Custom Connectors

Scenario

In this lab, you will build a custom connector for A Datum's Risk Score API.

High-level lab objectives

Build a custom connector

Modify the cloud flow to use the connector

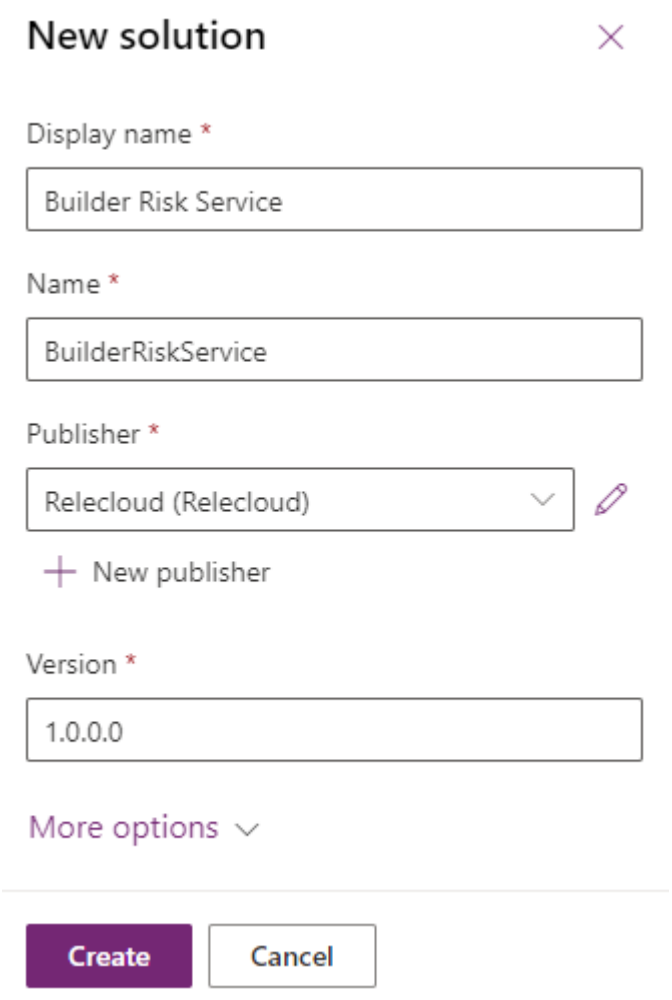
Exercise 1: Create a custom connector

Task 1: Create a new solution

Navigate to `https://make.powerapps.com/` and make sure you are in the Dev environment.

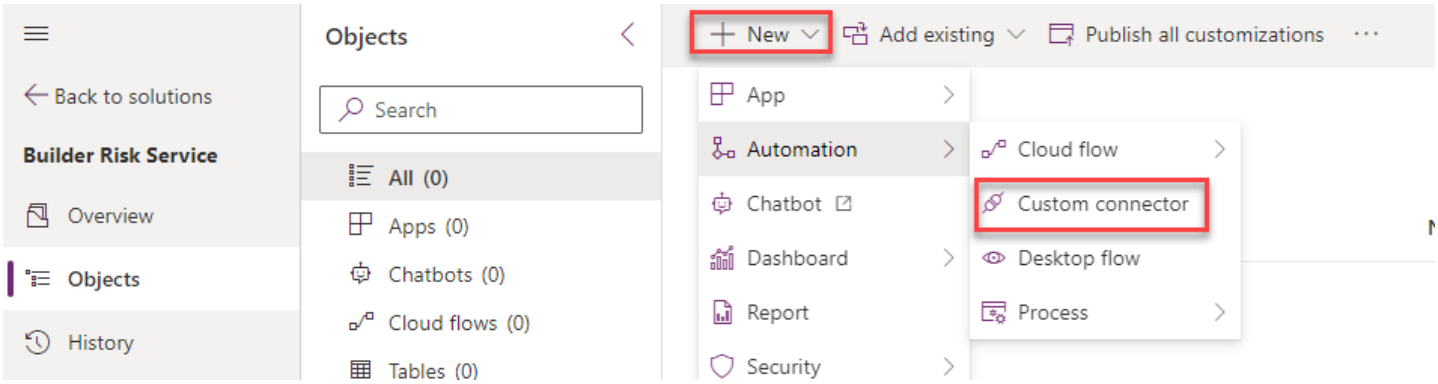
Select **Solutions** and click **+ New solution**. We are creating a new solution to keep the custom connector separate from the flow that uses it which is the current requirement of using a custom connector.

Enter `Builder Risk Service` for Display name, select **Relecloud** for Publisher, and click **Create**.

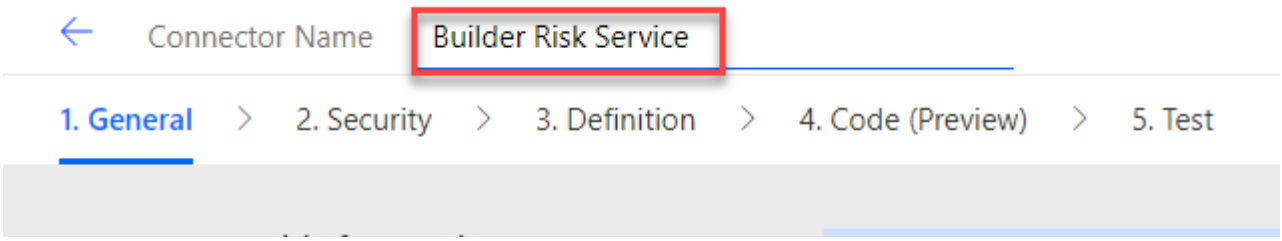


Task 2: Create custom connector

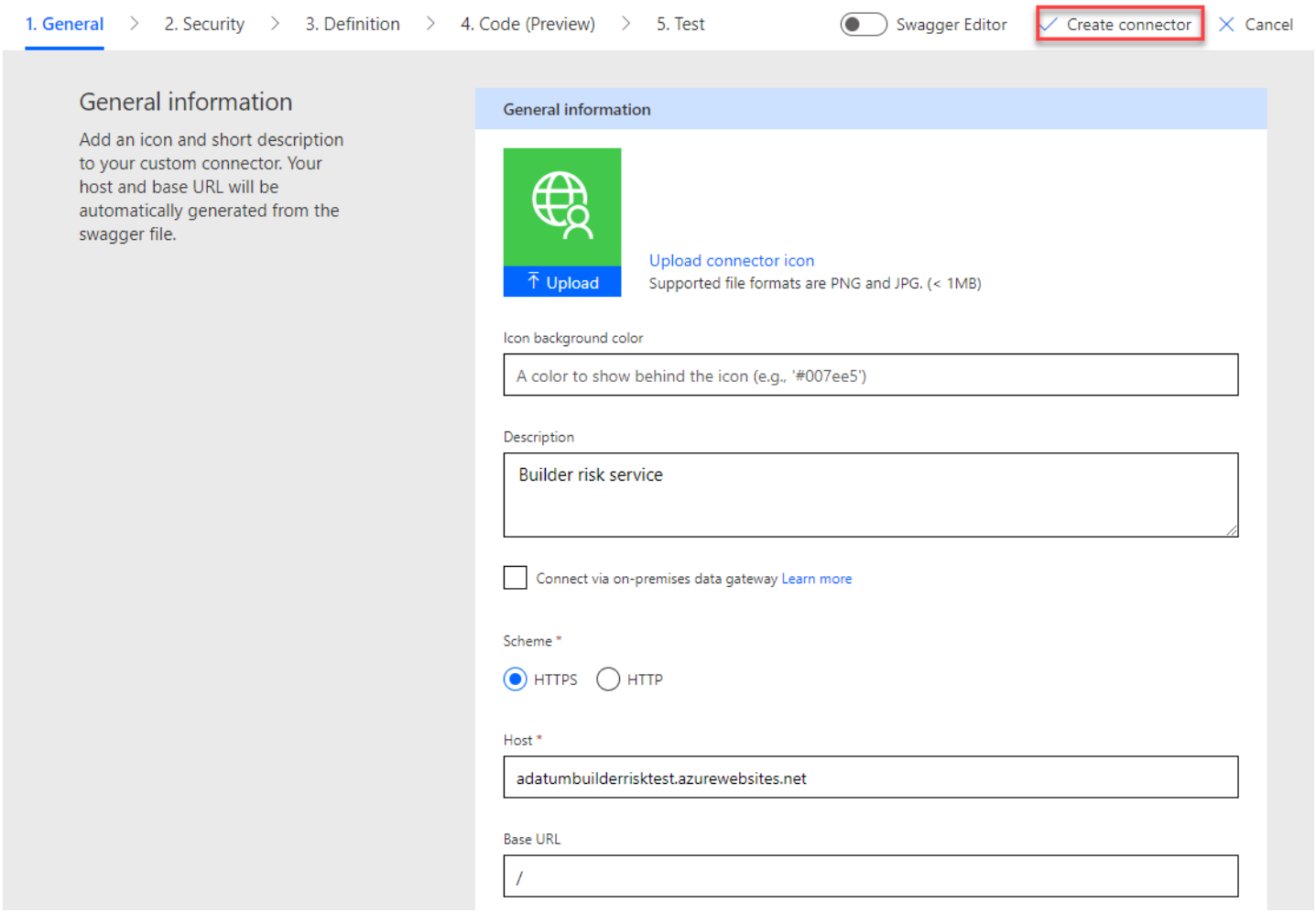
Click **+ New** and select **Automation | Custom connector**.



Enter `Builder Risk Service` for Connector Name.



Enter `Service for evaluating builder risk` for Description, enter `adatumbuilderrisktest.azurewebsites.net` for Host, and click **Create connector**.

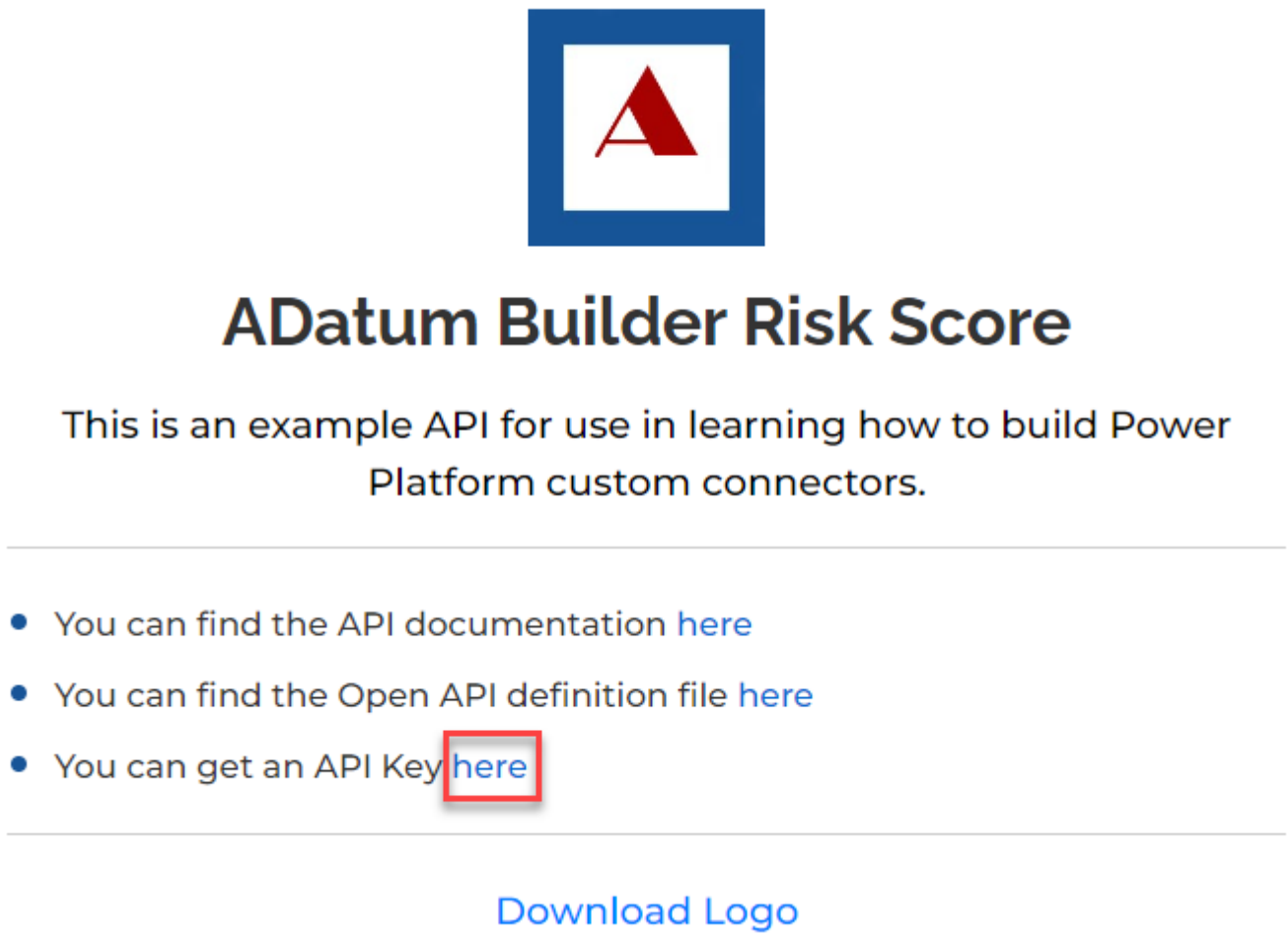


Task 3: Import Open API

Navigate to `https://adatumbuilderrisktest.azurewebsites.net/`

Click **Download Logo** and save the logo on your machine.

Click on the **API Key** link.



Copy the **API Key** and save it on a notepad.

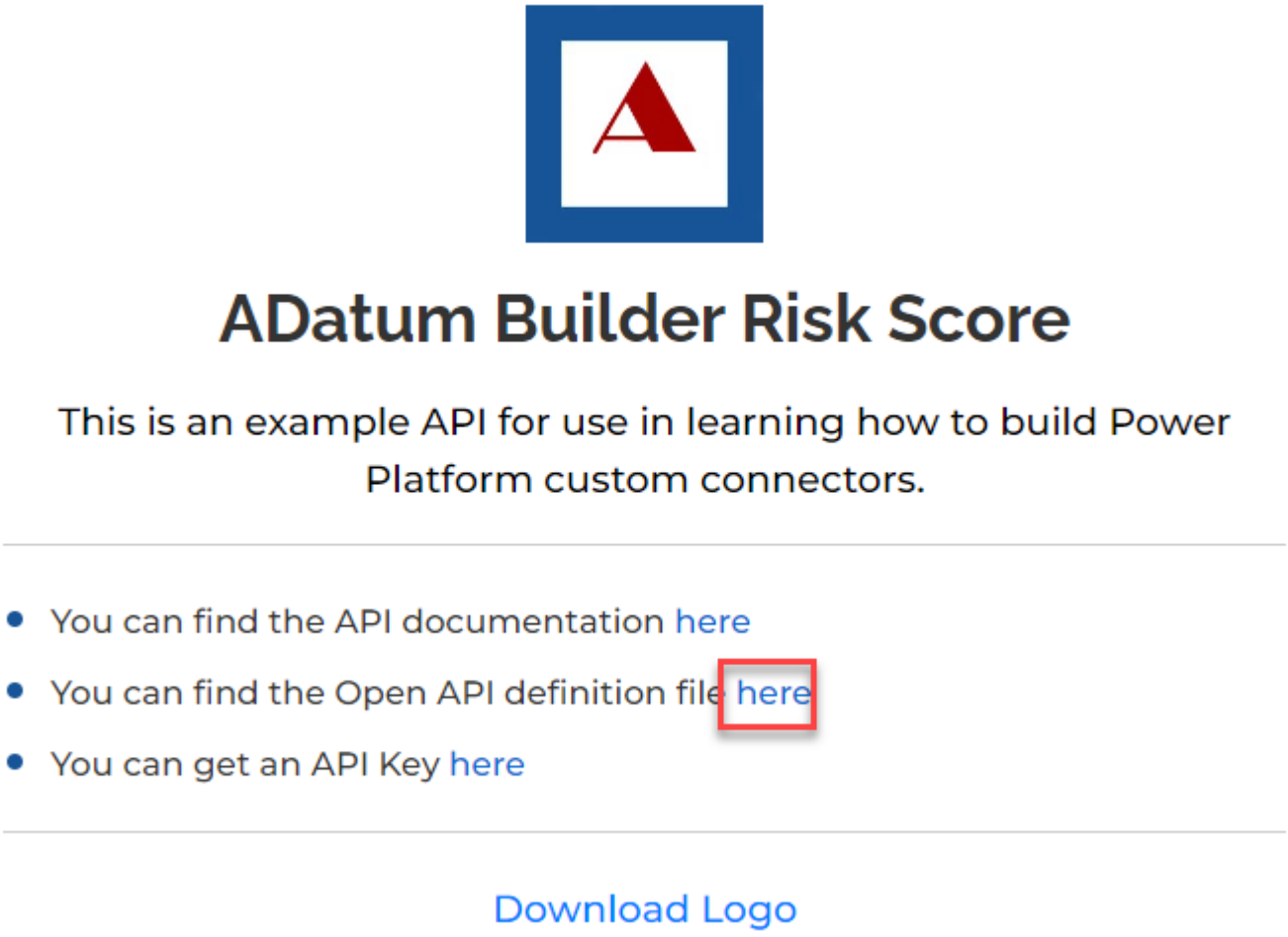
Click **Return to home**.

Click on the **API documentation** link.

Review the documentation.

Close the documentation browser tab or window, after you finish reviewing.

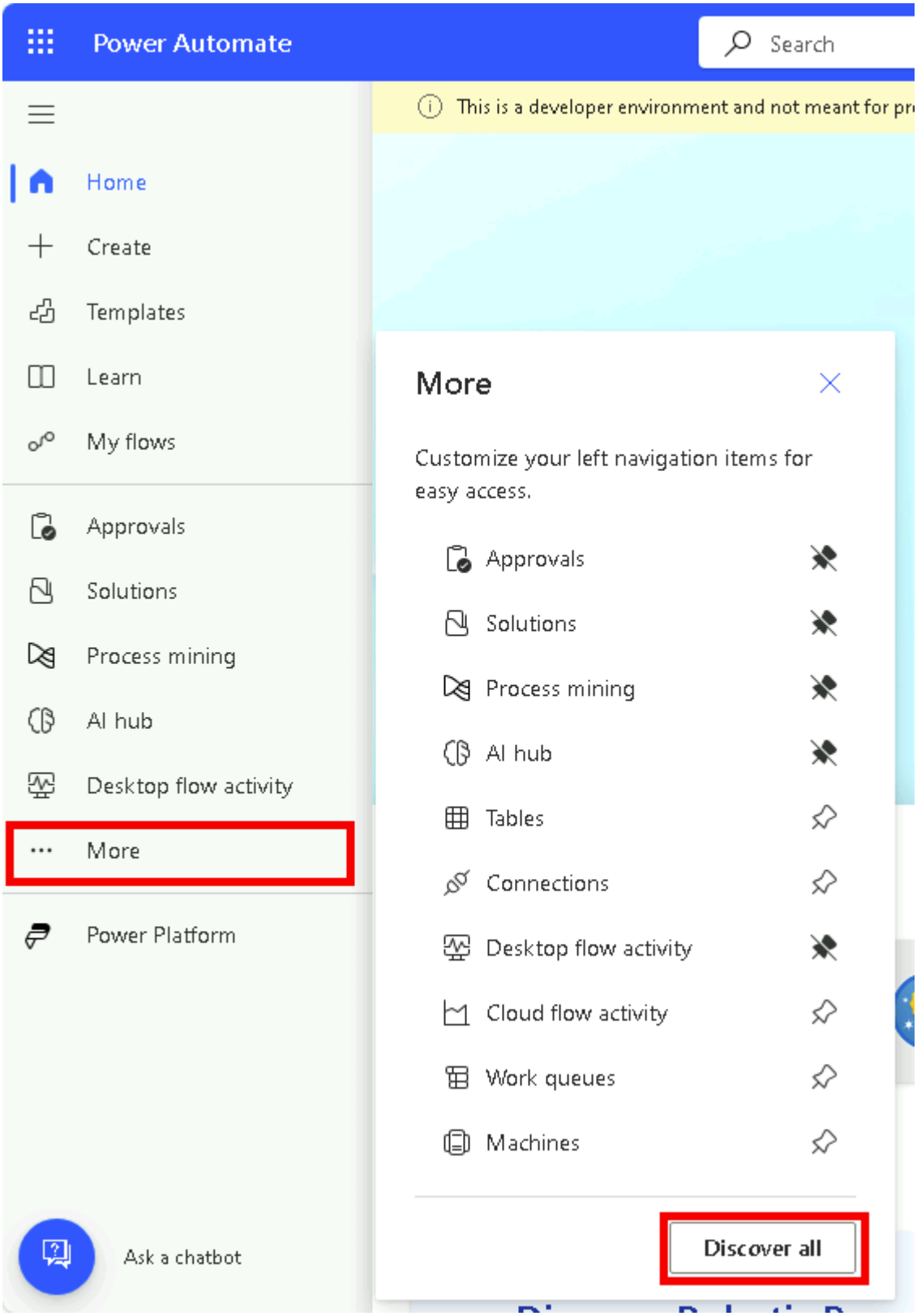
Click on the **Open API definition file** link.



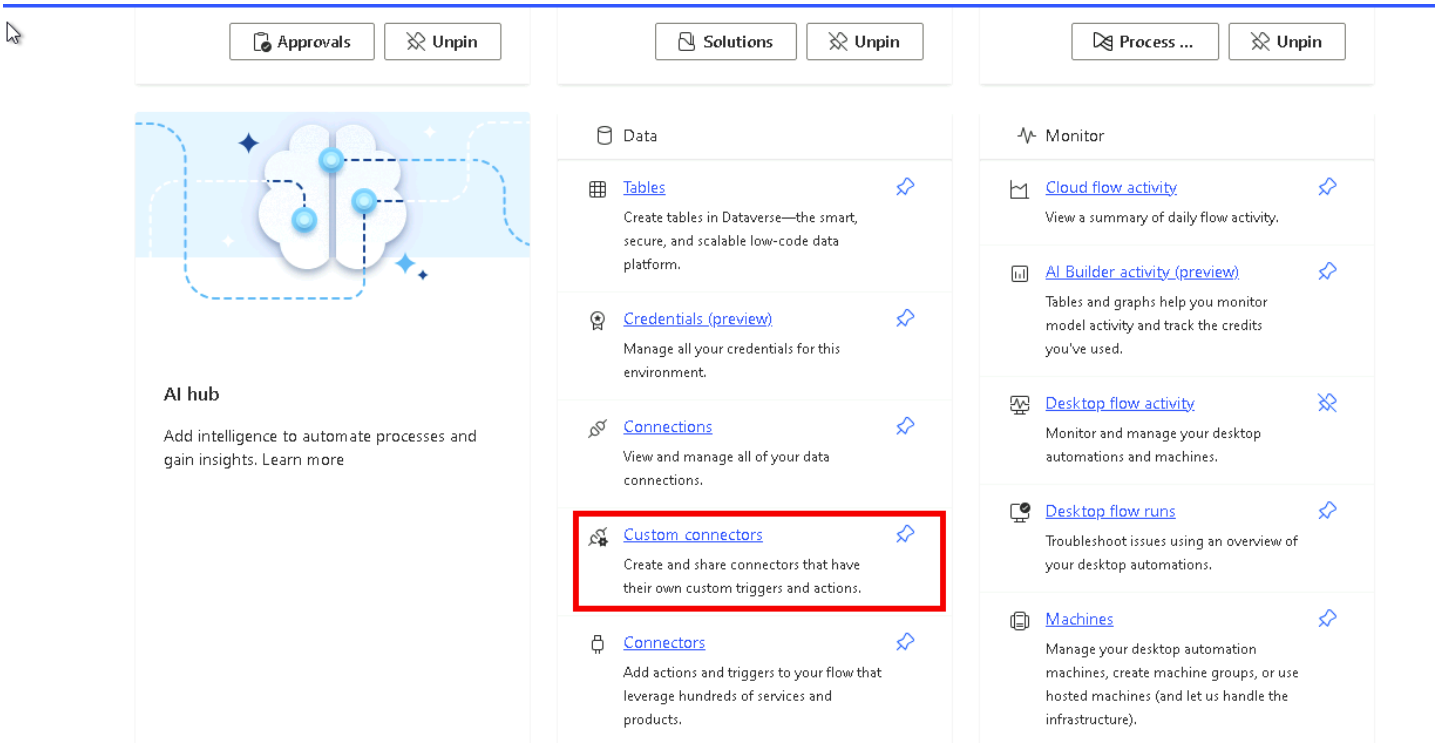
On your keyboard press **CTRL + S** and select **Save**. Now the file is saved on your machine.

Navigate to `https://make.powerautomate.com/` and make sure you are in the Dev environment.

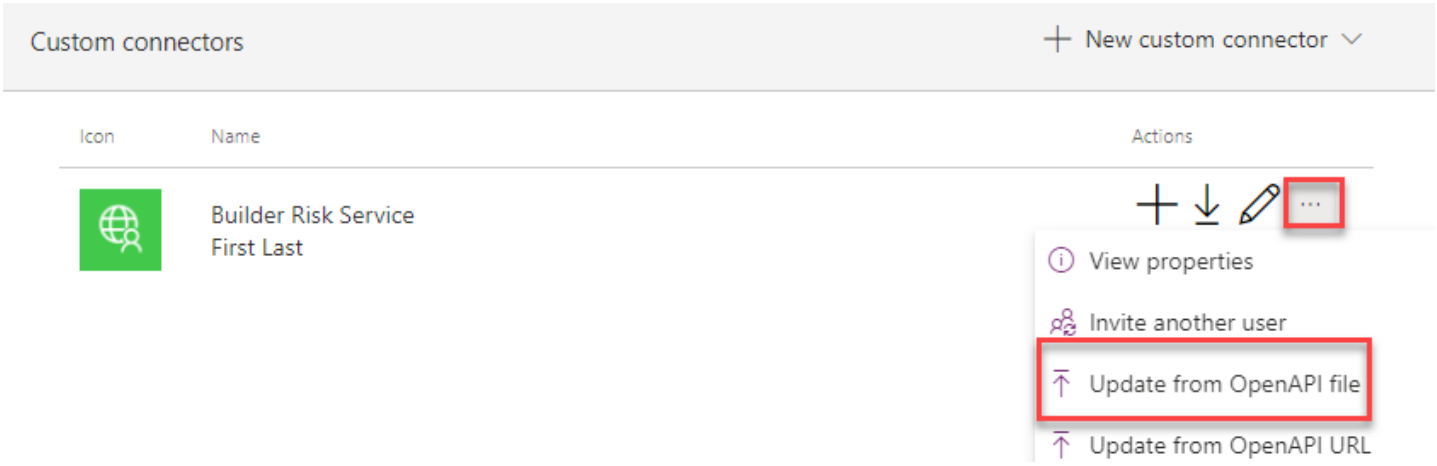
Click **More** and select **Discover all**.



Scroll down and select **Custom connectors** under data.



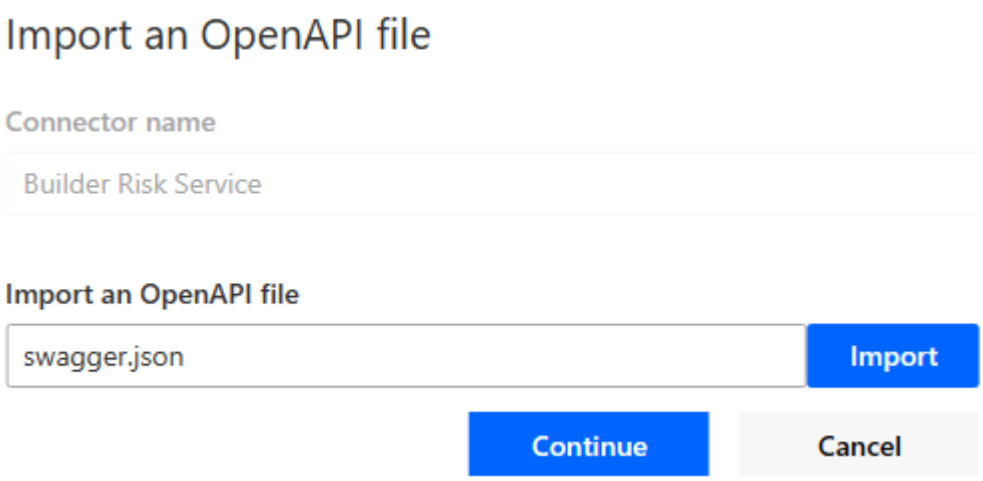
Click on the **…** more actions button of the **Builder Risk Service** custom connector and select **Update from OpenAPI file**.



Click **Import**.

Select the **swagger.json** file you saved to your machine and click **Open**.

Click **Continue**.

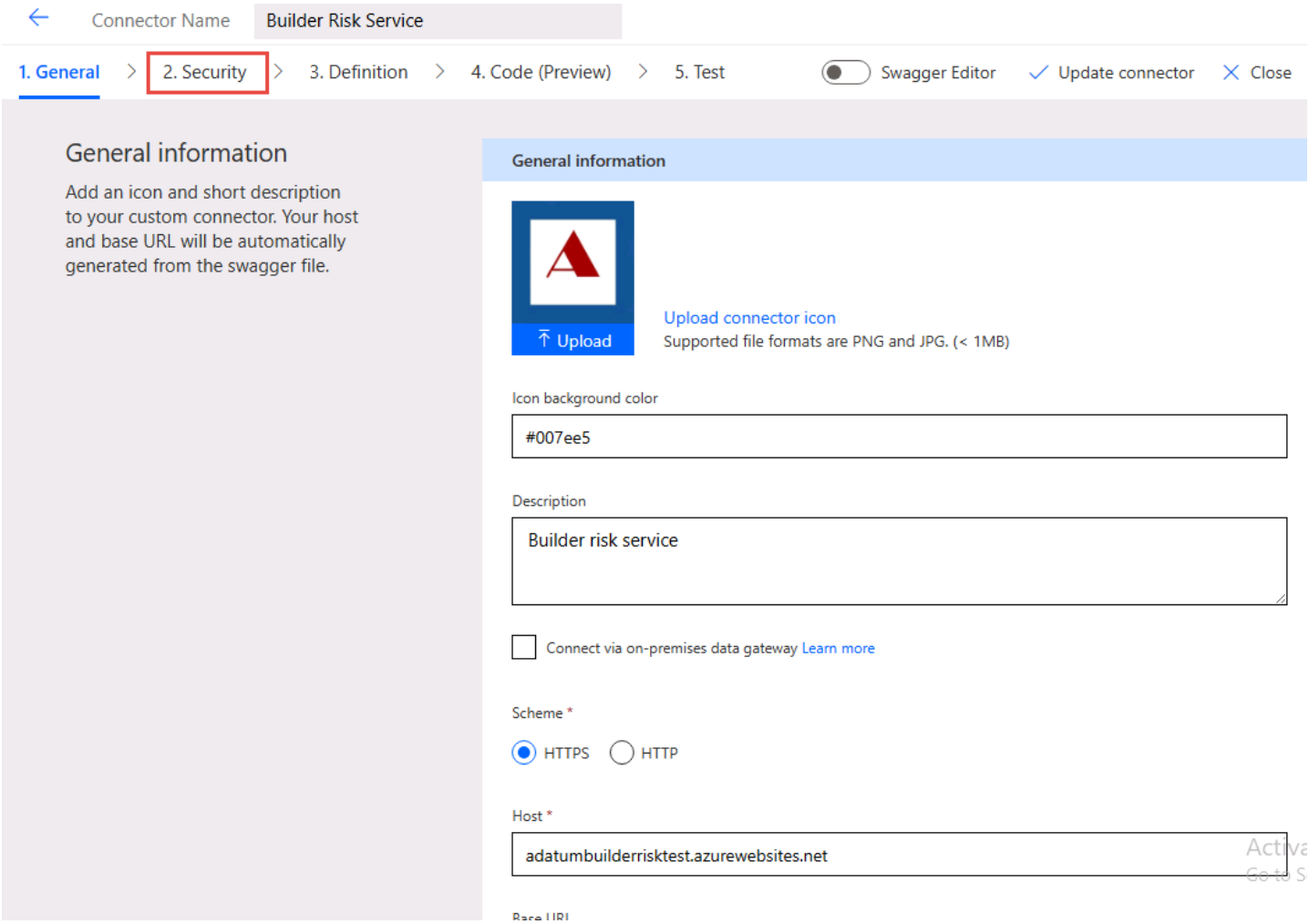


Click **Upload** under the logo.

Select the logo you downloaded and click **Open**.

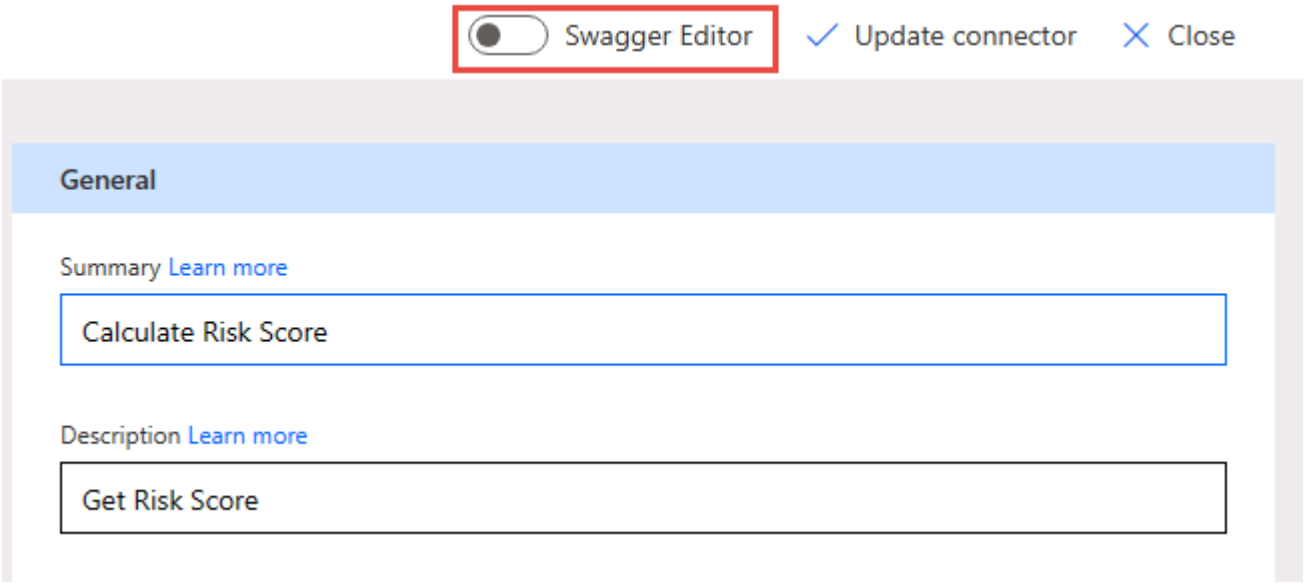
Enter `Service for evaluating builder risk` for Description, enter

`adatumbuilderrisktest.azurewebsites.net` for Host, and select **Security** from the breadcrumb navigation bar at the top of the screen.



Select **Definition** from the breadcrumb navigation bar at the top of the screen and see the operation imported.

Turn on **Swagger Editor**.



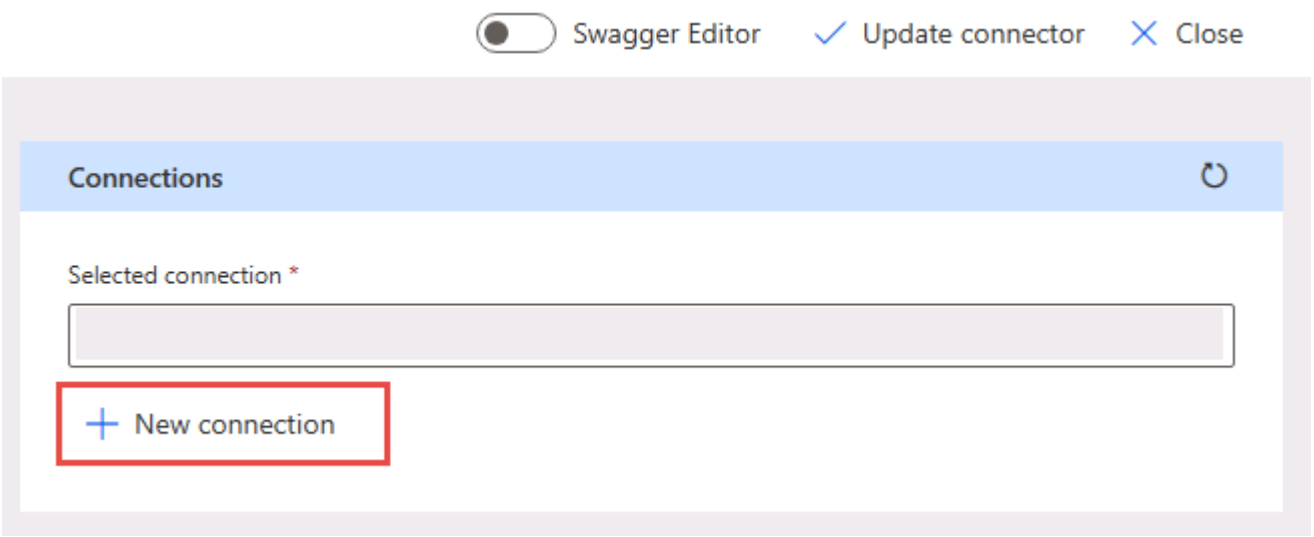
Have a look at the Swagger Editor and then turn off the **Swagger Editor**.

Select **Update connector** and wait for the connector to be updated.

Do not navigate away from this page.

Task 4: Test connector

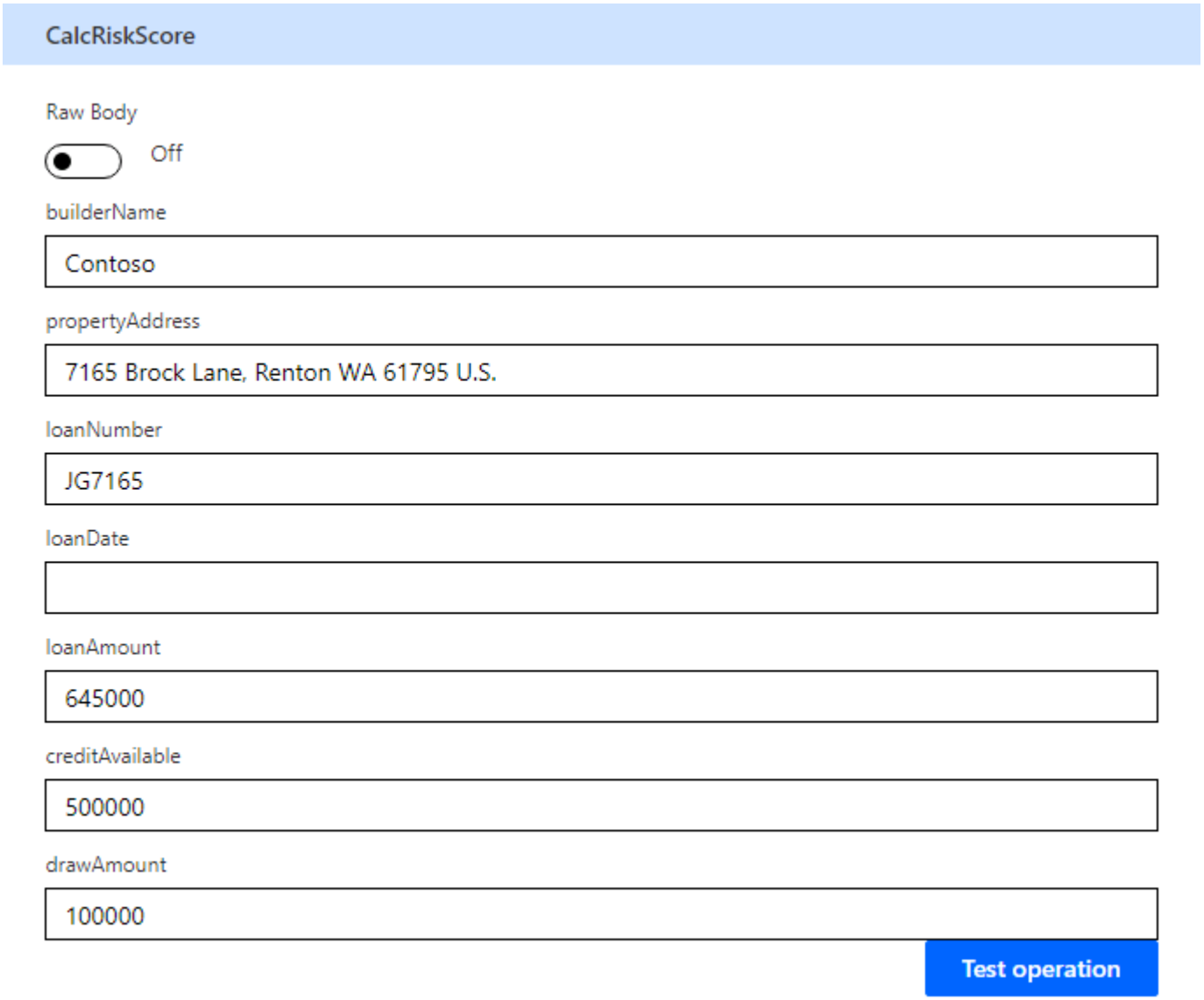
Select **Test** from the breadcrumb navigation bar at the top of the screen and click **+ New connection**.



Paste your **API Key** and click **Create connection**.

Click the **Refresh connections** button, on the right. The connection you just created should be the **Selected connection**.

Under CalcRiskScore, enter `Contoso` for builderName, `7165 Brock Lane Renton, WA 61795 U.S.` for propertyAddress, `JG7165` for loanNumber, `645000` for loanAmount, `500000` for creditAvailable, `100000` for drawAmount, and click **Test operation**.



The test should run successfully, and you should receive a score and a reason.

Click **Close** to return to the list of Custom connectors.

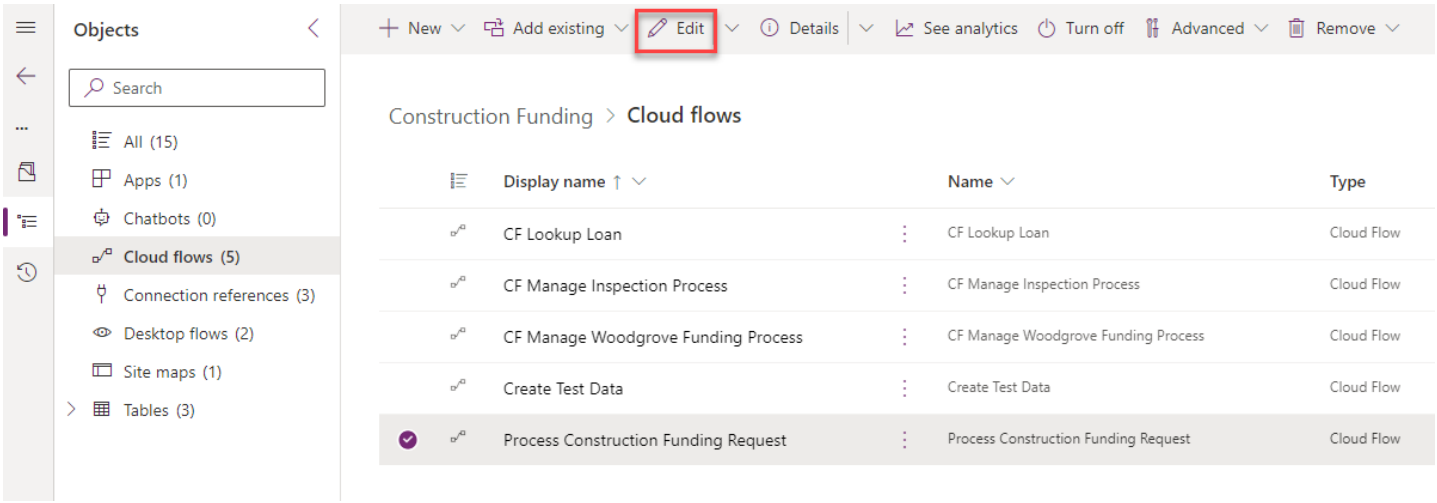
Exercise 2: Modify cloud flow to use connector

Task 1: Use custom connector in flow

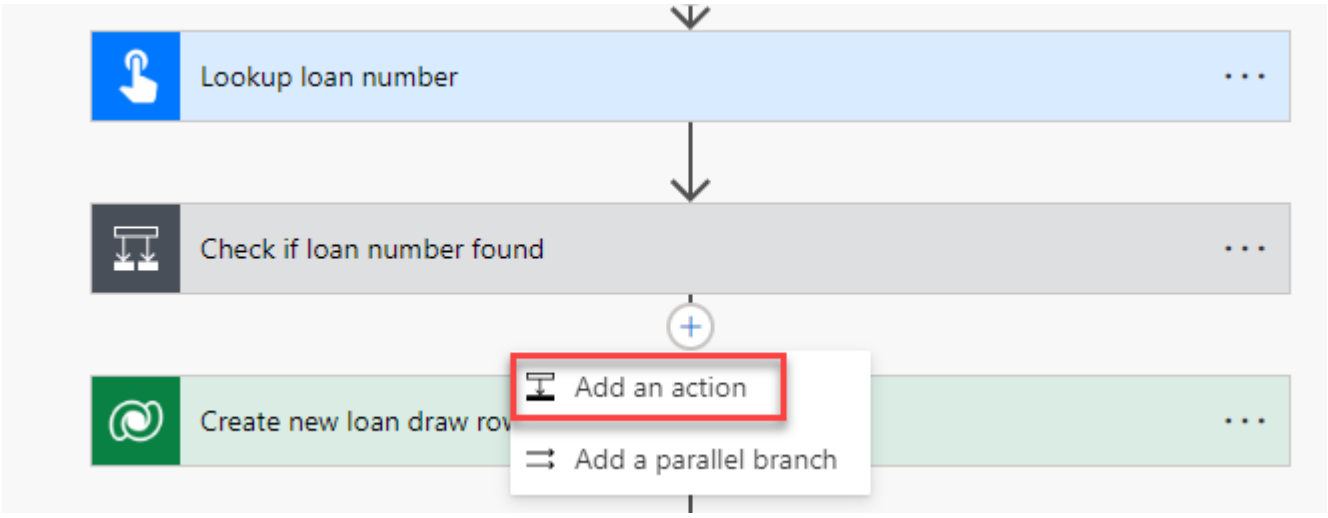
Navigate to `https://make.powerapps.com/` and make sure you are in the Dev environment.

Select **Solutions** and open the **Construction Funding** solution.

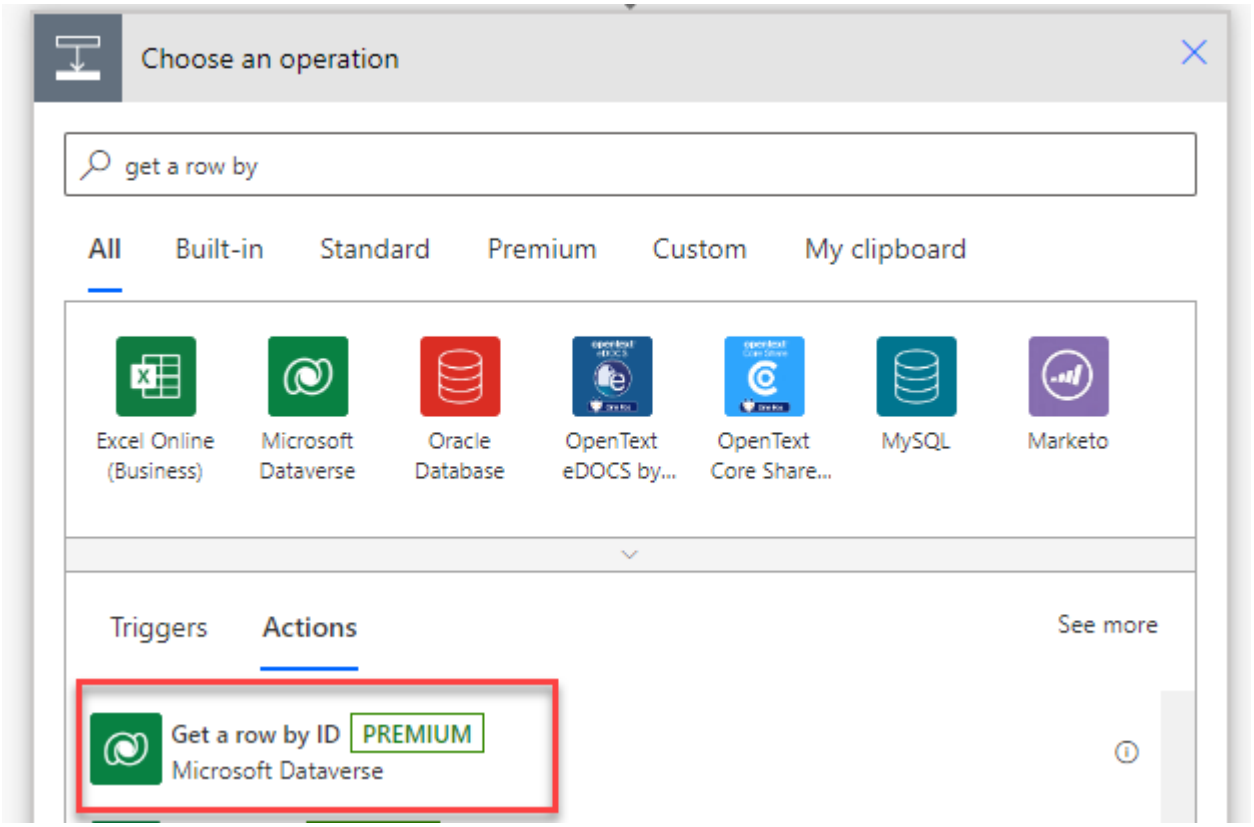
Select **Cloud flows**, select **Process Construction Funding Request** flow and click **Edit**.



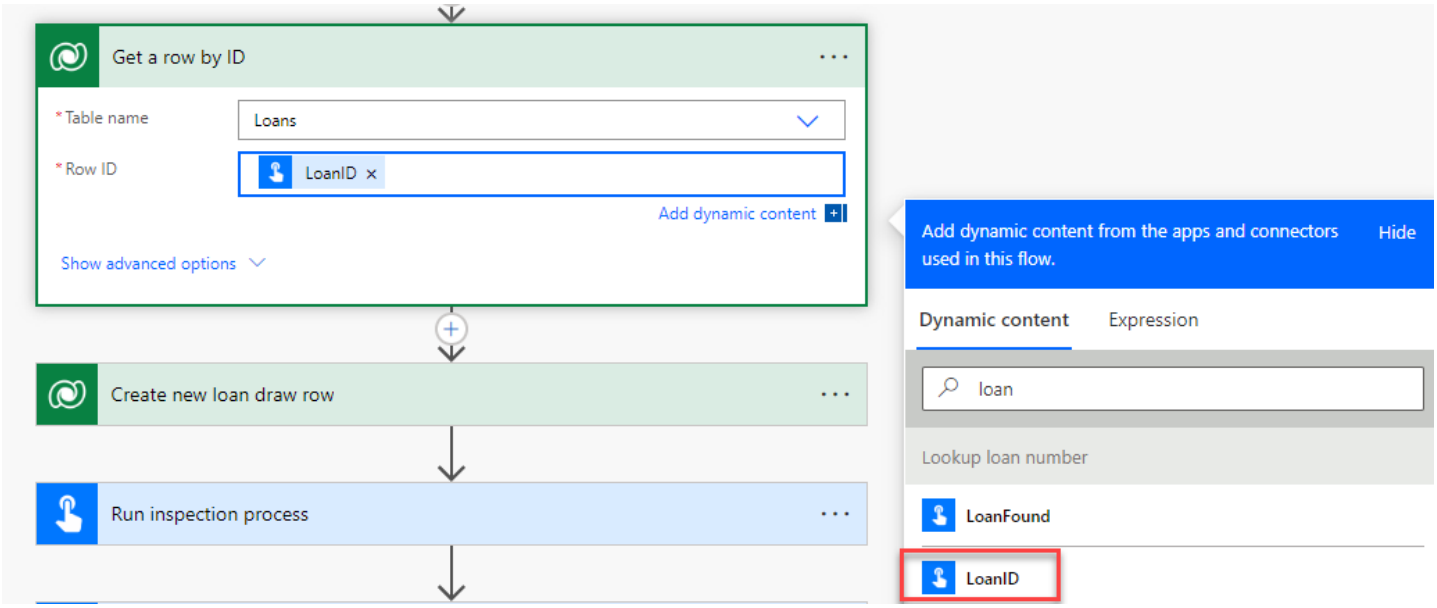
Click **+** insert new step after the **Check if loan number found** condition and select **Add an action.**



Select **Get a row by ID** Microsoft Dataverse.

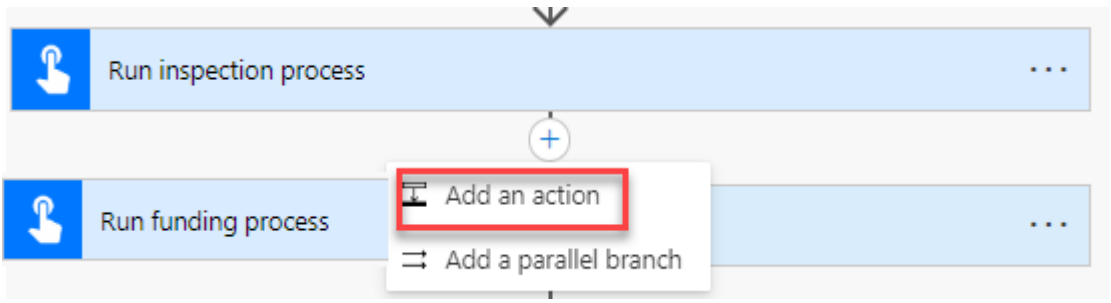


Select **Loans** for Table name, click on the **Row ID** field and select **LoanID** from the dynamic content pane.

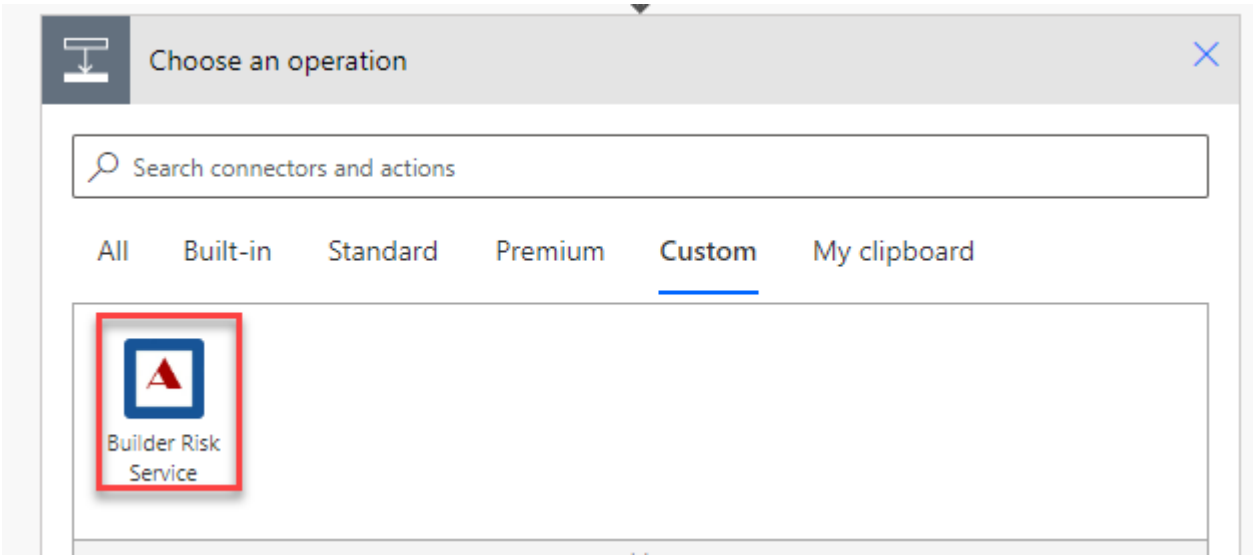


Rename the step **Get loan**.

Go to the **+** Insert a new step button after the **Run inspection process** and select **Add an action**.

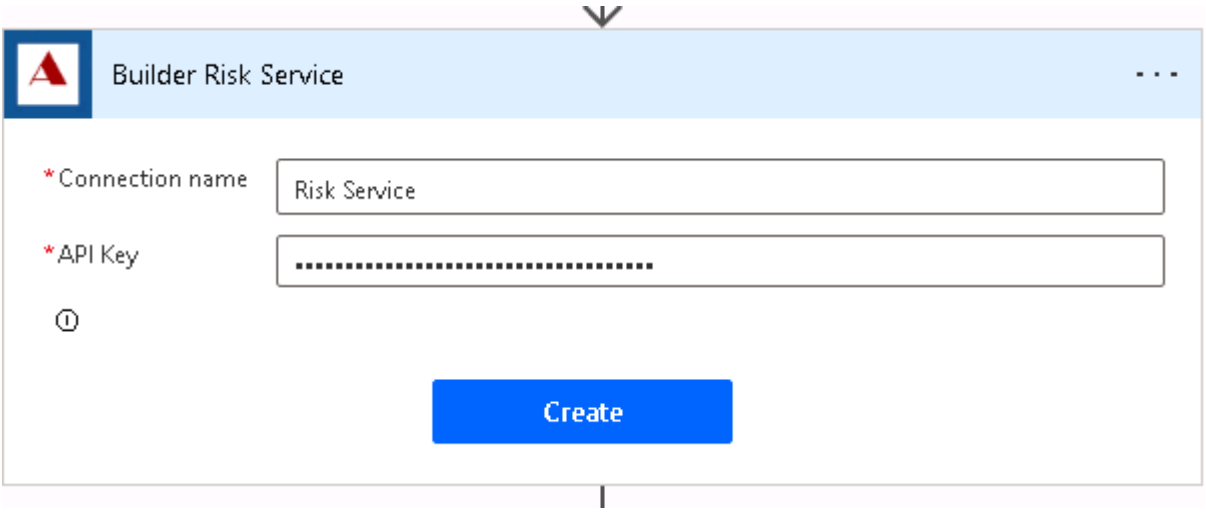


Go to the **Custom** tab and select **Builder Risk Service**.

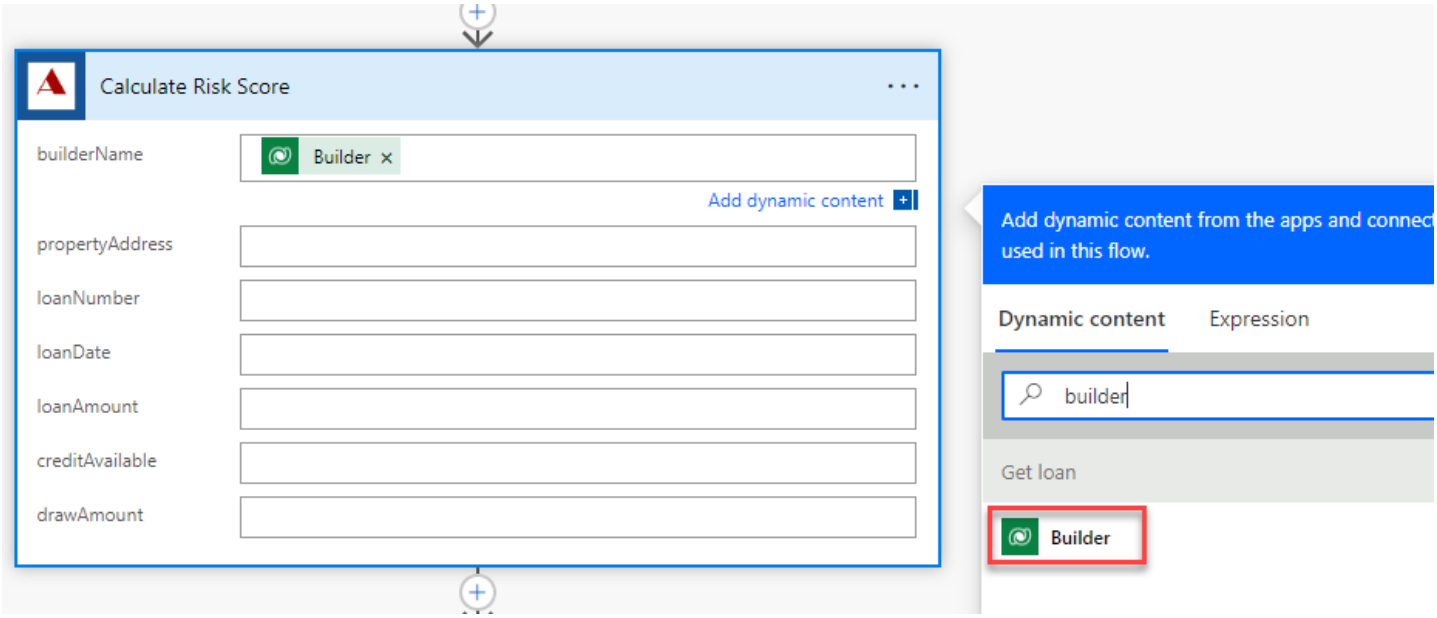


Select the **Calculate Risk Score** action.

Enter `Risk Service` for Connection name, paste the API Key you copied earlier, and click **Create**.



Click on the **builderName** field and select **Builder** from the dynamic content pane.



Click on the **propertyAddress** field and select **Address** from the dynamic content pane.

Click on the **loanNumber** field and select **Loan Number** from the dynamic content pane.

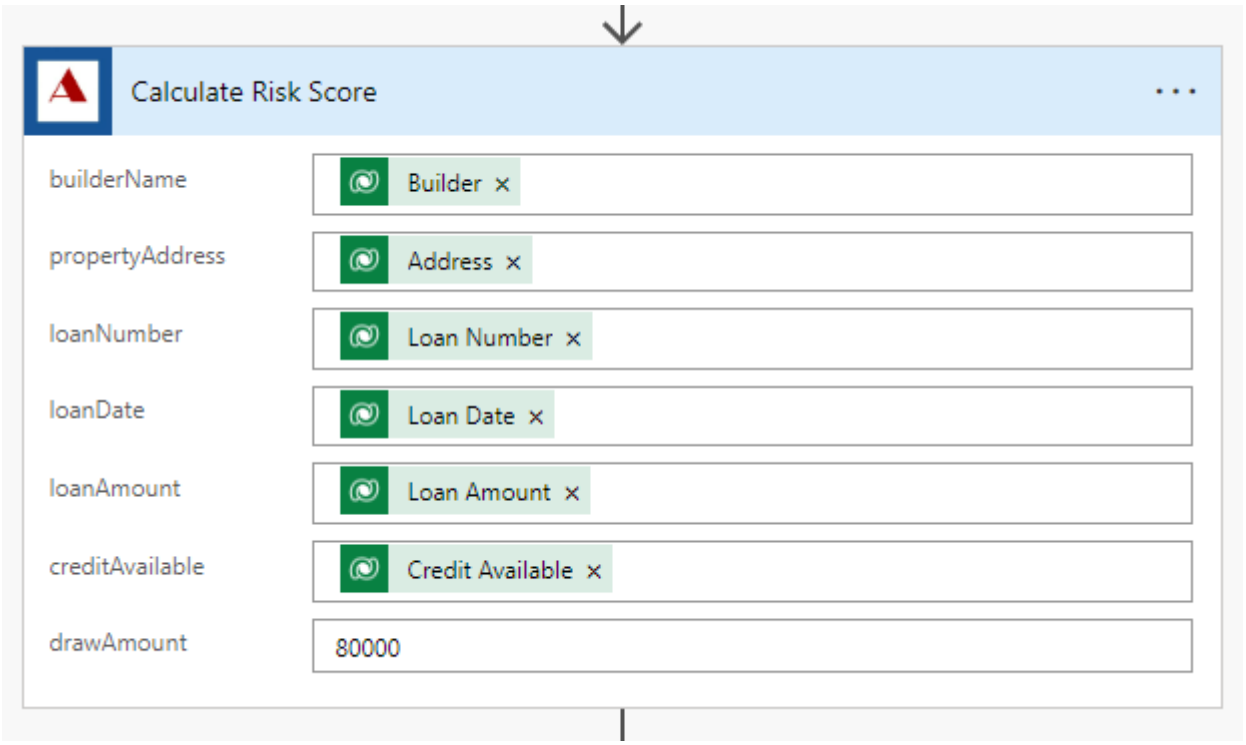
Click on the **loanDate** field and select **Loan Date** from the dynamic content pane.

Click on the **loanAmount** field and select **Loan Amount** form the dynamic content pane.

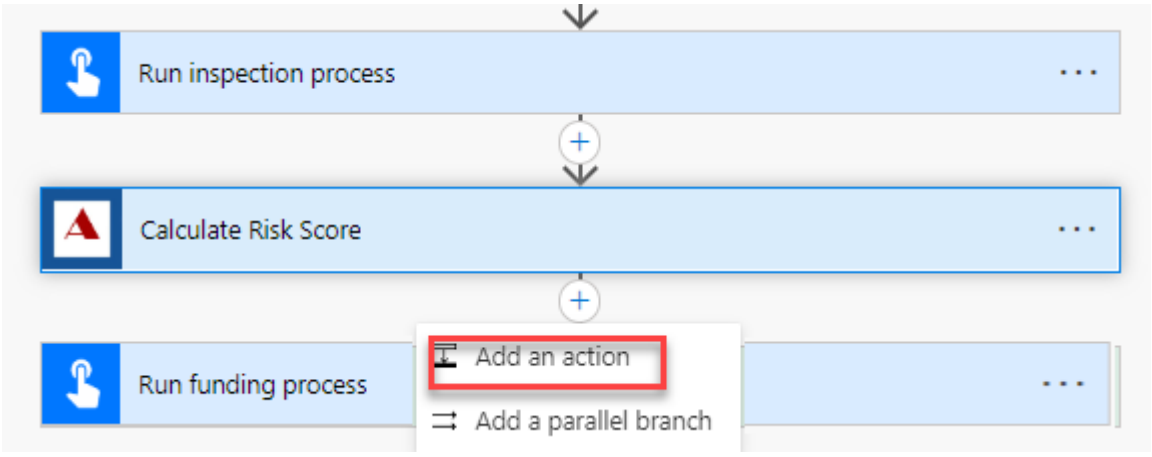
Click on the **creditAvailable** field and select **Credit Available** from the dynamic content pane.

Enter `80000` for drawAmount.

The calculate risk score step should now look like the image below.



Click on the **+** Insert a new step after the **Calculate Risk Score** step and select **Add an action**.



Select **Update a row** Microsoft Dataverse.

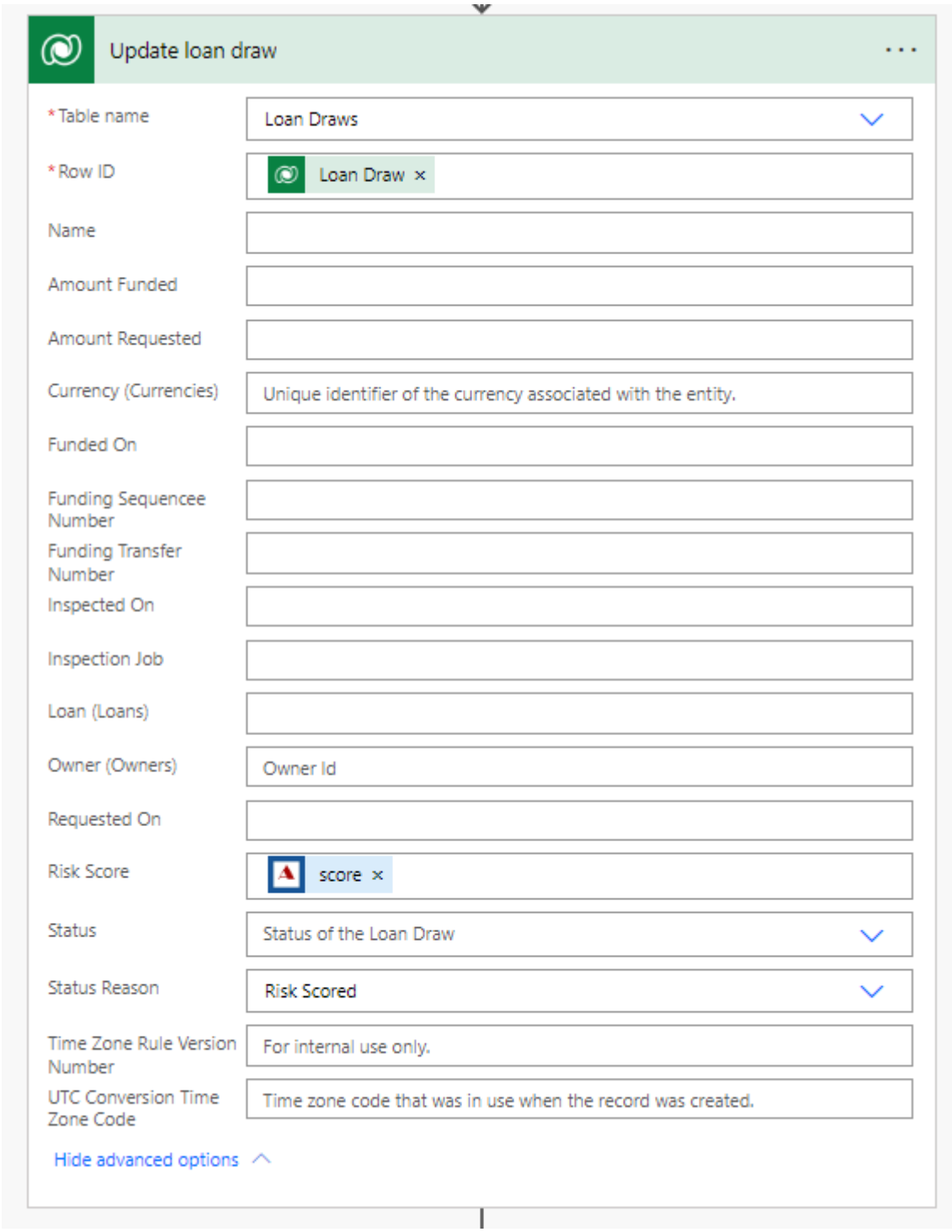
Select **Loan Draws** for Table name, click on the **Row ID** field and select **Loan Draw** from the dynamic content pane.

Expand Show advanced options and Click on the **Risk Score** field and select **score** from the dynamic content pane.

Select **Risk Scored** for Status reason.

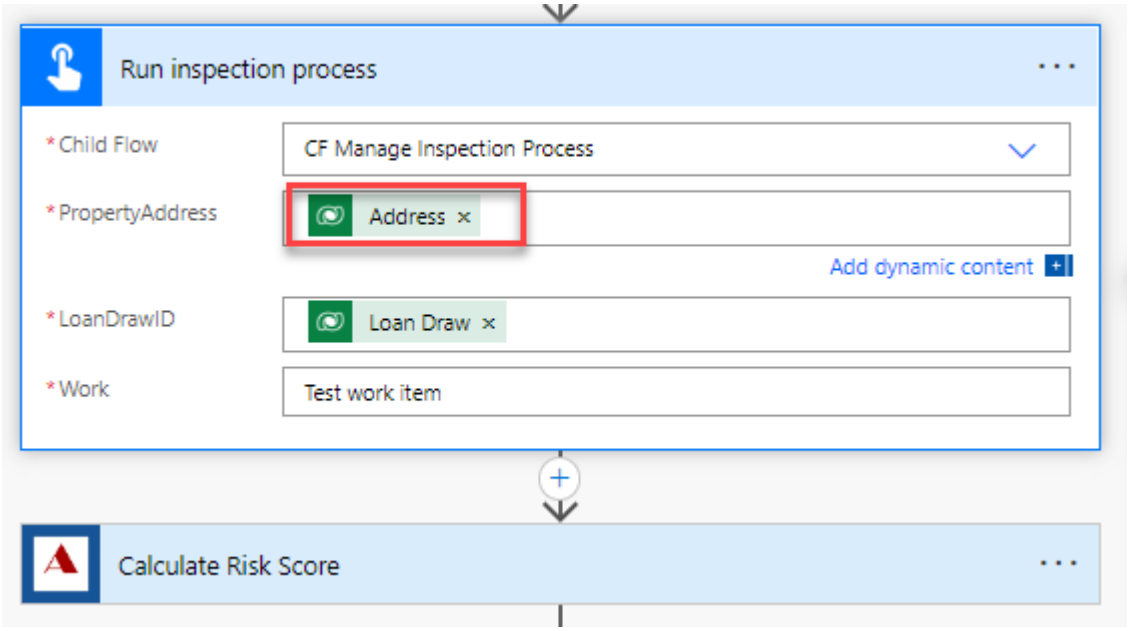
Rename the step **Update loan draw risk score**.

The update loan draw step should look like the image below.



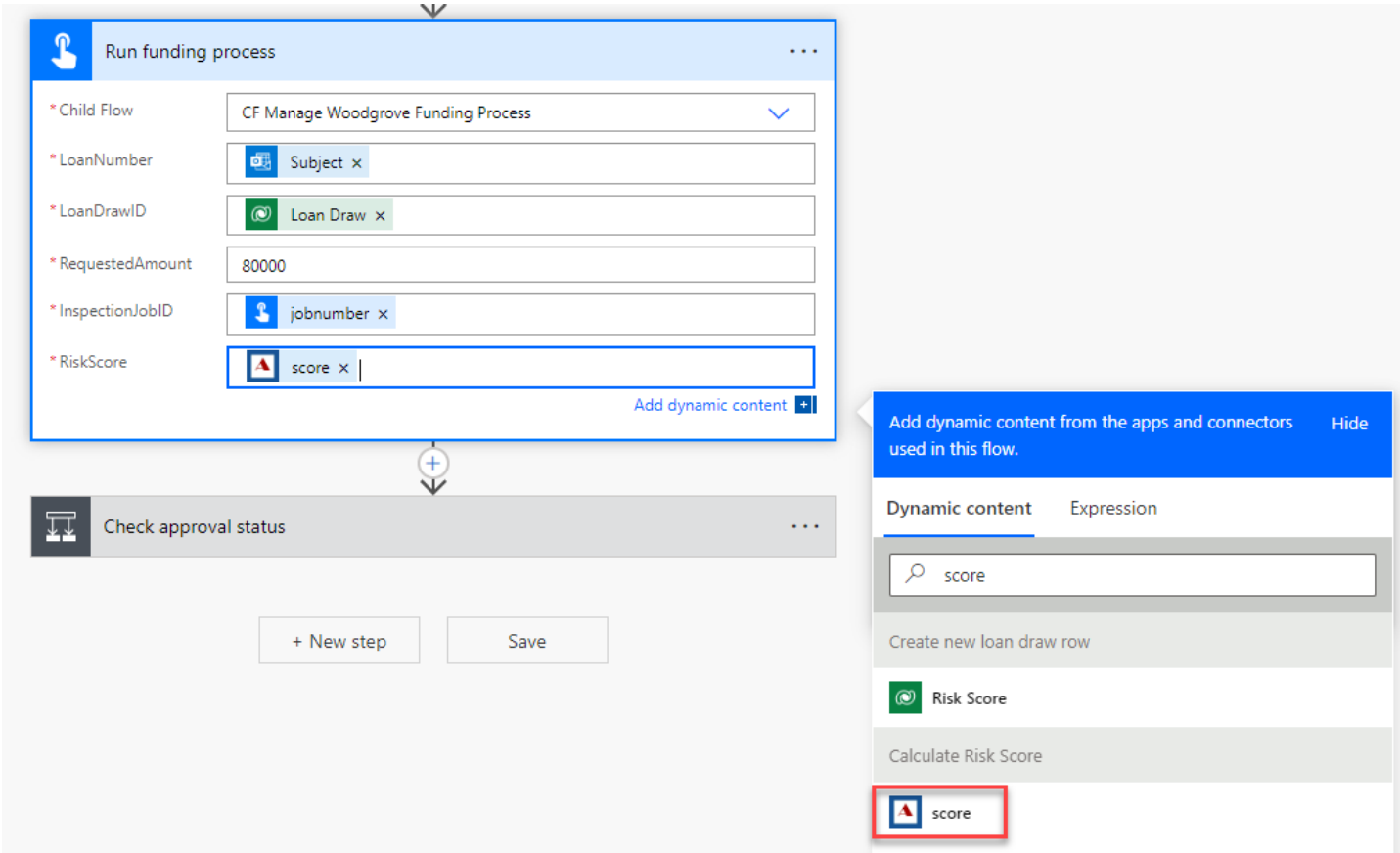
Click to expand the **Run inspection process** step.

Remove the **PropertyAddress** value and select **Address** from the dynamic content pane.



Expand the **Run funding process** step.

Remove the **RiskScore** value and select **Score** from the dynamic content pane.



Click **Save** and wait for the flow to be saved.

Task 2: Test the flow

Click **Test**.

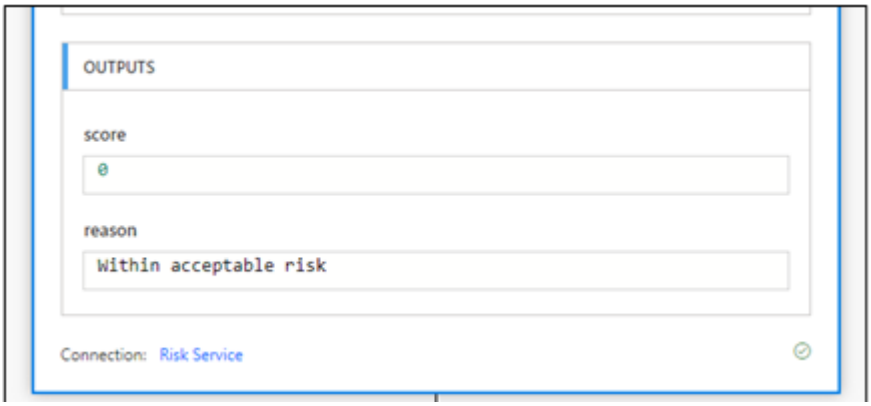
Select **Manually** and click **Test**.

Send an email to Funding@yourdomain.onmicrosoft.com with the Subject line as **PS7765**.

The flow test should run and succeed.

On the **Run History** for the flow test, all steps should show a green tick. Expand the **Calculate Risk Score** step.

The output should look like the image below:



You should receive an email with the subject **Draw Approved**.