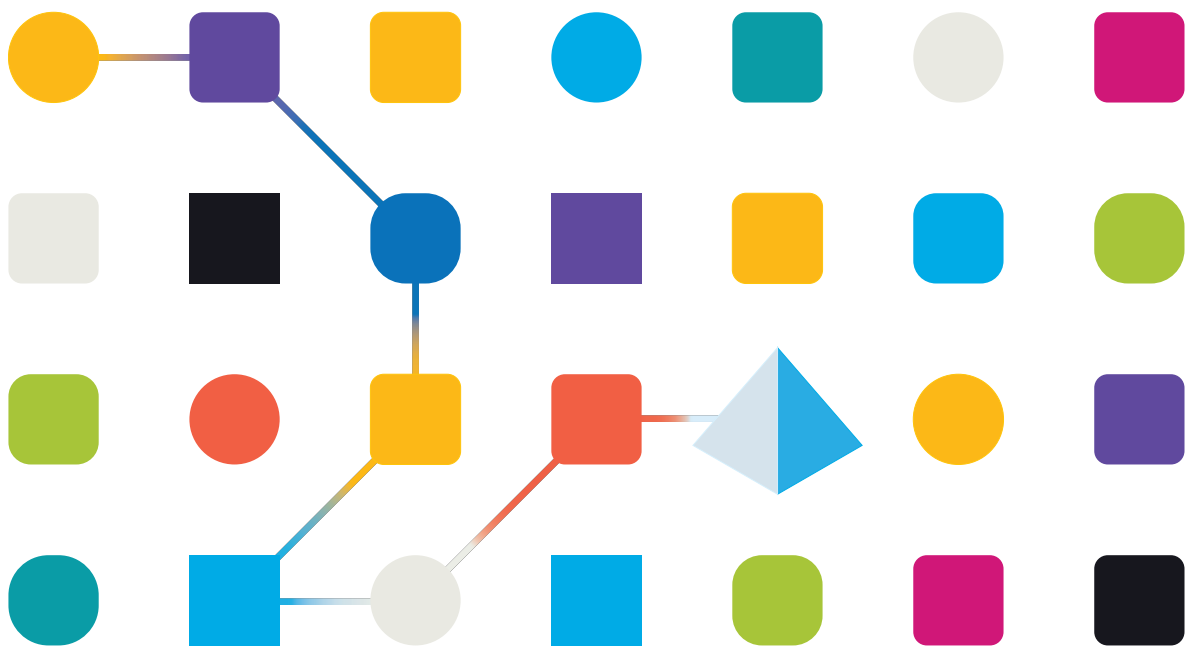




Blue Prism Cloud 2022.1

IADA.ai User Guide

Document Revision: 1.0



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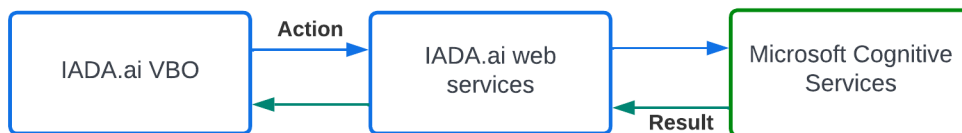
IADA.ai


This document details how to utilize the Intelligent Automated Digital Assistant (IADA) Visual Business Object (VBO) – *IADA.ai*.

The IADA.ai VBO is available for use with Blue Prism Cloud and has the following Intelligent Automation Skills available:

- Language translation
- Sentiment analysis
- Language detection
- Text analysis
- Extraction of key phrases.

The IADA.ai VBO enables you to use the inbuilt actions to call the IADA.ai web services, which use Microsoft Cognitive Services, with the results being returned to your automation.



 IADA.ai resides within a centralized Blue Prism Cloud Microsoft Azure subscription which is external to any client or partner platform subscription or account.

Prerequisites

IADA.ai needs to be installed and configured. To do this:

- If it is not already installed in Blue Prism, raise a request with Blue Prism Cloud Operations to install the VBO file.

The release file contains one VBO utility file, Utility – IADA.ai and two SOAP Web Services.

- Configure the web services.

Credentials need to be added for each of the services, see [Enter the credentials](#) below. Credentials can be obtained from the Blue Prism Cloud Support team and are associated with the subscription service that Blue Prism Cloud provides.

Enter the credentials

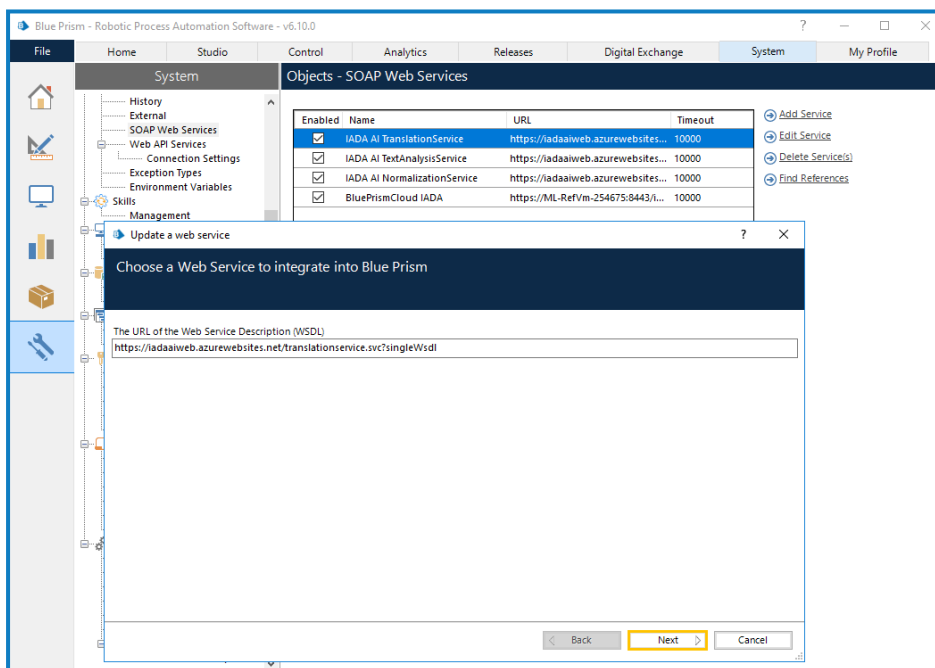
1. In the System > Objects - SOAP Web Services screen in Blue Prism, select the service to be configured. The services are:

- IADA.AI.TranslationService
- IADA.AI.TextAnalysisService

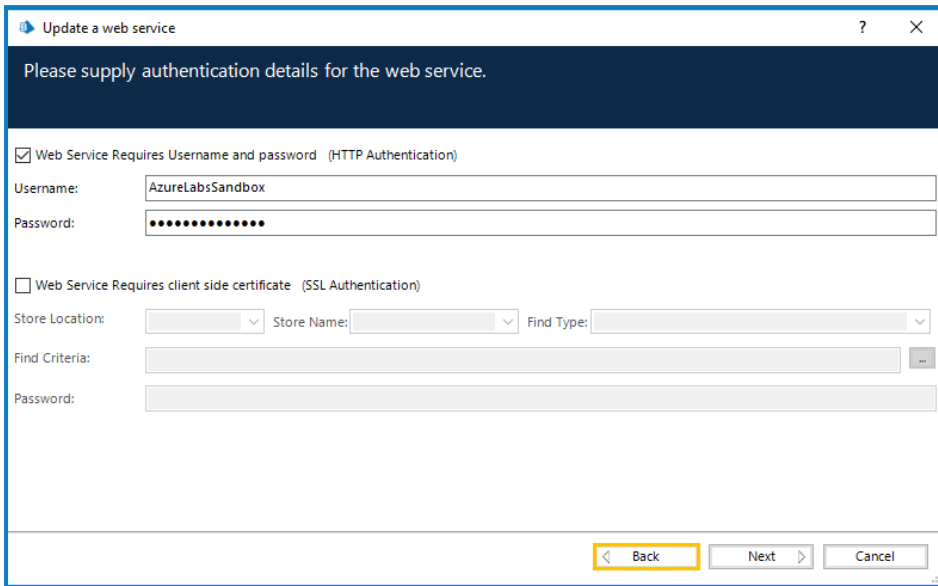
You will need to configure each service individually.


2. Click **Edit Service**.

The Update a web service wizard displays. The example below shows the TranslationService selected for editing.



3. Click **Next** and then enter your supplied credentials, for example:

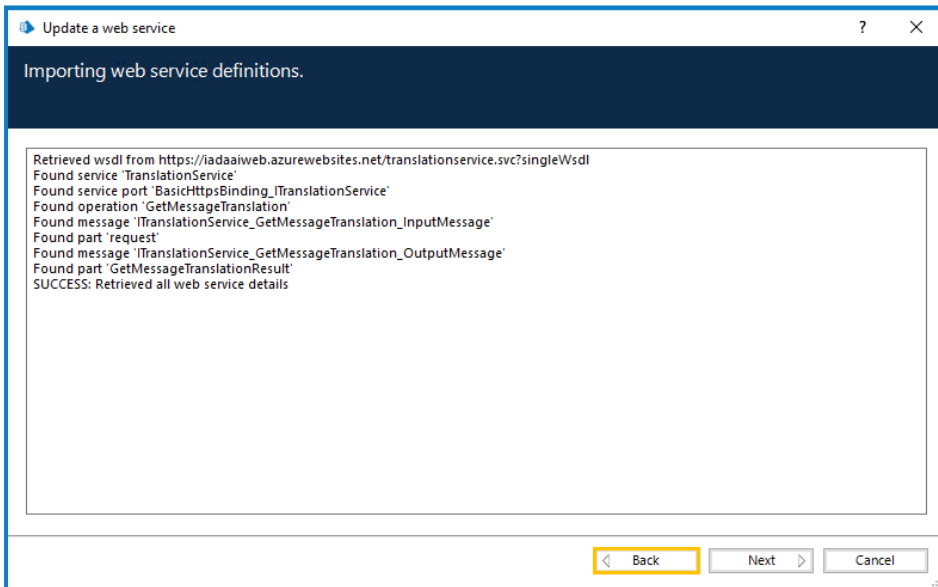


 Credentials can be obtained from the Blue Prism Cloud Support team and are associated with the subscription service that Blue Prism Cloud provides.

4. Click **Next**.

5. Leave the timeout at the default value and click **Next**.

This will then start the service and check that the credentials are valid, for example:




6. Continue to click **Next** until you reach the final screen and then click **Finish**.

7. Repeat the credentials setting for the other service.

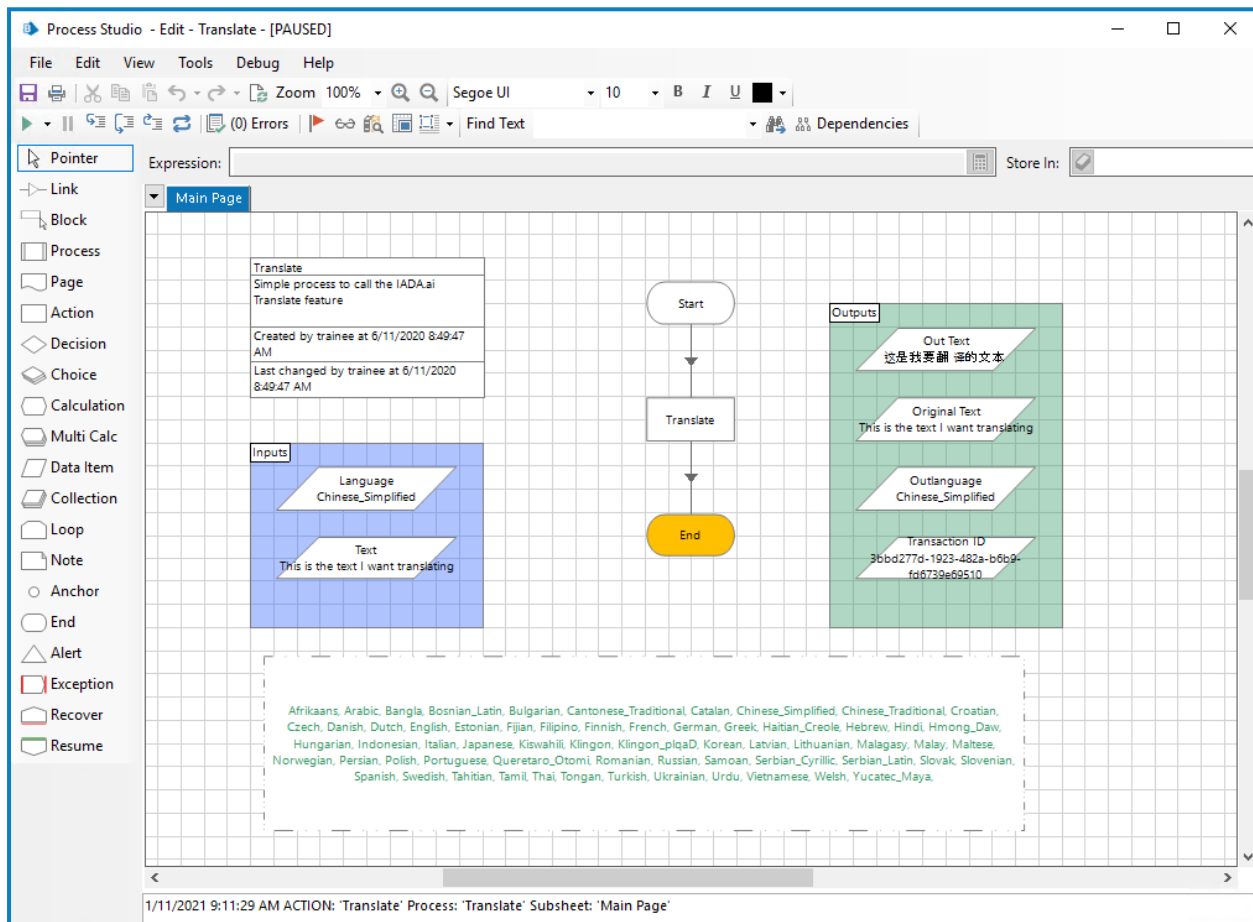
Using the IADA.ai VBO

The Skills within the IADA.ai VBO can be called using an Action stage in an automation process. The examples below show the results from operating some of the IADA.ai skills.

 The Normalization skill is no longer supported due to the withdrawal of Microsoft's web service for this function.

Translate

The image below shows a simple process calling the Translate skill from the business object Utility - IADA.AI, with the input and outputs shown. The note (in the image) below the process lists the available languages that can be used for translation.



In this example, the Translate action properties are set as follows:

Input

Action Properties

Name: Translate
Description:

Business Object: Utility - IADA.AI
Action: Translate

Group:
 Page Data Type
 View All Items

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

Name	Data Type	Value
Text to Translate	Text	[Text]
Target Language	Text	[Language]

Stage logging: Enabled Don't log parameters on this stage
Warning threshold: System Default Number of minutes 5 (0 to disable)

OK Cancel

Output

Action Properties

Name: Translate
Description:

Business Object: Utility - IADA.AI
Action: Translate

Group:
 Page Data Type
 View All Items

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

Name	Data Type	Store In
Transaction ID	Text	Transaction ID
Original Text	Text	Original Text
Target Language	Text	Outlanguage
Translation Result	Text	<input checked="" type="checkbox"/> Out Text

Stage logging: Enabled Don't log parameters on this stage
Warning threshold: System Default Number of minutes 5 (0 to disable)

OK Cancel

Detect

The image below shows a simple process calling the Detect Languages skill from the business object Utility - IADA.AI, with the input and outputs shown. The collection properties show the detected languages and the certainty for the confidence that the detected language is correct.

The screenshot displays the Process Studio interface for a process named 'Detect'. The process flow starts with a 'Start' node, followed by a 'Detect' action, and ends with an 'End' node. The 'Detect' action has an input collection named 'Text' containing the Polish text 'To jest tekst, który chcę przetłumaczyć'. The output collection is named 'Detected Languages' and contains three rows of data:

Detected Languages - Row 1 of 1
Original Text To jest tekst, który chcę przetłumaczyć
Transaction ID fc30ca6d-7db3-4ee5-9275-c101a331c9e3

The 'Collection Properties' window is open, showing the following details:

- Name: Detected Languages
- Description: (empty)
- Fields:

Fields	Initial Values	Current Values
Certainty (Number)		1
Language (Text)		Polish

In this example, the Detect action properties are set as follows:

Input

Action Properties

Name: Detect
Description:

Business Object: Utility - IADA.AI
Action: Detect Language

Group:
 Page Data Type
 View All Items

Name	Data Type	Value
Text to Detect Language	Text	[Text]

Stage logging: Enabled Don't log parameters on this stage
Warning threshold: System Default Number of minutes 5 (0 to disable)

Output

Action Properties

Name: Detect
Description:

Business Object: Utility - IADA.AI
Action: Detect Language

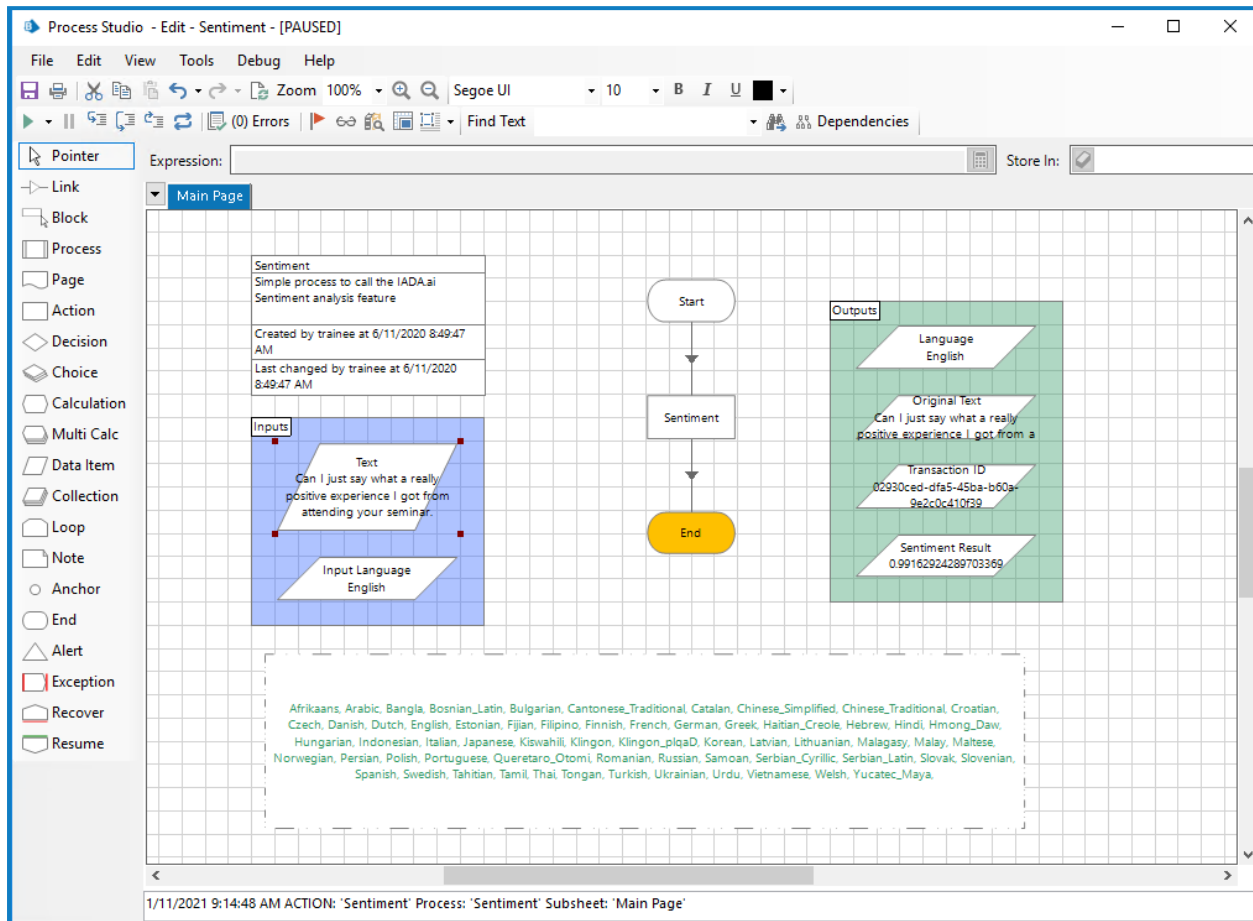
Group:
 Page Data Type
 View All Items

Name	Data Type	Store In
Transaction ID	Text	Transaction ID
Original Text	Text	Original Text
Detected Languages	Collection	<input checked="" type="checkbox"/> Detected Languages

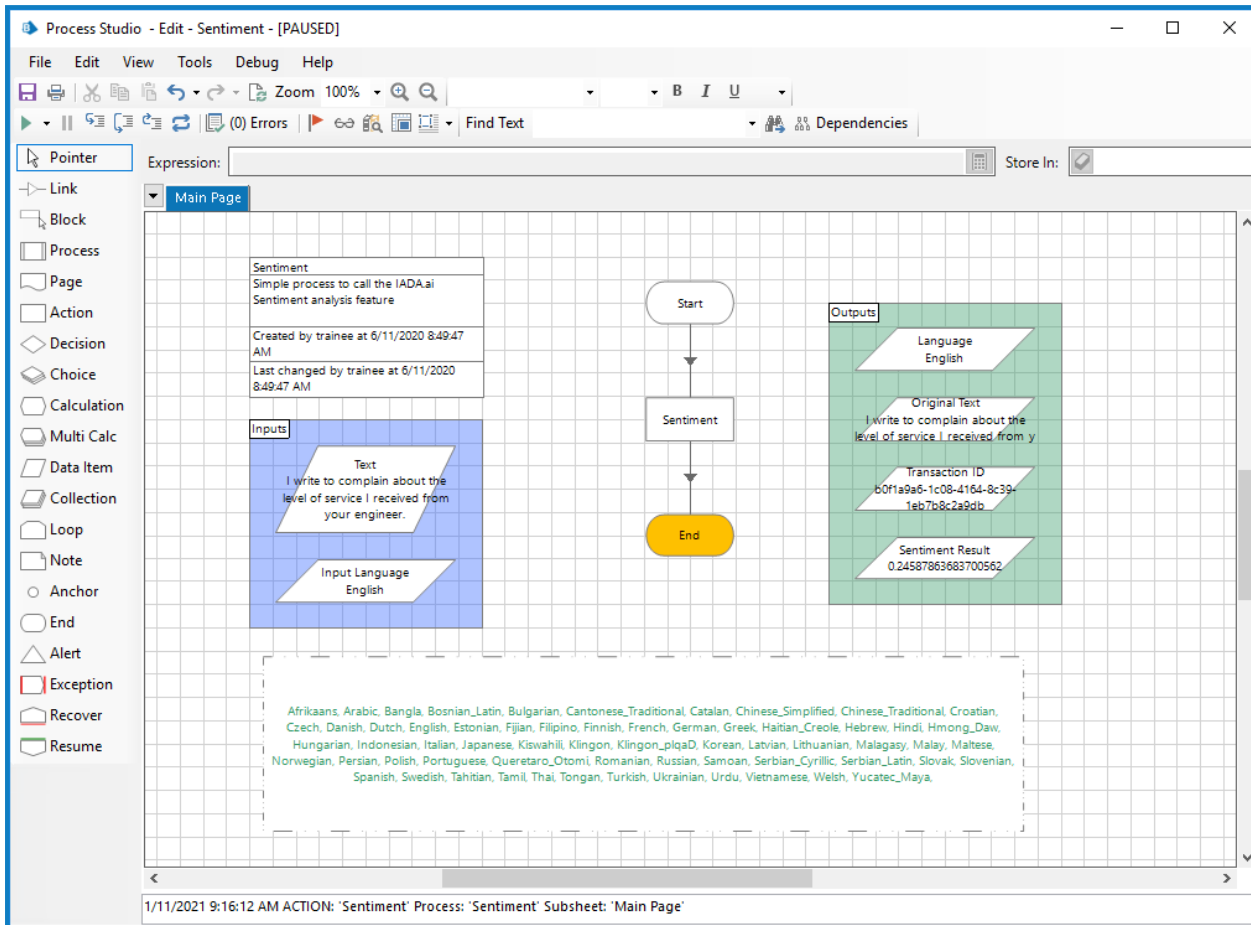
Stage logging: Enabled Don't log parameters on this stage
Warning threshold: System Default Number of minutes 5 (0 to disable)

Sentiment Analysis

The two images below illustrate a simple process using the Sentiment Analysis skill from the business object Utility - IADA.AI. The first image illustrates a 'positive' statement:



The next image illustrates a 'negative' comment:



The Sentiment Analysis results in a 'sentiment' is closer to '1' when 'positive' and closer to '0' if 'negative'. In this example, the Sentiment action properties are set as follows:

Input

Action Properties

Name:

Description:

Business Object:

Action:

Name	Data Type	Value
Text to Analyze Sentiment	Text	[Text]
Language of Text	Text	[Input Language]

Stage logging: Enabled Don't log parameters on this stage

Warning threshold: Number of minutes (0 to disable)

Group: Page Data Type

View All Items

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

Output

Action Properties
? - □ ×

Name:
 Description:

Business Object:
 Action:

Group:
 Page Data Type
 View All Items

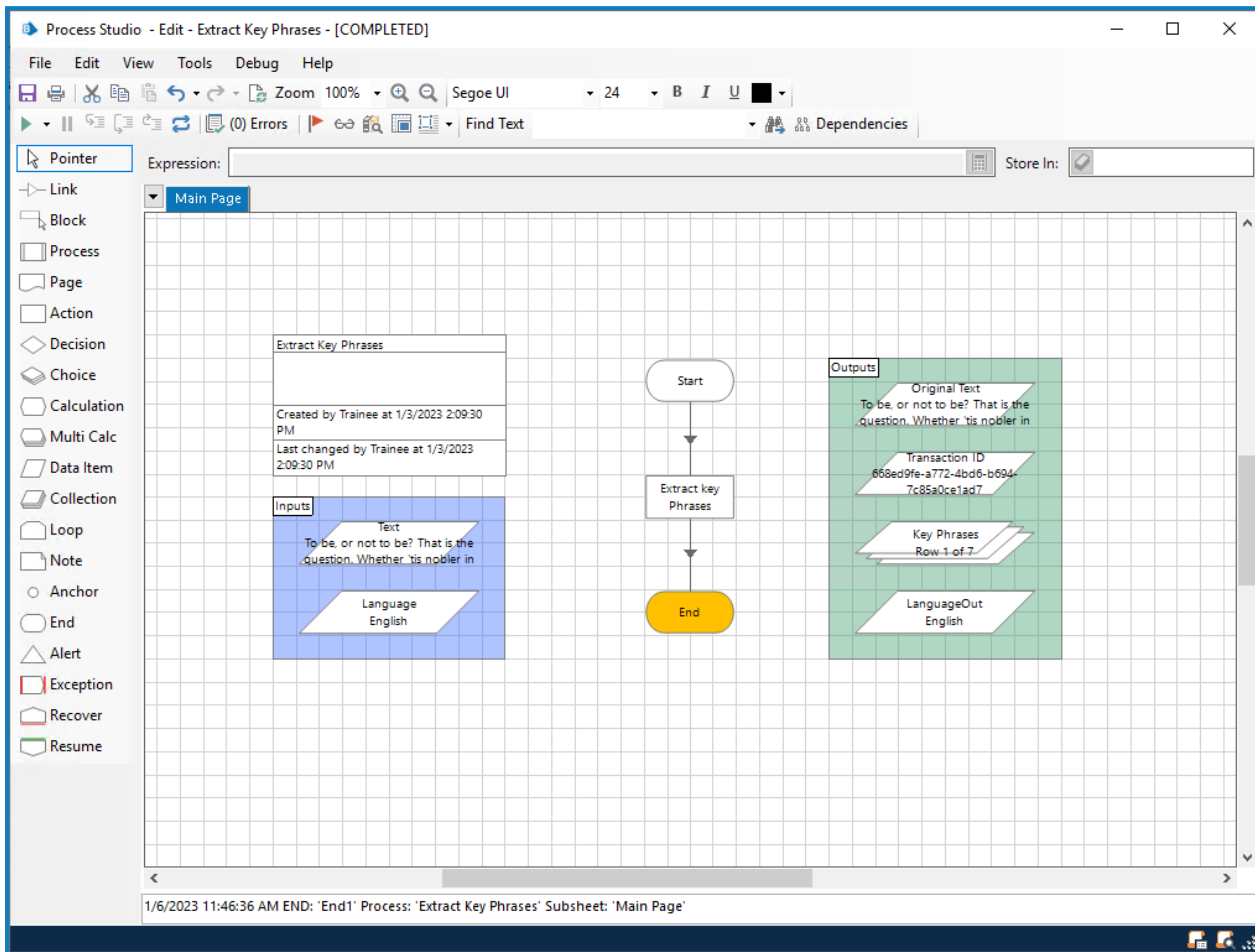
Inputs Outputs Conditions

Name	Data Type	Store In
Transaction ID	Text	Transaction ID
Original Text	Text	Original Text
Language	Text	Language
Sentiment Result	Number	<input checked="" type="checkbox"/> Sentiment Result

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

Extract Key Phrases

The image below shows a simple process call the Extract Key Phrases skill from the business object Utility - IADA.AI.



In this example, the Extract Key Phrases action properties are set as follows:

Input

Action Properties

Name:

Description:

Business Object:

Action:

Group: Page Data Type

View All Items

Name	Data Type	Value
Text to Extract From	Text	[Text]
Language of Text	Text	[Language]

Stage logging: Don't log parameters on this stage

Warning threshold: Number of minutes (0 to disable)

Output

Action Properties

Name:

Description:

Business Object:

Action:

Group: Page Data Type

View All Items

Name	Data Type	Store In
Transaction ID	Text	Transaction ID
Original Text	Text	Original Text
Key Phrases	Collection	Key Phrases
Language	Text	<input checked="" type="checkbox"/> LanguageOut

Stage logging: Don't log parameters on this stage

Warning threshold: Number of minutes (0 to disable)

Analyze Text

The image below shows a simple process calling the Analyze Text skill from the business object Utility - IADA.AI, which produces multiple outputs. Analyze Text combines several skills to produce its output.

The screenshot shows a Process Studio window titled 'Process Studio - Edit - Analysis - [PAUSED]'. The main workspace displays a process flow starting with a 'Start' node, followed by an 'Analyze' action, and ending with an 'End' node. The 'Analyze' action is connected to an 'Inputs' collection and an 'Outputs' collection.

The 'Inputs' collection contains a 'Text' field with the value: "To be, or not to be? That is the question. Whether 'tis nobler in the mind to suffer the slings and arrows of outrageous fortune, or to take arms against a sea of troubles, and, by opposing, end them?".

The 'Outputs' collection contains several fields: 'Detected Languages' (Row 1 of 1), 'Original Text' (To be, or not to be? That is the question. Whether 'tis nobler in the mind to suffer the slings and arrows of outrageous fortune, or to take arms against a sea of troubles, and, by opposing, end them?), 'Transaction ID' (8fe76409-7ce6-44a3-8f3b-7dffc2b496e), 'Key Phrases' (Row 1 of 7), and 'Sentiment' (0.23526746034622192).

Two 'Collection Properties' windows are open. The first window, titled 'Collection Properties', shows the 'Detected Languages' collection with the following data:

Fields	Initial Values	Current Values
Certainty (Number)	Language (Text)	
1	English	

The second window, titled 'Collection Properties', shows the 'Key Phrases' collection with the following data:

Fields	Initial Values
string (Text)	
arms	
mind	
slings	
arrows of outrageous fortu...	
sea of troubles	
'tis nobler	
question	

In this example, the Analyze Text action properties are set as follows:

Input

ⓘ Action Properties
? - □ ×

Name:

Description:

Business Object:

Action:

Group:

Page Data Type

View All Items

Inputs Outputs Conditions

Name	Data Type	Value
Text to Analyze	Text	[Text]

Stage logging: Don't log parameters on this stage

Warning threshold: Number of minutes (0 to disable)

Output

ⓘ Action Properties
? - □ ×

Name:

Description:

Business Object:

Action:

Group:

Page Data Type

View All Items

Inputs Outputs Conditions

Name	Data Type	Store In
Transaction ID	Text	Transaction ID
Original Text	Text	Original Text
Detected Languages	Collection	Detected Languages
Key Phrases	Collection	Key Phrases
Sentiment	Number	<input checked="" type="checkbox"/> Sentiment

Stage logging: Don't log parameters on this stage

Warning threshold: Number of minutes (0 to disable)