

Connector for Openai API V1.1

Integrate powerful AI capabilities into Blue Prism

Integration Guide V1.1.0

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1- Prerequisites

Use of this VBO requires:

Blue Prism **V6.0** or later.

2- Configuration

To use this asset:

1. Import the .bprelease file which contains the following: GPT Connector VBO V1.1
2. Update Credentials:
Openai API requests require authorization, it is necessary to add your API Key.
 - a. Select System > Security > Credentials > OPENAI_API_KEY
 - b. Update the 'Token' with your OpenAI API Key. Visit [API Keys](#) page to retrieve the API key you'll use in your requests.

Credential Details

Name: OPENAI_API_KEY

Description: Openai API Key

Type: Bearer Token

Application Credentials | Access Rights

Use this credential type for Bearer token authentication. The token will be directly added to the authentication header.

Token: [Masked]

Expires: 2/14/2023

Marked as invalid

3. Select System >> Web API Services >> Open API

System

Objects - Web API Services

Enabled	Name	Number of Actions	Last Updated	Skills
<input checked="" type="checkbox"/>	OpenAI API	1	23/01/2023	

4. change Http request connection timeout to 120 or more in case you are working with a larger prompt

Web API: OpenAI API

Configure a Web API definition for use by Blue Prism

Enter a unique name and the Base URL of the Web API. The URL is used in all requests generated by the actions within this definition. The Base URL can contain Common Parameter values when specified in the format [parameter name].

OpenAI API

- Common Headers
- Common Parameters
- Common Authentication
- Common Code
- Actions
 - Completions
 - Parameters
 - Request
 - Headers
 - Response

Name:

Base URL:

Enabled

Configure advanced connection settings.

HTTP request connection timeout: Seconds

- You can then call the connector in your processes and configure your input and output parameters. (Business Object : OpenAi – GPT VBO, Action : Openai – Answers)

Action Properties

Name:

Description:

Business Object:

Action:

Group: Page Data Type View All Items

Name	Data Type	Value
Model	Text	
Question	Text	
Prompt	Text	
Answer_format	Text	
Temperature	Number	
Max_tokens	Number	
Top_p	Number	
Frequency_penalty	Number	
Presence_penalty	Number	

Binaries
Collections
Dates
DateTimes
Flags
Images
Numbers
Passwords
Text
Times
TimeSpans

Stage logging: Don't log parameters on this stage

Warning threshold: Number of minutes (0 to disable)

3- Using the Asset

This VBO provides action that abstract some of the complexity of using the Openai API. Using only a blue prism action you can get the answer to any question or extract a structured data (Text, Json, CSV) from any text (structured or unstructured) without using regular expressions or advanced scripts and without the need for extensive machine learning expertise.

The run-mode of this VBO is Background.


4- Create Openai - Answers Object

This action can be used to generate the answer based on your question and prompt:

Parameter	Direction	Data Type	Description
Model	In	Text	ID of the model to use. You can use the List models API to see all of your available models, or see our Model overview for descriptions of them. Example : text-davinci-003
Question	In	Text	The question or data you need to extract from the text.
Prompt	In	Text	The text from which you need to extract data.
Answer_format	In	Text	In which format you need the answer (text, json, csv), you can even describe the csv file header
Temperature	In	Number	What sampling temperature to use. Higher values means the model will take more risks. Try 0.9 for more creative applications, and 0 (argmax sampling) for ones with a well-defined answer. We generally recommend altering this or top_p but not both.
Max_tokens	In	Number	The maximum number of tokens to generate in the completion. The token count of your prompt plus max_tokens cannot exceed the model's context length. Most models have a context length of 2048 tokens (except for the newest models, which support 4096).
Top_p	In	Number	An alternative to sampling with temperature, called nucleus sampling, where the model considers the results of the tokens with top_p probability mass. So 0.1 means only the tokens comprising the top 10% probability mass are considered. We generally recommend altering this or temperature but not both.

Frequency_penalty	In	Number	Number between -2.0 and 2.0. Positive values penalize new tokens based on their existing frequency in the text so far, decreasing the model's likelihood to repeat the same line verbatim.
Presence_penalty	In	Number	Number between -2.0 and 2.0. Positive values penalize new tokens based on whether they appear in the text so far, increasing the model's likelihood to talk about new topics.
Answer	Out	Text	Only the first answer without further details.
HTTP Status Code	Out	Text	HTTP Status Code
Response Content	Out	Text	A json response that contains all the information: (id, object, model, choice, usage....).
Response Headers	Out	Collection	Response Headers

a- Configuration example :

 Action Properties

Name:

Description:

Business Object

Action

Inputs		
Name	Data Type	Value
Model	Text	"text-davinci-003"
Question	Text	"List the countries in this text and their capital"
Prompt	Text	"Europe is home to some of the world's most prosperous and stable economies. Among the best"
Answer_format	Text	"CSV format with the header: Country: Capital."
Temperature	Number	0.7
Max_tokens	Number	1000
Top_p	Number	1
Frequency_penalty	Number	0.0
Presence_penalty	Number	0.0

Action Properties [?] [] [X]

Name:
Description:

Business Object: ⓘ
Action:

Inputs | **Outputs** | Conditions

Name	Data Type	Store In
Answer	Text	Answer
HTTP Status Code	Text	HTTP Status Code
Response Content	Text	Response Content
Response Headers	Collection	<input checked="" type="checkbox"/> Response Headers

Group:
 Page Data Type
 View All Items

- Binaries
- Collections
- Dates
- DateTimes
- Flags
- Images
- Numbers
- Passwords
- Text
- Times
- TimeSpans

Stage logging: Don't log parameters on this stage
Warning threshold: Number of minutes (0 to disable)