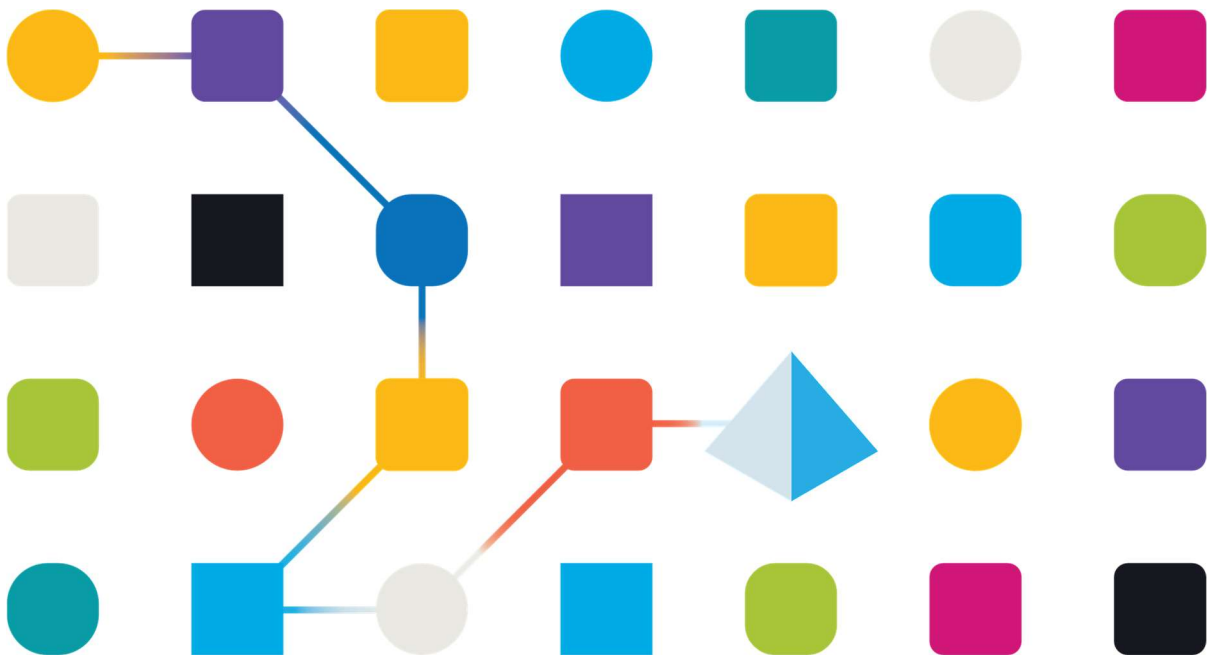# blueprism®

Azure Form Recognizer VBO
User Guide

Document Revision 1.0

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Contents

Figures

Introduction

This document describes the various actions exposed by the Form Recognizer VBO (Visual Business Object) for working with Azure Form Recognizer.

Azure Form Recognizer is a cloud-based Azure Applied AI Service that uses machine-learning models to extract key-value pairs, text, and tables from your documents.

NOTE: Only a subset of the available Azure Form Recognizer endpoints has been implemented in this VBO. Additional endpoints will be added in later versions.

You can find further details about the **Form Recognizer API 2.1** at the following links:

- https://learn.microsoft.com/en-us/azure/applied-ai-services/form-recognizer/quickstarts/get-started-sdks-rest-api?view=form-recog-2.1.0&pivots=programming-language-rest-api

- https://learn.microsoft.com/en-us/azure/applied-ai-services/form-recognizer/overview?view=form-recog-2.1.0

- https://westus.dev.cognitive.microsoft.com/docs/services/form-recognizer-api-v2-1/operations/AnalyzeWithCustomForm

Prerequisites

The following pre-requisites apply to this VBO:

- Blue Prism v6.7 or later.
- This VBO requires the following additional VBOs, available from the Digital Exchange:
  - Utility – HTTP v6.10.5 or later
  - Utility – JSON v10.0.0 or later
- Form Recognizer Resource.

  Follow steps as outlined on this page https://learn.microsoft.com/en-us/azure/applied-ai-services/form-recognizer/create-a-form-recognizer-resource?view=form-recog-2.1.0 to create the Form Recognizer Resource in your Azure account.

  Make sure to note the **Key** and **Endpoint** after following the steps

- Configure VBO

  See the Configuration section for details about configuring the VBO before use

Configuration

Configure VBO

1. Set the **Key** in the Access Token Collection
2. Set the **Endpoint** in the Base URL Data Item
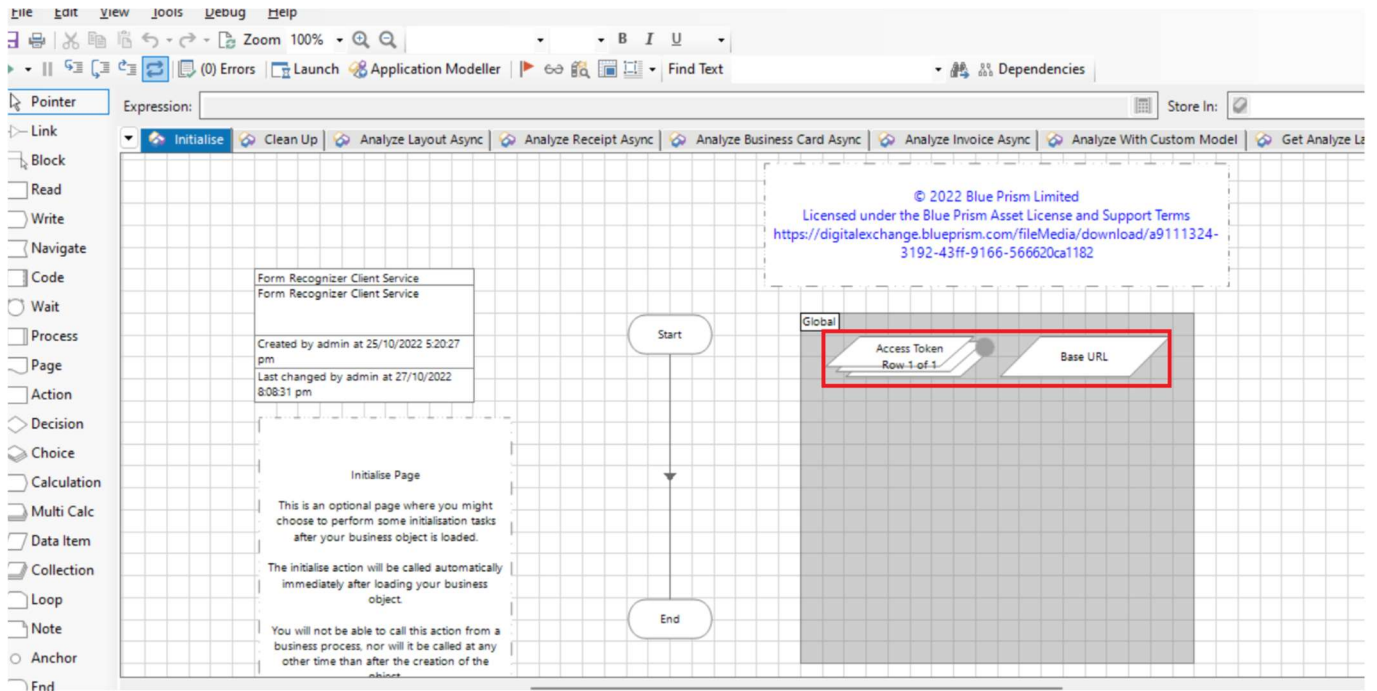

Figure 1

Congratulations! You are now prepared to use the Form Recognizer VBO in your processes.

Using the Asset

Use this section to describe the published actions/pages of the Asset.

Analyze Business Card Async

Extract field text and semantic values from a given business card document. The input document must be of one of the supported content types - 'application/pdf', 'image/jpeg', 'image/png' or 'image/tiff'.

Parameter	Direction	Data Type	Description
FilePath	In	Text	The path of the file
includeTextDetails	In	Flag	Optional. Include text lines and element references in the result. Defaults to True
locale	In	Text	Optional. Locale of the input document. Supported locales include: en-AU, en-CA, en-GB, en-IN, en-US(default).
Success	Out	Flag	A flag indicating the success or failure of the action.
Response Message	Out	Text	If an error is encountered, further details may be available here.
Result ID	Out	Text	Result ID used to query the status of the asynchronous operation and get the results.

Analyze Invoice Async

Extract field text and semantic values from a given invoice document. The input document must be of one of the supported content types - 'application/pdf', 'image/jpeg', 'image/png' or 'image/tiff'.

Parameter	Direction	Data Type	Description
FilePath	In	Text	The path of the file
includeTextDetails	In	Flag	Optional. Include text lines and element references in the result. Defaults to True
locale	In	Text	Optional. Locale of the input document. Supported locales include: en-AU, en-CA, en-GB, en-IN, en-US(default).
Success	Out	Flag	A flag indicating the success or failure of the action.
Response Message	Out	Text	If an error is encountered, further details may be available here.

Result ID	Out	Text	Result ID used to query the status of the asynchronous operation and get the results.

Analyze Layout Async

Extract text and layout information from a given document. The input document must be of one of the supported content types - 'application/pdf', 'image/jpeg', 'image/png', 'image/tiff' or 'image/bmp'.

Parameter	Direction	Data Type	Description
FilePath	In	Text	The path of the file
Success	Out	Flag	A flag indicating the success or failure of the action.
Response Message	Out	Text	If an error is encountered, further details may be available here.
Result ID	Out	Text	Result ID used to query the status of the asynchronous operation and get the results.

Analyze Receipt Async

Extract field text and semantic values from a given receipt document. The input document must be of one of the supported content types - 'application/pdf', 'image/jpeg', 'image/png' or 'image/tiff'.

Parameter	Direction	Data Type	Description
FilePath	In	Text	The path of the file
Success	Out	Flag	A flag indicating the success or failure of the action.
Response Message	Out	Text	If an error is encountered, further details may be available here.
Result ID	Out	Text	Result ID used to query the status of the asynchronous operation and get the results.

Analyze With Custom Model

Extract key-value pairs, tables, and semantic values from a given document. The input document must be of one of the supported content types - 'application/pdf', 'image/jpeg', 'image/png' or 'image/tiff'.

Parameter	Direction	Data Type	Description
FilePath	In	Text	The path of the file

modelId	In	Text	Model identifier
Success	Out	Flag	A flag indicating the success or failure of the action.
Response Message	Out	Text	If an error is encountered, further details may be available here.
Result ID	Out	Text	Result ID used to query the status of the asynchronous operation and get the results.

Delete Custom Model

Mark model for deletion. Model artifacts will be permanently removed within a predetermined period.

Parameter	Direction	Data Type	Description
modelId	In	Text	Model identifier
Success	Out	Flag	A flag indicating the success or failure of the action.
Response Message	Out	Text	If an error is encountered, further details may be available here.

Get Analyze Business Card Result

Track the progress and obtain the result of the analyze business card operation.

Parameter	Direction	Data Type	Description
resultId	In	Text	Analyze operation result identifier.
Success	Out	Flag	A flag indicating the success or failure of the action.
Response Message	Out	Text	If an error is encountered, further details may be available here.
Operation status	Out	Text	Operation status
documentResults	Out	Collection	Document-level information extracted from the input.
errors	Out	Collection	List of errors reported during the analyze operation.
pageResults	Out	Collection	The "pageResults" collection includes the tables extracted. For each table, the text, row, and column index, row and column spanning, bounding box, and more are extracted.

readResults	Out	Collection	The "readResults" collection contains every line of text with its respective bounding box placement on the page.

Get Analyze Form Result

Obtain current status and the result of the analyze form operation.

Parameter	Direction	Data Type	Description
resultId	In	Text	Analyze operation result identifier.
modelId	In	Text	Model identifier.
Success	Out	Flag	A flag indicating the success or failure of the action.
Response Message	Out	Text	If an error is encountered, further details may be available here.
Operation status	Out	Text	Operation status
documentResults	Out	Collection	Document-level information extracted from the input.
errors	Out	Collection	List of errors reported during the analyze operation.
pageResults	Out	Collection	The "pageResults" collection includes the tables extracted. For each table, the text, row, and column index, row and column spanning, bounding box, and more are extracted.
readResults	Out	Collection	The "readResults" collection contains every line of text with its respective bounding box placement on the page.

Get Analyze Invoice Result

Track the progress and obtain the result of the analyze invoice operation.

Parameter	Direction	Data Type	Description
resultId	In	Text	Analyze operation result identifier.
Success	Out	Flag	A flag indicating the success or failure of the action.
Response Message	Out	Text	If an error is encountered, further details may be available here.
Operation status	Out	Text	Operation status

documentResults	Out	Collection	Document-level information extracted from the input.
errors	Out	Collection	List of errors reported during the analyze operation.
pageResults	Out	Collection	The "pageResults" collection includes the tables extracted. For each table, the text, row, and column index, row and column spanning, bounding box, and more are extracted.
readResults	Out	Collection	The "readResults" collection contains every line of text with its respective bounding box placement on the page.

Get Analyze Layout Async

Track the progress and obtain the result of the analyze layout operation

Parameter	Direction	Data Type	Description
resultId	In	Text	Analyze operation result identifier.
Success	Out	Flag	A flag indicating the success or failure of the action.
Response Message	Out	Text	If an error is encountered, further details may be available here.
Operation status	Out	Text	Operation status
documentResults	Out	Collection	Document-level information extracted from the input.
errors	Out	Collection	List of errors reported during the analyze operation.
pageResults	Out	Collection	The "pageResults" collection includes the tables extracted. For each table, the text, row, and column index, row and column spanning, bounding box, and more are extracted.
readResults	Out	Collection	The "readResults" collection contains every line of text with its respective bounding box placement on the page.

Get Analyze Receipt Result

Track the progress and obtain the result of the analyze receipt operation.

Parameter	Direction	Data Type	Description
resultId	In	Text	Analyze operation result identifier.

Success	Out	Flag	A flag indicating the success or failure of the action.
Response Message	Out	Text	If an error is encountered, further details may be available here.
Operation status	Out	Text	Operation status
documentResults	Out	Collection	Document-level information extracted from the input.
errors	Out	Collection	List of errors reported during the analyze operation.
pageResults	Out	Collection	The "pageResults" collection includes the tables extracted. For each table, the text, row, and column index, row and column spanning, bounding box, and more are extracted.
readResults	Out	Collection	The "readResults" collection contains every line of text with its respective bounding box placement on the page.

Get Custom Model

Get detailed information about a custom model.

Parameter	Direction	Data Type	Description
modelId	In	Text	Model identifier.
Success	Out	Flag	A flag indicating the success or failure of the action.
Response Message	Out	Text	If an error is encountered, further details may be available here.
Model Information	Out	Collection	Information pertaining to the model

Get Custom Models

Get information about all custom models

Parameter	Direction	Data Type	Description
op	In	Text	Specify whether to return summary or full list of models. Value can be either "summary" or "full". Defaults to "summary"
Success	Out	Flag	A flag indicating the success or failure of the action.

Response Message	Out	Text	If an error is encountered, further details may be available here.
Model Information	Out	Collection	Information pertaining to the models

Train Custom Model Async

Create and train a custom model.

Parameter	Direction	Data Type	Description
Source Path	In	Text	Source path containing the training documents. Externally accessible Azure storage blob container Uri (preferably a Shared Access Signature Uri)
Success	Out	Flag	A flag indicating the success or failure of the action.
Response Message	Out	Text	If an error is encountered, further details may be available here.
Model Id	Out	Text	The generated model Id

Support

This asset is provided free-of-charge by Blue Prism. Blue Prism does not provide formal support of this asset. Please direct any questions you have, related to this asset, to the Digital Exchange Community page:

https://community.blueprism.com/communities/community-home?CommunityKey=1e516cfe-4d1f-4de9-a9eb-58d15bf38c81