



6.7 User Guide

Blue Prism and Power Platform Integration

Document Revision 2.0



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Blue Prism Limited, 2 Cinnamon Park, Crab Lane, Warrington, WA2 0XP, United Kingdom
Registered in England: Reg. No. 4260035. Tel: +44 870 879 3000. Web: www.blueprism.com

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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 Power Automate and PowerApps.

Power Platform allows business users to standardize and automate processes in their organization through the creation of BPFs that can include 3rd 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

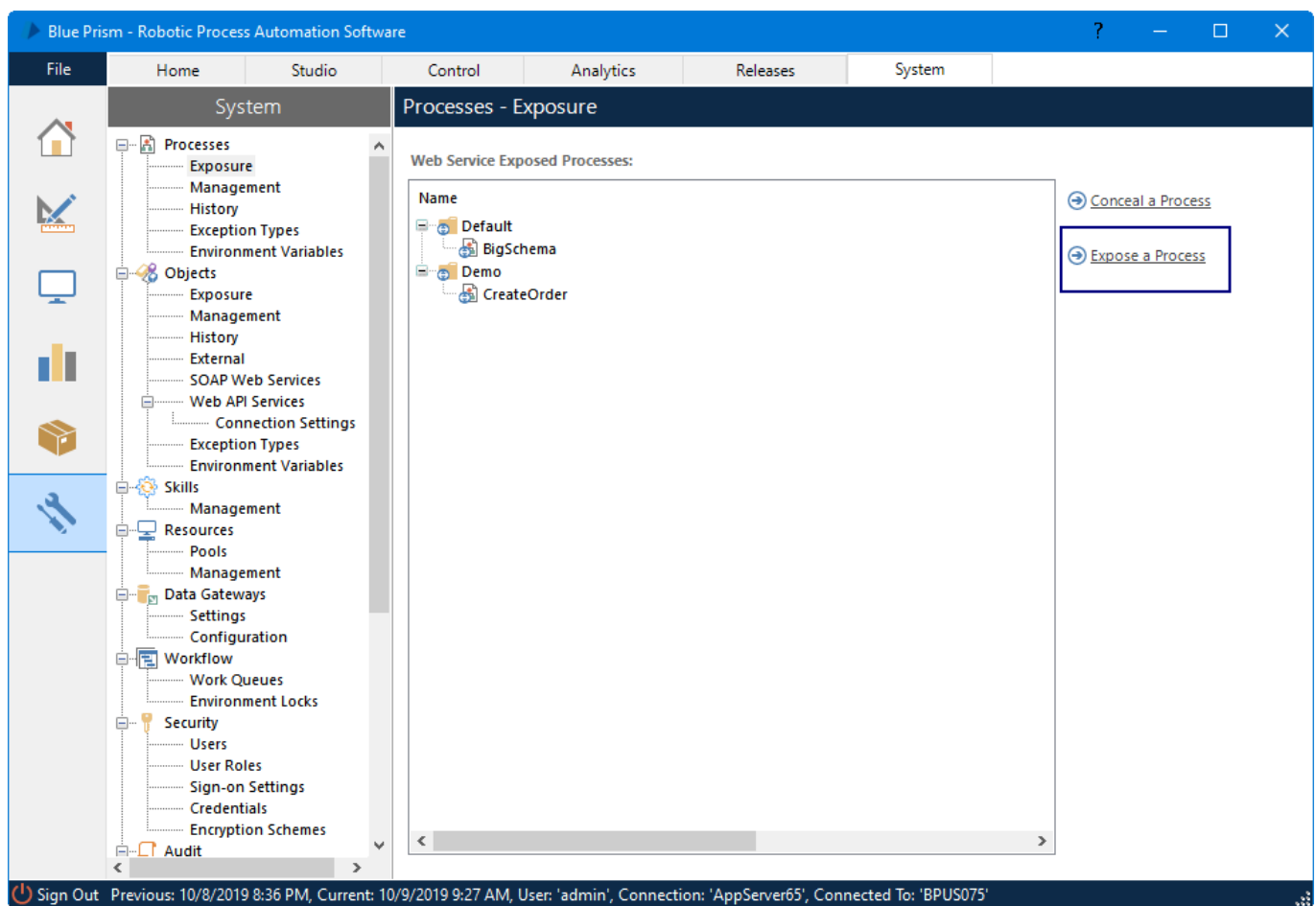
Power Platform to Blue Prism Integration

Components of the Solution

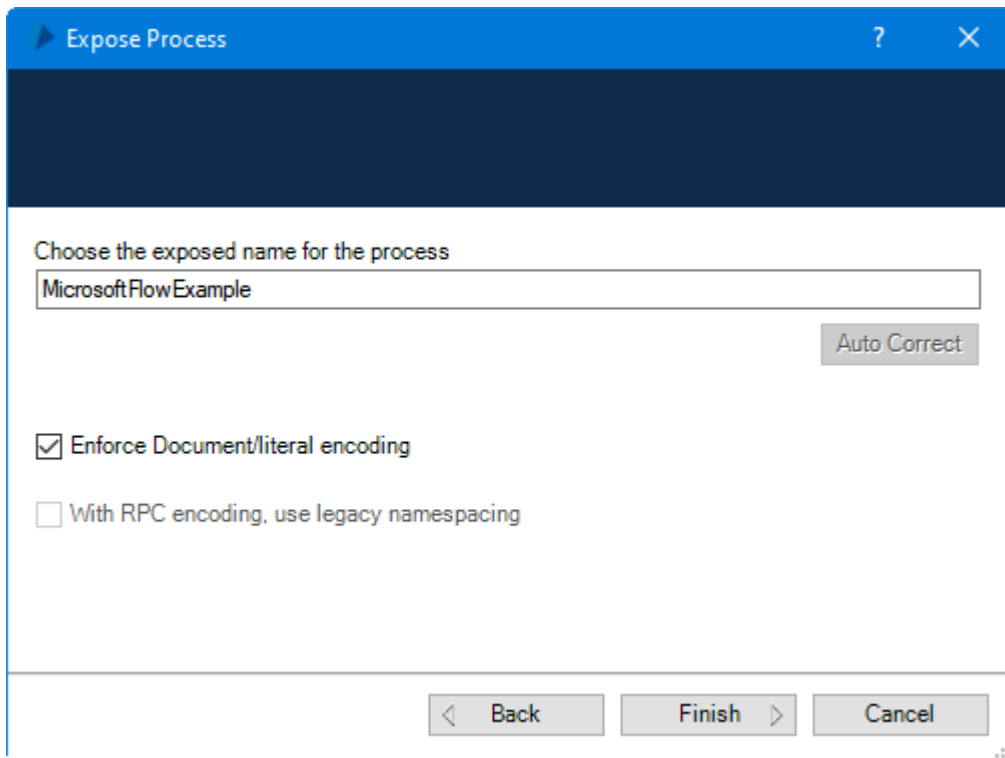
- Blue Prism Process exposed as SOAP Web Service
- Azure Function for REST Services
- Blue Prism Custom Connector
- Microsoft Power Automate Business Process

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

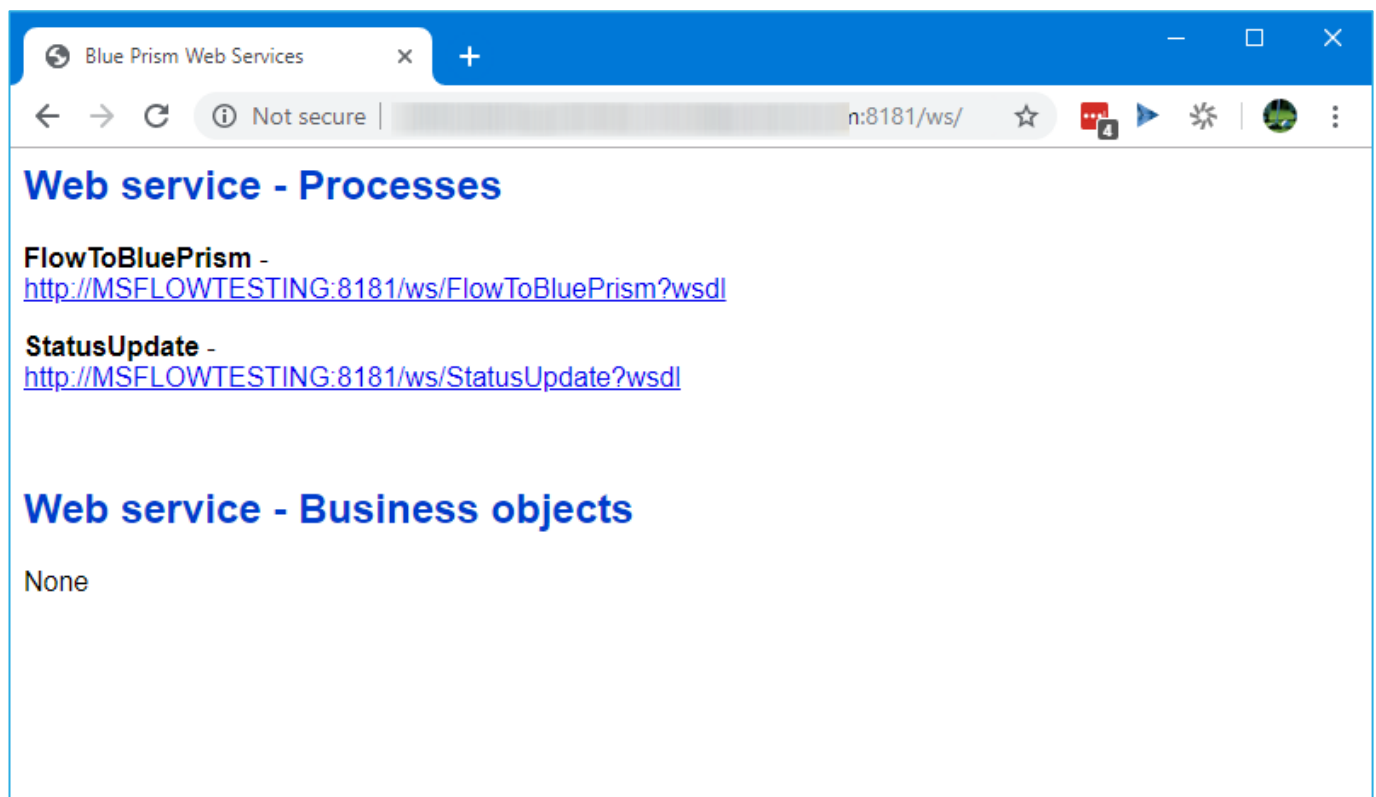
☒ Enforce Document/literal encoding

☐ 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_v2

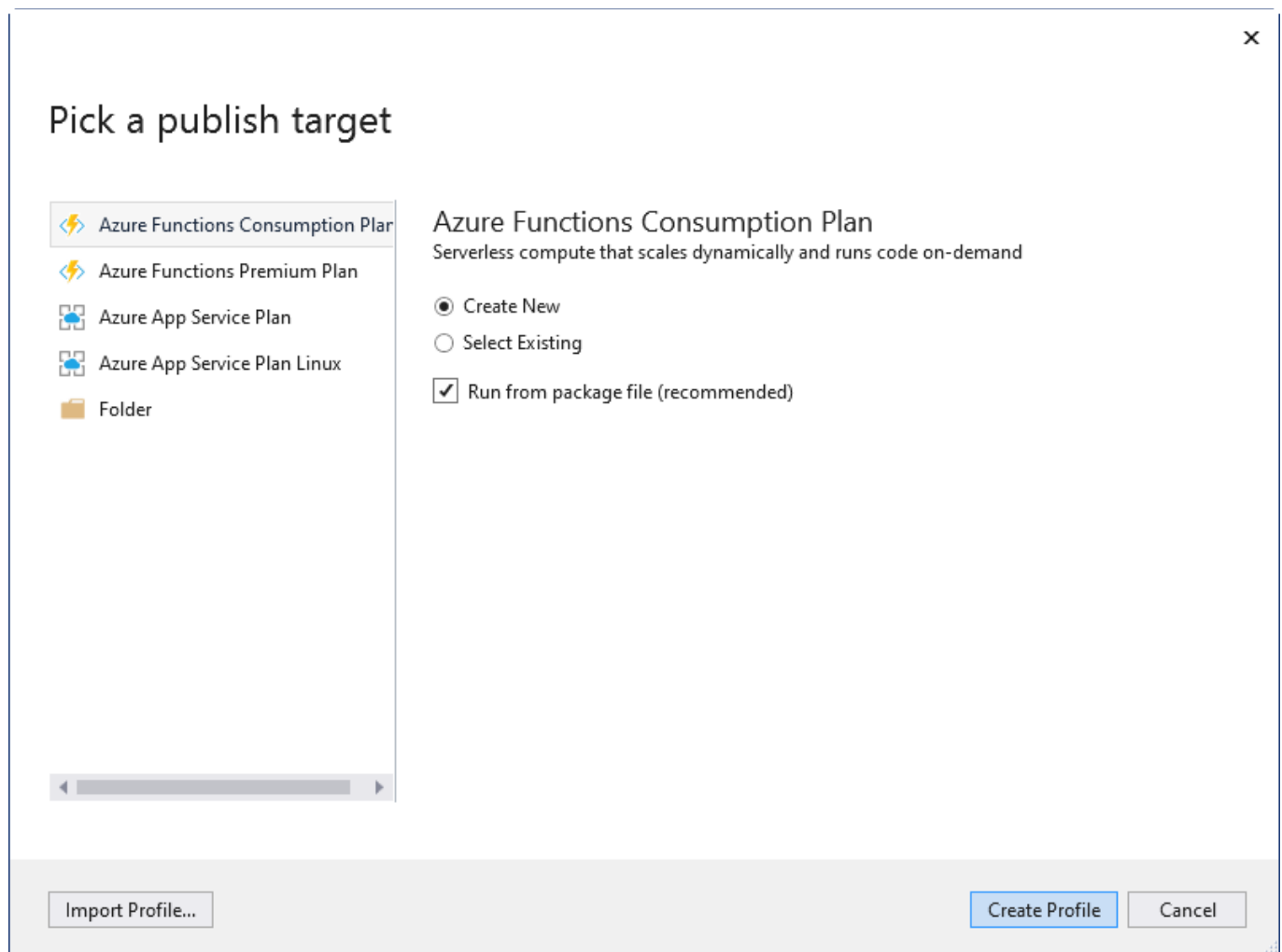
In depth tutorials on loading projects from GitHub repos can be found here:

<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>

Create a publishing for Azure



Provide the details for your Azure environment



App Service

Create new

Name

Subscription

MySubPlan

Resource group

MyResourceGroup - MySubPlan

New...

Location


South Central US

Azure Storage

MyStorage - MySubPlan - MyResourceGroup

New...


Export...




Storage account created

MyStorage - MySubPlan - MyResourceGroup

Explore additional Azure services


[Create a storage account](#)

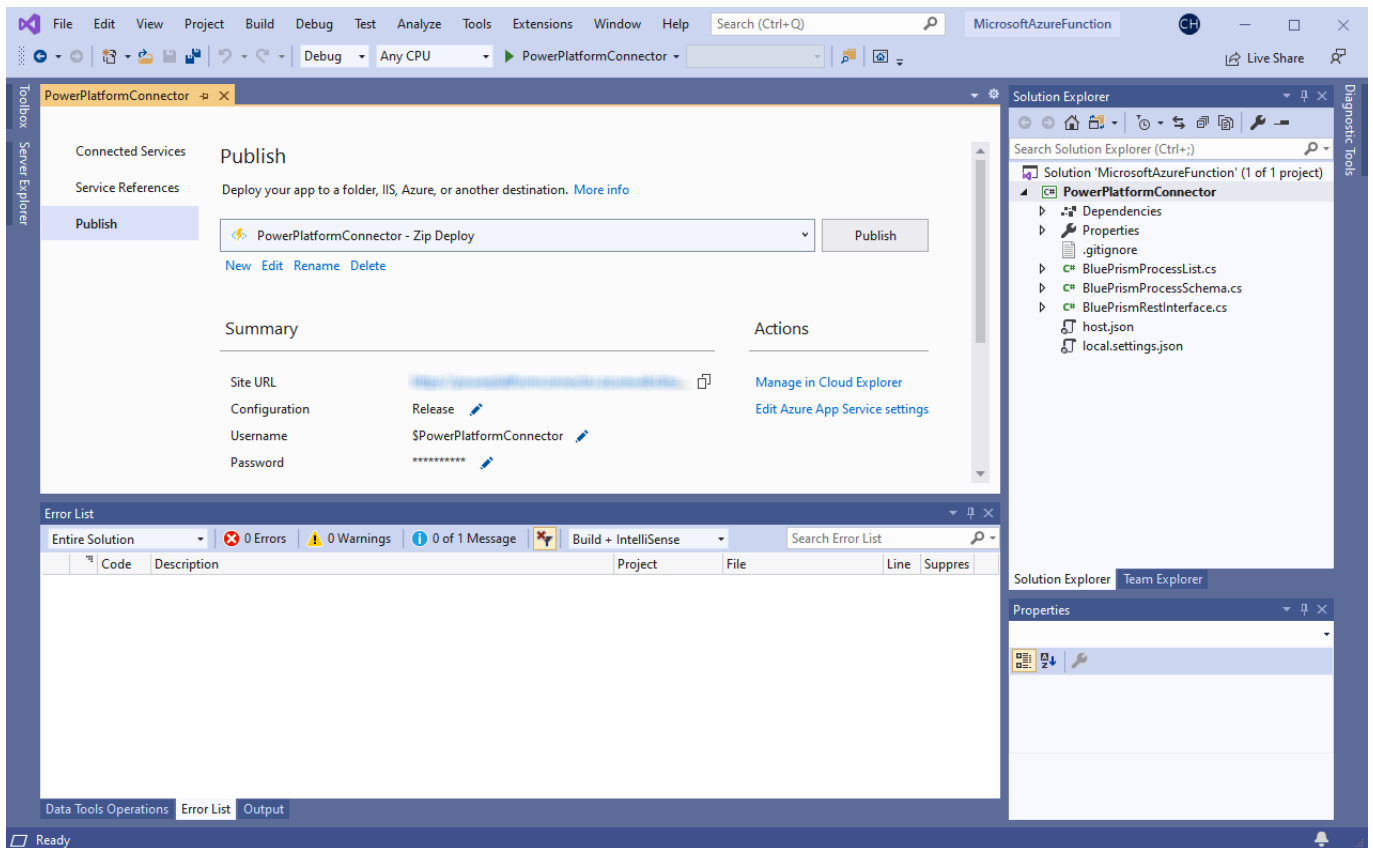

[Create a SQL Database](#)

Clicking the Create button will create the following Azure resources

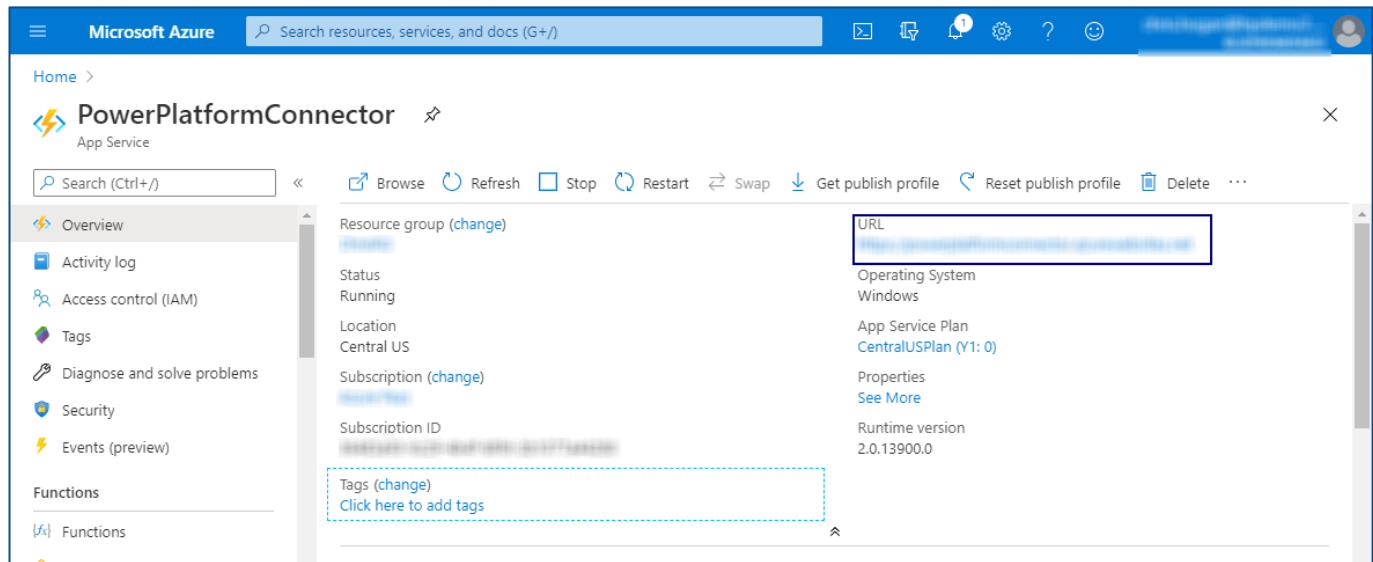
App Service - PowerPlatform-XXXXXXXX-XXXX

Create

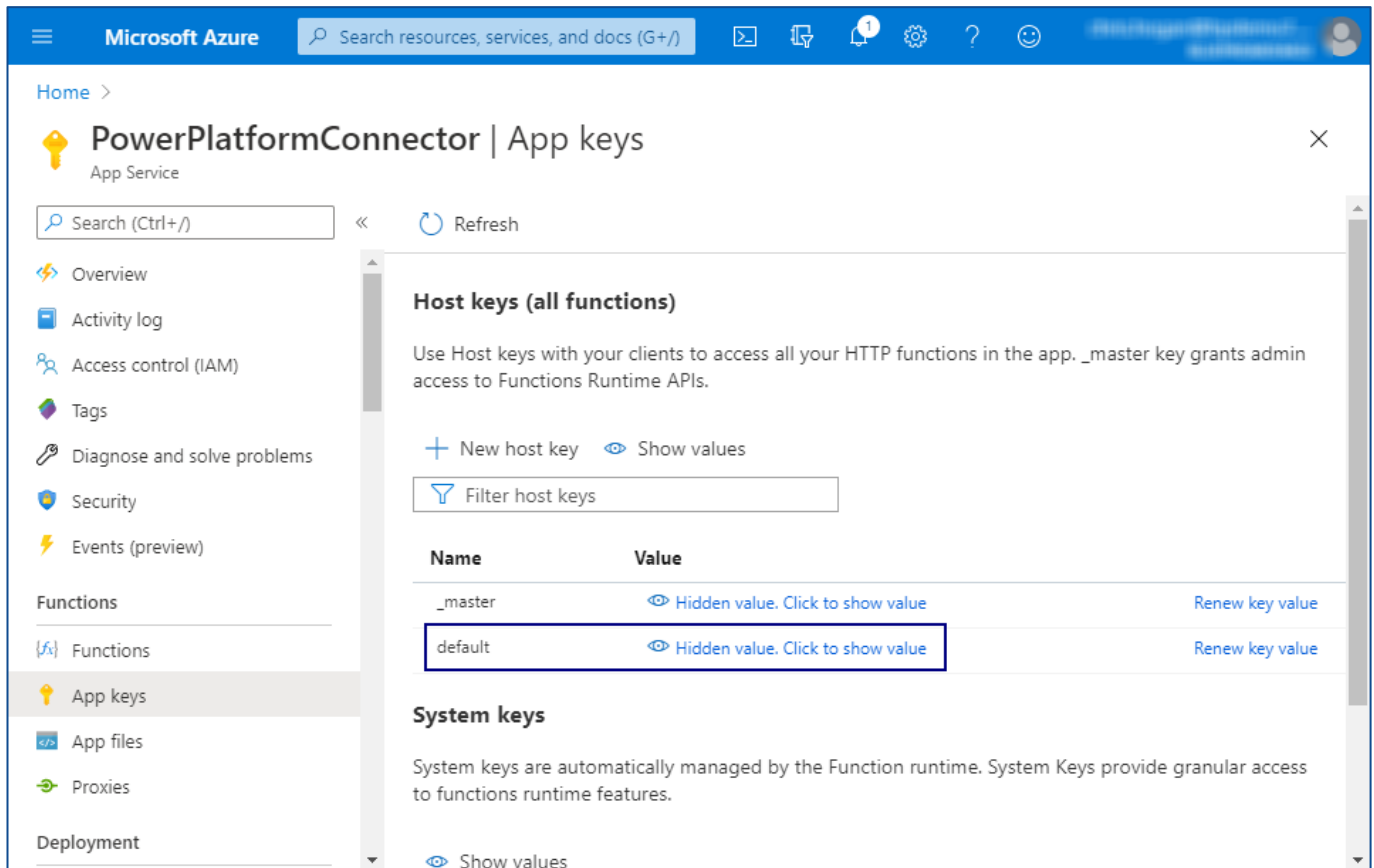
Cancel



Once published to Azure, make note of the URL



Also make note of the default App Function Key



PowerPlatformConnector | App keys

App Service

Search (Ctrl+/) Refresh

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Security

Events (preview)

Functions

Functions

App keys

App files

Proxies

Deployment

Host keys (all functions)

Use Host keys with your clients to access all your HTTP functions in the app. _master key grants admin access to Functions Runtime APIs.

+ New host key Show values

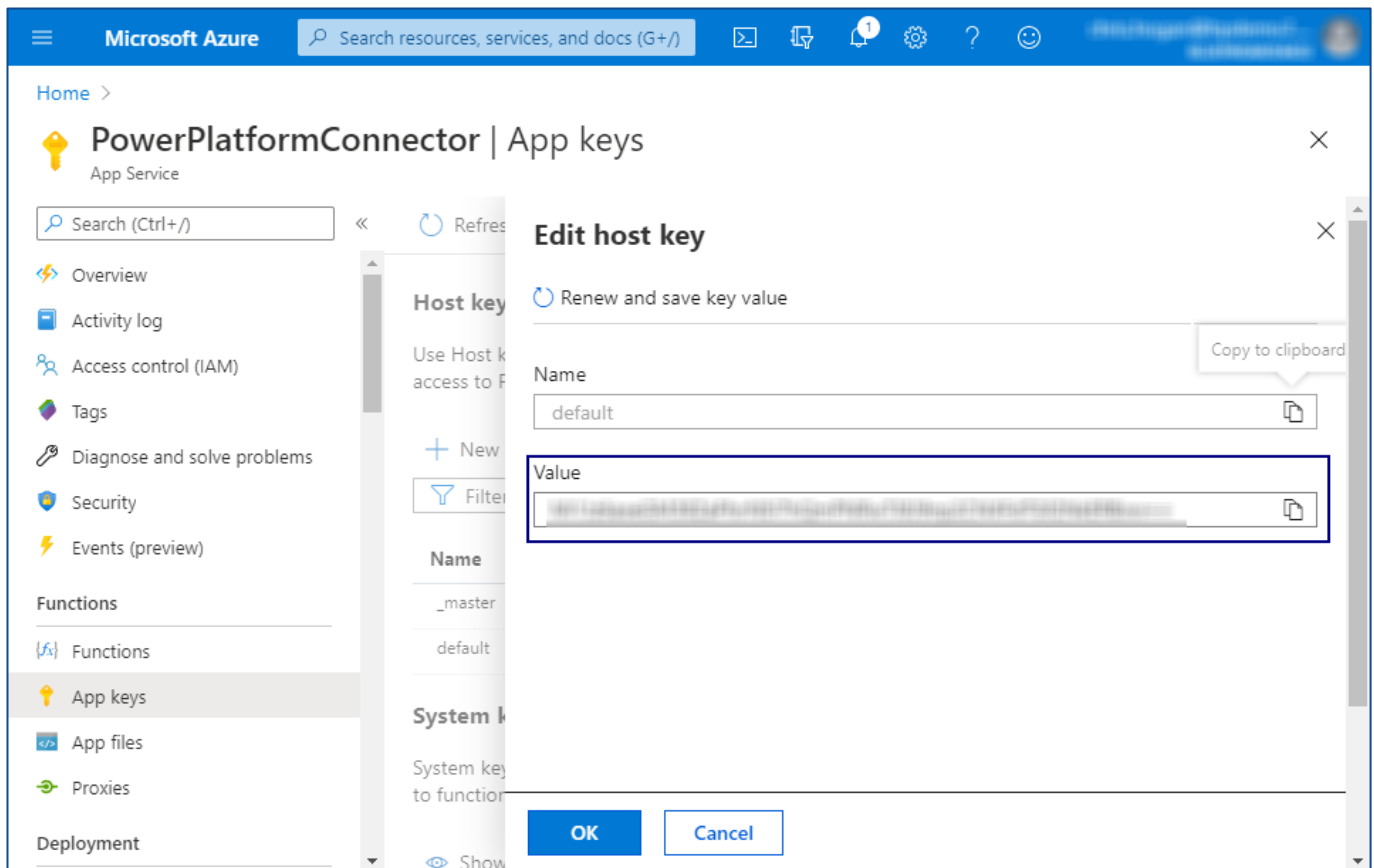
Filter host keys

Name	Value	
_master	Hidden value. Click to show value	Renew key value
default	Hidden value. Click to show value	Renew key value

System keys

System keys are automatically managed by the Function runtime. System Keys provide granular access to functions runtime features.

Show values



PowerPlatformConnector | App keys

App Service

Search (Ctrl+/) Refresh

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Security

Events (preview)

Functions

Functions

App keys

App files

Proxies

Deployment

Edit host key

Renew and save key value

Use Host keys with your clients to access all your HTTP functions in the app. _master key grants admin access to Functions Runtime APIs.

+ New host key Show values

Filter host keys

Name	Value	
_master	Hidden value. Click to show value	Renew key value
default	Hidden value. Click to show value	Renew key value

System keys

System keys are automatically managed by the Function runtime. System Keys provide granular access to functions runtime features.

Show values

Copy to clipboard

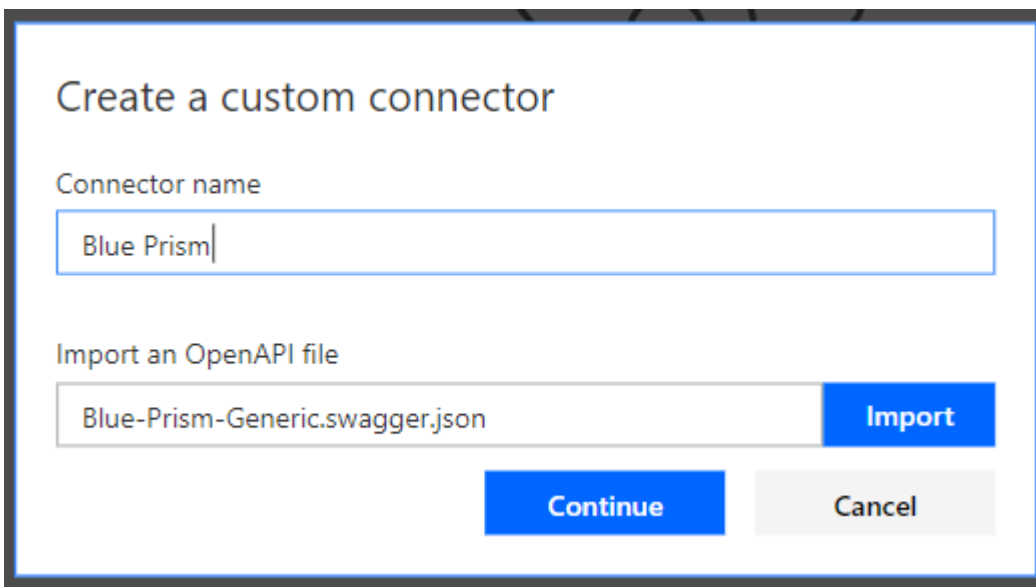
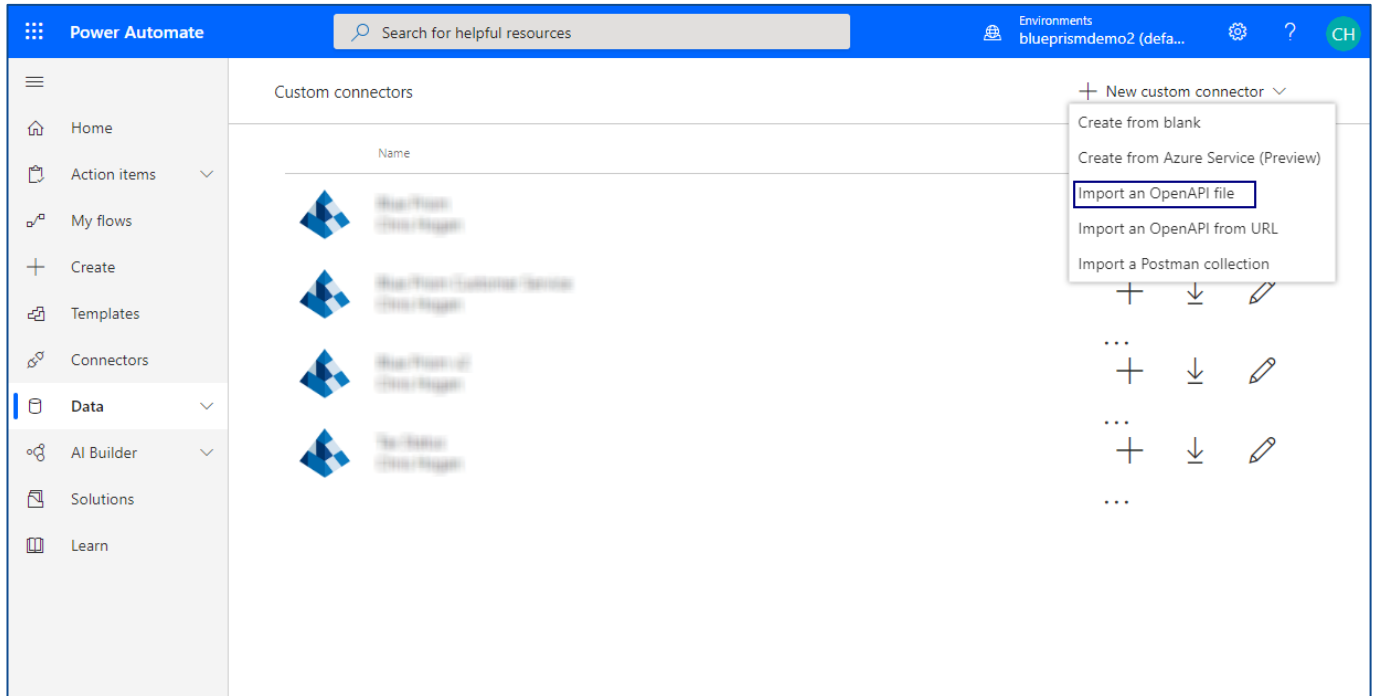
Name: default

Value: [Redacted]

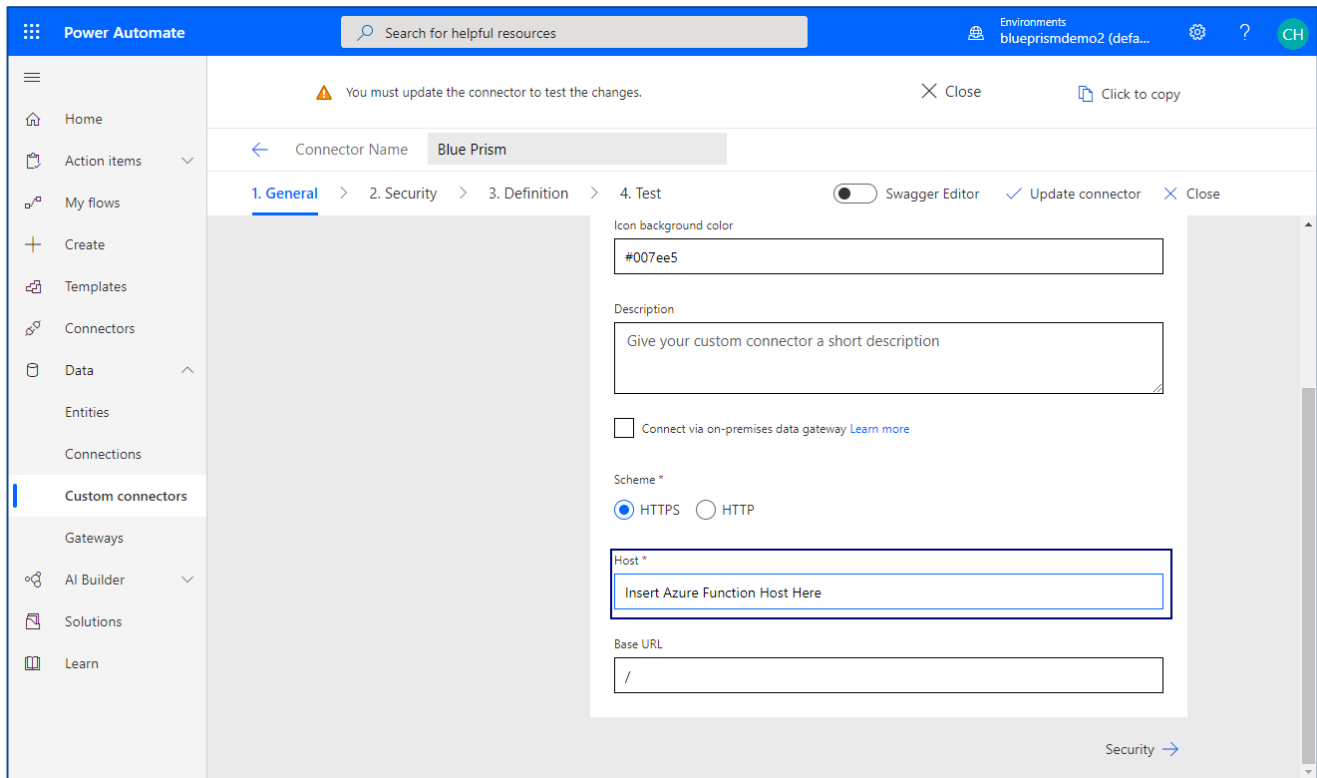
OK Cancel

Blue Prism Custom Connector

Import the Blue-Prism-v2.swagger.json connector definition from The Digital Exchange into Microsoft Power Automate

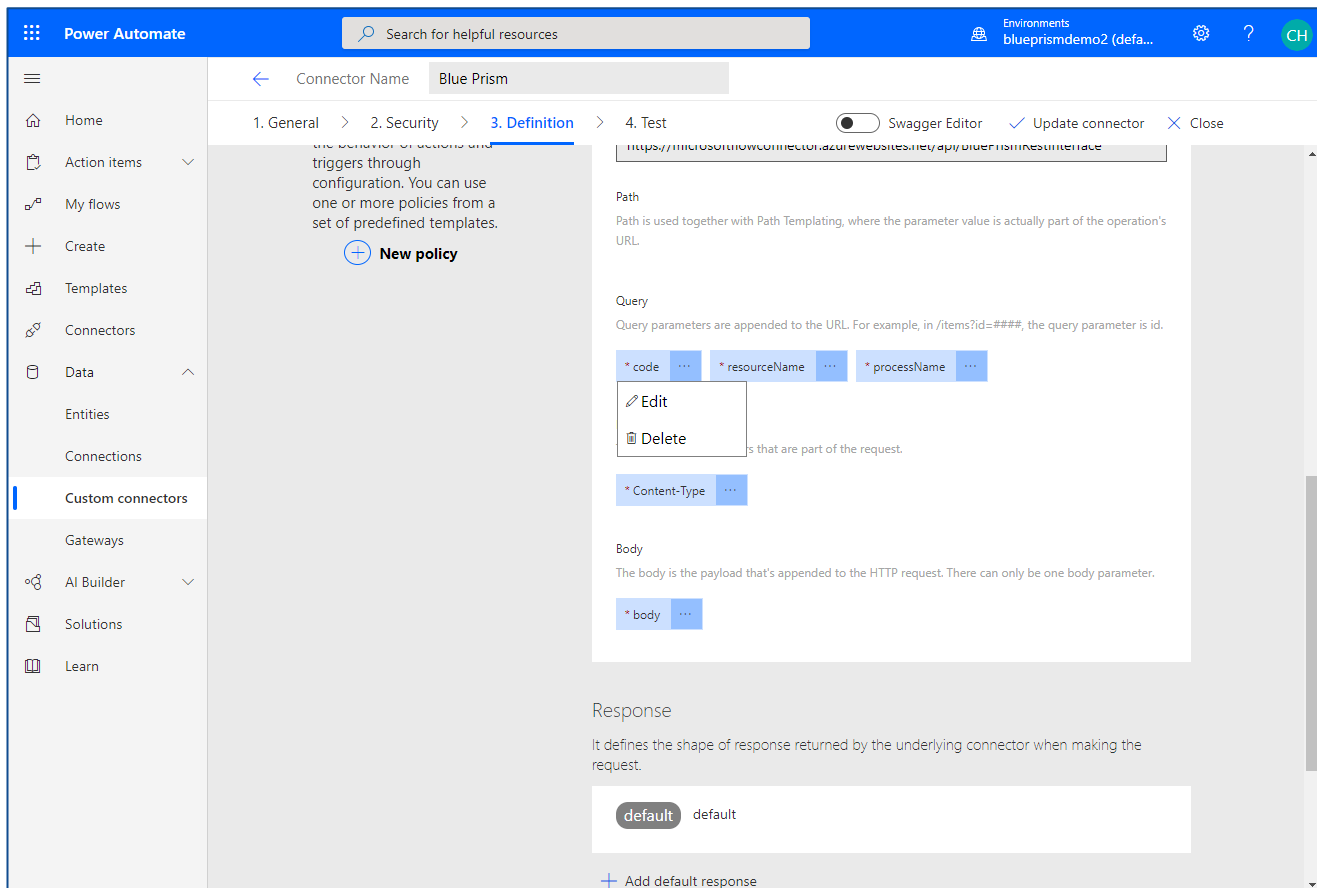


Add a custom icon if preferred, and specify the host from the Azure Function:

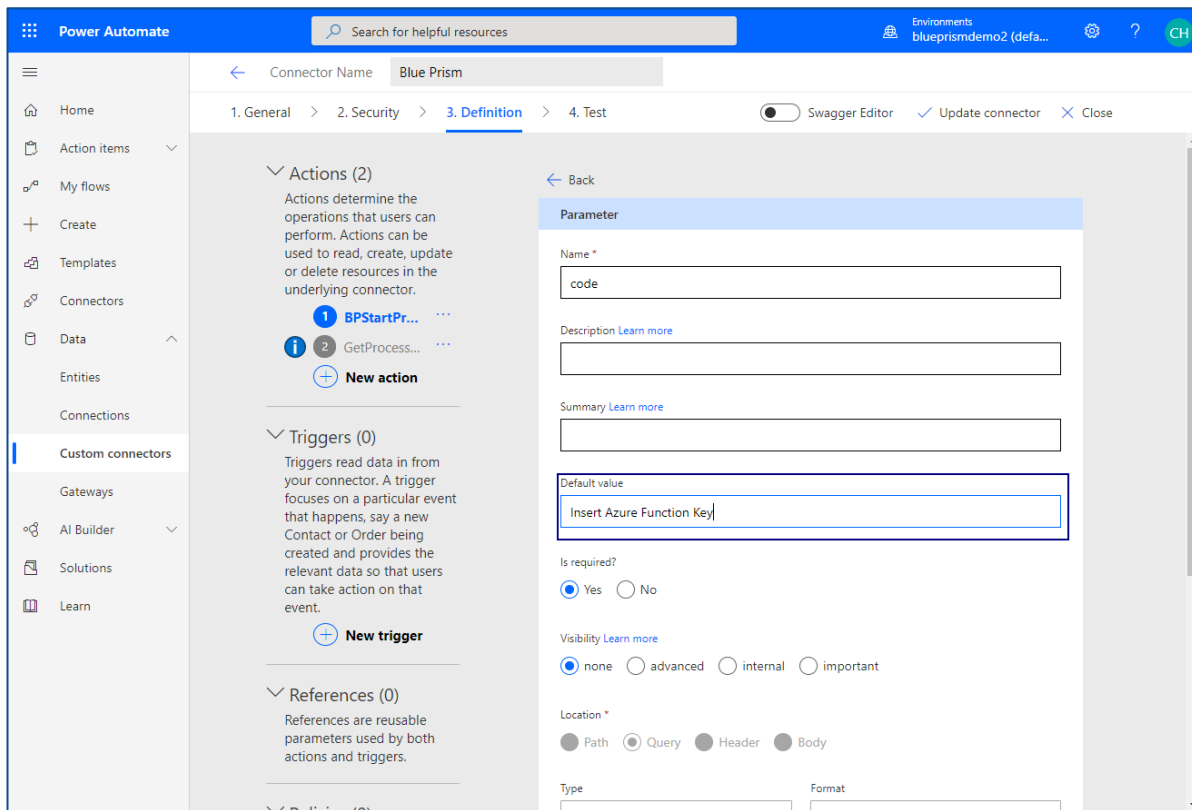


The screenshot shows the Power Automate interface with the 'Blue Prism' connector configuration. The 'General' tab is selected, and the 'Host' field is highlighted with a red box. The 'Host' field contains the text 'Insert Azure Function Host Here'. Other fields include 'Icon background color' (set to #007ee5), 'Description' (placeholder: Give your custom connector a short description), 'Scheme' (set to HTTPS), and 'Base URL' (placeholder: /).

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



The screenshot shows the Power Automate interface with the 'Blue Prism' connector configuration. The 'Definition' tab is selected, and the 'code' field is highlighted with a red box. The 'code' field contains the text 'https://microsoft.connector.azurewebsites.net/api/OAuthUserInfo'. Other fields include 'Path' (placeholder: Path is used together with Path Templating, where the parameter value is actually part of the operation's URL), 'Query' (placeholder: Query parameters are appended to the URL. For example, in /items?id=###, the query parameter is id.), 'Body' (placeholder: The body is the payload that's appended to the HTTP request. There can only be one body parameter.), and 'Response' (placeholder: It defines the shape of response returned by the underlying connector when making the request.).



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...

New action

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.

New trigger

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

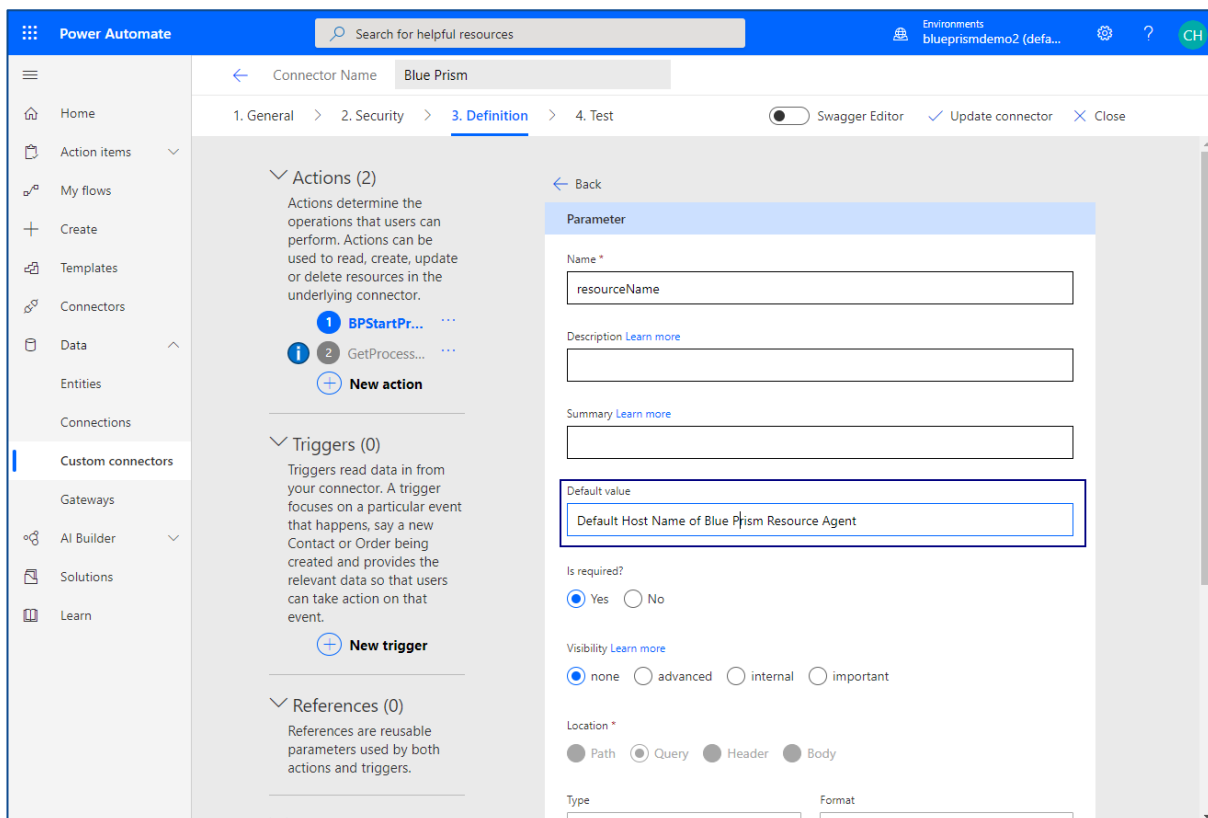
none advanced internal important

Location *

Path Query Header Body

Type Format

You can also provide the default values for the Resource Agent Host (and optional port number <hostname>:<port>). This can also be specified later when using the connector in a Flow.



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

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New trigger

References (0)

References are reusable parameters used by both actions and triggers.

Parameter

Name *

resourceName

Description Learn more

Summary Learn more

Default value

Default Host Name of Blue Prism Resource Agent

Is required?

Yes No

Visibility Learn more

none advanced internal important

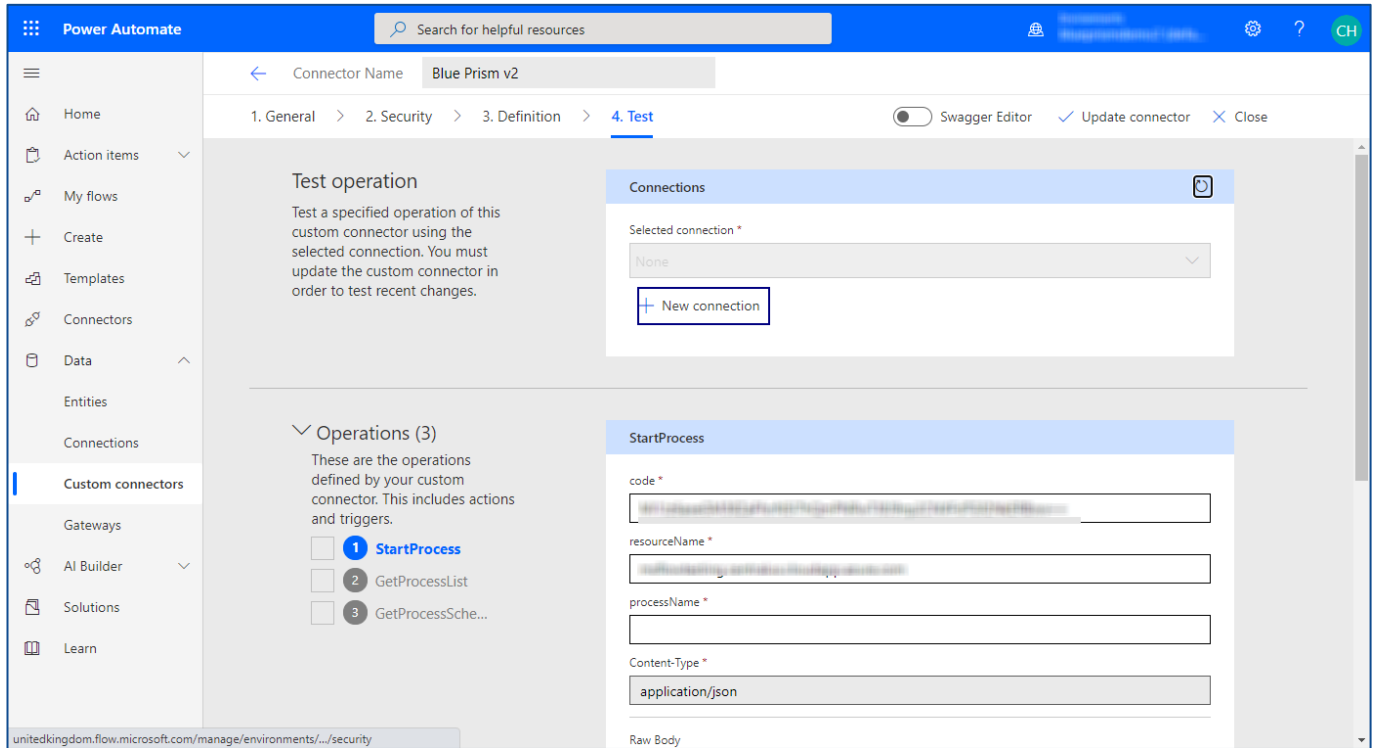
Location *

Path Query Header Body

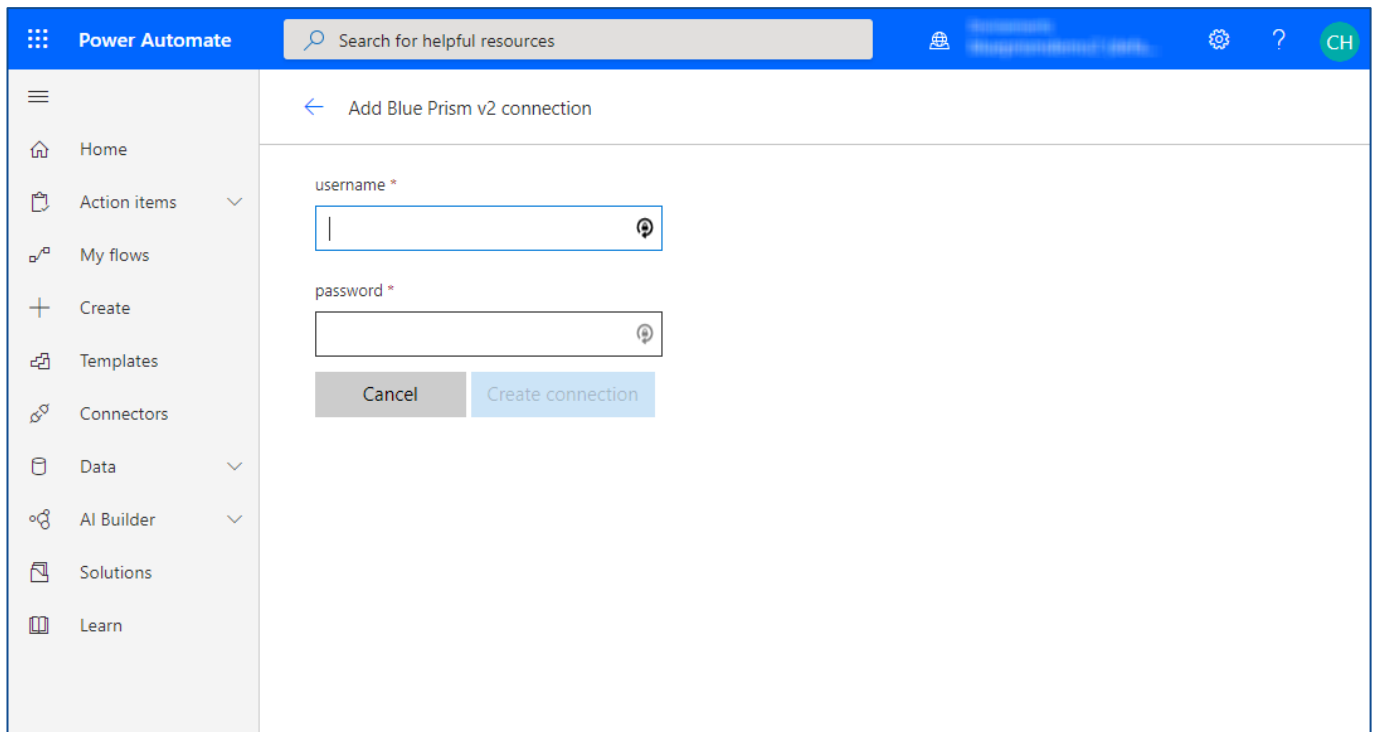
Type Format

After supplying the function name host, as well as the Blue Prism Resource host, click “Update Connector” and proceed to the “Test” section.

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

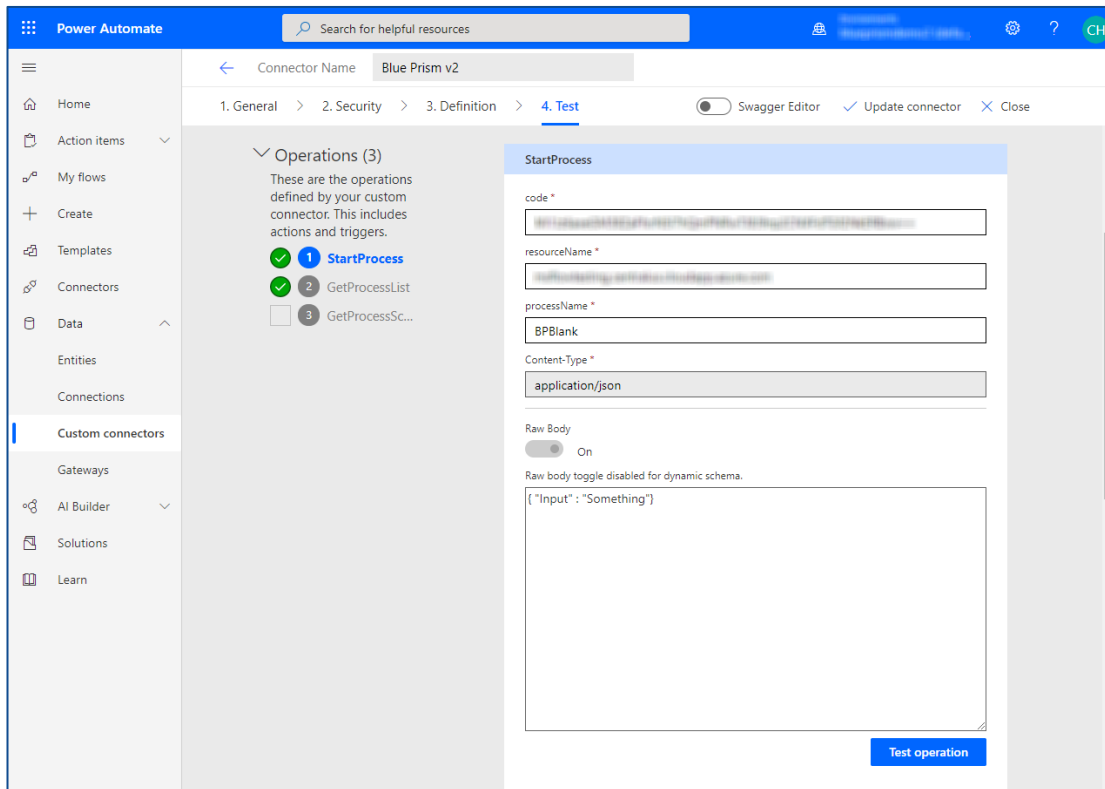


The screenshot shows the Power Automate interface with the 'Blue Prism v2' connector selected. The 'Test' tab is active, displaying the 'Test operation' section. Below this, a list of operations is shown, with 'StartProcess' selected. The details for 'StartProcess' are visible on the right, including fields for 'code', 'resourceName', 'processName', and 'Content-Type'.

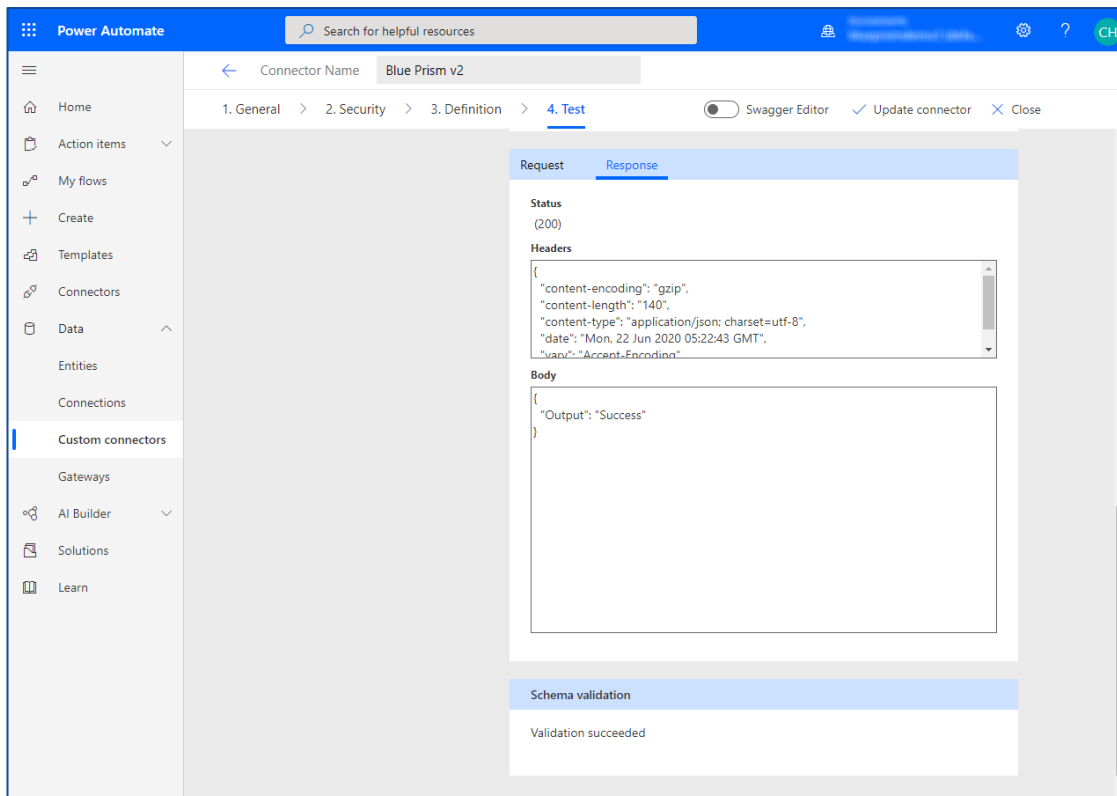


The screenshot shows the 'Add Blue Prism v2 connection' dialog in Power Automate. It contains two input fields: 'username' and 'password'. Below the fields are two buttons: 'Cancel' and 'Create connection'.

The API Code and Resource Name should be filled in. In the testing environment you will need to provide a Process name and input JSON payload. When using the connector in a Power Automate Flow, the Process Name as well as data inputs/outputs are dynamically retrieved for you.

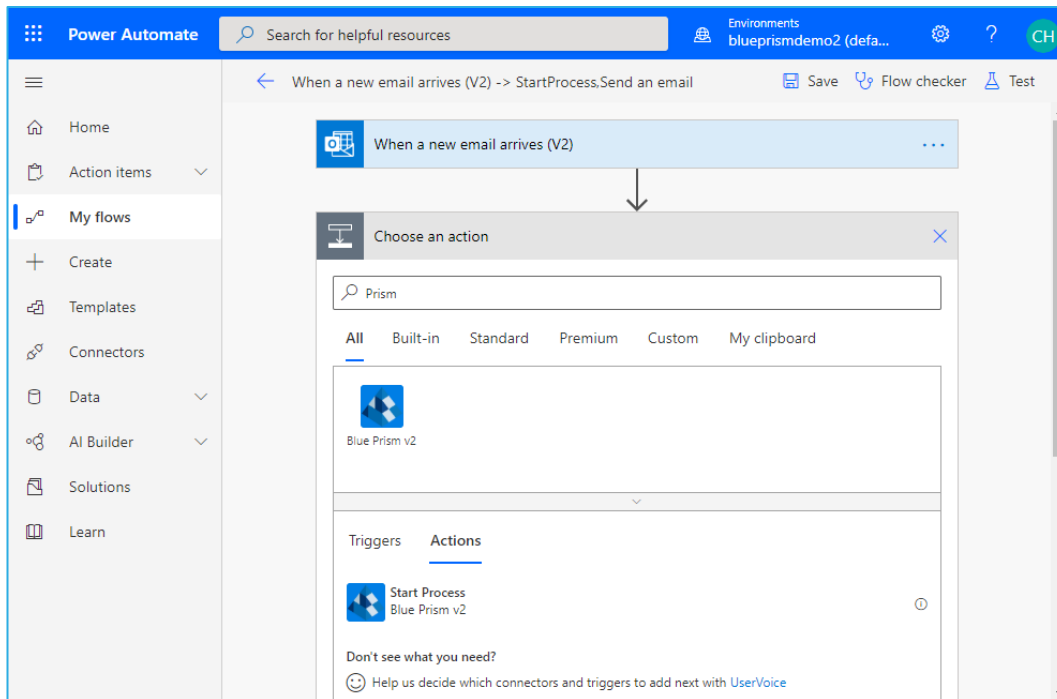


Upon completion, you will see the response that corresponds to the output of your Blue Prism Process

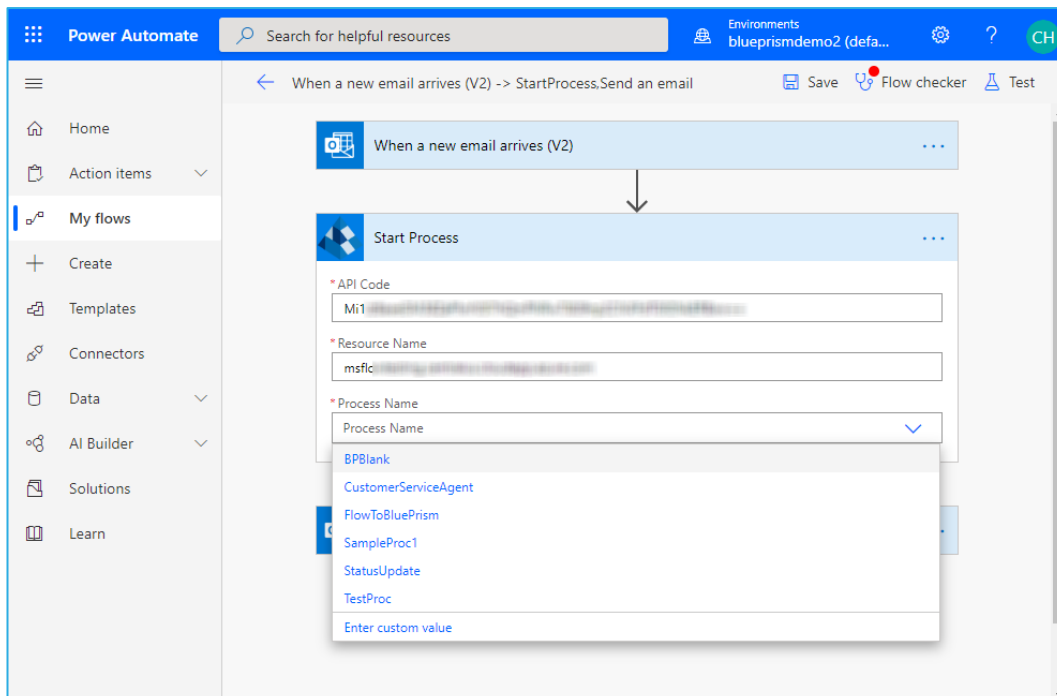


Microsoft Power Automate Business Process

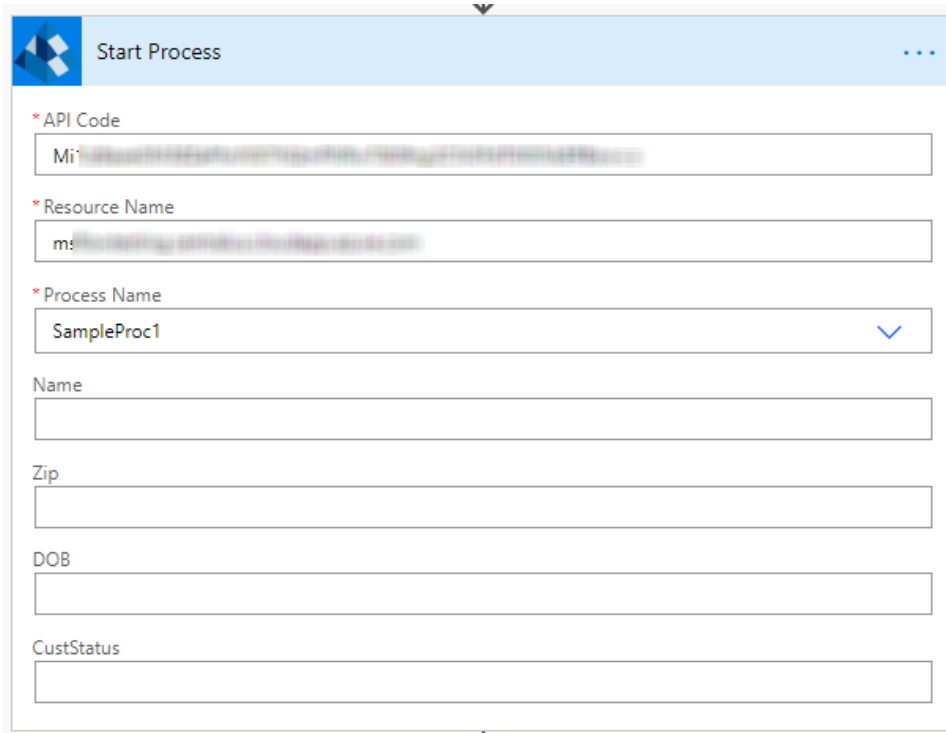
You can now create a new Flow Business Process, or add the Blue Prism Connector to an existing one



Select the Process to start from the drop down list



Based upon the process you select, you will be presented with the inputs needed by that process



Start Process

* API Code
Mi...

* Resource Name
m...

* Process Name
SampleProc1

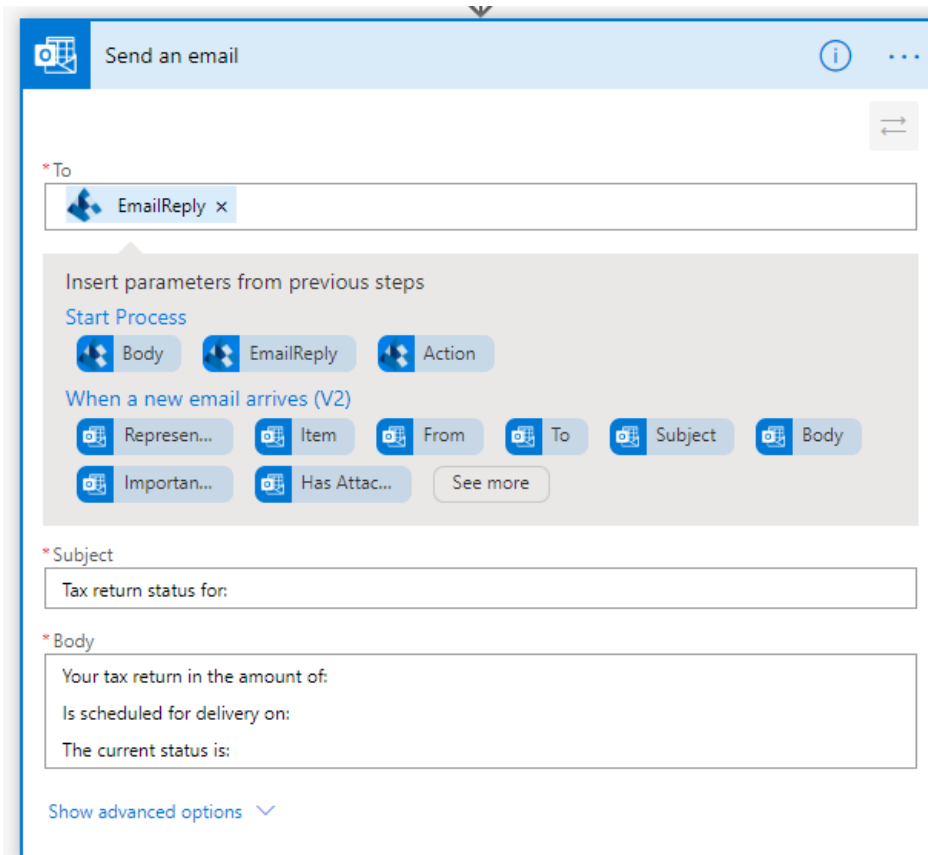
Name

Zip

DOB

CustStatus

Downstream action in the Flow will be able to use the outputs from the Blue Prism process as inputs



Send an email

* To
EmailReply x

Insert parameters from previous steps

Start Process
Body EmailReply Action

When a new email arrives (V2)
Represent... Item From To Subject Body
Importan... Has Attac... See more

* Subject
Tax return status for:

* Body
Your tax return in the amount of:
Is scheduled for delivery on:
The current status is:

Show advanced options