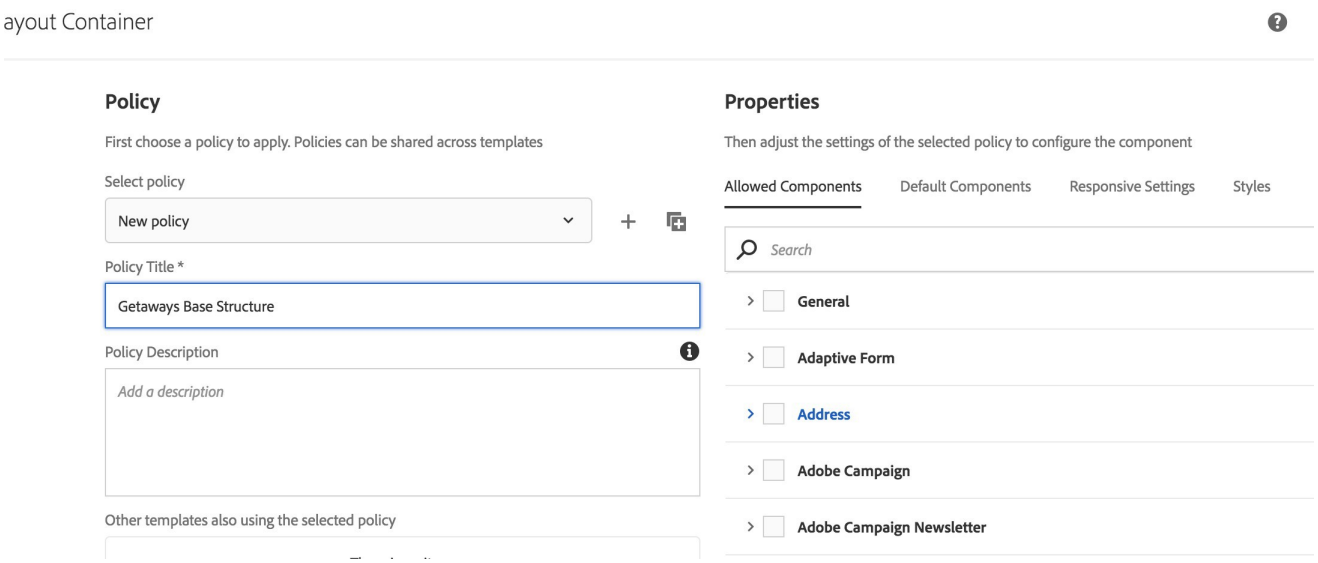
1. While we could create pages without the style sheets and retro fit later, now that we want to transition template creation to template authors, it's most likely a better approach to complete the tool set before creating templates.
2. Upload and install getaways-design.zip from Activity 4 folder. Notice this folder has the design package but also has icons we can use to begin differentiating our templates.



At this juncture we are ready to create our first policy. Policies define the allowed components. In static templates this is normally done just for the parsys or responsiveGrid. With Editable templates I want to do that with structure components as well.

Two important things to practice with when creating templates: Understand the container relationships, the lock and policy icons and how they drive editable template creation.

Policies are pretty intuitive to create. Add new and name as such:



The Getaways Base Structure Policy can be assigned the Summit Getaways Structure Component Group. Once that is assigned, unlock the container and switch to Initial Content Mode to create the basic home page content using a Header, Footer and the Home Carousel Components. We will add navigation later for logged in users. Notice the link checker is highlighting broken links because we haven't created pages for the statically coded navigation…yet.

At this time we can also start to decorate our templates using custom icons. This can be vexing; Browsers are browsers so hang in there.

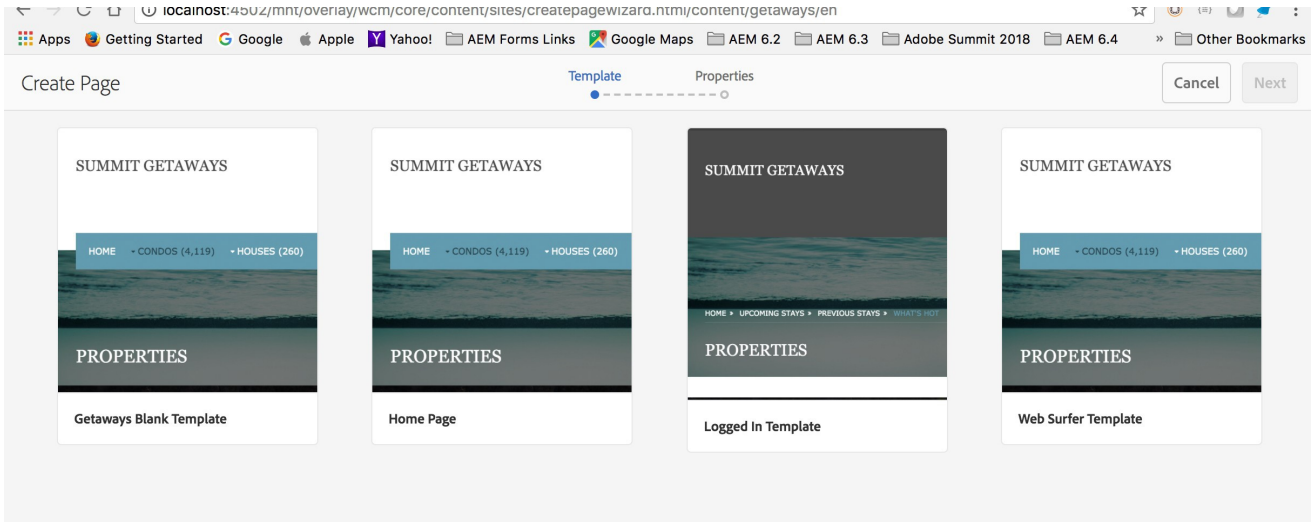
Activity 5: Upload Logged In Header and Footer Components

Another transitional functionality in AEM is the migration from Design Mode to Content Policies. AEM sites don't support both. Once you take the plunge to editable templates, Design Mode is no longer available but don't worry, it has been replaced by Content Policies. These are persisted in the "conf" directory. Multi-tenancy will be supported by migrating things that used to live in /etc (global) to /conf (tenant specific).

Once we upload this package to add those components we can begin to look at Content Policies. We are ready to start creating templates and using them to create pages.

Using the Home Page Template we created earlier, make an English Home Page. You'll see our initial content may be all we need!

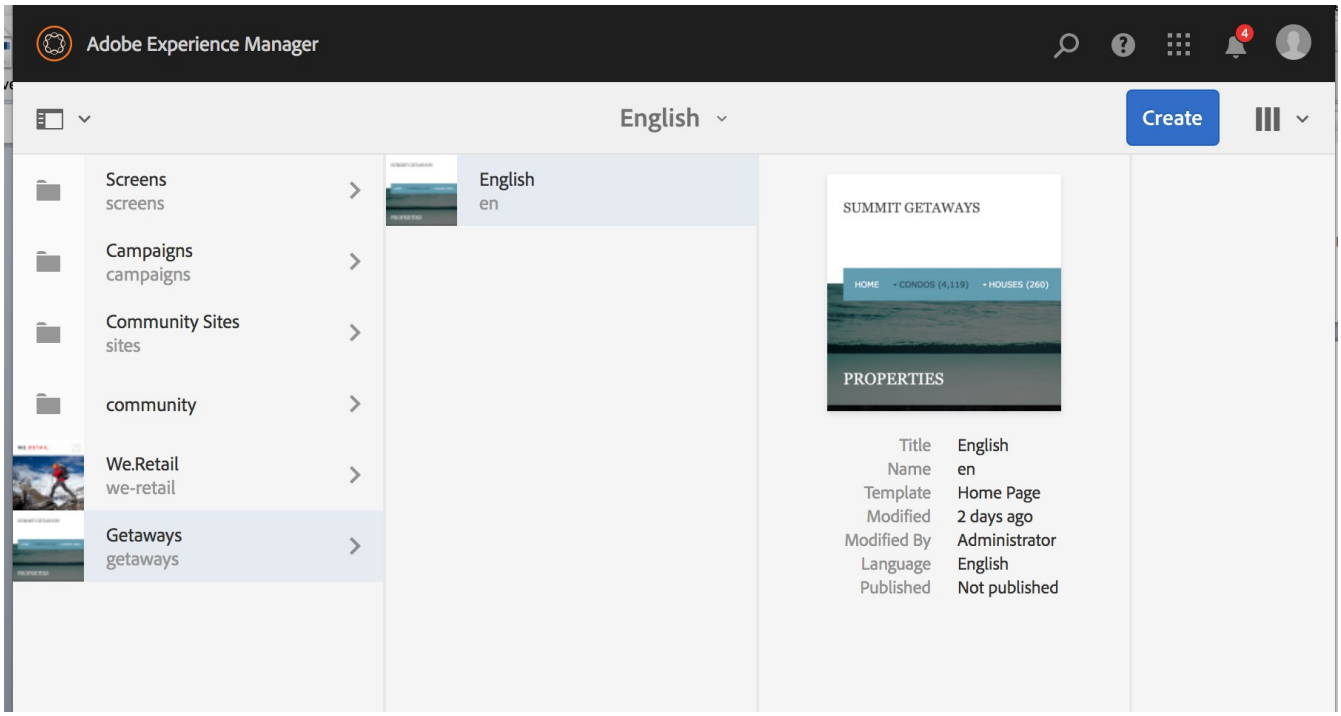
Using the Empty Page Template create a Web Surfer Template and a Logged In Template. Create Policies that include all of the Getaways Components but you start to see where we can regulate what's available by using policies. When the first few are done:



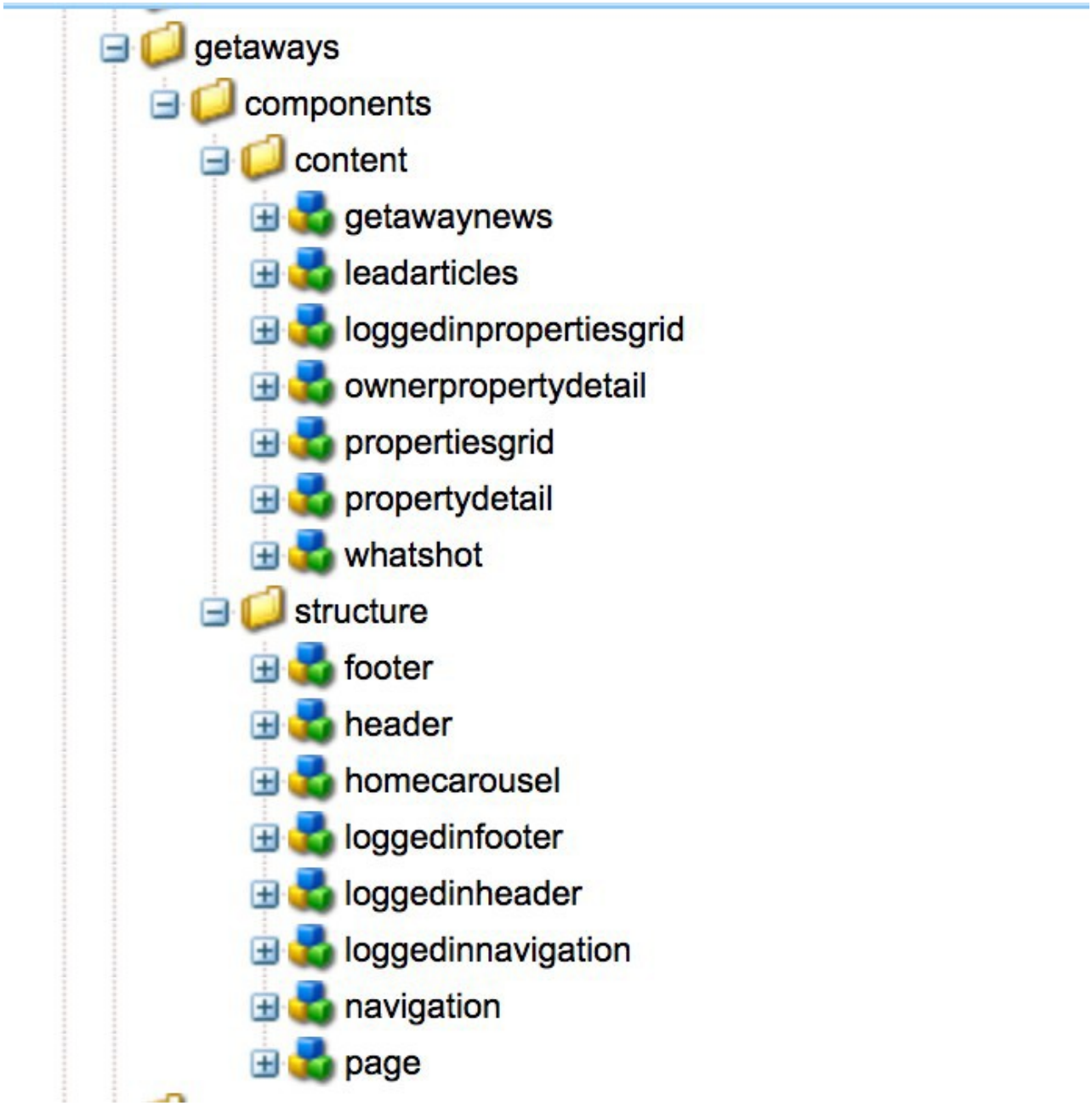
Activity 6: Build and Configure

We now have delivered a toolset to the Template Authors to begin to create and govern pages for our site.

There is more work to be done before we're ready to turn this over completely to Template and Content Authors (code dynamic navigation, determine what sections will be free form versus controlled areas, etc.), but the purpose of this lab is to demonstrate the philosophy behind creating Editable Templates. This feature was the introductory concept to the "conf" directory in AEM but Adobe will continue porting tenant-based approaches to configuration into this area. Navigate into our base and see what we've done:



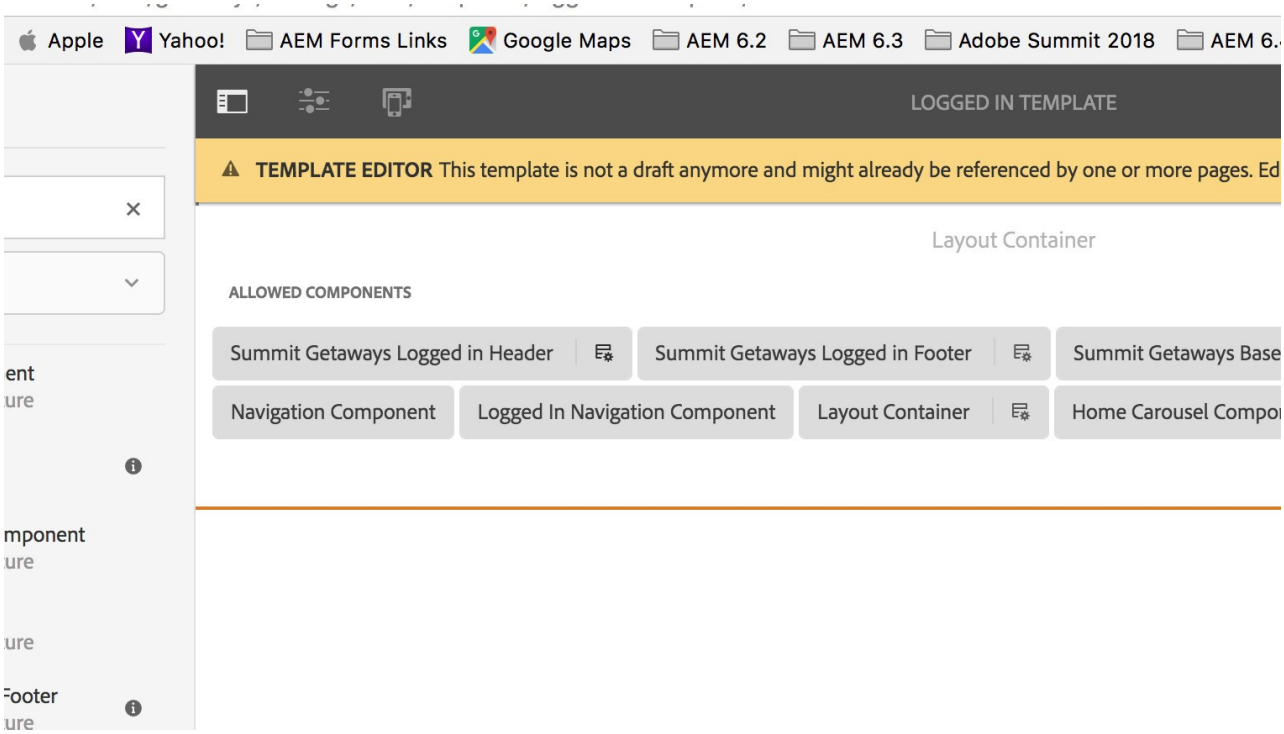
Here is a list of the initial components created by the developers:



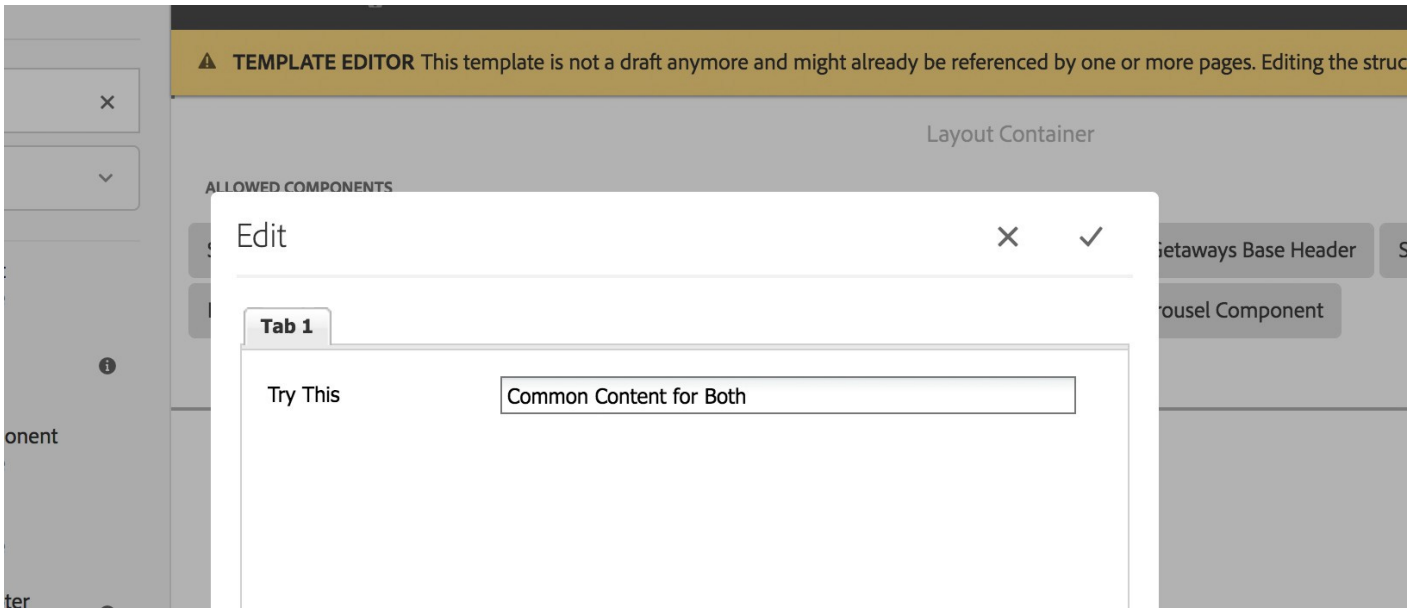
Now lets revisit our requirements and create the right number of templates. Templates authors that manage policies can grant themselves access to structure components in order to establish templates and then rescind those components once we go “live”.

At this point we still have some decisions to make. Do I need more than one logged in template? My requirements dictate that the footer display different link lists for Owners and Renters. That sounds like I need two different content policies for those two customer groups. The header is to be the same for both so that makes my logged in header re-useable with only one policy. To illustrate this flexibility, let's configure the Logged In Template for Renters and then create another template and content policy for the Owners group.

Open the Logged In Template we've created and notice the additional icons on the Logged In Header and Logged In Footer Components:

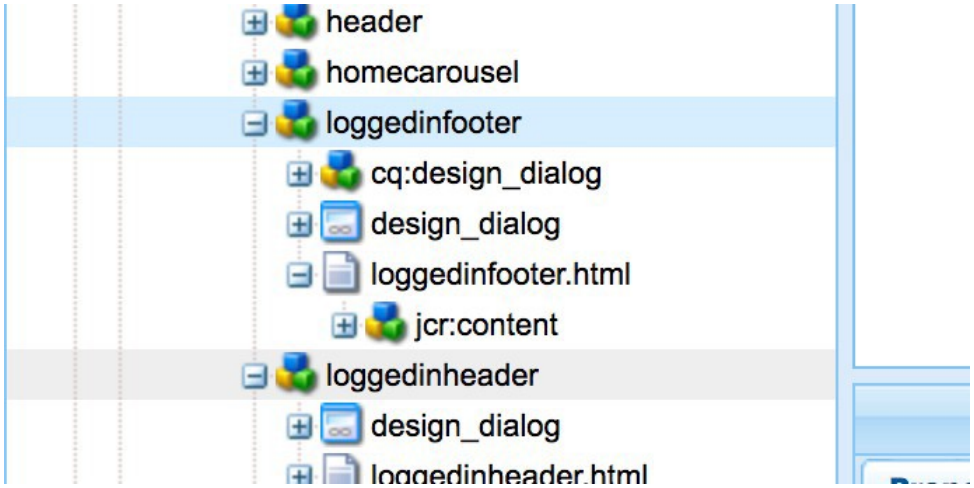


Select the icon on the Logged In Header and you will see a different type of policy window. Create a policy; click Edit Design, save the policy and you will see a familiar looking dialog window:

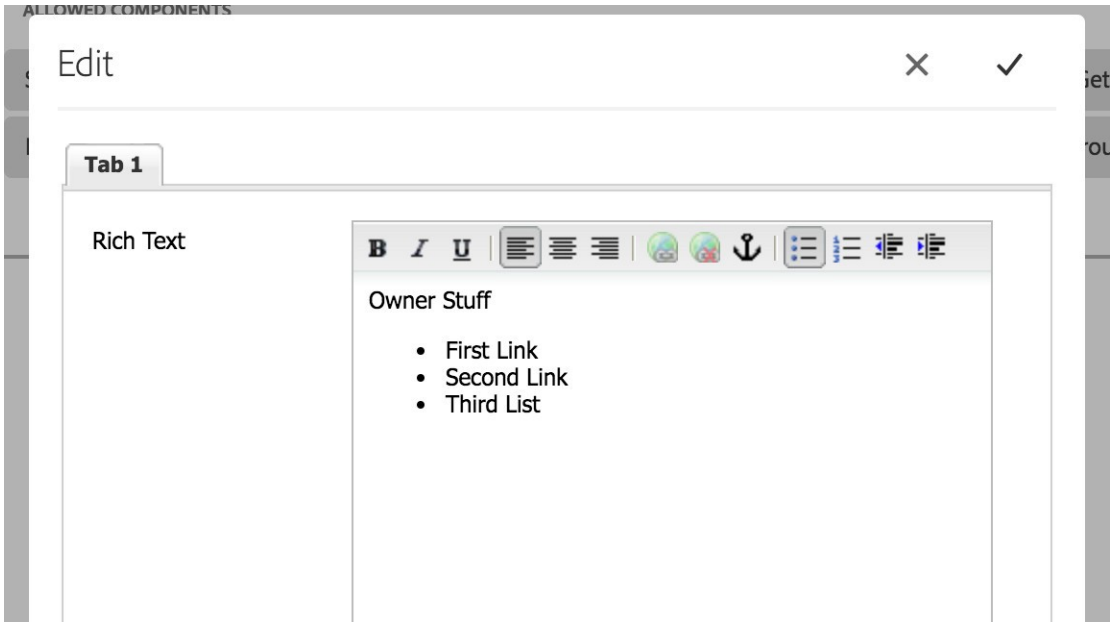


Save and view the content with Initial Content Mode.
Now do the same for the Logged In Footer. Note that for each different content policy you wish to configure, you will need a different template instance. There is a companion workshop for targeted components using this site that will explore different ways to present content to Owners and Renters using the same component. These are both viable options depending on your site requirements.

Now that you've done the header, repeat the procedure on the Logged In Footer. Notice the dialog you see is not correct. This is intentional to illustrate the relationship/hierarchy of dialogs remains unchanged. Go to CRXDE-Lite and delete the cq:dialog:



Now you will see a Rich Text input where you can add the footer bullets:



To create the rest of the site, open the Design Creative in another browser window and try to match the prefabricated components with the design.

Activity 6 provides the following packages:
getaways-completed-templates.zip
getaways-components-complete.zip
getaways-content.zip
getaways-core-content-examples.zip

I encourage you to start page building on your own but then we will install the other packages so everyone can explore core components. We will talk about design and overlays to understand Adobe best practices for component creation.

Thank you for attending Adobe Summit and the L732 Hands on Lab! If you have any questions, feel free to contact me by email:
Dennis Selfridge selfridg@adobe.com

I'd like to thank Mark at OS Templates for allowing me to use his responsive design templates as the basis for this workshop. More information on OS can be found at http://www.os-templates.com/