



## 6.5 User Guide

Blue Prism and Power Platform Integration

Document Revision 1.1



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## Introduction

This document outlines the integration and configuration of Blue Prism and the Microsoft Power Platform which includes Power BI, Microsoft Flow and PowerApps.

Power Platform allows business users to standardize and automate processes in their organization through the creation of BPFs that can include 3<sup>rd</sup> party applications. This is extremely powerful, but somewhat limited in scope as it can only be done in a cost effective “no code” fashion in environments where all applications offer existing connectors within the Power Platform or public APIs.

This document assumes a general understanding of Blue Prism Processes as well as Microsoft Flow.

Details on the Power Platform can be found here: <https://powerplatform.microsoft.com>

Requirements include:

- Blue Prism Software
- Microsoft Power Automate account
- Microsoft Azure account and ability to publish Azure functions from Visual Studio

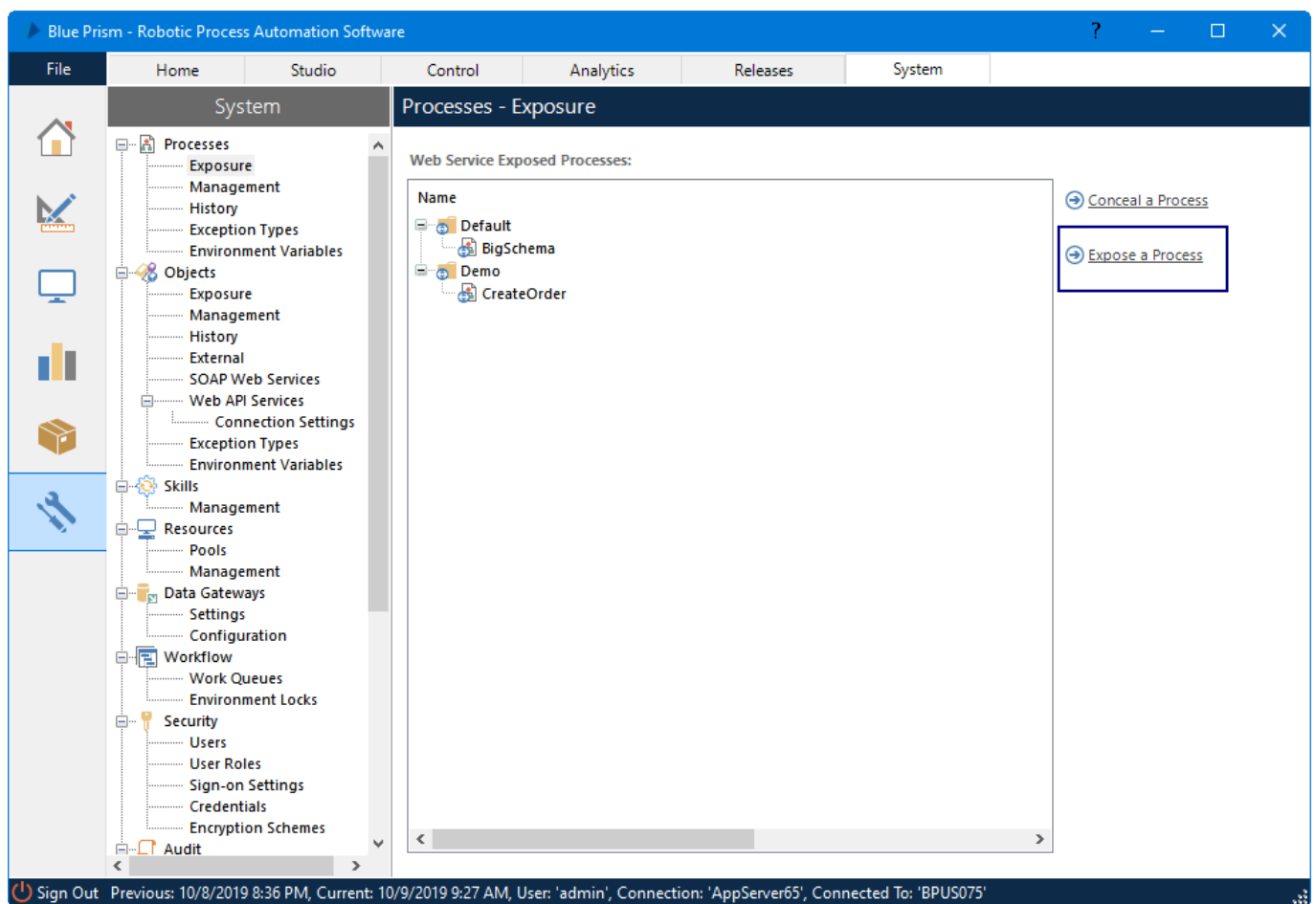
## Flow to Blue Prism Integration

### Components of the Solution

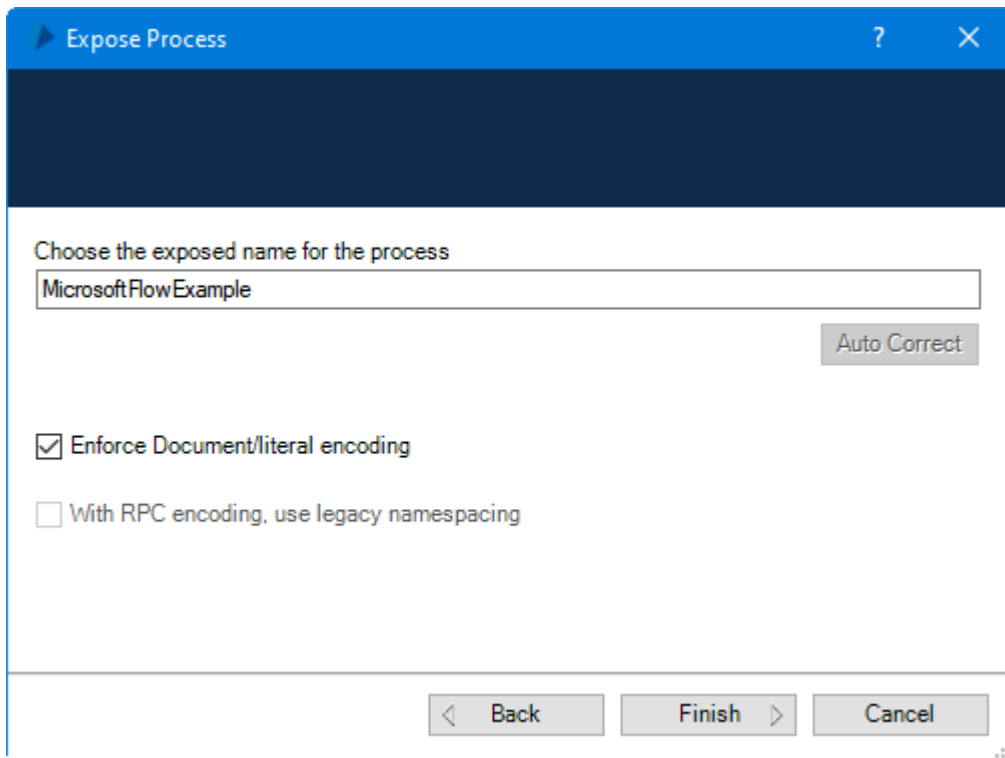
- Blue Prism Process exposed as SOAP Web Service
- Azure Function for REST Services
- Blue Prism Custom Connector
- Microsoft Power Automate Business Process

### Blue Prism process exposed as SOAP Web Service

Expose the Blue Prism process as a SOAP Web Service.



Make sure that you specify Document/literal encoding.



Expose Process

Choose the exposed name for the process

MicrosoftFlowExample

Auto Correct

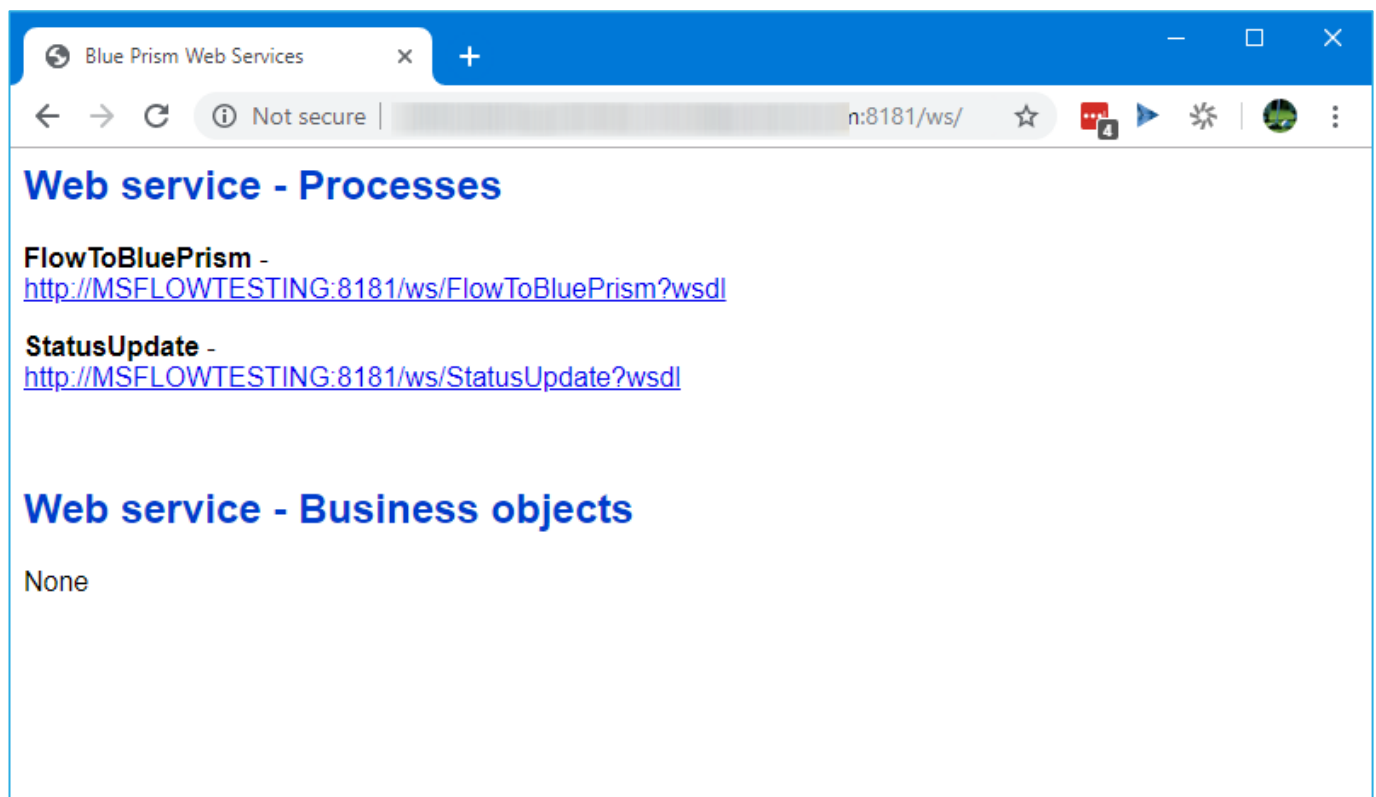
☒ Enforce Document/literal encoding

☐ With RPC encoding, use legacy namespacing

Back Finish Cancel

You can test to make sure the SOAP service is available by using the URL in a browser window:

http://<<machinename>>:<<resource agent port>>/ws/



Blue Prism Web Services

Not secure | n:8181/ws/

## Web service - Processes

**FlowToBluePrism** -  
<http://MSFLOWTESTING:8181/ws/FlowToBluePrism?wsdl>

**StatusUpdate** -  
<http://MSFLOWTESTING:8181/ws/StatusUpdate?wsdl>

## Web service - Business objects

None

## Azure Function for REST Services

The Azure Function is provided as a Visual Studio project here:

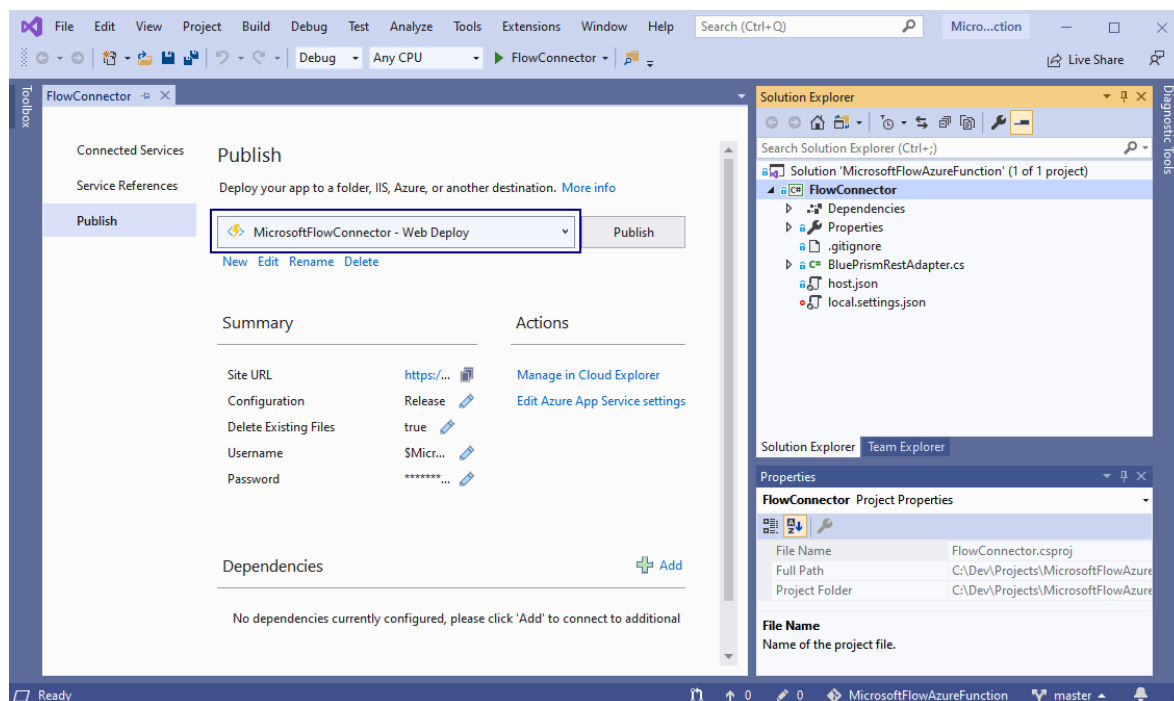
<https://github.com/blue-prism/MicrosoftFlowAzureFunction>

In depth tutorials on loading projects from GitHub repos can be found here:

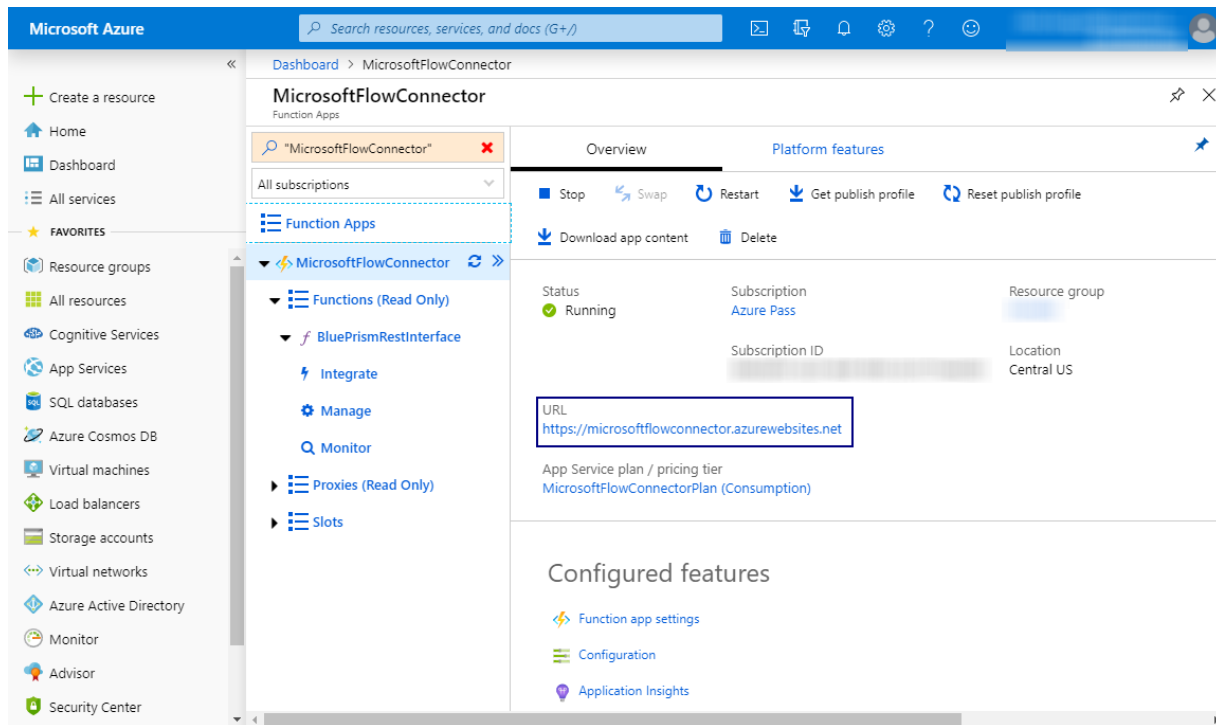
<https://docs.microsoft.com/en-us/visualstudio/get-started/tutorial-open-project-from-repo?view=vs-2019>

Open the solution in Visual Studio and publish the Azure Function. You will need to specify your own Azure Function name. In depth tutorials on publishing to Azure from Visual Studio can be found here:

<https://docs.microsoft.com/en-us/azure/azure-functions/functions-create-your-first-function-visual-studio>

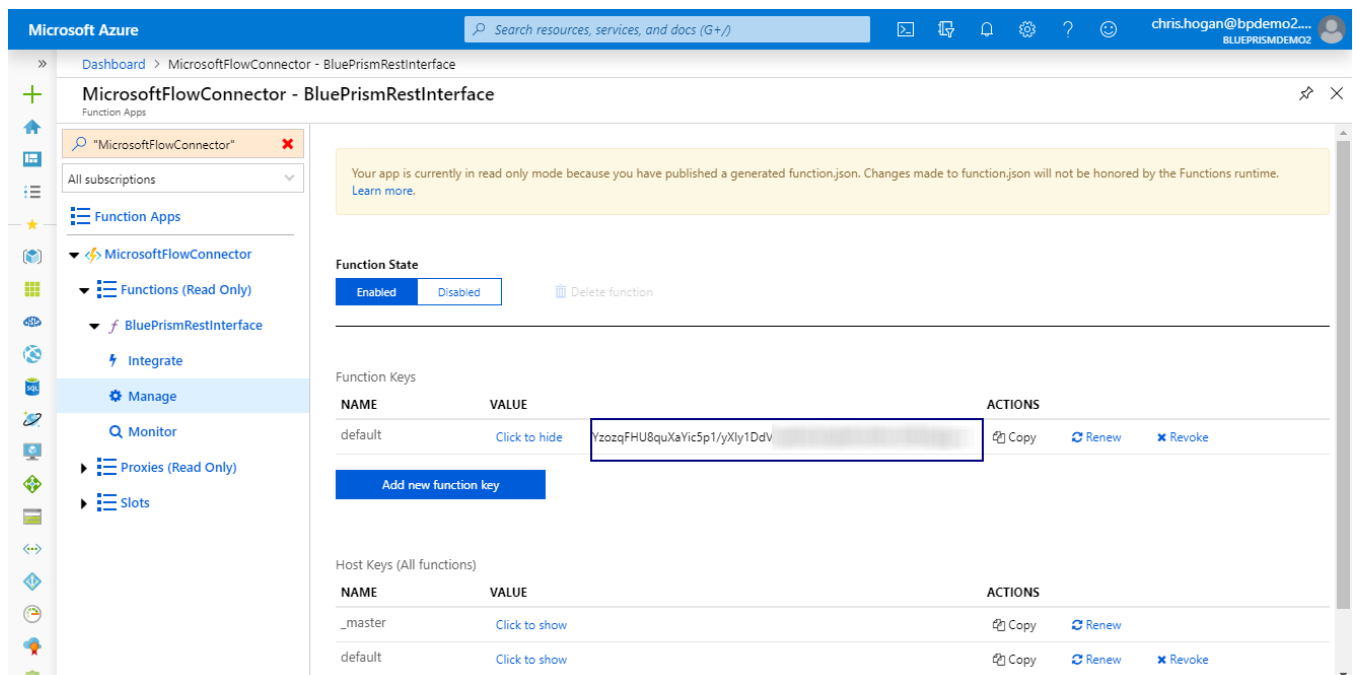


Once published to Azure, make note of the URL



The screenshot shows the Microsoft Azure portal interface. On the left is the navigation pane with options like 'Create a resource', 'Home', 'Dashboard', 'All services', and 'FAVORITES'. The main area displays the 'MicrosoftFlowConnector' Function App. The 'Overview' tab is selected, showing the app's status as 'Running', its subscription as 'Azure Pass', and its location as 'Central US'. A URL is highlighted: `https://microsoftflowconnector.azurewebsites.net`. Below this, the 'Configured features' section lists 'Function app settings', 'Configuration', and 'Application Insights'.

Also make note of the Function Key

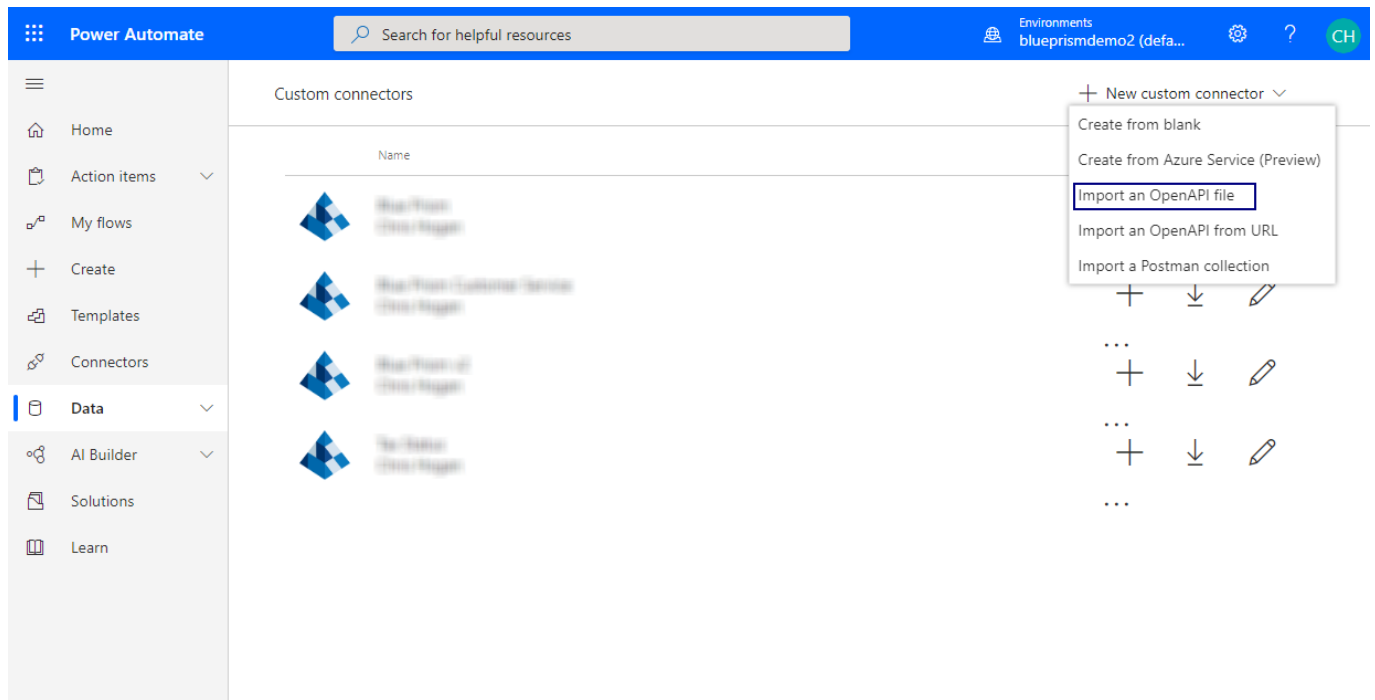


The screenshot shows the 'Function Keys' section for the 'MicrosoftFlowConnector - BluePrismRestInterface' Function App. A yellow warning banner at the top states: 'Your app is currently in read only mode because you have published a generated function.json. Changes made to function.json will not be honored by the Functions runtime. [Learn more.](#)'. Below this, the 'Function State' is 'Enabled'. The 'Function Keys' table has columns for NAME, VALUE, and ACTIONS. The 'default' key is highlighted, with its value being a long alphanumeric string. Below the table is a button 'Add new function key'. The 'Host Keys (All functions)' section shows a table with columns for NAME, VALUE, and ACTIONS, listing '\_master' and 'default' keys.

## Blue Prism Custom Connector

Import the Blue-Prism-Generic.swagger.json connector definition from The Digital Exchange into Microsoft Flow



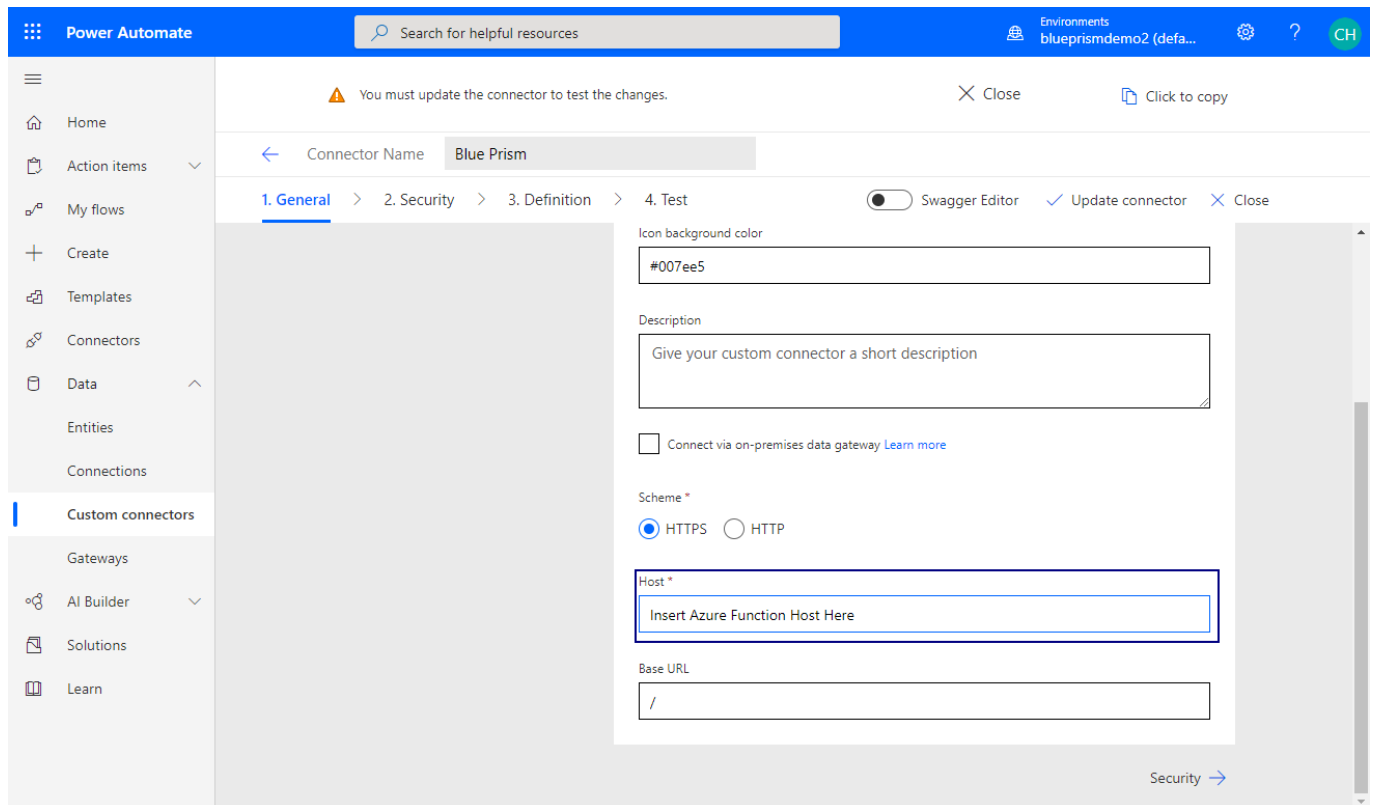


## Create a custom connector

Connector name

Import an OpenAPI file

Add a custom icon if preferred, and specify the host from the Azure Function:



**Power Automate** Search for helpful resources

Environments: blueprismdemo2 (defa...)

**Connector Name:** Blue Prism

**1. General** > 2. Security > 3. Definition > 4. Test

Swagger Editor Update connector Close

Icon background color: #007ee5

Description: Give your custom connector a short description

☐ Connect via on-premises data gateway [Learn more](#)

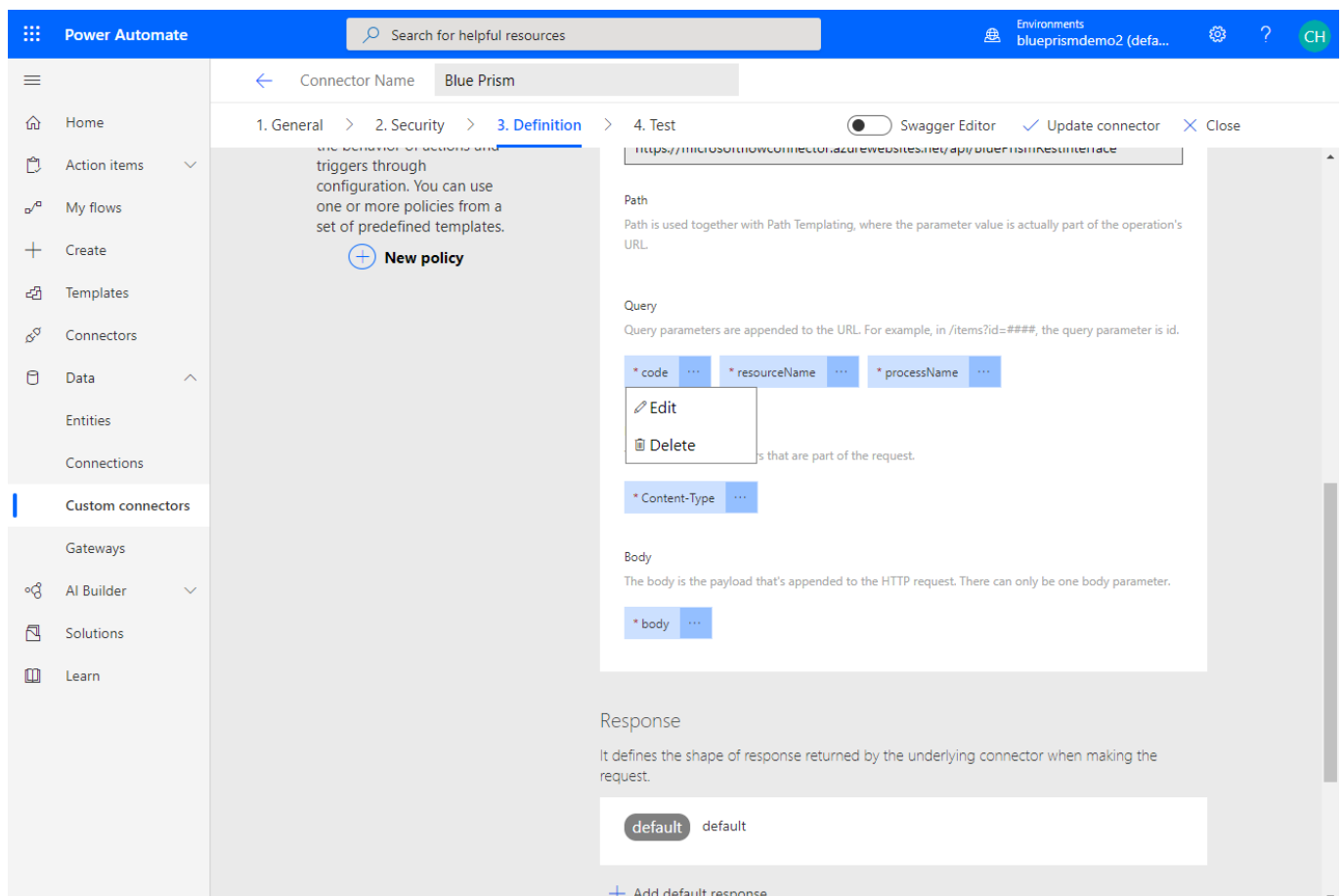
Scheme \*  
☒ HTTPS ☐ HTTP

Host \*  
 Insert Azure Function Host Here

Base URL  
 /

Security →

On definition tab, edit code and provide the Azure Function Key:



**Power Automate** Search for helpful resources

Environments: blueprismdemo2 (defa...)

**Connector Name:** Blue Prism

1. General > 2. Security > **3. Definition** > 4. Test

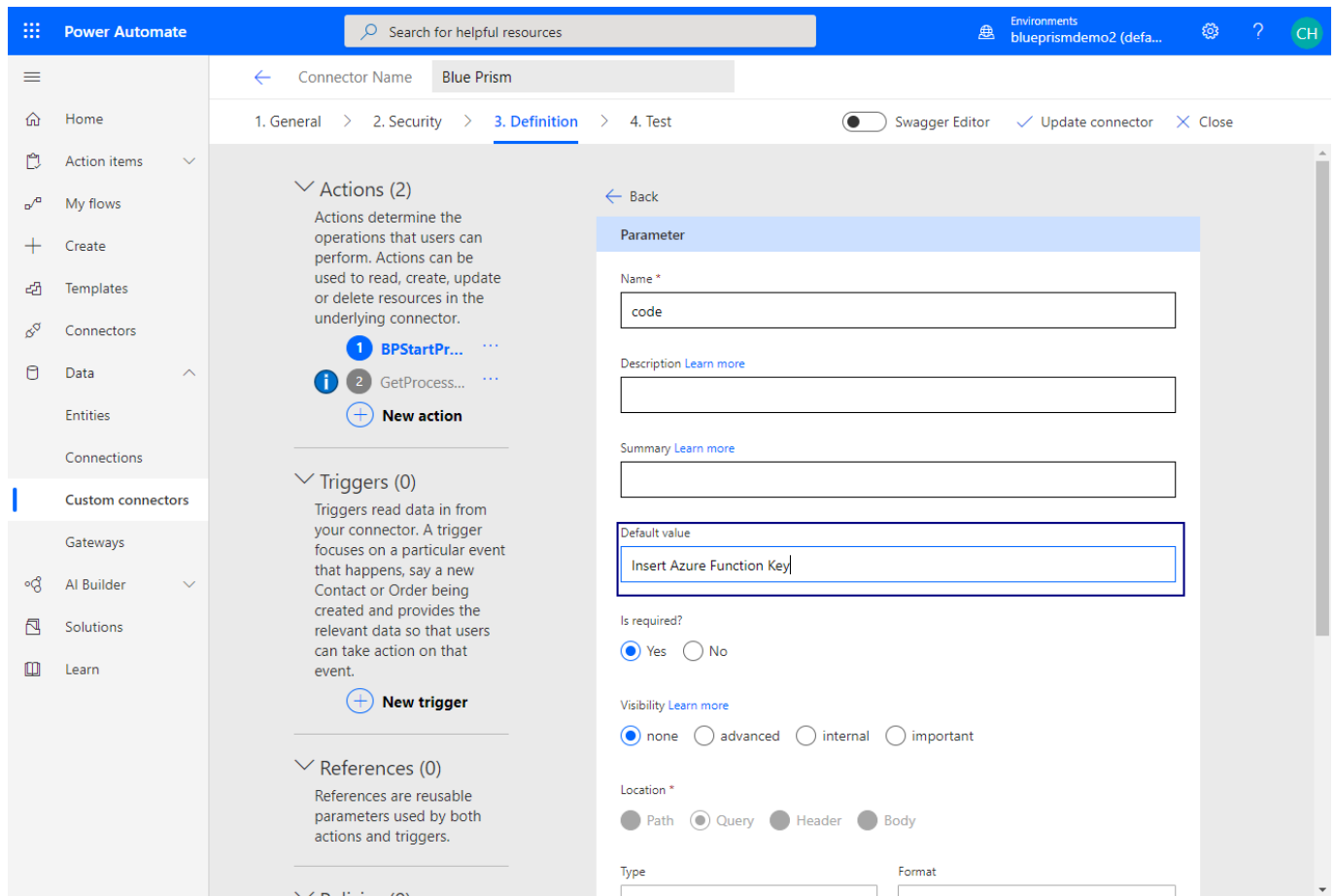
Swagger Editor Update connector Close

Path  
 https://microsoft.com/connector/azurewebsites.net/api/BluePrismTestName

Query  
 Query parameters are appended to the URL. For example, in /items?id=###, the query parameter is id.  
 \* code ... \* resourceName ... \* processName ...  
 Edit Delete  
 \* Content-Type ...

Body  
 The body is the payload that's appended to the HTTP request. There can only be one body parameter.  
 \* body ...

Response  
 It defines the shape of response returned by the underlying connector when making the request.  
 default default  
 + Add default response



**Power Automate** Search for helpful resources

Environments: blueprismdemo2 (defa...)

Connector Name: Blue Prism

1. General > 2. Security > **3. Definition** > 4. Test

Swagger Editor Update connector Close

**Actions (2)**  
Actions determine the operations that users can perform. Actions can be used to read, create, update or delete resources in the underlying connector.

1 BPStartPr...  
2 GetProcess...

**Triggers (0)**  
Triggers read data in from your connector. A trigger focuses on a particular event that happens, say a new Contact or Order being created and provides the relevant data so that users can take action on that event.

**References (0)**  
References are reusable parameters used by both actions and triggers.

**Parameter**

Name \*  
code

Description [Learn more](#)

Summary [Learn more](#)

Default value  
Insert Azure Function Key

Is required?  
☒ Yes ☐ No

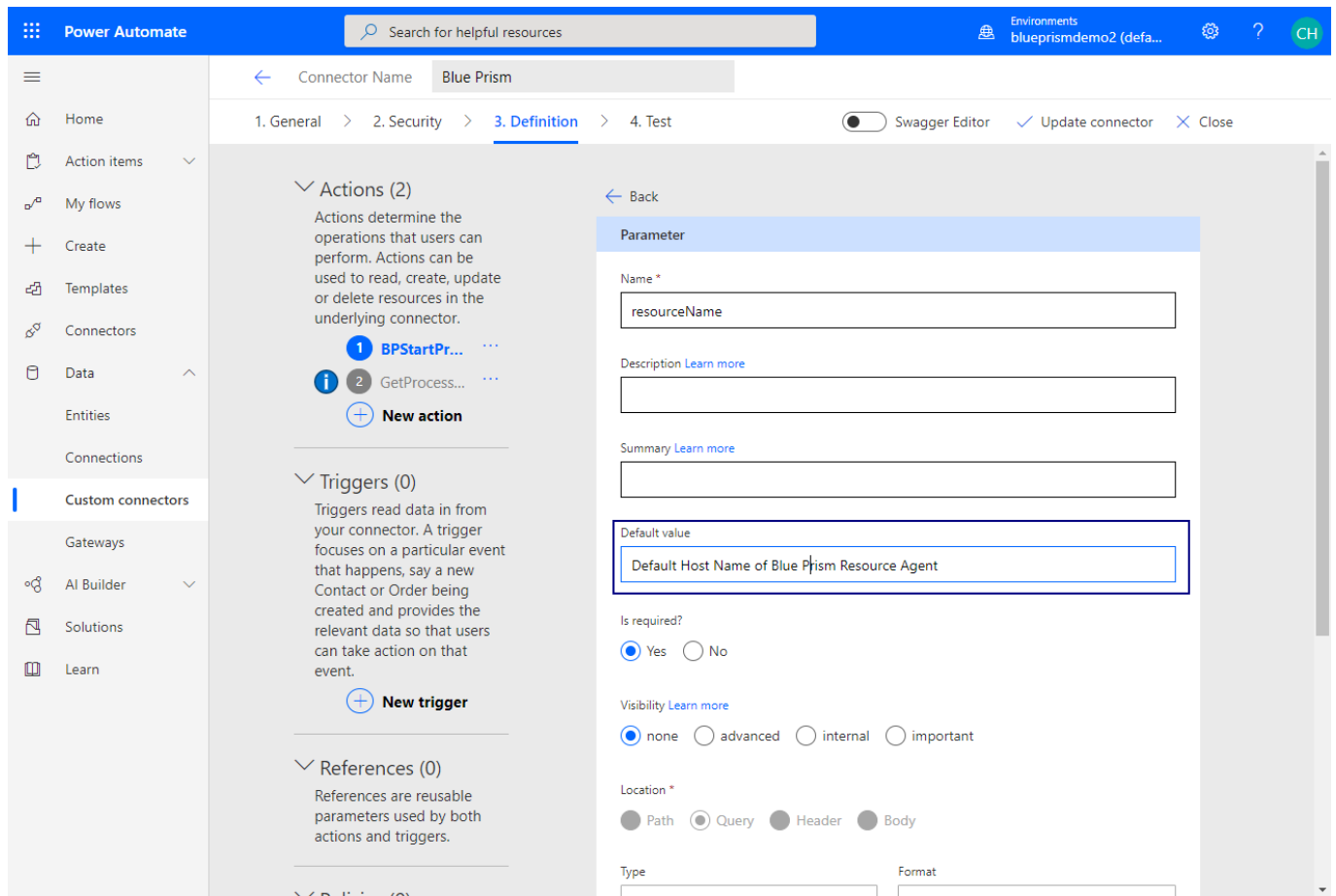
Visibility [Learn more](#)  
☒ none ☐ advanced ☐ internal ☐ important

Location \*  
☐ Path ☒ Query ☐ Header ☐ Body

Type  
Text

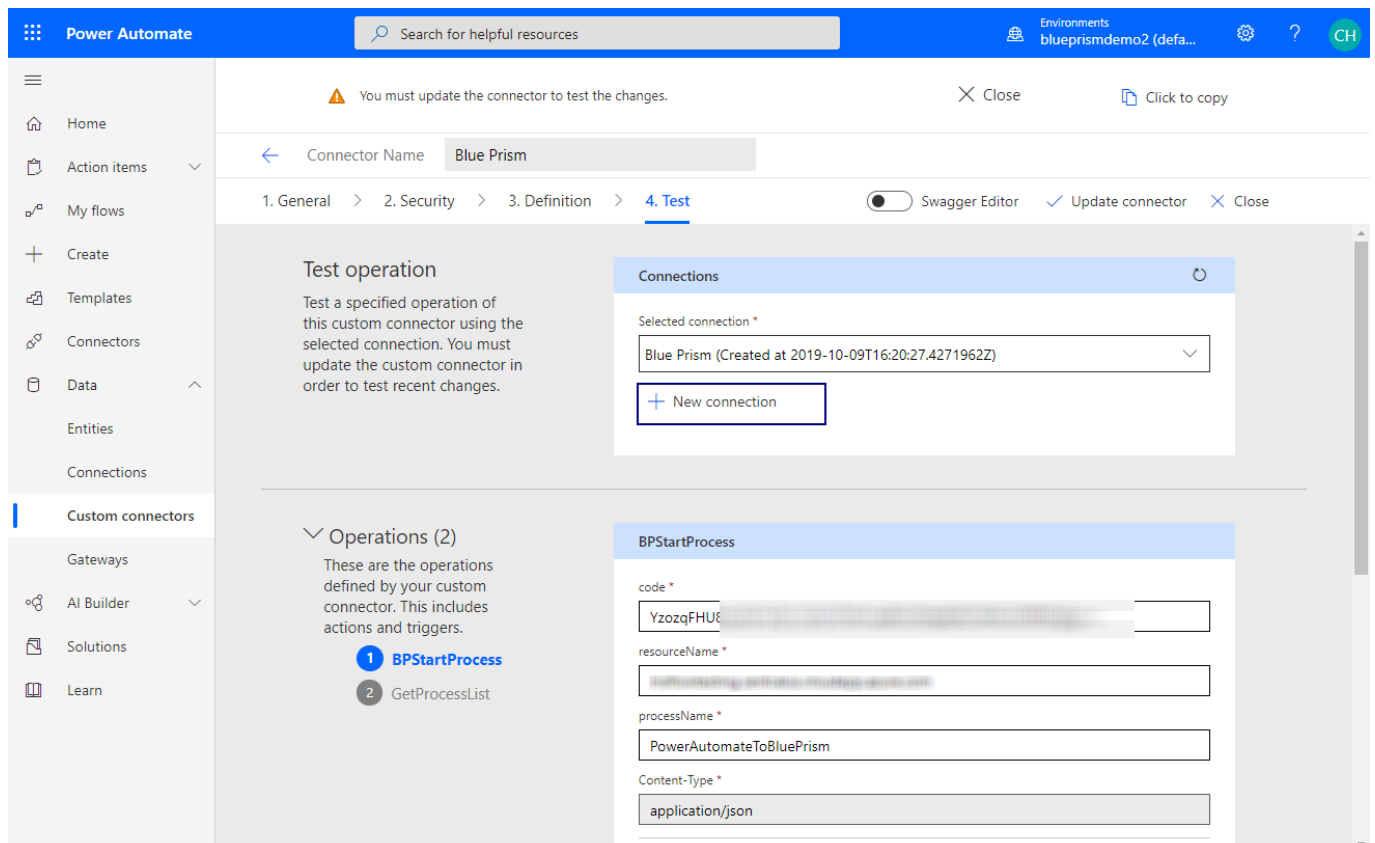
Format

You can also provide the default values for the Resource Agent Host, and Process Name to invoke. These can also be specified later when using the connector in a Flow.



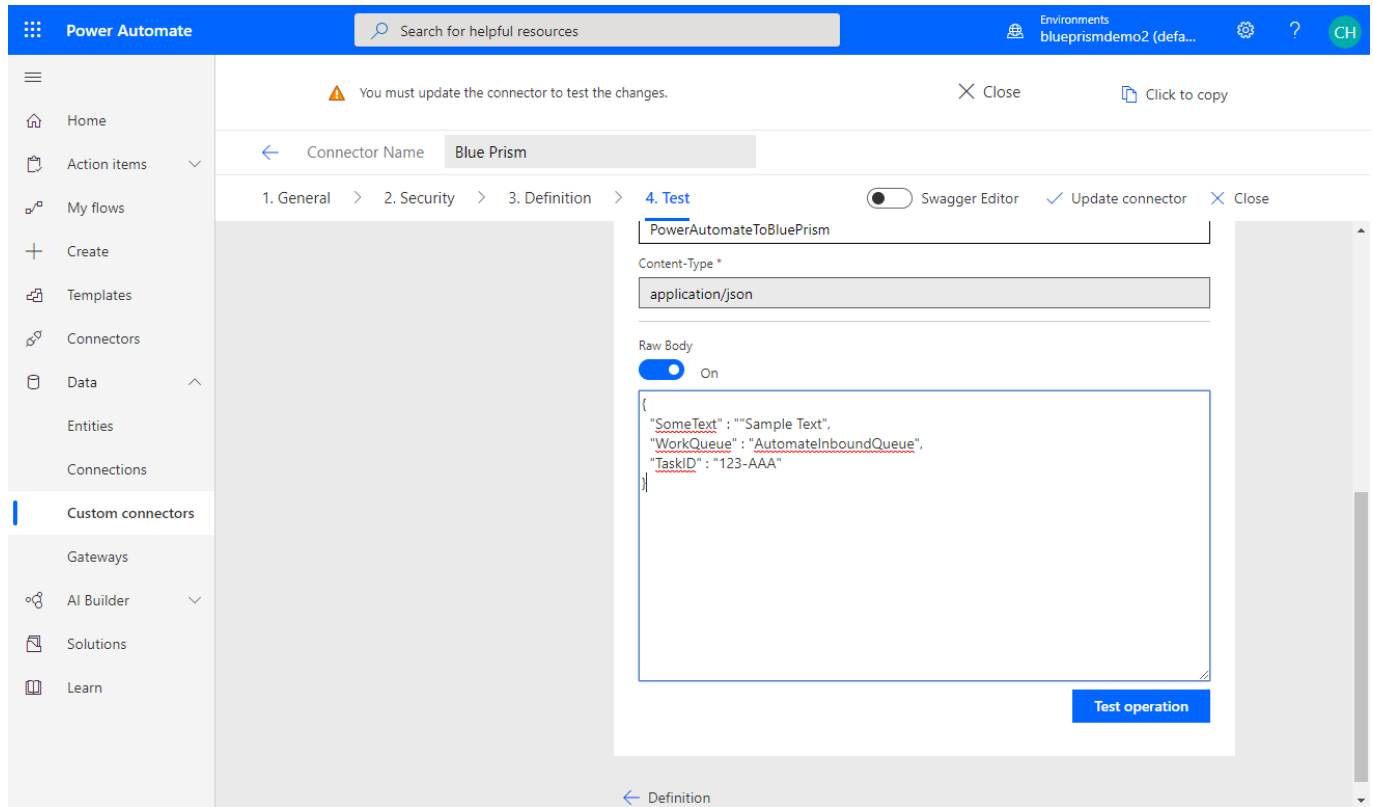
The screenshot shows the 'Definition' tab of a custom connector named 'Blue Prism' in Power Automate. The interface includes a left sidebar with navigation options like Home, Action items, My flows, Create, Templates, Connectors, Data, Entities, Connections, and Custom connectors. The main area is divided into sections: Actions (2), Triggers (0), and References (0). The 'Actions' section lists 'BPStartPr...' and 'GetProcess...', with a 'New action' button. The 'Triggers' section has a 'New trigger' button. The 'References' section has a 'New reference' button. On the right, the 'Parameter' configuration is shown, including fields for Name (resourceName), Description, Summary, Default value (Default Host Name of Blue Prism Resource Agent), Is required? (Yes), Visibility (none), and Location (Path, Query, Header, Body). The 'Type' and 'Format' fields are also present.

You can test the connector by creating a connection with the credentials that Blue Prism needs

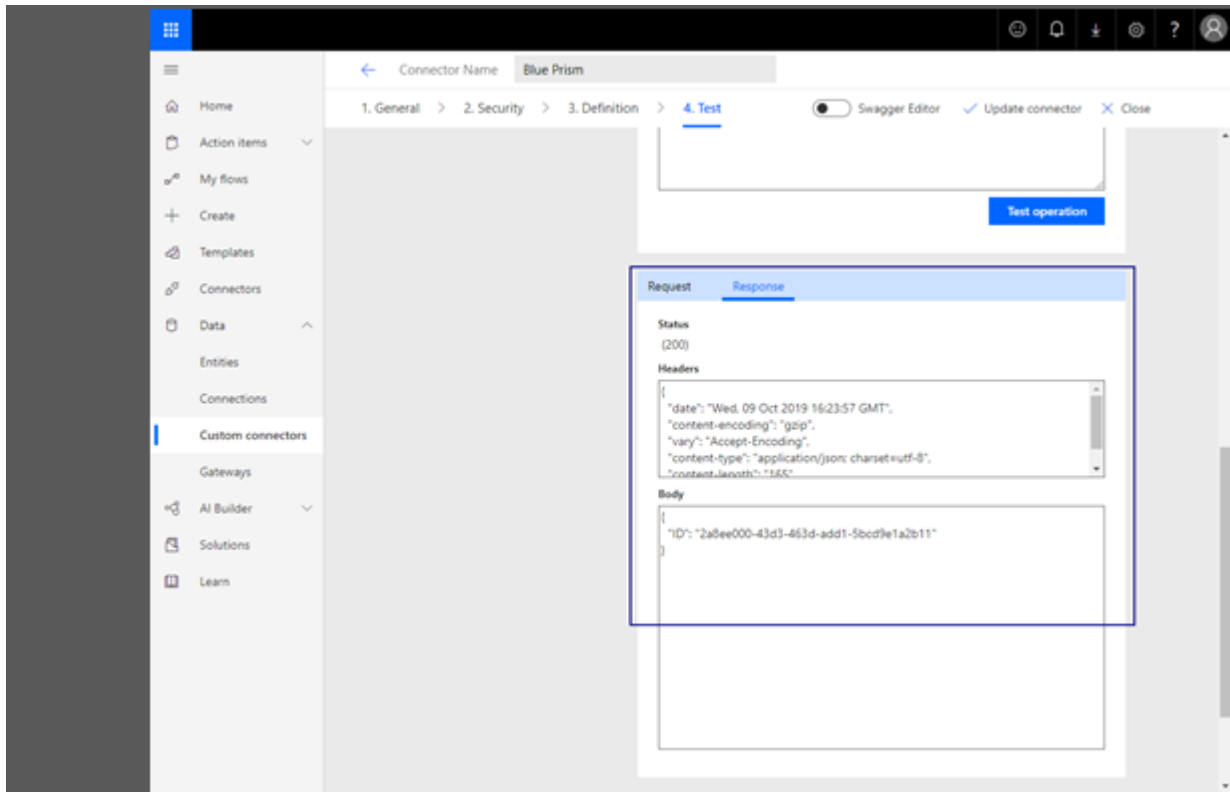


The screenshot shows the 'Test' tab of the custom connector 'Blue Prism'. A warning message at the top states: 'You must update the connector to test the changes.' The main area is divided into sections: Test operation and Operations (2). The 'Test operation' section includes a description and a 'Connections' dropdown menu showing 'Blue Prism (Created at 2019-10-09T16:20:27.4271962Z)' with a '+ New connection' button. The 'Operations' section lists 'BPStartProcess' and 'GetProcessList'. The 'BPStartProcess' operation is expanded, showing fields for code (YzoqFHU6), resourceName, processName (PowerAutomateToBluePrism), and Content-Type (application/json).

Finally, provide the JSON payload of Data Item names and values that your Blue Prism Process has defined as input parameters.

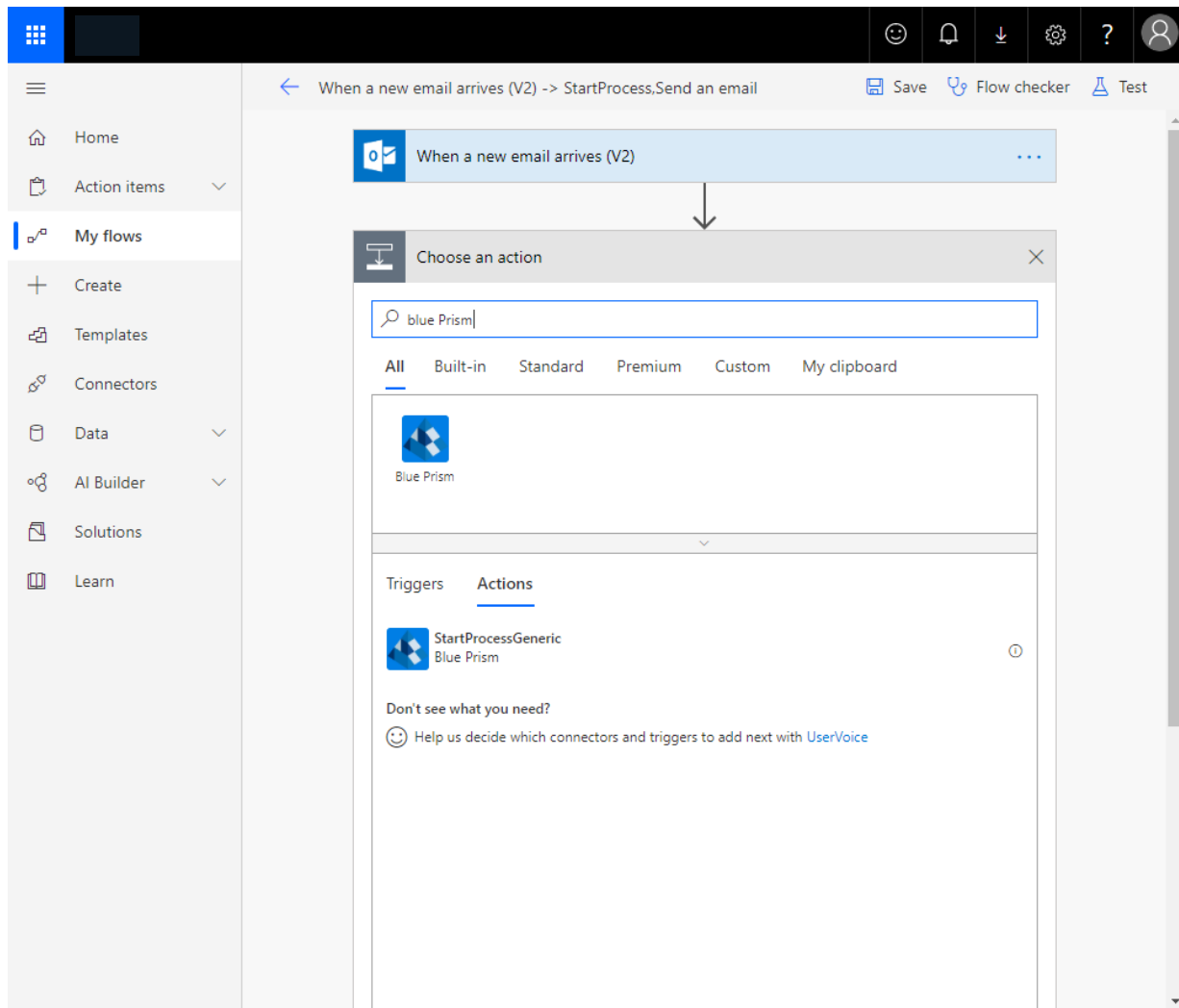


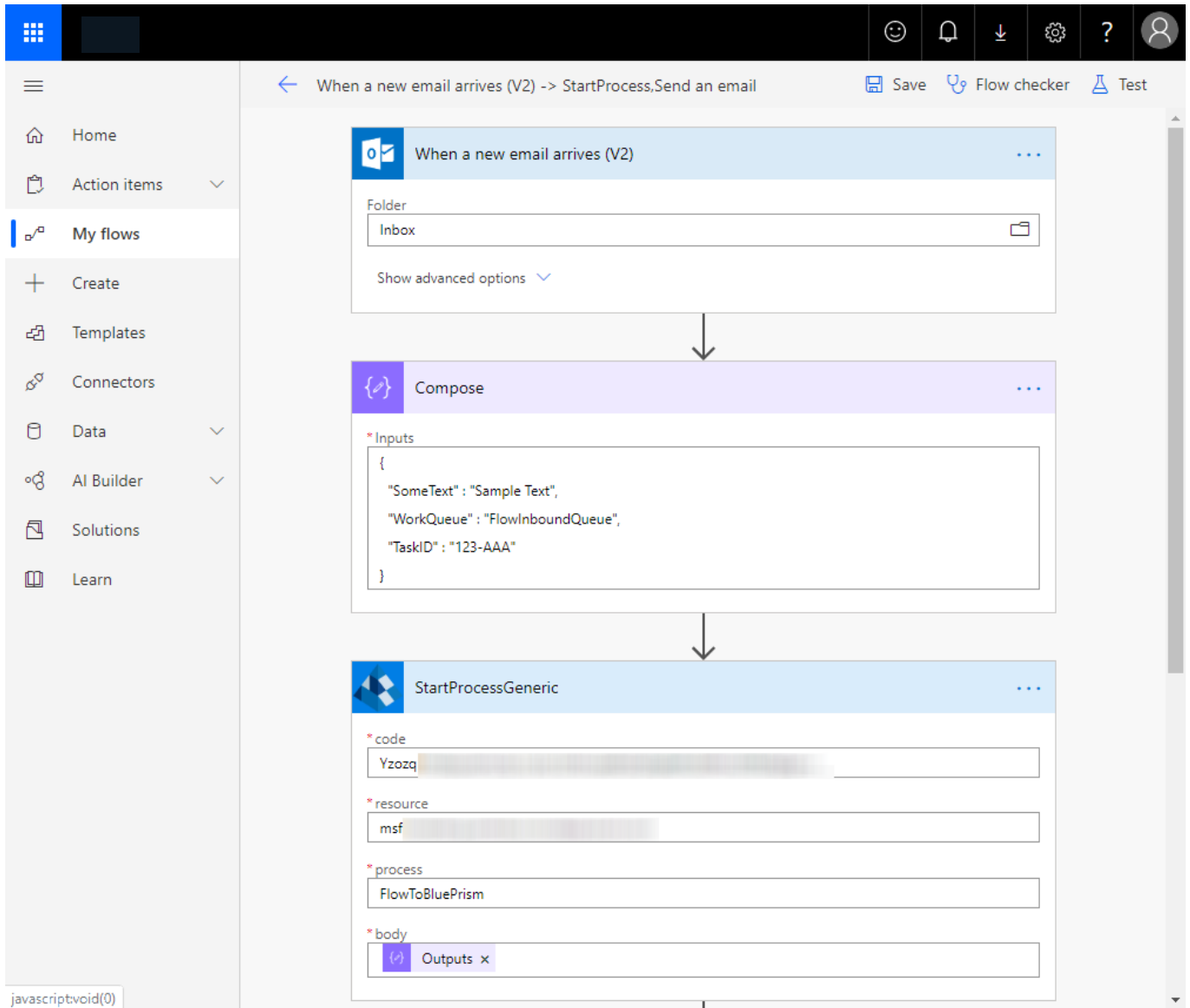
Upon completion, you will see the response that corresponds to the output of your Blue Prism Process



## Microsoft Power Automate Business Process

You can now create a new Flow Business Process, or add the Blue Prism Connector to an existing one





The screenshot displays the Blue Prism Flow Designer interface for a flow named "When a new email arrives (V2) -> StartProcess, Send an email". The flow is composed of three steps:

- When a new email arrives (V2)**: The trigger step, configured with the folder "Inbox".
- Compose**: An action step that constructs a JSON input payload. The payload is:
 

```
{
  "SomeText": "Sample Text",
  "WorkQueue": "FlowInboundQueue",
  "TaskID": "123-AAA"
}
```
- StartProcessGeneric**: An action step that initiates a process. It is configured with:
  - code**: Yzoq
  - resource**: msf
  - process**: FlowToBluePrism
  - body**: Outputs

Arrows indicate the flow sequence from the trigger to the Compose step, and then to the StartProcessGeneric step.

With the generic connector, you are responsible for constructing the input JSON payload as well as reading the JSON response from the service.