AEM Forms Level 2 Training – Foundational Adaptive Forms Components

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Objectives of training

- 1. Demo data capture Demo in AEM Forms
 - Create and Edit: Modify existing adaptive forms to suit your needs.
 - Prefill: Set up forms to automatically populate with user data
 - **Apply basic logic**: Implement simple rules for showing and hiding form fields based on user responses.
 - Validate data: Ensure data accuracy with field-level validation rules.
 - Generate documents: Create and customize document outputs based on submitted data.
 - **Submit data**: Choose between OneDrive and SharePoint for data submission.
- At the end you, will understand how to talk through a data capture demo. Be able to create a form, talk through form pre-population, talk through the form authoring process and how form data is submitted.

Pre-requisites

1. Adobe Experience Manager Cloud Service:

- Have access to: An AEM Cloud Service sandbox with the following features enabled:
 - o **AEM Forms:** This module requires the ability to build and edit forms within AEM.
 - o **Reference Demo:** This specific demo will be used throughout the training.

2. Microsoft Azure Portal:

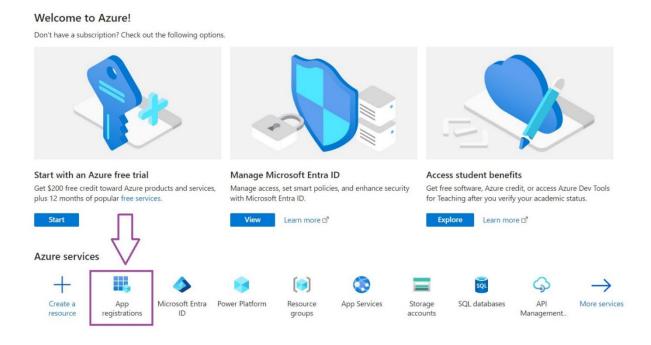
- Possess an active Azure account and the ability to create App Registrations:
 - Log in to: https://portal.azure.com/
 - Navigate to: "App registrations" under Azure Services.
 - o **Confirm:** You can see and access the App registrations section.

3. Cloud Storage:

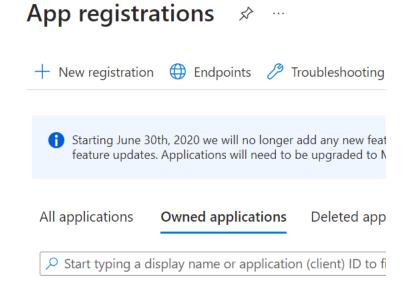
- Be able to connect to OneDrive or SharePoint using your Adobe ID:
 - o **Ensure:** You have an active account with either OneDrive or SharePoint.
 - Verify: You can successfully log in to your chosen platform with your Adobe credentials.

Setting up OneDrive Submit Action in AEM Forms

- 1. Register Your App in Azure Portal:
 - a. Navigate to the Azure Portal: Open a web browser and visit https://portal.azure.com.
 - b. Find App Registrations: Under "Azure services," locate and click on "App registrations."

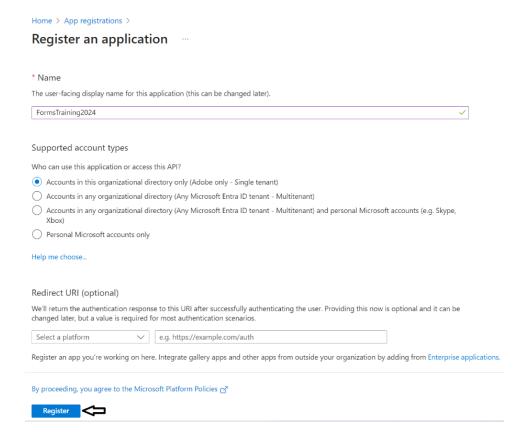


c. Add a New Registration: Select "+ New registration" on the App registrations page



2. Registering Your Application:

- a. Choose a Name: Enter a unique and descriptive name for your application.
- b. **Select Account Type**: Choose "Accounts in this organizational directory only (Adobe only Single tenant)."
- c. Save Application Details: Click "Register" to create the application,



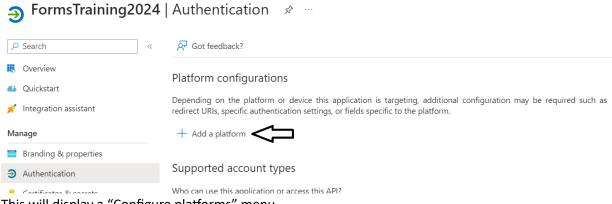
3. Copy the Application ID:

- a. After creating the application, you'll be redirected to its details page.
- b. Find and copy the "Application (client) ID" value. Keep it safe for later use.

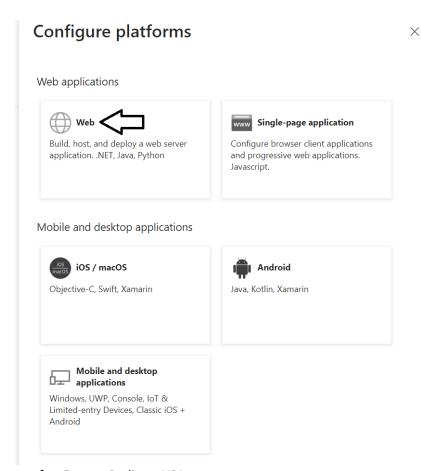


4. Add a Redirect URI:

- a. On the same page, to the right or the application id, click "Add a Redirect URI."
- b. This will open the Authentication page.
- c. Under Platform configurations on the Authentication page, select "Add a Platform"



- d. This will display a "Configure platforms" menu.
- e. Select "Web" located under the Web application.



- f. Enter a Redirect URI.
 - i. The redirect URI should have the following format:
 - 1. https://aeminstance.com/libs/cq/onedrive/content/configurations/wizard.htm
 - 2. Replace aeminstance.com with your current AEM Cloud Service instance URL.

Configure Web

 \times

 ✓ All platforms
 Quickstart
 Docs

* Redirect URIs

The URIs we will accept as destinations when returning authentication responses (tokens) after successfully authenticating or signing out users. The redirect URI you send in the request to the login server should match one listed here. Also referred to as reply URLs. Learn more about Redirect URIs and their restrictions

Enter the redirect URI of the application



Front-channel logout URL

This is where we send a request to have the application clear the user's session data. This is required for single sign-out to work correctly.

e.g. https://example.com/logout

Implicit grant and hybrid flows

Request a token directly from the authorization endpoint. If the application has a single-page architecture (SPA) and doesn't use the authorization code flow, or if it invokes a web API via JavaScript, select both access tokens and ID tokens. For ASP.NET Core web apps and other web apps that use hybrid authentication, select only ID tokens. Learn more about tokens.

Select the tokens you would like to be issued by the authorization endpoint:

Access tokens (used for implicit flows)
ID tokens (used for implicit and hybrid flows)

g. Click "Configure" to save the Redirect URI.

Configure Web



 ✓ All platforms
 Quickstart
 Docs ☐

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https://author-p96606-e882934.adobeaemcloud.com/libs/cq/onedrive/content/configur

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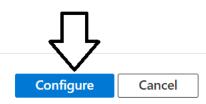
e.g. https://example.com/logout

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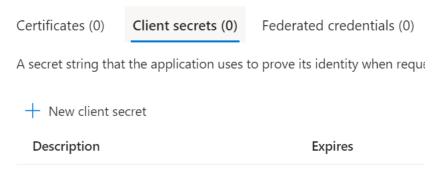
Access tokens (used for implicit flows)	
ID tokens (used for implicit and hybrid	flows)



5. Generate a Client Secret:

a. Select "Overview" in the left navigation menu to return to the applications details page

b. In the application details page, select "**Certificates & secrets**" and then "New client secret."



No client secrets have been created for this application.

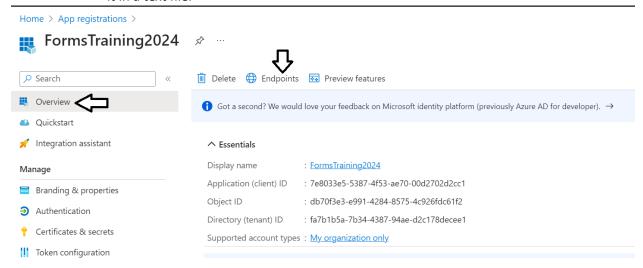
- c. This will open a new window.
 - i. Provide a descriptive name for the secret and choose an expiry time (or leave the default).
 - ii. Select the "Add" to generate the secret.
 - iii. Copy the secret's "Value" and save it securely in a text file.



6. Get the OAuth endpoint:

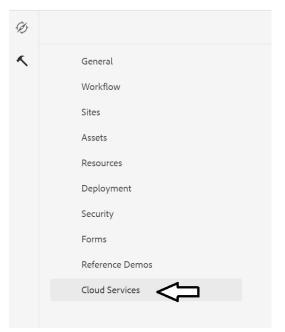
a. In the left-hand menu, select "Overview" and then "Endpoints" in the top menu.

b. Copy the value under the first entry, titled "OAuth 2.0 authorization endpoint (v2)." Save it in a text file.

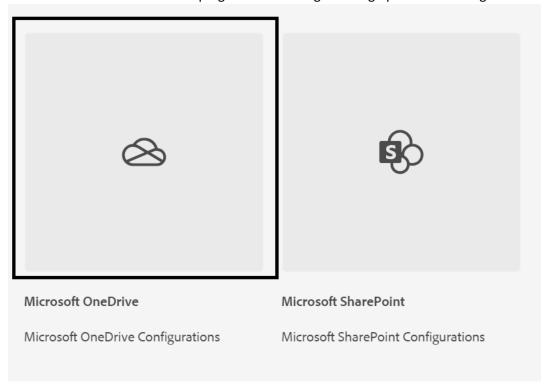


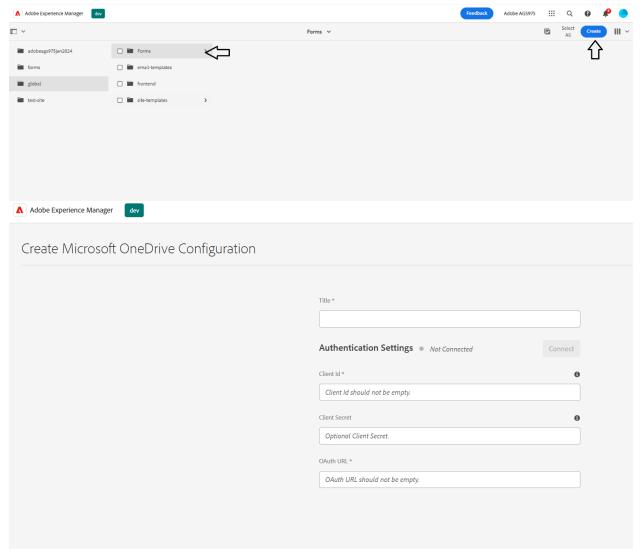
7. Configure OneDrive in AEM Cloud Service

- a. Log in to your AEM Cloud Service instance.
- b. Click the **hammer icon** on the left side of the page to open the **tools menu**.
- c. Choose Configuration Browser to create a new configuration or select an existing one.
 - If creating a new configuration, ensure **Cloud Configurations** is selected.
 - For detailed instructions on creating configurations, refer to this guide: [https://experienceleague.adobe.com/docs/experience-manager-cloud-service/content/implementing/developing/configurations.html?lang=en]



- d. From the tools menu, select **Cloud Services**.
- e. Click the Microsoft OneDrive option.
- f. In the left-hand menu, choose the configuration you created or select an existing one.
- g. Click the **Create** button in the top right corner to begin setting up OneDrive integration.





8. Enter the configuration Details:

Title: Give your configuration a clear and descriptive name.

Client ID: Paste the application ID obtained in the "Registering your Application" step.

Client Secret: Paste the client secret value you copied in the "Registering your Application" step.

OAuth URL: Paste the OAuth endpoint URI from the "Registering your Application" step.

- a. Click the Connect button.
- b. You will be redirected to a permissions confirmation page.



toniw@adobe.com

Permissions requested

FormsTraining2024 App info

This application is not published by Microsoft.

This app would like to:

- ✓ Maintain access to data you have given it access to
- ✓ Have full access to all files you have access to
- View your basic profile

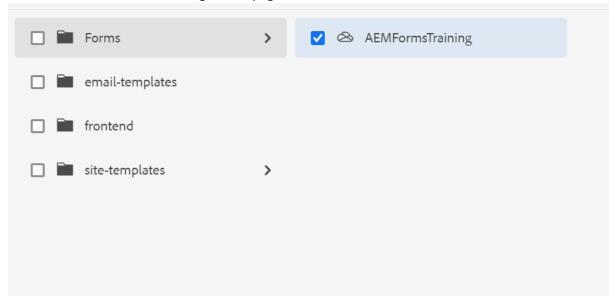
Accepting these permissions means that you allow this app to use your data as specified in their terms of service and privacy statement. You can change these permissions at https://myapps.microsoft.com. Show details

Does this app look suspicious? Report it here



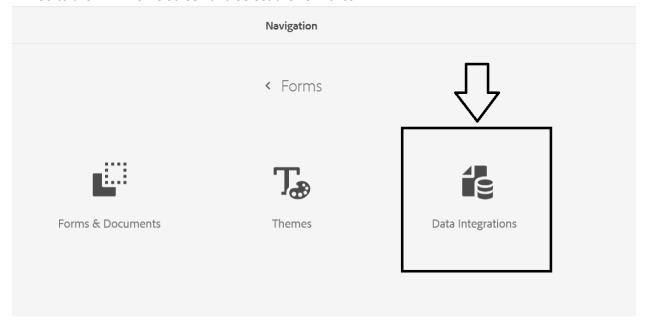
- c. Carefully review the requested permissions and click Accept to proceed.
- d. If the connection was successful, you will see a message that states, "Connection Successful" message.
- e. Click the Create Folder button, to create a new OneDrive folder for storing submissions.
- f. Alternatively, select an existing folder from your OneDrive account.
- g. Click **Create** in the top right corner to finalize the connection.

9. You will be returned to the configuration page with the new connection listed.



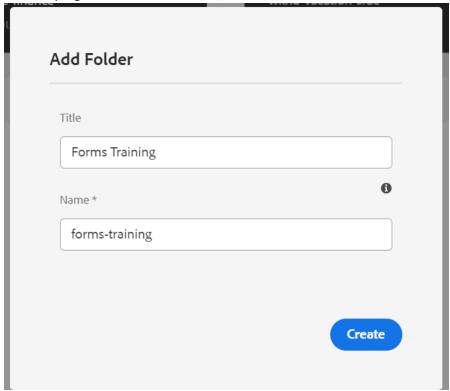
Configure the user prefill service.

1. Go to the AEM Home Screen and Select the Forms Icon.

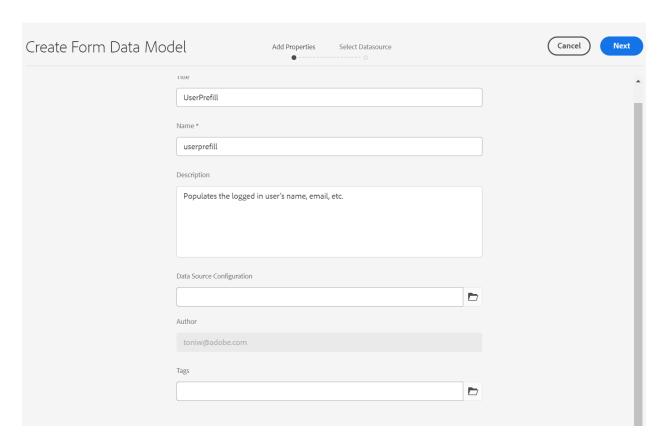


2. In the Forms Main Menu, locate the "**Data Integration**" icon. Click on this icon to access the Data Integration tools.

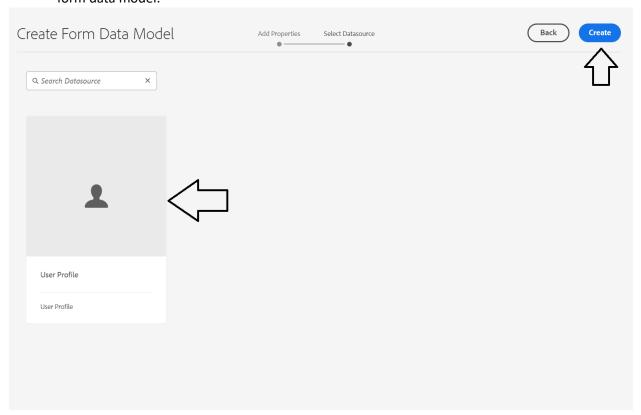
3. In the top right corner of the screen, click the "Create" button.



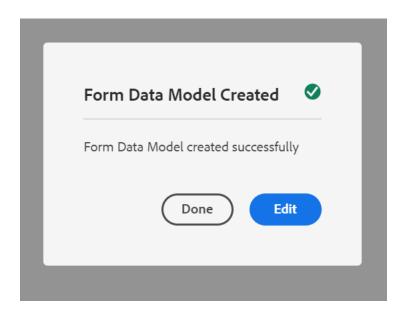
- 4. Choose "Folder" from the available options. This will allow you to create a new folder for organizing your data integrations.
- 5. Give your new folder a descriptive title that reflects its purpose.
- 6. Navigate to the newly created folder, and double click to open it.
- 7. On the top right corner of the page, select the "Create" button, this time select the "Form Data Model" option.
- 8. This will open the "Create Form Data Model" page.
 - a. Enter the following information:
 - 1. **Title**: Give your form data model a descriptive name that clearly reflects its purpose.
 - 2. **Name**: This is an internal identifier for the data model and can be a shorter version of the title.
 - 3. **Description**: Optionally, add a brief description to further explain the purpose of the data model



b. Click the Next button in the top right corner to move on to the next step of creating your form data model.



- c. Select the "User Profile" card and click the "Create" button to continue.
- d. A message will appear on the screen confirming that your Form Data Model has been successfully created.
- e. Select the "Edit" button to begin configuring the Form Data Model

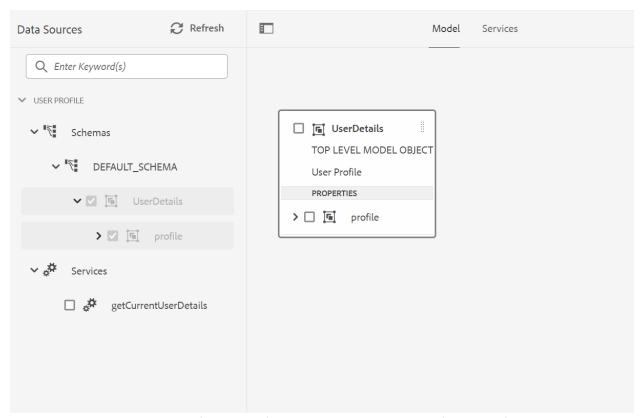


- 9. This will open the Form Data Model editor.
- 10. Click the arrow next to the text "USER PROFILE" on the "Form Data Model edit page". This will expand the data model, showing you more details about its structure.

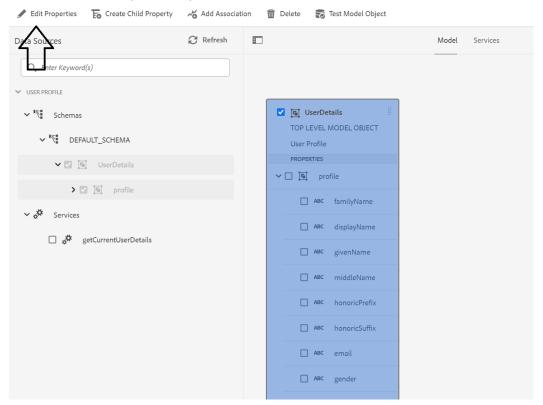


- 11. Click the arrow next to "Default_Schema" and "Services" to expand them. This will reveal more details about each section.
- 12. Next, select the checkboxes next to "UserDetails" and "getCurrentUserDetails"
- 13. Finally, click the "Add Selected" button located in the bottom left corner of the page to add these elements to your data model.

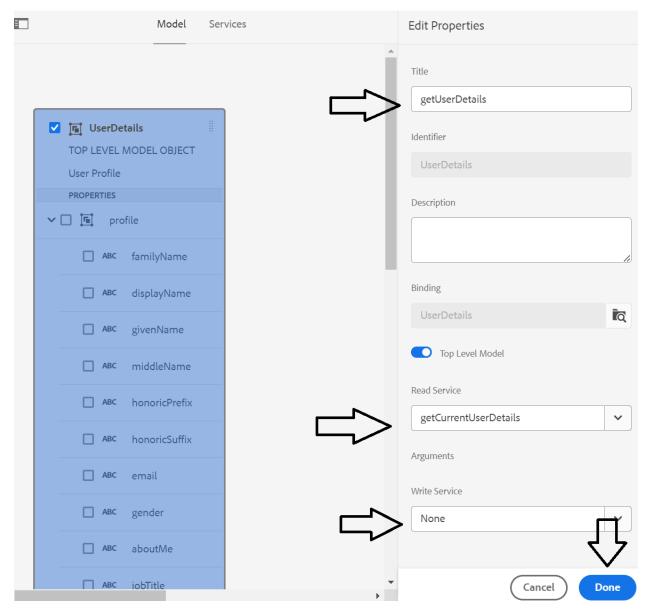




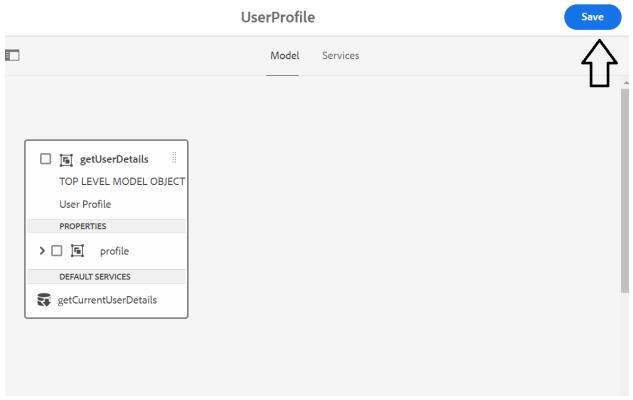
14. Click the checkbox at the very top of the object's section. Then, in the top left corner of the page, choose the "Edit Properties" option.



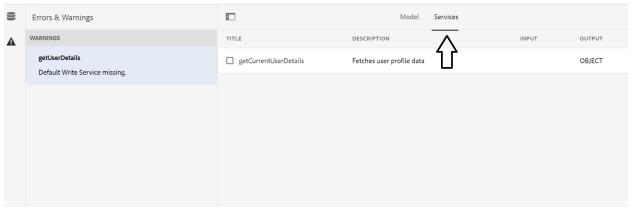
- 15. On the right side of the page, you will see the "Properties" menu appear.
 - Title: In the "Title" field, enter "getUserDetails".
 - Read Service: From the "Read Service" dropdown menu, select "getCurrentUserDetails".
 - Write Service: In the "Write Service" dropdown menu, choose "None".
 - Confirm: Once you have selected the options above, click the "Done" button to save your changes.



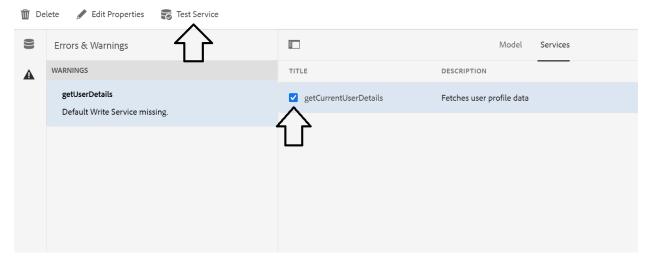
16. Select the "Save" button to save the changes.



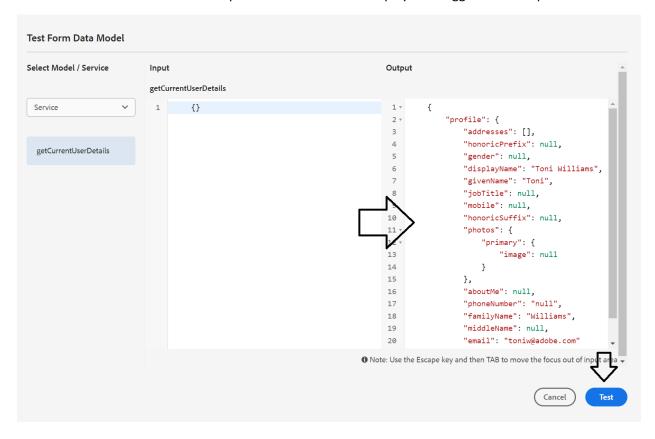
17. Next, select the "Services" tab to test the service.



- 18. This brings you to the Services view.
 - a. Click the checkbox next to "getCurrentUserDetails" to select it.
 - b. Then, in the top menu, choose the "Test Service" option.



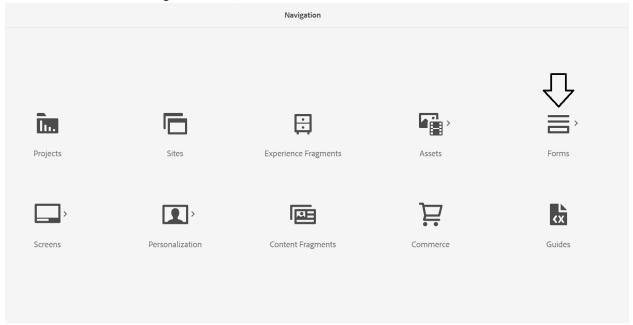
- 19. This will open the "Test Form Data Model" window.
 - a. Select the "Test" button in the bottom right corner of this page, to test the service.
 - b. You will see the output of the service. This displays the logged in user's profile data.



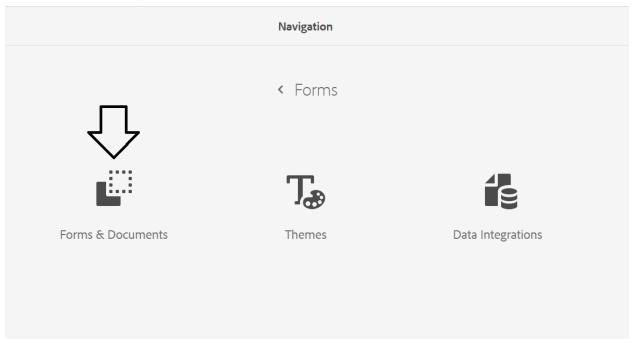
Creating an Adaptive Form Experience

Copy RDA Registration Form

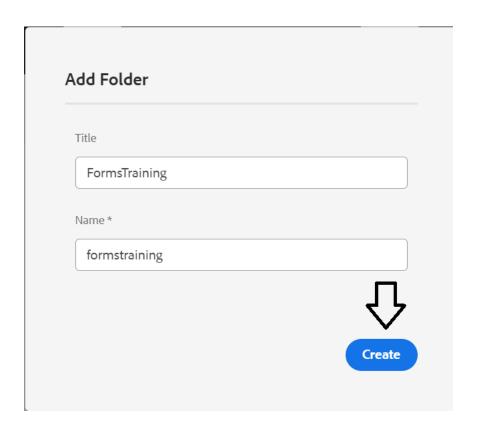
1. From the AEM Home Navigation menu, select the "Forms" icon



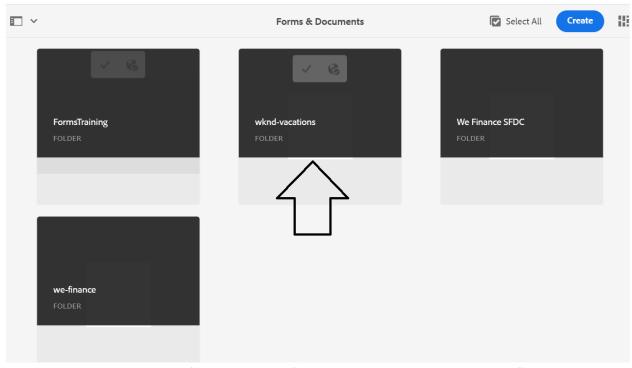
2. From the Forms menu, select the "Forms & Documents" icon



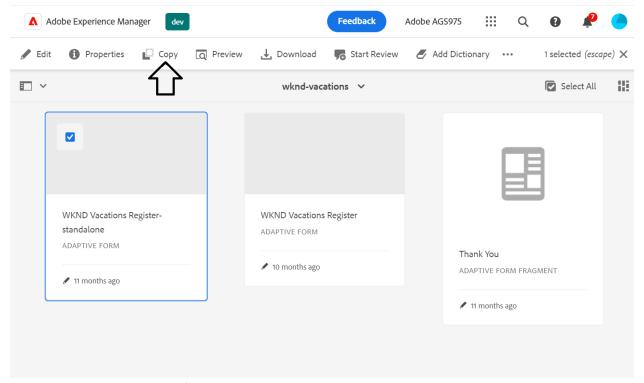
- 3. Select the "Create" button and select the "Folder" option to create a new folder.
- 4. Give the folder a Title and select the "Create" button to create the new folder.



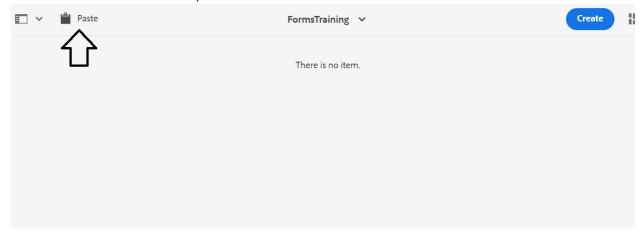
- 5. You'll be returned to the Forms & Documents page where you can see your newly created folder.
- 6. Now select the "wknd-vacations" folder



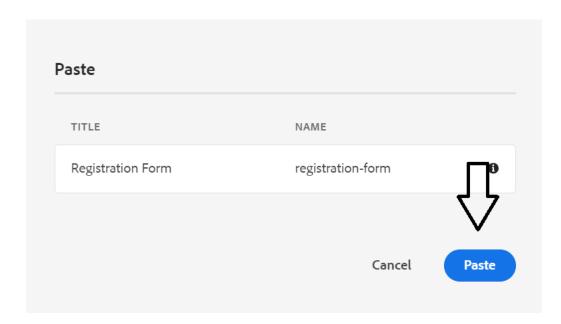
7. In the wknd-vacations folder, select the "WKND Vacations Register-standalone" Adaptive Form, and select "Copy" in the top menu.



- 8. Navigate back to the folder you created in step 4.
- 9. Select "Paste" in the top menu

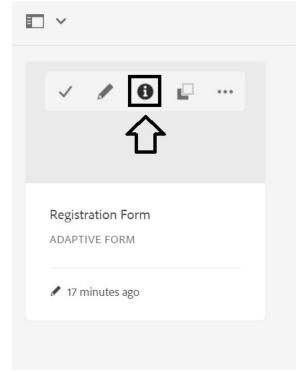


- 10. A confirmation window will display, you can keep the existing name or select to rename the form
- 11. Select the "Paste" button to copy the form to this folder.

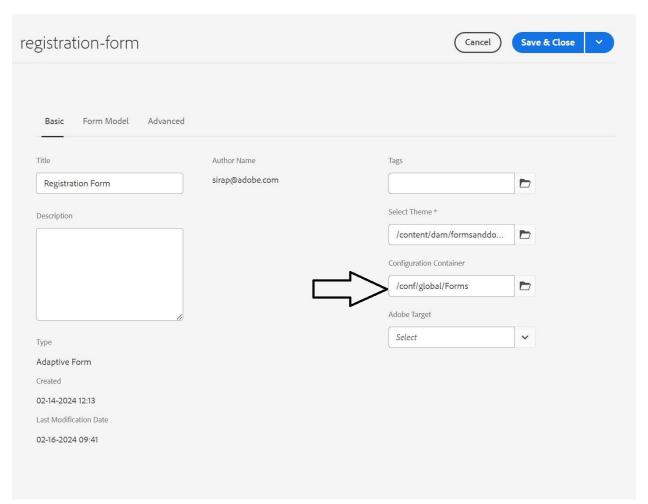


Edit and Configure the Registration Form

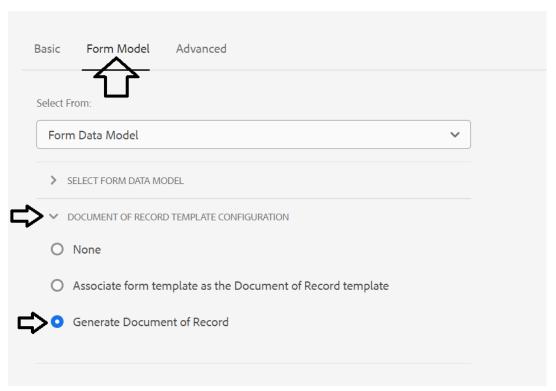
• Hover over your newly created form tile and select the Properties icon.



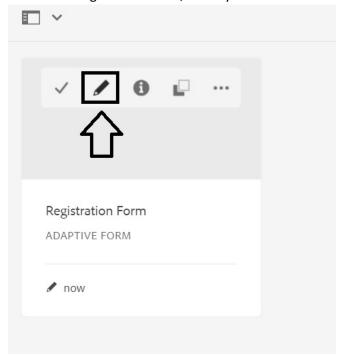
- This opens the page properties for the form.
- In the Configuration Container field, select the folder on the right to navigate to the Configuration you previously created.



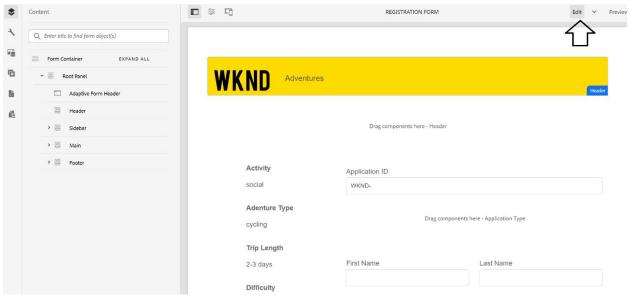
- Click the "Select" button to the confirm the configuration change.
- Select the "Form Model" tab.
 - a. Select the arrow next to "Document of Record Template Configuration" to expand the section.
 - b. Select the "Generate Document of Record" radio button.



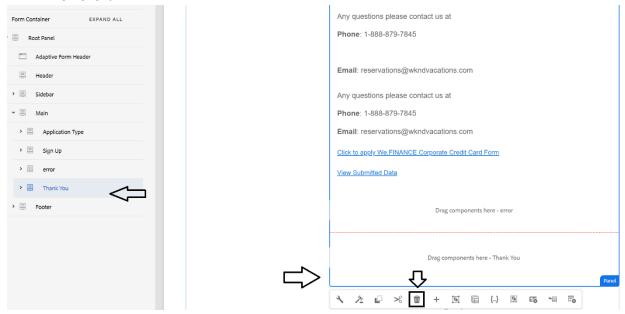
- Select the "Save & Close" button to save the configurations.
- To edit the Registration Form, hover your mouse over the tile and click the pencil icon.



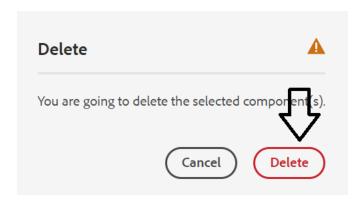
a. After the form opens, look for the navigation menu on the left and the word "Edit" in the top right corner. This confirms you're in edit mode.



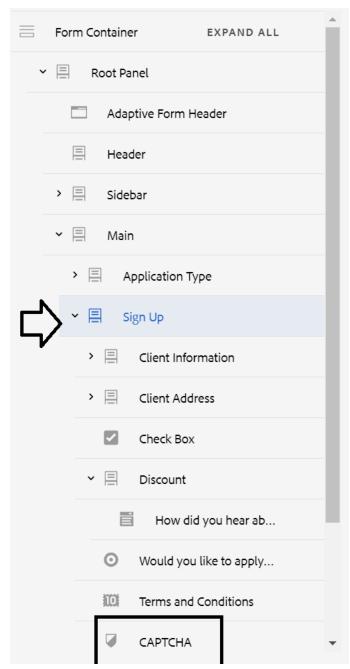
- Next, we will make a few changes to the appearance of the Form.
 - a. **Expand the "Main" panel**: In the form content menu on the left, click the arrow next to "Main" to open it.
 - b. Click the "Thank You" panel to highlight it in the form.
 - c. Click the trash can icon in the menu bar at the bottom of the highlighted panel to remove it.



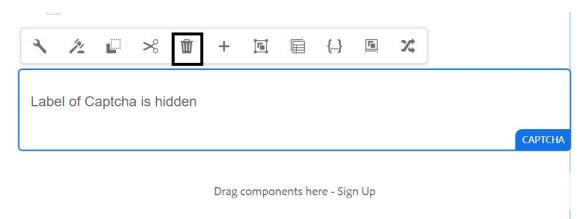
d. In the confirmation window that appears, click the "Delete" button to permanently remove the panel.



- e. Next, do the same for the "error" panel.
- f. In the form content menu on the left, click the arrow next to "Sign Up" within the "Main" panel to open it.
- g. Double-click the "CAPTCHA" label to bring up its edit options.

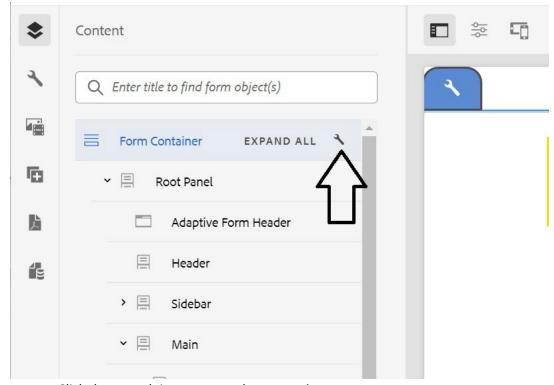


h. Click the trash can icon in the panel menu to remove the CAPTCHA field from the form.



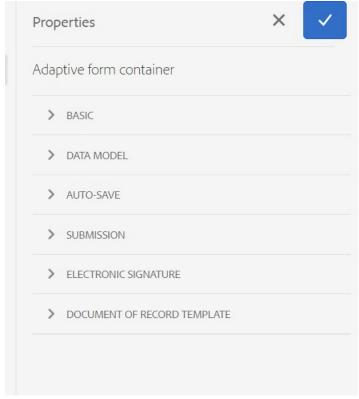
i. Confirm the deletion to continue.

- Configure Form Properties
 - a. Select the "Form Container" panel in the content menu on the left.
- Hover over the right edge of the panel. You'll see a wrench icon appear.

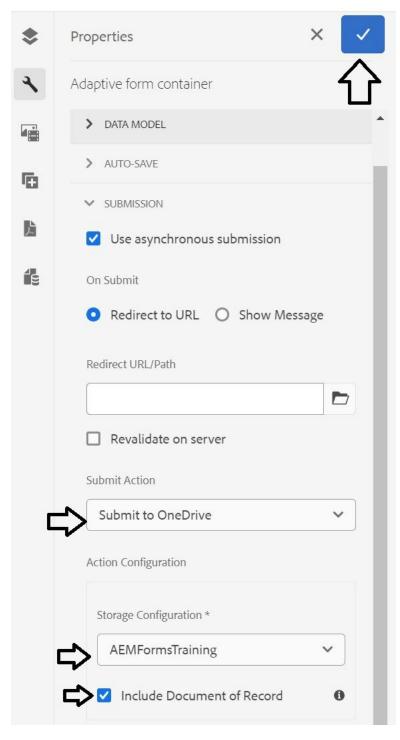


a. Click the wrench icon to open the properties menu.

b. The form properties menu, is organized by sections.



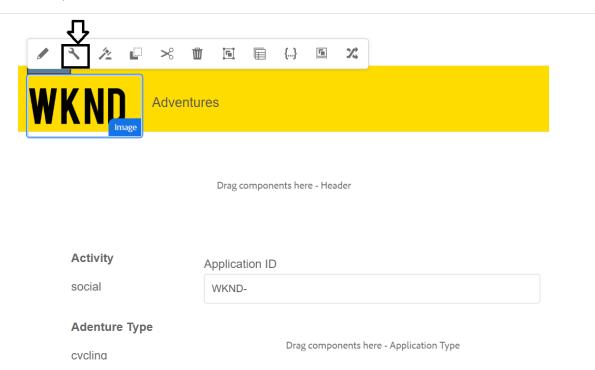
- c. Click the arrow next to "Basic" in the Form Container settings.
 - Select a different theme from the "Adaptive Form Theme" dropdown to observe how it affects the form's appearance.
 - Click the arrow again to close the "Basic" section
- d. Click the arrow next to "Data Model".
 - Ensure the "WKND Vactions-tripRWOdata-DI" data model is selected. Expand the "Submission" section
- e. Click the arrow next to "Submission" in the Form Container settings.
 - Locate the "Submit Action" label and use the dropdown to choose "Submit to OneDrive".
 - Under "Storage Configuration", choose the OneDrive configuration you previously created.
 - Check the "Include Document of Record" checkbox.



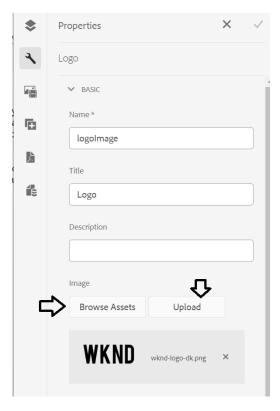
f. Click the blue check icon at the top of the menu to save the selections.

• Change the Form Header (Optional)

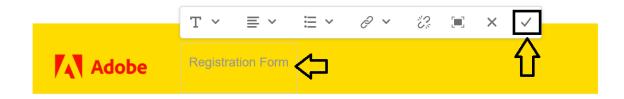
- a. Click the WKND logo at the top of the form.
- b. In the properties submenu that appears, select the wrench icon to open the properties panel on the left.



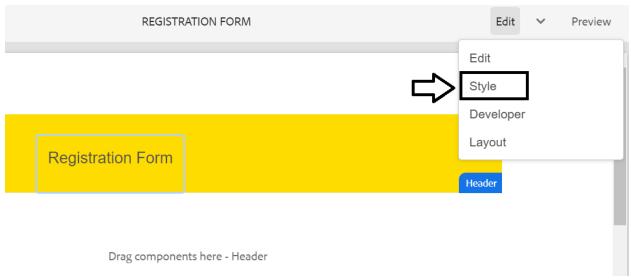
- c. Locate the "Image" label in the properties panel.
 - i. Choose either "Browse Assets" to select an existing image or "Upload" to add a new image.



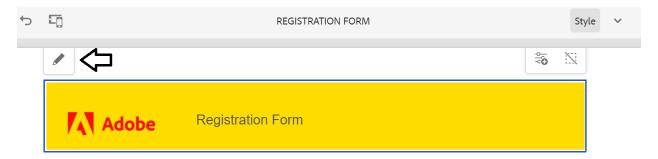
- d. Change the Form Title text. Select the "Adventures" text object in the form header.
- e. Click the blue check icon at the top to save your changes.
- f. Click the "Adventures" text in the header to edit it.
- g. Type your new form name in the highlighted field.
- h. Click the checkmark icon to save your changes.



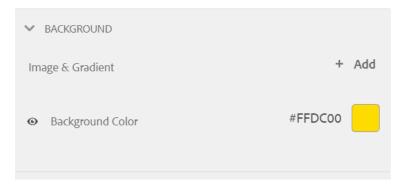
- Change the header background color (optional)
 - a. Click the down arrow next to "Edit" in the top right corner.
 - b. Choose "Style" from the menu. This will open the Style mode, allowing you to directly edit the form's appearance.



- c. In Style view, click the "Adaptive Form Header" option.
- d. A pencil icon will appear. Click it to open the properties menu on the left.



- e. Expand the "Background" section by clicking the arrow next to it.
- f. Choose a new color:
 - i. Enter a Hex code or RGB values in the corresponding fields or Click the color swatch to open the palette and select a color.

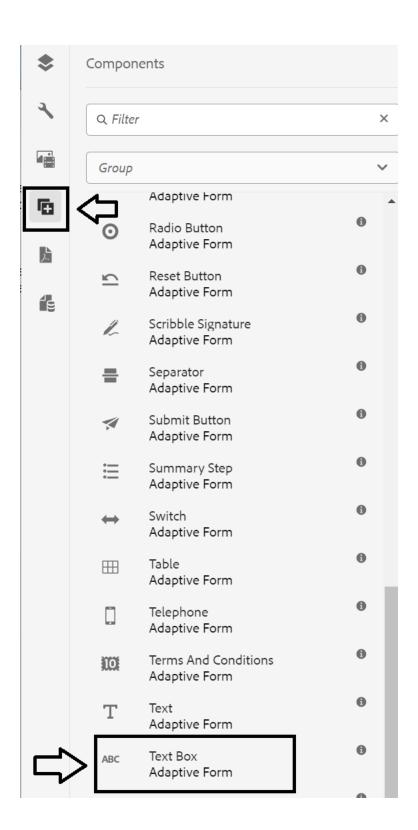


g. Click the blue checkmark icon at the top to save your changes.

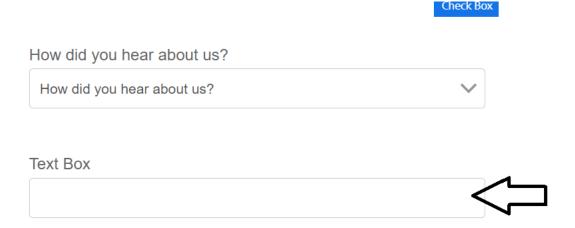
- **Switch back to Edit mode**: Click the down arrow next to "Edit" in the top right corner and select "Edit".
- **Preview your changes**: Click the "Preview" button in the top right corner to see how the form looks
- Return to editing: Click "Edit" again (to the left of "Preview") to resume making changes

Prefill Data and Add Conditional Logic

- 1. Click the dropdown field "How did you hear about us?"
 - a. In the pop-up menu, select the wrench icon to open its properties on the right.
 - b. Under "Items", click "Add" to create a new option.
 - Enter "Other=Other" in the field and click the blue checkmark icon to confirm.
- 2. Select the "Components" icon in the left side of the properties menu.
 - a. Select the "Components" icon in the left rail of the properties menu.
 - Choose "Text Box" from the available components and drag it below the dropdown field to add it to the form.



- b. Click the Text Box you added to select it.
- c. In the sub menu, click the wrench icon to access its properties.



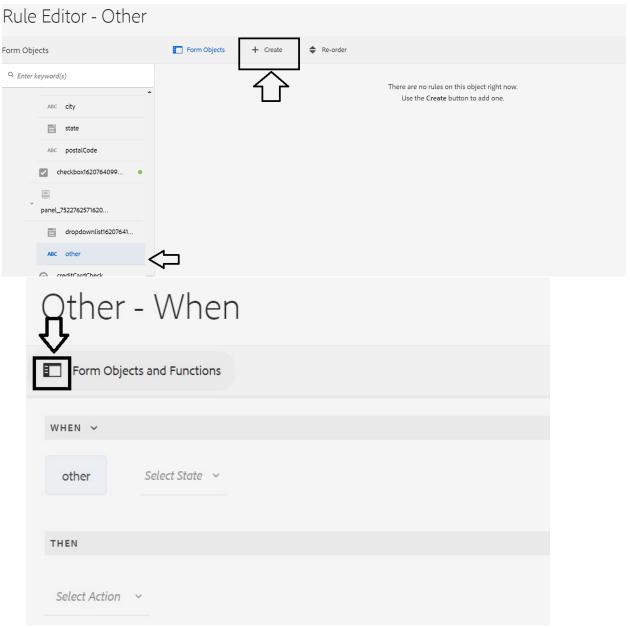
Drag components here - Discount

- d. Enter a "Name" and "Title" for the Text Box.
- e. Click the blue checkmark icon to save your changes.
 - Check the box to receive 5% off

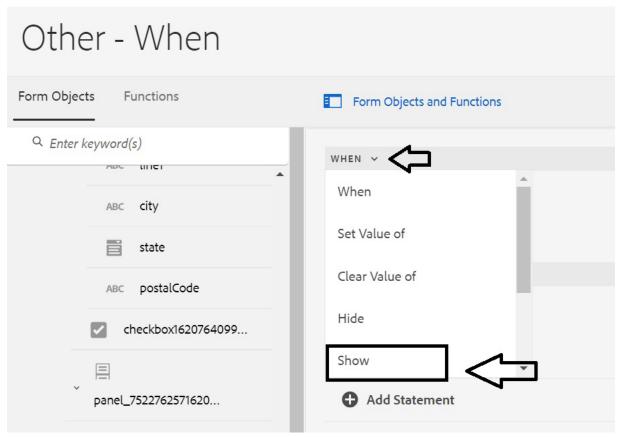
 How did you hear about us?

 Other

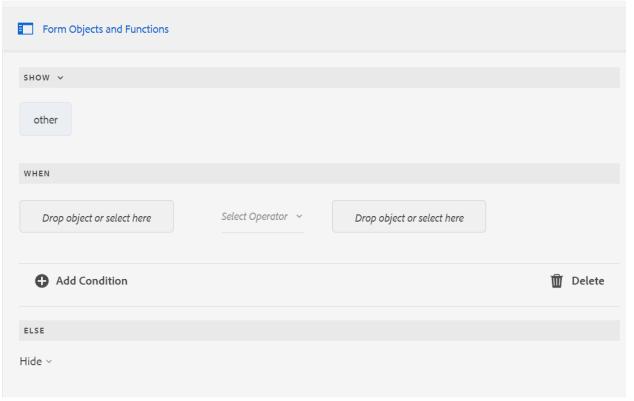
 Other
- 3. Select the newly added Text Box in the form.
- 4. In the pop-up menu, select the "Hammer" icon, this will open the rule editor.
- 5. In the rules editor, verify the "Other" field is selected in the left navigation menu.
- 6. Click the "Create" button in the top menu to start creating a rule.



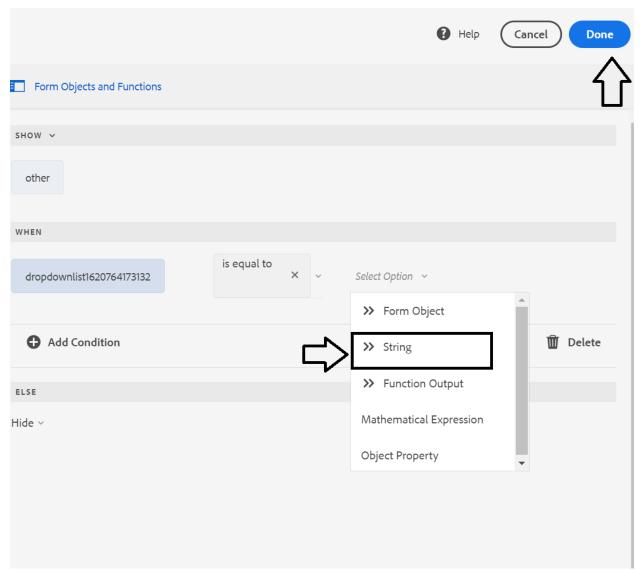
a. Choose "Show" form the "When" dropdown.



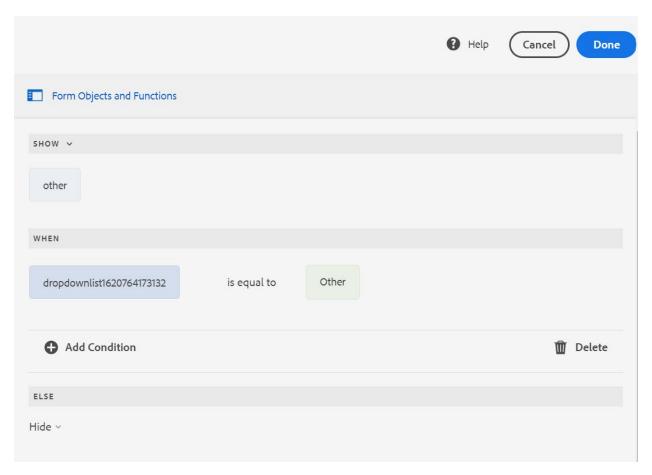
b. Click the plus icon next to "Add Condition" to create a new "When" condition.



c. In the "Drop object or select here" field, choose the dropdown list object.



- d. From the "Select Operation" dropdown, select "is equal to".
- e. In the last field, select "String" and then "Other".
- 7. Select "Edit" at the top right of the page to return to the edit view.
 - a. Your final rule should look like the image below. Select the "Done" button to save the changes.



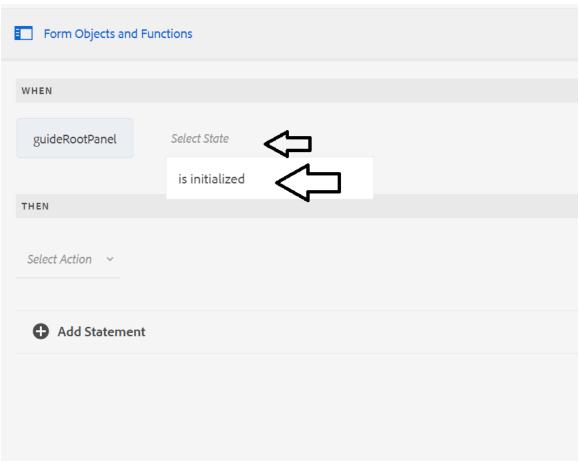
b. Select the "Close" button and return to the editing the form.

8. Test the Rule:

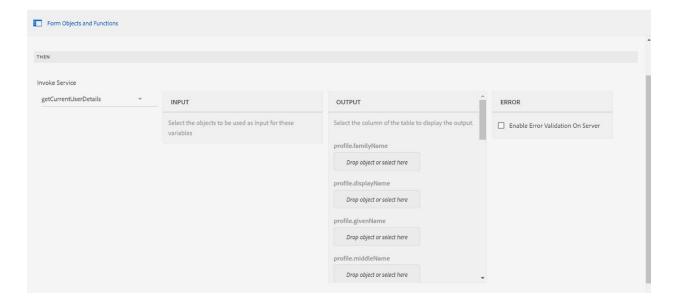
- a. Click "Preview" in the top right corner.
- b. To show the Text Box:
 - Check the "Check the box to receive 5% off" checkbox.
 - Select "Other" from the "How did you hear about us?" dropdown.
- c. To hide the Text Box:
 - Select any option other than "Other" from the dropdown.

9. Prefill Form with User Information:

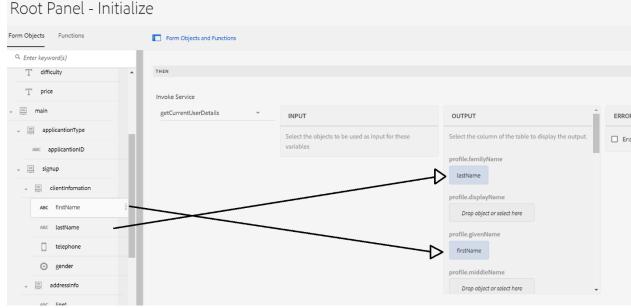
- a. In the left navigation menu, select the Root Panel
- b. In the pop-up menu, select the "Hammer" icon to open the rules editor.
- c. Click the "Create" button to create a new rule.
- d. Under the When label, select the "Select State" label, and choose "is initialized".



- e. Under the "Then" section. Select the
 - "Select Option" drop down, and select "Invoke Service"
- f. In the "Select" field, select the "getCurrentUserDetails", from the Form Data Model you created earlier.
- g. Your page should look the image below.



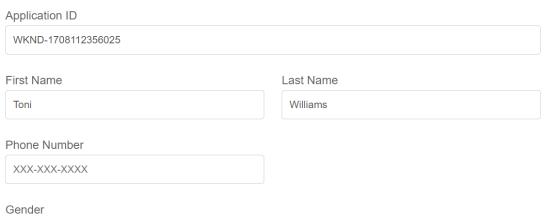
- h. Drag the "firstName" object from the left menu to the "profile.givenName" field in the "Output" column.
- i. Repeat previous step for the "lastName" object by dragging it to the "profile.familyName" field in the "Output" column.



- j. Click "Done" to save your changes.
- k. Click "Close" to return to the form in Edit view.

10. Test Prefill: Preview and Verify:

- a. Click "Preview" in the top right corner
- b. Check if the "First Name" and "Last Name" fields are pre-filled with your information.



- 11. Select 'Edit' to return to edit mode.
- 12. Replace the Submit button.
 - a. In the form, scroll down to the submit button and delete it.
 - b. Select the Toolbar panel, then select the plus icon in the pop-up menu to add a component to the panel.

c. Select the **Submit** Button

Testing the Form Submission

- 1. Select the "Preview" button at top right corner.
- 2. Scroll down and select the "Submit" button.
 - a. The will should validate your entries.
 - b. Your First Name and Last Name will be pre-populated based on your logged-in user information.
 - c. You will need to complete any other required fields.
 - d. Select the "Submit" button to submit the form.
- 3. Upon successful submission, you'll see a confirmation message indicating the form was submitted successfully.

REGISTRATION FORM

Thank you for submitting the form.

We will contact you once the application has been approved.

Any questions please contact us at

Phone: 1-888-879-7845

Email: reservations@wkndvacations.com

- 4. Navigate to the OneDrive folder you selected in the configuration step.
 - a. Drill down to the relevant form submission folder (folder hierarchy details provided in training).
 - b. Open the "Document of Record.pdf" file with Adobe Reader to view the submitted data in a PDF format.
 - c. data.json: This file contains the submitted data in JSON format.
 - d. metadata.json: This file contains metadata about the form submission.

Advanced Topics

Add an Adaptive Form to an AEM Sites Page

https://experienceleague.adobe.com/docs/experience-manager-cloud-service/content/forms/adaptive-forms-authoring/create-or-add-an-adaptive-form-to-aem-sites-page.html?lang=en

Adobe Sign Integration (requires Adobe Sign configuration)

- Obtain an Adobe Sign developer account. You will need to use a personal email address for this
 account, not your Adobe ID. https://www.adobe.com/sign/developer-form.html
- Follow the instructions here, https://experienceleague.adobe.com/docs/experience-manager-cloud-service/content/forms/integrate/services/adobe-sign-integration-adaptive-forms.html?lang=en#adobe-acrobat-sign-for-government, to configure Adobe Sign on you AEM as Cloud Service environment.

Conclusion and Additional Resources

Congratulations!

You've successfully completed Level 2 Forms training. You've learned valuable skills in:

- Creating and Authoring Adaptive Forms
- Configuring Form Submissions
- Adding Form Field Validation
- Building Simple Show/Hide Rules with the Rules Engine
- Generating Documents of Record
- Submitting Forms to OneDrive or SharePoint
- Delivering a Stand-and-Deliver Demo (15-20 minutes)

Remember, you can always refer back to these instructions if you need a refresher on any of the covered topics.

Resources:

Configure One Drive Submissions in AEM Forms

https://experienceleague.adobe.com/docs/experience-manager-learn/cloud-service/forms/one-drive/store-form-submission-one-drive.html?lang=en

AEM Reference Demo

https://internal.adobedemo.com/content/demo-hub/en/demos/external/aem-reference-demos.html

AEM Forms Rules Engine

 $\frac{https://experienceleague.adobe.com/docs/experience-manager-cloud-service/content/forms/adaptive-forms-authoring/authoring-adaptive-forms-foundation-components/add-rules-and-use-expressions-in-an-adaptive-form/rule-editor.html?lang=en$