

ABBYY



ABBYY Vantage

Connector for Blue Prism Guide

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About the ABBYY Vantage Connector for Blue Prism

ABBYY Vantage is a comprehensive Content Intelligence platform that provides AI-powered cognitive services and pre-trained and trainable skills that can "understand" business documents and extract actionable data and insights.


The ABBYY Vantage Connector for Blue Prism allows you to incorporate ABBYY Vantage skills into your processes.

System requirements

You will need an account with ABBYY Vantage both to configure and to run your process.

The ABBYY Vantage Connector for Blue Prism can be used with:

- ABBYY Vantage 2.4 or later
- Blue Prism 6.10 or later

 **Note:** When upgrading to Blue Prism version 7.2, be sure to [update](#) your ABBYY Vantage Connector for Blue Prism to the latest version.

The following external component must be installed:

- Microsoft .Net Framework 4.7.2 or later

The connector can't be run on computers with Windows Server 2012 R2, Windows 8.1, and older operating systems. The following operating systems are supported:

- Windows 10
- Windows Server 2016
- Windows Server 2019

Installing the ABBYY Vantage Connector for Blue Prism

The ABBYY Vantage Connector for Blue Prism is a visual business object (VBO) providing a set of actions that let you send documents to ABBYY Vantage, process them with one of the available skills, and get the processing results.

The ABBYY Vantage Connector for Blue Prism is shipped with a preconfigured sample process called "ABBYY Vantage Skills example." This sample process is imported when you import the bprelease file. See the [Running the sample process](#) section for details on how to run the sample process.

It is necessary to install the connector on each machine with Blue Prism, where it is supposed to run a process using a connector. You can do this using the installer and following the instructions of the installation wizard. For more information, see the [Installing the connector via the installation wizard](#) section.

For automated installation of the connector on a large number of machines, you can use the silent installation mode. For more information, see the [Installing the connector in silent mode](#) section.

Installing the connector via the installation wizard

The connector needs to be installed on all machines where you are planning to launch Blue Prism processes that use it.

To install the ABBYY Vantage Connector for Blue Prism via the installation wizard, perform the following steps:

Important! Installing the connector requires administrator privileges.

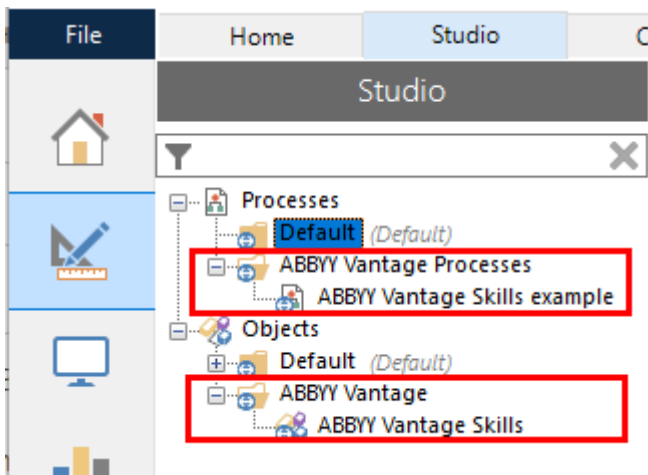
1. Upload the **ABBYYVantageConnectorForBluePrism<version>.exe** setup file.
2. Run **ABBYYVantageConnectorForBluePrism<version>.exe** on the machine where Blue Prism is installed and follow the instructions of the Installation Wizard.

Note: The installer requires that all Blue Prism Automate.exe processes be stopped during installation. If one or more Automate.exe processes are running, the installer wizard will display a warning. If you continue with the installation, the Automate.exe processes will be forcibly terminated.

3. In Blue Prism, open the **Studio** tab and click **File** → **Import** → **Release / Skill**. In the window that opens, select the **ABBYY Vantage Skills <version>.bprelease** file in the folder where the ABBYY Vantage Connector for Blue Prism was installed in step 3 (the default location is **C:\Program Files (x86)\ABBYY Vantage Connector for Blue Prism** for 64-bit systems or **C:\Program Files\ABBYY Vantage Connector for Blue Prism** for 86-bit systems). Follow the setup instructions.

If you install the connector on a large number of machines there is no need to perform step 3 on each machine. You can do it only once on any machine where the Blue Prism client is installed.

Once the import completes, an **ABBYY Vantage Processes** section (containing the sample process) will be created in the list of processes, and an **ABBYY Vantage** section (containing the ABBYY Vantage Skills VBO) will be created in the list of objects.




Installing the connector in silent mode

To install the ABBYY Vantage Connector for Blue Prism in silent mode, perform the following steps:

1. On the machine where Blue Prism is installed, run the command line as an administrator.
2. Navigate to the directory where the connector setup file is located.
3. Run the following command:

```
ABBYYVantageConnectorForBluePrism.<version>.exe -install /q
```

This command will unpack distribution files to the default folder (**C:\Program Files (x86)\ABBYY Vantage Connector for Blue Prism** for 64-bit systems or **C:\Program Files\ABBYY Vantage Connector for Blue Prism** for 86-bit systems) and copy the **Abbyy.Rpa.Vantage.BluePrism.dll** library into the Blue Prism installation folder. This library is required for ABBYY Vantage Skills VBO.

 **Note:** The installer requires that all Blue Prism Automate.exe processes be stopped during installation. If one or more Automate.exe processes are running, the installer wizard will display a warning. If you continue with the installation, the Automate.exe processes will be forcibly terminated.

To uninstall the connector, run the following command:

```
ABBYYVantageConnectorForBluePrism.<version>.exe -uninstall /q
```

Updating the connector


If you have an older version of ABBYY Vantage Connector for Blue Prism, you can update it to the latest version.

 **Important!** Updating the connector requires administrator privileges.

To update the ABBYY Vantage Connector for Blue Prism to the latest version:

1. Perform one of the following actions, depending on the installation type:
 - If the connector was installed via the [installation wizard](#), run **ABBYYVantageConnectorForBluePrism<version>.exe** of the latest version, and then click **Update**.
 - If the connector was installed in [silent mode](#), run the following command:

```
ABBYYVantageConnectorForBluePrism.<version>.exe -install /q
```

 **Note:** The installer requires that all Blue Prism Automate.exe processes be stopped during installation. If one or more Automate.exe processes are running, the installer wizard will display a warning. If you continue with the installation, the Automate.exe processes will be forcibly terminated.

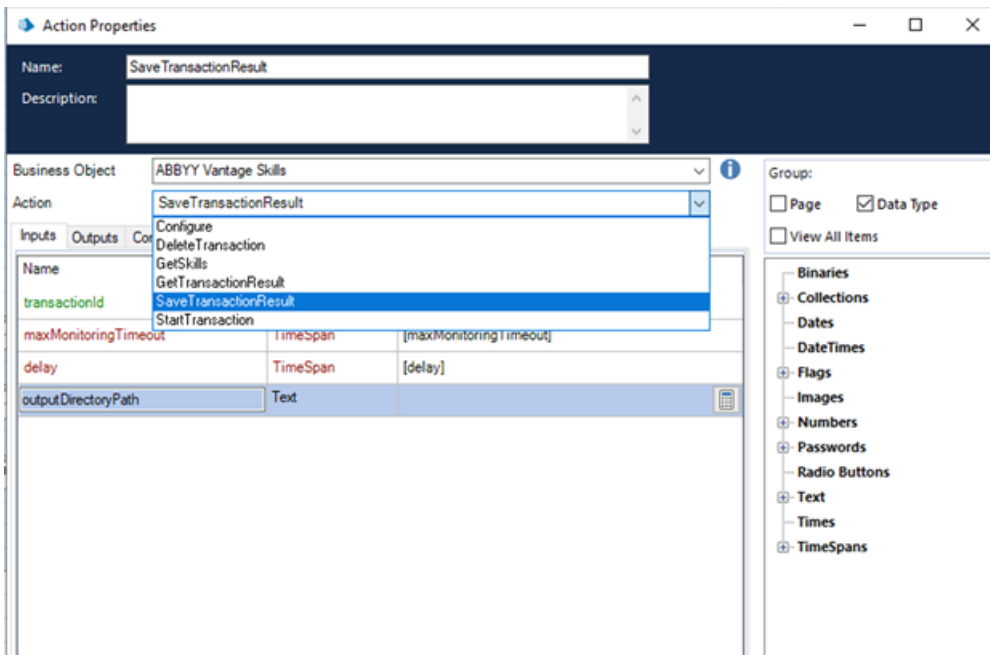
2. In Blue Prism, open the **Studio** tab and click **File** → **Import** → **Release / Skill**. In the window that opens, select the **ABBYY Vantage Skills <version>.bprelease** file in the folder where the latest version of ABBYY Vantage Connector for Blue Prism is stored. Follow the setup instructions. During the setup process, in the **Resolve Import Conflicts** section, select the following resolutions for the sample process and for the ABBYY Vantage Skills VBO:
 - For the **ABBYY Vantage Skills example** component, select the **Overwrite the existing process with the incoming process** option.
 - For the **ABBYY Vantage Skills** component, select the **Overwrite the existing business object with the incoming business object** option.

Replacing the GetTransactionResult action with the SaveTransactionResult action

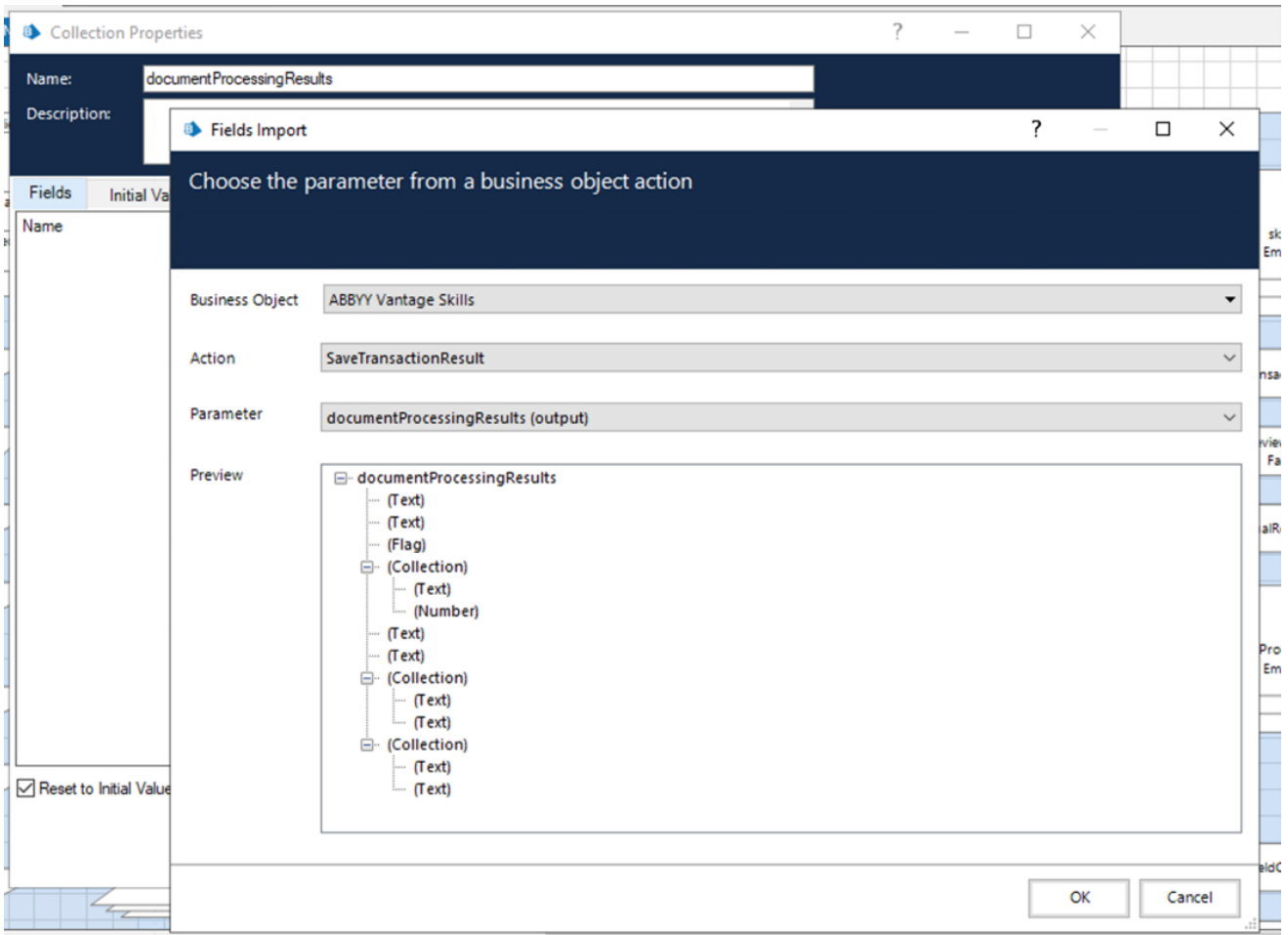
If you are using Blue Prism version 7.2, be sure to update your ABBYY Vantage Connector for Blue Prism to the latest version. Once the connector is updated, in those Blue Prism processes that contain the

GetTransactionResult action, replace the **GetTransactionResult** action with the **SaveTransactionResult** action as described below.

1. Open a process in Blue Prism Process Studio.
2. Double-click the **GetTransactionResult** action to open its properties. In the **Action Properties** window, specify the following:
 - In the **Action** field, select the **SaveTransactionResult** action.
 - On the **Inputs** tab, for the **outputDirectoryPath** parameter, specify the path to the folder containing the transaction results.



3. Change the structure of file processing results:
 - In the **Output Data Items** area, open the collection of documents obtained as a result of the transaction.
 - Open **Collection Properties** and then click **Clear** to reset the parameters.
 - Import the collection fields for the **documentProcessingResults** parameter of the **SaveTransactionResult** action:
 - a. Click **Import**.
 - b. Select **Business Object: ABBYY Vantage Skills**.
 - c. Select **Action: SaveTransactionResult**.
 - d. Select **Parameter: documentProcessingResults (output)**.



4. Open the process and then remove the actions for saving files from the workflow.

Using ABBYY Vantage skills in a Blue Prism process

You can use the ABBYY Vantage Skills VBO to create a new Blue Prism process or integrate the VBO into your existing process. To do this:

1. Create a new Blue Prism process (on the **Studio** tab, right-click **Processes** and select **Create Process** in the context menu) or open an existing process.
2. Drag and drop the **Action** element from the left-hand panel to the canvas. Double-click the element to open its properties.
3. The **Action Properties** window will be displayed. In this window, specify the following information:
 - In the **Name** field, enter the name of the activity.
 - In the **Business Object** field, select **ABBYY Vantage Skills** from the drop-down list.
 - In the **Action** field, select one of the available actions:
 - [Configure](#)
 - [GetSkills](#)
 - [StartTransaction](#)
 - [GetTransactionResult](#)


- [SaveTransactionResult](#)
- [DeleteTransaction](#)
- Specify the input and output parameters on the **Inputs** and **Outputs** tabs. For more details, see the [Configuring the ABBYY Vantage skills VBO](#) section.

You can also use the sample process named "ABBYY Vantage Skills example." See the [Running the sample process](#) section for details on how to run the sample process.

Configuring the ABBYY Vantage skills VBO

Setting up the Configure action

The **Configure** action specifies the settings required to connect to the ABBYY Vantage server. As the **Configure** action passes the connection settings to other actions of the ABBYY Vantage Skills VBO, it must be called before calling any such actions.

 **Note:** You can configure authentication using Resource Owner Password Credentials Flow and Client Credentials Flow. If you set up an External Identity Provider in Vantage, the only authentication flow that will work is the Client Credentials Flow.

For more information, see:


- Setting up an External Identity Provider: https://vantage-eu.abbyy.com/help/English/AdminGuide/?topic=sysadmin_externalidentityprovider if you are in Western Europe, https://vantage-us.abbyy.com/help/English/AdminGuide/?topic=sysadmin_externalidentityprovider if you are in North America, and https://vantage-au.abbyy.com/help/English/AdminGuide/?topic=sysadmin_externalidentityprovider if you are in Australia.
- Authentication flows: https://vantage-eu.abbyy.com/help/English/DevGuide/?topic=developer_apiauthentication if you are in Western Europe, https://vantage-us.abbyy.com/help/English/DevGuide/?topic=developer_apiauthentication if you are in North America, and https://vantage-au.abbyy.com/help/English/DevGuide/?topic=developer_apiauthentication if you are in Australia.

Action parameters


Parameter	Direction	Data Type	Required For	Description
baseUrl	In	Text	Resource Owner Password Credentials Flow, Client Credentials Flow	The address of the ABBYY Vantage server.
login	In	Text	Resource Owner Password	ABBYY Vantage user login.

			Credentials Flow	
password	In	Password	Resource Owner Password Credentials Flow	ABBYY Vantage user password.
logFilePath	In	Text	Optional parameters	Full path to the log file (to avoid using the log, leave it empty).
proxyServerUrl	In	Text		Proxy server URL (e.g. http://127.0.0.1:8080).
proxyUsername	In	Text		Proxy username.
proxyPassword	In	Password		Proxy user password.
tenant	In	Text	Resource Owner Password Credentials Flow if the user whose credentials are used to connect to the ABBYY Vantage server is registered in more than one tenant on the server. The tenant name can be found on the Vantage sign-in page in your browser when entering the password.	ABBYY Vantage tenant ID or name.
clientId	In	Text	Client Credentials	ABBYY Vantage application identifier.

			Flow, Resource Owner Password Credentials Flow (optional)	
clientSecret	In	Password	Client Credentials Flow, Resource Owner Password Credentials Flow (optional)	ABBYY Vantage application key.

 **Note:** If all the properties in the Vantage Public API Client settings are empty (**clientId** and **clientSecret**), then the default ABBYY Vantage client is used.

When you create a client in ABBYY Vantage, configure the following in the **OAuth 2.0 Flows Settings** section of the client settings, depending on the grant type you use:

- Resource Owner Password Credentials Flow:
 - Enable the **Allow Resource Owner Password Credentials Flow** option.
- Client Credentials Flow:
 - Enable the **Allow issuing refresh tokens to refresh access tokens** option.
 - Enable the **Allow client credentials flow** option.
 - Select the required roles with which the application will log in to Vantage by clicking the **Manage Roles** setting.  **Important!** If you need to select one or more roles associated with skills, also select the allowed skills for these roles. For more information about ABBYY Vantage roles, see https://vantage-eu.abbey.com/help/English/AdminGuide/?topic=admin_rolebasedaccess if you are in Western Europe, https://vantage-us.abbey.com/help/English/AdminGuide/?topic=admin_rolebasedaccess if you are in North America, and https://vantage-au.abbey.com/help/English/AdminGuide/?topic=admin_rolebasedaccess if you are in Australia.

Proxy Settings

You can configure connector requests at runtime to go through a proxy server. The following proxy authentication types are supported: Basic, NTLM, IP authentication, and transparent proxy.

To use a proxy, open the **Configure** action and specify proxy parameters on the **Inputs** tab.

If you are using Basic authentication, in the **proxyUsername** and **proxyPassword** properties, specify the proxy connection credentials.

If you are using NTLM authentication, the **proxyUsername** and **proxyPassword** fields are optional. If the **proxyUsername** and **proxyPassword** fields are empty, the credentials of the user under which the Blue Prism process is running will be used.

Setting up the GetSkills action

The **GetSkills** action obtains a list of skills that are available in ABBYY Vantage to the user whose credentials were specified in the Configure action.

Note: For more information about role-based access to skills for users, see https://vantage-eu.abbyy.com/help/English/AdminGuide/?topic=admin_rolebasedaccess if you are in Western Europe, https://vantage-us.abbyy.com/help/English/AdminGuide/?topic=admin_rolebasedaccess if you are in North America, and https://vantage-au.abbyy.com/help/English/AdminGuide/?topic=admin_rolebasedaccess if you are in Australia.

The list of skills is a collection. From this collection, you can get the name of a skill you are going to use for processing a document. This name should be passed to the **skill** input parameter of the **StartTransaction** action.

Note: Alternatively, you can also pass the skill identifier to input parameter skill in the **StartTransaction** action.

Action parameters



Parameter	Direction	Data Type	Description
skills	Out	Collection	A collection of all skills.
- Id	Out	Text	Skill ID.
- Name	Out	Text	Skill name.
- Type	Out	Text	Skill type.

Setting up the StartTransaction action

The **StartTransaction** action creates a transaction for processing a document by means of an ABBYY Vantage skill.

Action parameters

Parameter	Direction	Data Type	Description
skill	In	Text	ABBYY Vantage skill name or skill identifier.
transactionRegistrationParameters	In	Collection	(Optional) Collection of registration parameters for a new transaction.
- Key	In	Text	Registration parameter key.
- Value	In	Text	Registration parameter value.
inputFiles	In	Collection	Collection of input files for a new transaction.

			<p> Note: If you need to only add a single file to the transaction, populate the collection with only one element (for that single file).</p>
- FilePath	In	Text	<p>Path to the input file.</p> <p> Note: When populating the input files collection, make sure that the FilePath parameter has no empty rows.</p>
- Index	In	Number	(Optional) Transaction input file order index.
- FileRegistrationParameters	In	Collection	(Optional) File registration parameter collection.
transactionId	Out	Text	Transaction identifier.

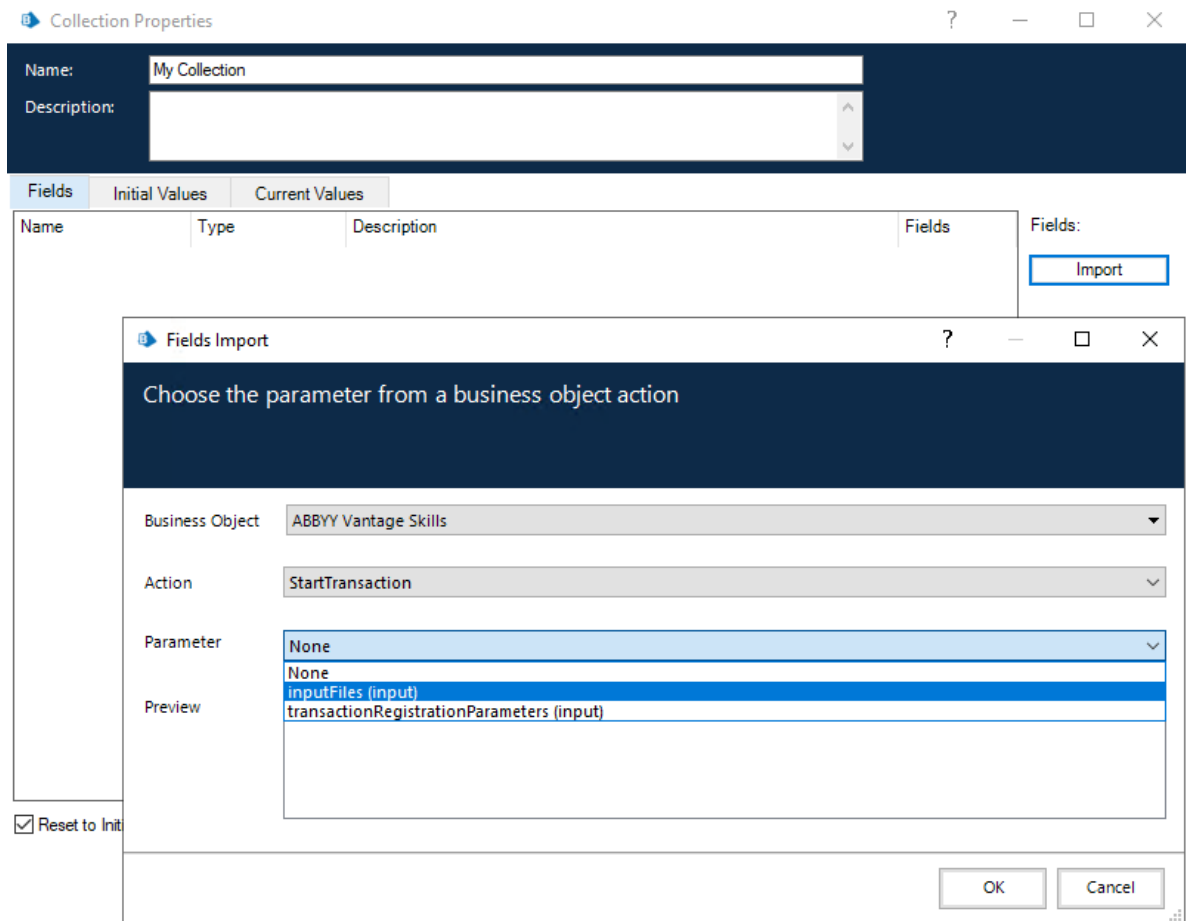
FileRegistrationParameters type columns:

Name	Type	Description
Key	Text	File registration parameter key.
Value	Text	File registration parameter value.

When using a collection to pass data to the inputFiles and transactionRegistrationParameters parameters, do the following to make sure that the collection structure will be valid for those parameters:

1. Open the process in Blue Prism Process Studio.
2. Add a collection to the layout.
3. Open **Collection Properties**.
4. Import collection fields for the **inputFiles** parameter of the **StartTransaction** action:
 - a. Click **Import**.
 - b. Select **Business Object: ABBYY Vantage Skills**.
 - c. Select **Action: StartTransaction**.

d. Select **Parameter: inputFiles (input)**.



e. Click **OK**. This collection can now be specified in the **inputFiles** input parameter of the **StartTransaction** action.

Note: You need to populate this collection before calling the **StartTransaction** action.

Repeat the above steps to create a **transactionRegistrationParameters** collection, however, select the **transactionRegistrationParameters (input)** parameter when importing collection fields.

To create a **FileRegistrationParameters** collection, you can also use the **transactionRegistrationParameters (input)** parameter.

Setting up the GetTransactionResult action

The **GetTransactionResult** action monitors the status of a transaction and gets processing results from ABBYY Vantage.

Important! If you want to use Blue Prism version 7.2, be sure to [update your ABBYY Vantage Connector for Blue Prism to the latest version](#) and [reconfigure the existing processes to use SaveTransactionResult action](#). The **GetTransactionResult** action will work with earlier versions of Blue Prism up to version 7.2.

Action parameters

Parameter	Direction	Data Type	Description
transactionId	In	Text	Transaction identifier.

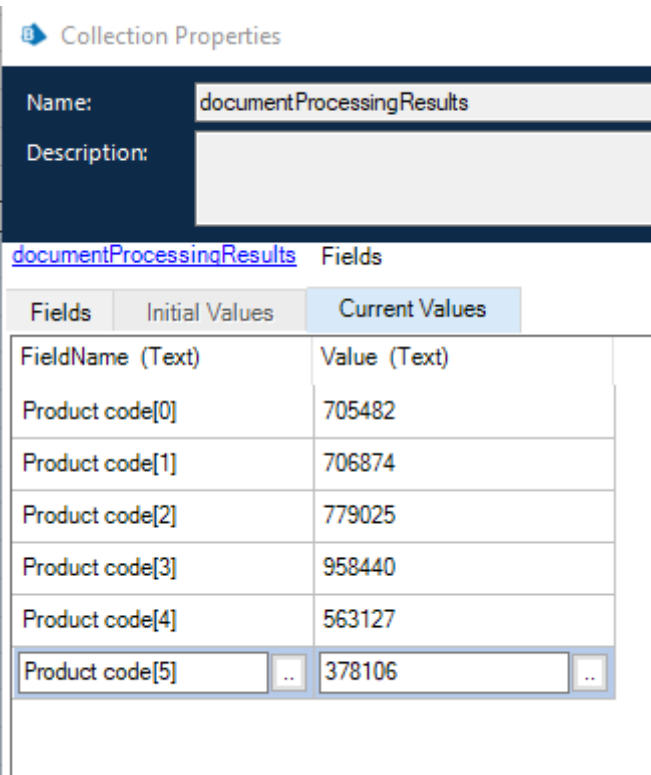
maxMonitoringTimeout	In	TimeSpan	(Optional) The maximum transaction status monitoring time. Default value: 10 minutes.
delay	In	TimeSpan	(Optional) The period of time between transaction status checks. Default value: 1 second.
manualReviewLink	Out	Text	Link to review the processing results using the ABBYY Vantage Manual Review Client.
documentProcessingResults	Out	Collection	Collection of document processing results.
- Id	Out	Text	Document ID.
- ClassName	Out	Text	The document class based on the classification results. 📌 Note: Classification results are available only when using classification skills or process skills with a classification step.
- IsClassificationConfident	Out	Flag	The resulting class is deemed to have been determined with confidence if this value is TRUE. 📌 Note: Classification results are available only when using classification skills or process skills with a classification step.
- ClassificationResults	Out	Collection	Comprises a list of all the classes available in the Classification Skill applied to the document, together with their classification confidence values. If the Classification Skill has not been applied, the parameter value will be empty. 📌 Note: Classification results are available only when using classification skills or process skills with a classification step.
- ExtractedData	Out	Text	Extracted data JSON if available. 📌 Note: This parameter will only be available when using a document skill, classification skill, or a process skill that has "Values, metadata, and field structure" JSON export selected in the Output activity in the Fields tab of Exported Data Settings.
- DocumentFullText	Out	Text	Full-text layer of the document that was captured by ABBYY Vantage. 📌 Note: This field will contain a value only when using an OCR skill or process skill with both an OCR step and a configured OCR text export.
- Fields	Out	Collection	Fields collection if available. 📌 Note: A field collection will only be available when

			using document skills or process skills with an Extract activity that have "Values, metadata, and field structure" JSON export selected in the Output activity in the Fields tab of Exported Data Settings.
- ResultFiles	Out	Collection	Exported files collection.

ClassificationResults type columns:

Name	Type	Description
ClassName	Text	The name of the class.
Confidence	Number	The degree of confidence that the document belongs to this class. Possible values range from 0 to 100.

Fields type columns:

Name	Type	Description
FieldName	Text	<p>The name of the field.</p> <p>If the field name contains a postfix, this field is repeatable. The number in the postfix displays how many times the field repeats in the document, i.g. Line Items[2]::Total Price.</p> <p>Note: Double colons are used as nesting separators (e.g., for fields that are part of a group of fields or for fields that are cells of a column in a table).</p> <p>Note: For repeating fields, the postfix starts at zero.</p> 

Value	Text	Field value.
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ResultFiles type columns:

Name	Type	Description
Name	Text	Exported file name.
Content	Binary	Binary file content.

If transaction processing is completed successfully when calling the **GetTransactionResult** action, the results will be saved in the output parameters.

If the transaction is still being processed when calling the **GetTransactionResult** action, the action will request the status of the transaction at intervals specified in the **delay** input parameter. The request for the transaction status will repeat either until transaction processing is completed or until the timeout specified in the **maxMonitoringTimeout** input parameter is reached.

A special case, where transaction is in progress and the document of this transaction requires manual review, is described below.

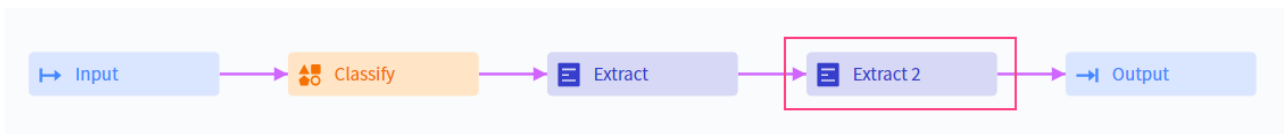
The results that the **GetTransactionResult** action may obtain will vary depending on the skill applied to the document.

- If a Classification Skill is used (for example, Vantage Classifier), the following results will be obtained:
 - **documentProcessingResults** (for each document):
 - **Id**
 - **ClassificationResults**
 - **ClassName**
 - **IsClassificationConfident**
 - **ExtractedData**
 - **ResultFiles** (JSON file containing classification results data)
- If a Document Skill is used (for example, Invoice US), the following results will be obtained:
 - **documentProcessingResults** (for each document):
 - **Id**
 - **ExtractedData**
 - **Fields**
 - **ResultFiles** (the results will be contained in two JSON files. The first file will contain all document data. The second file will contain the values of the extracted fields and the rule errors (if any). The name of the second file will end with "_fields.json").

- If an OCR Skill is used, the following results will be obtained:
 - **documentProcessingResults** (for each document):
 - **Id**
 - **ResultFiles** (those files will be received the export to which is configured in the OCR Skill)
 - **DocumentFullText** (if export to TXT is enabled in the skill)
- If a Process Skill is used, the obtained results will depend on the activities that make up the Process Skill and their settings, in particular the **Output** activity settings. For more information about the Process Skill, see https://vantage-eu.abbyy.com/help/English/SkillDesigner/?topic=procskill_settingup if you are in Western Europe, https://vantage-us.abbyy.com/help/English/SkillDesigner/?topic=procskill_settingup if you are in North America, and https://vantage-au.abbyy.com/help/English/SkillDesigner/?topic=procskill_settingup if you are in Australia.

If a Process Skill comprises a **Classify** activity and an **Extract** activity, the above results will be obtained for both a Classification Skill and a Document Skill.

If a Process Skill comprises multiple **Classify** or **Extract** activities, the results will be obtained for the last activities of a particular type. For example, the JSON file returned by the Process Skill illustrated below will contain the extraction results from the **Extract** activity that is highlighted in red.



If the **PDF** option is enabled in the **Exported Data Settings** dialog of an **Output** activity of a Process Skill, the results will contain the JSON file with the extraction results and the document image exported to a PDF file together with a text layer.

A Process Skill can also contain a **Review** activity. When using such a skill for document processing, processing can be suspended if the document requires manual review. In this case, the **GetTransactionResult** action will obtain the following results:

- manualReviewLink

Once the manual review and transaction processing are completed, you can obtain the above results by calling the **GetTransactionResult** action again.





Transaction processing may fail for a number of reasons. For example, a corrupted input file or an unsupported input file format may be used. In this case, the **GetTransactionResult** action will throw an exception.



Setting up the SaveTransactionResult action

The **SaveTransactionResult** action monitors the status of a transaction, gets processing results from ABBYY Vantage, and saves these results.

Important! If you want to use Blue Prism version 7.2, be sure to [update your ABBYY Vantage Connector for Blue Prism to the latest version](#) and [reconfigure the existing processes to use SaveTransactionResult action](#). The **GetTransactionResult** action will work with earlier versions of Blue Prism up to version 7.2.

Action parameters



Parameter	Direction	Data Type	Description
transactionId	In	Text	Transaction identifier.
maxMonitoringTimeout	In	TimeSpan	(Optional) The maximum transaction status monitoring time. Default value: 10 minutes.
delay	In	TimeSpan	(Optional) The period of time between transaction status checks. Default value: 1 second.
manualReviewLink	Out	Text	Link to review the processing results using the ABBYY Vantage Manual Review Client.
documentProcessingResults	Out	Collection	Collection of document processing results.
- Id	Out	Text	Document ID.
- ClassName	Out	Text	The document class based on the classification results.  Note: Classification results are available only when using classification skills or process skills with a classification step.
- IsClassificationConfident	Out	Flag	The resulting class is deemed to have been determined with confidence if this value is TRUE.  Note: Classification results are available only when using classification skills or process skills with a classification step.
- ClassificationResults	Out	Collection	Comprises a list of all the classes available in the Classification Skill applied to the document, together with their classification confidence values. If the Classification Skill has not been applied, the parameter value will be empty.  Note: Classification results are available only when using classification skills or process skills with a classification step.
- ExtractedData	Out	Text	Extracted data JSON if available.  Note: This parameter will only be available when using a document skill, classification skill, or a process skill that has "Values, metadata, and field structure" JSON export selected in the Output activity in the Fields tab of Exported Data Settings.
- DocumentFullText	Out	Text	Full-text layer of the document that was captured by ABBYY Vantage.

			<p> Note: This field will contain a value only when using an OCR skill or process skill with both an OCR step and a configured OCR text export.</p>
- Fields	Out	Collection	<p>Fields collection if available.</p> <p> Note: A field collection will only be available when using document skills or process skills with an Extract activity that have "Values, metadata, and field structure" JSON export selected in the Output activity in the Fields tab of Exported Data Settings.</p>
- ResultFiles	Out	Collection	Exported files collection.
outputDirectoryPath	In	Text	The path to the folder where transaction export files are stored.

ClassificationResults type columns:

Name	Type	Description
ClassName	Text	The name of the class.
Confidence	Number	The degree of confidence that the document belongs to this class. Possible values range from 0 to 100.

Fields type columns:

Name	Type	Description
FieldName	Text	<p>The name of the field.</p> <p>If the field name contains a postfix, this field is repeatable. The number in the postfix displays how many times the field repeats in the document, i.g. Line Items[2]::Total Price.</p> <p> Note: Double colons are used as nesting separators (e.g., for fields that are part of a group of fields or for fields that are cells of a column in a table).</p> <p> Note: For repeating fields, the postfix starts at zero.</p>

Collection Properties

Name: documentProcessingResults

Description:

[documentProcessingResults](#) Fields

Fields	Initial Values	Current Values
FieldName (Text)		Value (Text)
Product code[0]		705482
Product code[1]		706874
Product code[2]		779025
Product code[3]		958440
Product code[4]		563127
Product code[5]		378106

Value	Text	Field value.
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ResultFiles type columns:

Name	Type	Description
Name	Text	Exported file name.
FilePath	Text	Absolute path to the saved file.

If transaction processing is completed successfully when calling the **SaveTransactionResult** action, the results will be saved in the output parameters.

If the transaction is still being processed when calling the **SaveTransactionResult** action, the action will request the status of the transaction at intervals specified in the **delay** input parameter. The request for the transaction status will repeat either until transaction processing is completed or until the timeout specified in the **maxMonitoringTimeout** input parameter is reached.

A special case, where transaction is in progress and the document of this transaction requires manual review, is described below.

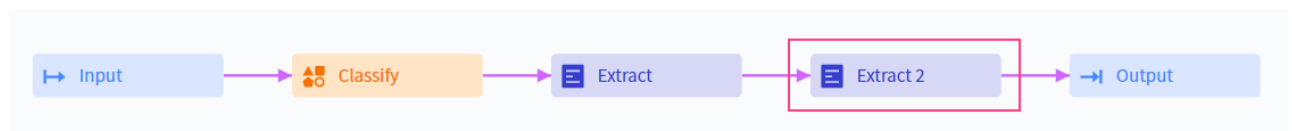
The results that the **SaveTransactionResult** action may obtain will vary depending on the skill applied to the document.

- If a Classification Skill is used (for example, Vantage Classifier), the following results will be obtained:
 - **documentProcessingResults** (for each document):
 - **Id**

- **ClassificationResults**
 - **ClassName**
 - **IsClassificationConfident**
 - **ExtractedData**
 - **ResultFiles** (JSON file containing classification results data)
- If a Document Skill is used (for example, Invoice US), the following results will be obtained:
 - **documentProcessingResults** (for each document):
 - **Id**
 - **ExtractedData**
 - **Fields**
 - **ResultFiles** (the results will be contained in two JSON files. The first file will contain all document data. The second file will contain the values of the extracted fields and the rule errors (if any). The name of the second file will end with "_fields.json").
 - If an OCR Skill is used, the following results will be obtained:
 - **documentProcessingResults** (for each document):
 - **Id**
 - **ResultFiles** (those files will be received the export to which is configured in the OCR Skill)
 - **DocumentFullText** (if export to TXT is enabled in the skill)
 - If a Process Skill is used, the obtained results will depend on the activities that make up the Process Skill and their settings, in particular the **Output** activity settings. For more information about the Process Skill, see https://vantage-eu.abbey.com/help/English/SkillDesigner/?topic=procskill_settingup if you are in Western Europe, https://vantage-us.abbey.com/help/English/SkillDesigner/?topic=procskill_settingup if you are in North America, and https://vantage-au.abbey.com/help/English/SkillDesigner/?topic=procskill_settingup if you are in Australia.

If a Process Skill comprises a **Classify** activity and an **Extract** activity, the above results will be obtained for both a Classification Skill and a Document Skill.

If a Process Skill comprises multiple **Classify** or **Extract** activities, the results will be obtained for the last activities of a particular type. For example, the JSON file returned by the Process Skill illustrated below will contain the extraction results from the **Extract** activity that is highlighted in red.



If the **PDF** option is enabled in the **Exported Data Settings** dialog of an **Output** activity of a Process Skill, the results will contain the JSON file with the extraction results and the document image exported to a PDF file together with a text layer.

A Process Skill can also contain a **Review** activity. When using such a skill for document processing, processing can be suspended if the document requires manual review. In this case, the **SaveTransactionResult** action will obtain the following results:

- manualReviewLink

Once the manual review and transaction processing are completed, you can obtain the above results by calling the **SaveTransactionResult** action again.

Transaction processing may fail for a number of reasons. For example, a corrupted input file or an unsupported input file format may be used. In this case, the **SaveTransactionResult** action will throw an exception.

Setting up the DeleteTransaction action

The **DeleteTransaction** action deletes a transaction and all of its associated data. Call this action after you have obtained the processing results by means of the **GetTransactionResult** (or **SaveTransactionResult**) action.

Action parameters

Parameter	Direction	Data Type	Description
transactionId	In	Text	Transaction identifier.

Running the sample process

ABBYY Vantage Connector for Blue Prism is shipped with a sample process that demonstrates how you can use ABBYY Vantage Skills VBO in your Blue Prism process, how to configure your Blue Prism process to pass input data to ABBYY Vantage Skills actions, and how process data is received from ABBYY Vantage Skills actions.

A sample process also shows how you can configure the connector to create a multi-file transaction in ABBYY Vantage, set transaction and file registration parameters, and how you can process results from several documents of one transaction.

You can run this process and see how one person's Bank Statement and Utility Bill documents are processed in a single transaction using the connector.


The process is set up in such a way that each document added by the connector to the transaction will have the following file registration parameters set:

- **SourceFolder** (path to the file's source folder)
- **SourceType** (the process passes "Blue Prism" as the value)

The process also sets the following registration parameters for the entire transaction:

- **Resource PC** (the name of the computer from which the Blue Prism process and the connector were launched)
- **Creator** (the name of the Vantage user specified in the login data item)

You can access the values of document (file) and transaction registration parameters in Vantage if you add the corresponding columns in the Transactions section of the Skill Monitor.

 **Note:** The registration parameters described above are for demonstration purposes. You can choose to not pass these parameters.


To run the sample process, perform the following steps:

1. In Blue Prism, import the default business objects. To do this, click **File** → **Import** → **Process / Object** and locate the following files:


- **BPA Object - Utility - Environment**
- **BPA Object - Utility - Collection Manipulation**
- **BPA Object - Utility - File Management**

The default location is **C:\Program Files\Blue Prism Limited\Blue Prism Automate\VBO**. If these objects are already installed, skip this step.

2. On the **Studio** tab, expand the **Processes** and **ABBYY Vantage Processes** sections. Next, double-click the **ABBYY Vantage Skills example** process to open it.

 **Note:** The process will become available on the **Studio** tab only once all installation steps have been completed (in particular, after the import of bprelease - see step 3 of [Installing the connector via the installation wizard](#)).

3. In the **Input data items** area, double-click the **baseUrl** data item. In the **Data Properties** window that opens, specify the address of the ABBYY Vantage server in the **Initial Value** field.
4. Specify the login and password that were used to register your ABBYY Vantage account. Double-click the login data item and fill in the Initial Value field. Do the same for the password data item.

 **Note:** If your Vantage user is in multiple Vantage tenants, fill in the Initial Value field of the tenant data item.

5. On a local disk, create a new folder accessible to the user running Blue Prism, for example, **C:\ABBYY_Vantage**.
6. In the folder you created in step 5, create another folder called **Input** and copy the sample image files (Bank Statement and Utility Bill documents) from the **SampleImages** folder to this new **Input** folder. This folder is located in the folder where the connector has been installed. The default location is **Program Files\ABBYY Vantage Connector for Blue Prism\SampleImages**.

Specify the full path to the Input folder in the Initial Value field of the **inputDirectoryPath** data item (e.g. C:\ABBYY_Vantage\Input).


7. In the folder you created in step 5, create a folder called **Output** and specify the full path to this folder in the **Initial Value** field of the **outputDirectoryPath** data item (e.g. C:\ABBYY_Vantage\Output). Files containing the processing results for all documents in the transaction will be saved to the Output folder.
8. Specify the path to the file containing the text log in the **logFilePath** data item (e.g. C:\ABBYY_Vantage\log.log). Alternatively, leave this data item empty (this will prevent the log from being recorded).

9. Run the process. The process uses the Default Process Skill to process transactions created using input files. The name of the skill is specified in the **skill** data item.

When the process completes, a subfolder for storing the transaction processing results on the disk will be created in the folder the filepath to which was specified in the **outputDirectoryPath** data item. The name of this subfolder will be the same as the transaction identifier.

In the subfolder containing the transaction output files, more subfolders will be created for the results of each transaction document. These subfolders will be named as follows: "document class name'_document identifier". In each of the document subfolders, the process will save the processing result files for that specific document.

Additionally, the process also demonstrates how individual fields can be extracted from the **Fields (Collection)** parameter of the **documentProcessingResults** output property in the **SaveTransactionResult** action. The process has a search set up for the "Customer::Name" field in the Utility Bill document and for the "Bank Name" field in the Bank Statement document. Fields detected this way are added to the **filteredFields** collection.

 **Note:** You are not required to save files to your hard drive, you can set up the processing of results from the **documentProcessingResults** output property in the **GetTransactionResult** action in a different way using Blue Prism.

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