

ABBYY FlexiCapture

Connector for Blue Prism Guide

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About the ABBYY FlexiCapture Connector for Blue Prism

ABBYY FlexiCapture enables users to perform high-quality full-text recognition, classify documents, detect fields and capture their data, and convert files into various formats (e.g. searchable PDF).

ABBYY FlexiCapture Integration Solution for Blue Prism is intended for loading document files and captured data into the Blue Prism robotic process automation.

Architecture

The ABBYY FlexiCapture 12 integration solution for Blue Prism comprises the following three components:

- [FlexiCapture 12 VBO](#), a business object that operates on the Blue Prism side. This object sends data to ABBYY FlexiCapture 12 and receives results in synchronous mode.
- [FlexiCapture 12 Listener](#), a web service that operates on the Blue Prism side. This service handles requests from ABBYY FlexiCapture 12.
- [A Blue Prism connector](#) operating on the ABBYY FlexiCapture 12 side. This connector sends requests to the FlexiCapture 12 Listener web service at the export stage.

System requirements

Software requirements for FlexiCapture 12 VBO and FlexiCapture 12 Listener:

- Blue Prism 6.2.1 or higher
- Microsoft .NET Framework 4.5

Software requirements for the ABBYY FlexiCapture Connector for Blue Prism:

- ABBYY FlexiCapture 12 Distributed (12.0.2)
- ABBYY FlexiCapture Cloud
- Microsoft .NET Framework 4.5

Usage scenarios

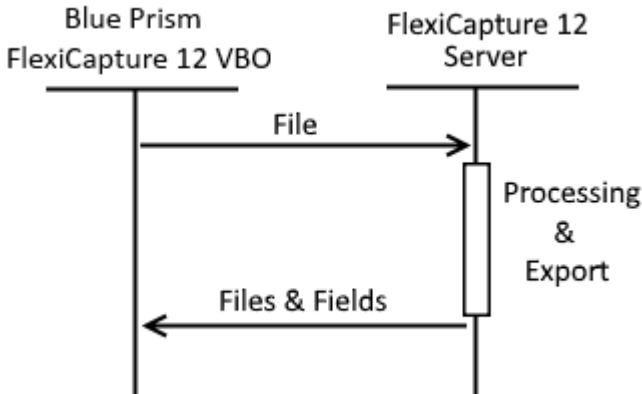
The ABBYY FlexiCapture Integration Solution for Blue Prism can typically be used in the following three scenarios.

1. [FlexiCapture as an unattended service](#): files are sent synchronously from Blue Prism to ABBYY FlexiCapture 12; no verification is required

The FlexiCapture 12 VBO component, which runs on the Blue Prism side, sends a file to ABBYY FlexiCapture 12 and gets back extracted fields and exported files. In this scenario, files received by ABBYY FlexiCapture 12 do not require verification, so once the recognition is completed, they go directly to the export stage.

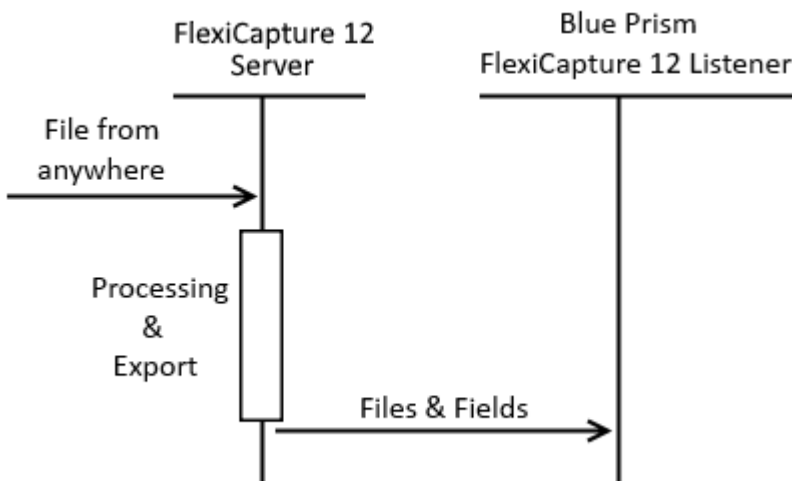
 **Note:** The ABBYY FlexiCapture operator must have the role of **Scanning Operator** or **Administrator**

for the given project and batch type. These roles are granted by the administrator in the Administration and Monitoring Console.



2. FlexiCapture as input: files and data are sent synchronously from ABBYY FlexiCapture 12 to Blue Prism

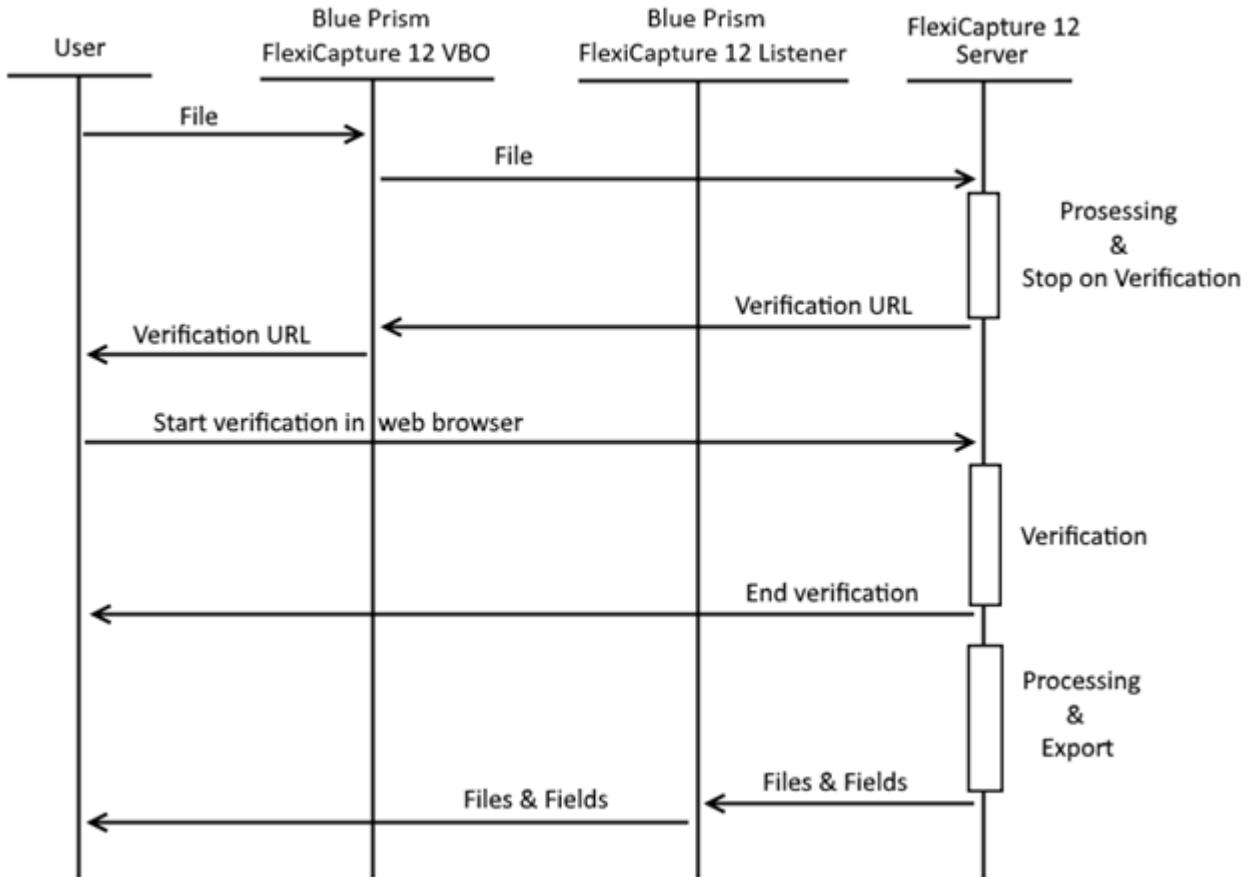
The ABBYY FlexiCapture Connector for Blue Prism is used at the export stage in ABBYY FlexiCapture 12 according to a script export profile. The connector sends files and extracted fields to the FlexiCapture 12 Listener web service. ABBYY FlexiCapture 12 may receive image files from the Scanning Station or FlexiCapture Mobile Client, for example.



3. FlexiCapture as an attended service: files are sent asynchronously from Blue Prism to ABBYY FlexiCapture 12; verification is required

The FlexiCapture 12 VBO, which runs on the Blue Prism side, sends a file to ABBYY FlexiCapture 12 and gets back a URL to a document verification page on the Web Verification Station. The user clicks the link and verifies the document. Once the verification is completed, a script export profile is applied on the ABBYY FlexiCapture 12 side, which makes the ABBYY FlexiCapture Connector for Blue Prism send the files and extracted field data to the FlexiCapture 12 Listener web service.

Note: The ABBYY FlexiCapture operator must either have the roles of Scanning Operator (to send documents) and Verification Operator (to receive URL to document verification page on the Web Verification Station) for the given project and batch type, or the role of Administrator.



ABBYY FlexiCapture as an unattended service

To configure this scenario, complete the following steps:

1. On the Blue Prism side, install and configure the [FlexiCapture 12 VBO](#).
2. To enable the FlexiCapture 12 VBO to receive information about the extracted fields on the Blue Prism side, the [standard XML export profile](#) (*Export to data files*) must be configured in the Document Definition.

Note: If, besides export to XML, other standard export profiles are configured in ABBYY FlexiCapture to export data into other file formats, files in these formats will also be sent back to the FlexiCapture 12 VBO.

3. On the ABBYY FlexiCapture side, click **Batch Type Properties** → **Workflow** tab (or **Project** → **Project properties** for the "Default" batch type) and select the **Unattended** schema.

For a sample ABBYY FlexiCapture project configured for this scenario, see the "[Sample FlexiCapture project](#)" section.

For detailed instructions on how to use ABBYY FlexiCapture as an unattended service and [as an attended service](#) within one workflow, see the "[Configuring attended and unattended processing in one workflow](#)" section.

Sample FlexiCapture project


The ABBYY FlexiCapture Integration Solution for Blue Prism is shipped with a preconfigured ABBYY FlexiCapture project that contains some test images.

This example demonstrates how documents can be processed in the scenario that does not require verification (using the **Unattended service** batch type).

For the batch type used in this example, the **Unattended** processing schema is selected on the **Workflow** tab of the **Batch Type Properties** dialog box. At the export stage, only the XML export profile is applied.

To run the "Unattended processing" example:

1. Open the sample project on the ABBYY FlexiCapture **Project Setup Station** and then upload it to the ABBYY FlexiCapture Application Server.
2. In Blue Prism, [install BPA Object - FlexiCapture 12 VBO.xml](#) together with the **BPA Process - FlexiCapture 12 Processor.xml** usage example.
3. In the FlexiCapture 12 Processor example, specify the following:
 - **InputFilePath** – the path to the file (including the file name) to be sent to ABBYY FlexiCapture 12
 - **OutputDir** – the folder where the processing results are to be saved
 - **ServerUrl** – the address of the ABBYY FlexiCapture 12 server
 - **Company** - the name of the ABBYY FlexiCapture tenant, if you are working with a tenant
 - **Username** and **Password** – the credentials of the user's ABBYY FlexiCapture account

 **Note:** Make sure that the user has the role of Scanning Operator for this project and batch type, or the role of Administrator.

- **ProjectName** – the name of the project on the server (specify "InvoiceDemoProject")
 - **BatchType** – the name of the batch type (specify "Unattended service")
4. In Blue Prism, start the FlexiCapture 12 Processor process.

The image file will be sent to ABBYY FlexiCapture 12, where it will be processed, and the processing results will be immediately sent back to Blue Prism. The processing results in this example will include the original image file, an XML document, and fields and their data, which Blue Prism will write into a text document it creates.

ABBYY FlexiCapture as input

To configure this scenario, complete the following steps:

1. On the Blue Prism side, install and configure the [FlexiCapture 12 Listener process](#).
2. On the ABBYY FlexiCapture side, create a [script export profile](#) in the Document Definition.

ABBYY FlexiCapture as an attended service

To configure this scenario, complete the following steps:

1. On the Blue Prism side:

- a. Install and configure the [FlexiCapture 12 VBO](#).
 - b. Install and configure the [FlexiCapture 12 Listener process](#).
2. On the ABBYY FlexiCapture side:
- a. [Create a scrip export profile](#) in the Document Definition.
 - b. Click **Batch Type Properties** → **Workflow** tab (or **Project** → **Project properties** for the "Default" batch type) and select either the **Advanced** or **Simple** schema.
 - c. On the same tab, select the verification stage and click the **Edit...** button to open the **Workflow Stage Properties** dialog box and on the **General** tab, select the **Enable web stations** option. Click **OK** to save the changes.

For detailed instructions on how to use ABBYY FlexiCapture as an attended service and [as an unattended service](#) within one workflow, see the "[Configuring attended and unattended processing in one workflow](#)" section.

Configuring attended and unattended processing in one workflow

When ABBYY FlexiCapture receives a document from Blue Prism, the document may go to the verification stage or skip that stage and go directly to the export stage, depending on whether the extracted data require verification or not.

If the extracted data do not require verification, the document goes to the export stage in ABBYY FlexiCapture and the export results are then sent to Blue Prism. In this case, the sending and receiving is done by means of the ABBYY FlexiCapture Web API.

If the extracted data require verification, Blue Prism will receive the processing results *asynchronously*. First, the ABBYY FlexiCapture 12 VBO will send the data to ABBYY FlexiCapture via the Web API and get a link to a document verification task on the Web Verification Station. Once the data are verified, they are sent to the ABBYY FlexiCapture 12 Listener service on the Blue Prism side.

Depending on whether you need to skip verification and send files and extracted data to the ABBYY FlexiCapture 12 VBO or to perform verification and send files and data to the Blue Prism Listener web service, you need to configure the workflow in ABBYY FlexiCapture accordingly.

To send results, such as fields and extracted field data, from ABBYY FlexiCapture to the ABBYY FlexiCapture VBO, you need to configure the standard [XML export profile](#). Additionally, you need to configure the [script export profile](#) so that it is applied only to documents that have gone through the verification stage.

Configuring the ABBYY FlexiCapture workflow

The ABBYY FlexiCapture workflow can be configured either for each batch type separately or for the "Default" batch type. To configure the workflow:

1. On the Project Setup Station, either click **Project** → **Project Properties...** (if you want to configure the "Default" batch type) or click **Project** → **Batch types** → **Edit...** (if you want to configure a particular batch type).
2. On the **Workflow** tab of the **<Project Name> Properties** dialog box, change the workflow schema from **Simple** to **Advanced**.

3. On the same tab, select the verification stage and click the **Edit...** button to open the **Workflow Stage Properties** dialog box and on the **General** tab, select the **Enable web stations** option. Click **OK** to save the changes.
4. Return to the **Workflow** tab in the **<Project Name> Properties** dialog box and click the **Stage...** button to add a new stage. In the **Create Processing Stage** dialog box, select **Automatic** and click **OK**.
5. In the **Workflow Stage Properties** dialog box, provide a name for the new stage, make sure that the **Wait for all documents of a batch** option is selected, and select the **Linked to previous** option.
6. On the **Script** tab, select **Document processing** from the **Type** drop-down list.
7. On the same tab, click the **Edit script...** button and type in the following script code:


```
Document.Properties.Set("WasVerified", bool.TrueString);
```

 This script adds a registration parameter to each processed document that indicates whether or not the given document has gone through the verification stage.
8. On the **Entry Conditions** tab, select **Under these conditions** and click the **Rule...** button to specify a condition when documents should be sent to the newly created stage.
9. In the **Rule Settings** dialog box, provide a name for the new rule in the **Name** field. Then from the **Condition type** drop-down list, select **Script**, click the **Script...** button and type in the following script code:


```
Result.CheckSucceeded = (Document.StageInfo.StageName == "Verification Postprocessing" || Document.StageInfo.StageName == "Verification");
```

 This script sets the input condition for the new stage: If a document arrives from the verification stage, it will be admitted into the new stage and will be provided with a "WasVerified" registration parameter.
10. Save the newly configured rule and the new script stage.

! Important! The new script stage must immediately follow the verification stage.

For a sample ABBYY FlexiCapture project configured for this scenario, see the "[Sample FlexiCapture project](#)" section.

Modifying script export profile

The profile will be applied to documents that have gone through the verification stage. To configure both unattended and attended processing for the same Document Definition, you must first [create a script export profile](#) and then modify this profile as described below:

1. In the **Export Settings** dialog box, click the **Edit...** button to modify an export script.
2. Click the **Edit Script...** button and add the following code into the script editor:


```

using Abbyy.Connectors.Dms.ComFacade;

using Abbyy.Infrastructure.Logging;

using System.Collections.Generic;

if (Document.Properties.Has("WasVerified")

    && Document.Properties.Get("WasVerified") == bool.TrueString)

{

    // TODO: Place the main code of your export script inside these braces.

    //

    // Factory factory = new Factory();


    // . . .

}

```

This script will check documents for the "WasVerified" registration parameter, which indicates whether or not the document has gone through the verification stage, and consequently, whether or not the user expects to receive verified data.

Once you have modified the script, you need to save and publish the modified Document Definition. To do this, close the Document Definition editor and click the **Publish** button.

 **Note:** If documents are being processed within the project at the time when you add a new export profile or edit an existing export profile, update them to the latest version by pressing **Alt+Shift+U** or by selecting **Update to Latest Version** from their shortcut menu.

Sample FlexiCapture project

The ABBYY FlexiCapture Integration Solution for Blue Prism is shipped with a preconfigured ABBYY FlexiCapture project that contains some test images.

This example demonstrates how documents can be processed in the [scenario that requires verification](#) (using the **Attended service** batch type).


To run the "Attended processing" example:

1. Open the sample project on the ABBYY FlexiCapture **Project Setup Station** and then upload it to the ABBYY FlexiCapture Application Server.
2. In Blue Prism, [install BPA Object - FlexiCapture 12 VBO.xml](#) together with the **BPA Process - FlexiCapture 12 Processor.xml** usage example.
3. [Install BPA Process - FlexiCapture 12 Listener.xml](#).
4. Open the properties dialog box for the Document Definition named **European Invoice**, click the **Export Destinations** tab, select the **Export_to_BluePrism** export profile, and click the **Edit...** button. Then click **Edit script** and in the code of the script, specify the actual values required to connect to the FlexiCapture12Listener web service in Blue Prism:

- `connectorSettings.DmsConnectionSettings.Server = "web-service-address";`
- `connectorSettings.DmsConnectionSettings.Credentials.Username = "username";`
- `connectorSettings.DmsConnectionSettings.Credentials.Password = "password";`

5. In the FlexiCapture 12 Processor example, specify the following:

- **InputFilePath** – the path to the file (including the file name) to be sent to ABBYY FlexiCapture 12
- **OutputDir** – the folder where the processing results are to be saved
- **ServerUrl** – the address of the ABBYY FlexiCapture 12 server
- **Company** – the name of the tenant, if the project has been uploaded to a tenant on the FlexiCapture Application Server (if you are working with ABBYY FlexiCapture Cloud, specify the name of your company here)
- **Username** and **Password** – the credentials of the user's ABBYY FlexiCapture account

 **Note:** Make sure that the user has the roles of Scanning Operator and Verification Operator for this project and batch type, or the role of Administrator.

- **ProjectName** – the name of the project on the server (specify "InvoiceDemoProject")
- **BatchType** – the name of the batch type (specify "Attended service")

6. In Blue Prism, start the FlexiCapture 12 Processor process.

The image file will be sent to ABBYY FlexiCapture 12 and, if the document does not require verification, the [standard XML export profile](#) will be applied at the export stage and the export results will be immediately sent back to Blue Prism. If, on the other hand, the document is sent to the verification stage, a link to a document verification task on the Web Verification Station will be sent to the ABBYY FlexiCapture 12 VBO. Once the document is verified, the script export profile will be applied at the export stage, which will send the data to the ABBYY FlexiCapture 12 Listener. The processing results in this example will include the original image file and a text file containing the fields and extracted field data.

Installing, configuring, and starting the components


[ABBYY FlexiCapture 12 VBO](#)

[ABBYY FlexiCapture 12 Listener process](#)

[ABBYY FlexiCapture 12 Connector for Blue Prism](#)

ABBYY FlexiCapture 12 VBO

The ABBYY FlexiCapture 12 VBO component appears as a business object to Blue Prism. This object sends files to ABBYY FlexiCapture 12 and gets back the processing results.

 **Important!** Before sending image files from Blue Prism to ABBYY FlexiCapture using the ABBYY FlexiCapture 12 VBO, you must separate the documents into files (one file per document).

The ABBYY FlexiCapture 12 VBO ships with a sample process named **BPA Process - FlexiCapture 12 Processor.xml** that accesses the VBO.

The ABBYY FlexiCapture 12 VBO comprises the following components:

Component	Description
BPA Object - FlexiCapture 12 VBO.xml	A business object that submits files to ABBYY FlexiCapture 12 and gets back the processing results.
BPA Process - FlexiCapture 12 Processor.xml	An example of using the ABBYY FlexiCapture 12 VBO.

Installing the ABBYY FlexiCapture 12 VBO

To make the ABBYY FlexiCapture 12 VBO and its usage example available on the Blue Prism side, you need to import the **BPA Object - FlexiCapture 12 VBO.xml** and **BPA Process - FlexiCapture 12 Processor.xml** files into Blue Prism. To do this:

1. Open Blue Prism and on the **File** menu, click **Import**.
2. Prompted by the on-screen instructions, select the following files to import, one by one:
 - **BPA Object - FlexiCapture 12 VBO.xml**
 - **BPA Process - FlexiCapture 12 Processor.xml**
 - Additional objects required to run the FlexiCapture 12 VBO usage example (their default location is C:\Program Files\Blue Prism Limited\Blue Prism Automate\VBO):
 - **BPA Object - Utility - File Management.xml**
A business object for working with files stored on the local hard drive.
 - **BPA Object - Utility - Environment.xml**
A business object for interacting with the environment (e.g. for running third-party processes, such as a web browser).
3. Once the import is complete, all the business objects and the usage example will be displayed in Blue Prism on the **Studio** tab.
4. Restart Blue Prism for the changes to take effect.

Configuring the ABBYY FlexiCapture 12 VBO


Before you can start using the ABBYY FlexiCapture 12 VBO, you need to create a new process in Blue Prism:

1. On the **Studio** tab, right-click **Processes** and then click the **Create Process** command on the shortcut menu.
2. In the workspace, create an element of type **Action**. Then double-click to open the added activity.
3. In the window that opens, specify the following:
 - **Name:** <name of activity>.


- **Business Object:** FlexiCapture 12 VBO.
- **Action:** Process.
- On the **Inputs** tab, specify the following input data elements:
 - **ServerUrl** – the address of the ABBYY FlexiCapture server in the following format:
http://<ApplicationServer>
 - **Company** - the name of the ABBYY FlexiCapture tenant (if you are working with ABBYY FlexiCapture Cloud, specify the name of your company here)


 **Note:** If you are not working with a tenant, leave this field empty.

- **Username** – the name of the ABBYY FlexiCapture user
- **Password** – the password of the ABBYY FlexiCapture user
- **ProjectName** – the name of the project on the ABBYY FlexiCapture server
- **BatchType** – the name of the batch type that will be assigned to the batch created in ABBYY FlexiCapture for processing the file
- **FileName** – the name of the input file
- **FileContent** – the file to be sent to ABBYY FlexiCapture (must be stored in a data item of binary data type)
- **BatchRegistrationParameters** – a collection of objects with "Name" and "Value" text fields (these objects will be transformed into batch registration parameters on the ABBYY FlexiCapture side, which can be used, for example, for naming export files)

 **Note:** You can have these elements created automatically by clicking the icon on the left of the value in the **Store In** column.

- On the **Outputs** tab, specify the output data elements that will store the results of the FlexiCapture 12 VBO Process method:
 - **DocumentDefinition** – the name of the Document Definition that was applied to the input image by ABBYY FlexiCapture
 - **Fields** – a collection of objects with "Name" and "Value" text fields for storing the names and extracted values of fields
 - **Files** – a collection of objects with a "Name" text field and a "Content" binary field for storing exported image files and their names
 - **VerificationUrl** – a text field that stores the URL of the document verification page

 **Note:** Windows authentication will be used to access the URL, which will be returned to the ABBYY FlexiCapture 12 VBO.

 **Note:** When a batch is created, the ABBYY FlexiCapture 12 VBO adds a **FileNameWithoutExtension** registration parameter to the batch. This registration parameter will store the name of the input file without the file extension. If the **BatchRegistrationParameters** input list of registration parameters already includes a **FileNameWithoutExtension** parameter, the value from

BatchRegistrationParameters will be passed as the name of the input file to the batch parameters.

Once the activity is configured, the elements of the specified types will appear in the workspace. Data received from ABBYY FlexiCapture 12 will be recorded in these elements.

Starting the ABBYY FlexiCapture 12 VBO

To start the configured ABBYY FlexiCapture 12 VBO, click the Go button on the Blue Prism toolbar.

If all the settings are correct, Blue Prism will receive processing results from ABBYY FlexiCapture 12 (the format of the results will depend on the [usage scenario](#)). These results will be stored in the output data elements you created when configuring the VBO.

If any of the configuration settings is invalid (e.g. if an incorrect ABBYY FlexiCapture 12 address is specified), an error message will be displayed.

ABBYY FlexiCapture 12 Listener process

The ABBYY FlexiCapture 12 Listener process is deployed on the Blue Prism side. The listener receives SOAP requests sent by the connector to Blue Prism. It is assumed that the user will import the ABBYY FlexiCapture 12 Listener into Blue Prism and modify it to suit his needs.

Important! To execute the FlexiCapture 12 Listener process, the machine with Blue Prism that will receive exported files and data must be running as a Resource PC. To make sure that your Blue Prism machine is running as a Resource PC, start Blue Prism, click the **Control** tab, and make sure that the machine is displayed as "connected" in the **Resources** window. If this is not the case, open the command line prompt and execute the following command:

```
"C:\Program Files\Blue Prism Limited\Blue Prism Automate\Automate.exe" /resourcepc /public
```

A window named "Blue Prism - Resource PC (Port 8181)" will open where you will see logs for your Resource PC. Click **Hide** to minimize this window.

The ABBYY FlexiCapture 12 Listener process comprises the following one file:

Component	Description
BPA Process - FlexiCapture 12 Listener.xml	A process that accepts and processes SOAP requests sent by the connector to Blue Prism.

Installing the ABBYY FlexiCapture 12 Listener

To make the FlexiCapture 12 Listener process available on the Blue Prism, you need to import the **BPA Process - FlexiCapture 12 Listener.xml** file into Blue Prism and expose the resulting process as a web service. To do this:

1. Open Blue Prism and on the **File** menu, click **Import**.
2. Prompted by the on-screen instructions, select the following files to import, one by one:
 - **BPA Process - FlexiCapture 12 Listener.xml**
 - Additional object required to run the ABBYY FlexiCapture 12 Listener usage example (its default location is C:\Program Files\Blue Prism Limited\Blue Prism Automate\VBO):
 - **BPA Object - Utility - File Management.xml**
A business object for working with files stored on the local hard drive.

Note: The FlexiCapture 12 Listener usage example already includes a request processing example. The user can freely modify this example with the exception of the parameters that have to be accepted on the **Start** block (see [below](#)).

3. Once the import is complete, all the business objects and the usage example will be displayed in Blue Prism on the **Studio** tab.
4. On the **System** tab, expand the **Processes** node and click **Exposure**. Then in the top right corner of the **Process - Exposure** window, click the **Expose a Process** link.
5. In the **Expose Process** dialog box, select **FlexiCapture 12 Listener** and click **Next**.
6. In the next dialog box, make sure that **FlexiCapture12Listener** is specified as the exposed name of the process and click **Finish**.

The process will appear in the list of exposed processes. To make sure that the process has been exposed as a web service, open the following link on the computer running Blue Prism: <http://localhost:8181/ws/FlexiCapture12Listener?wsdl>. If all the settings are correct, you will see a WSDL file with a description of the web service.

Configuring the ABBYY FlexiCapture 12 Listener process

Before you can start using the FlexiCapture 12 Listener process, you need to configure the following settings in Blue Prism:

1. On the **Studio** tab, double-click the name of the process to open the process editor.
2. By default, the FlexiCapture 12 Listener process saves received files and fields to the output folder, where it creates a subfolder with results for each exported document. You can specify an output folder in the data item named "RootDir."

The user can freely modify this process *with the exception of the process name and the set of input parameters*.

The input parameters, their names, and data types must match those in requests sent by the ABBYY FlexiCapture 12 Connector for Blue Prism. Open the properties of the very first element of the "Start" process and specify data items and their values in the "Store In" column:

- **DocumentDefinition** – the name of the Document Definition that was applied to the input image by ABBYY FlexiCapture (must be stored as the "Text" data type)
- **Fields** – a collection of objects with "Name" and "Value" text fields for storing the names and extracted values of fields
- **Files** – a collection of objects with a "Name" text field and a "Content" binary field for storing exported image files and their names
- **BatchRegistrationParameters** – a collection of objects with "Name" and "Value" text fields (contains the names and values of the batch registration parameters)

Starting the ABBYY FlexiCapture 12 Listener process

The ABBYY FlexiCapture 12 Listener process exposed as a web service is started by a SOAP request sent during document export from the ABBYY FlexiCapture server to the address of the web service.

ABBYY FlexiCapture 12 Connector for Blue Prism

The ABBYY FlexiCapture 12 Connector for Blue Prism is a set of libraries running on the ABBYY FlexiCapture 12 side. The purpose of these libraries is to export processing results from ABBYY FlexiCapture to Blue Prism.


The ABBYY FlexiCapture 12 Connector for Blue Prism:

Component	Description
DmsConnector.dll	An assembly of models and abstractions common to different types of connectors.
AfcDmsConnector.dll	This library receives as input objects specific to ABBYY FlexiCapture, converts them into an internal representation, and sends the converted result to Blue Prism.
BluePrismConnector.dll	This library contains the connector for Blue Prism. This library sends processing results from ABBYY FlexiCapture to the ABBYY FlexiCapture 12 Listener web service.

Connecting the libraries to a Document Definition

Before you can configure document export, you must connect the libraries to your ABBYY FlexiCapture project. To connect the libraries, complete the following steps:

1. Open the ABBYY FlexiCapture **Project Setup Station** and open the project.

 **Note:** To open a project from ABBYY FlexiCapture Cloud, select the **Open Project from Server...** command. In the **Application Server URL** field, specify the address in the following format: <https://europe.flexicapture.com#CompanyName>, where *CompanyName* is the name of your company.

2. Click **Project** → **Document Definitions...** to open the list of Document Definitions available for the project, select the Document Definition for which you want to specify new export settings, and click **Edit...**
3. Click **Document Definition** → **Document Definition Properties...** to open the properties of the Document Definition and then click the **.Net References** tab.
4. Click the **Add...** button on the **.Net References** tab. In the **Add Assembly** dialog box, select **Attached file** from the **Type** drop-down list and in the **Reference** field, specify the path to the DLL file you wish to add. Repeat this step for the **AfcDmsConnector.dll**, **DmsConnector.dll**, and **BluePrismConnector.dll**.

ABBYY FlexiCapture export profiles

ABBYY FlexiCapture exports data based on the export profiles in the Document Definitions. To configure a [usage scenario](#), you need to set up the corresponding export profile. There are two types of export profile:

1. [Standard XML export profile](#)

2. Script export profile. For details, please see:
 - [Creating an export profile](#)
 - [Using a script to specify export settings](#)
 - [Using an XML file to specify export settings](#)
 - [Configuration file fields](#)

Standard XML export profile

This profile is used by the ABBYY FlexiCapture 12 VBO to receive image files and extracted field data. The profile is applied to documents that have not gone through the verification stage.

To configure the standard XML export profile:

1. Open the ABBYY FlexiCapture **Project Setup Station** and open the project.
2. Click **Project** → **Document Definitions...** to open the list of Document Definitions available for the project. Select the Document Definition for which you want to specify new export settings, and click **Edit...**
3. Click **Document Definition** → **Export Settings...** and click the **Export Destinations** tab.
4. Click the **Add...** button to start the export profile creation wizard.
5. In the **Select the Type of Destination** step, select **Export to data files** from the **Type** drop-down list, select the **Save document images option**, and click **Next**.
6. In the **Export Data to Files** step, make sure the **Export path** field is empty and click **Next**.
7. In the **Data File Format** step, select **XML Document (*.xml)** in the **File type** field and click **Next**.
8. In the **Export Images to Files** step, select the **Save images with data** and click **Next**.
9. In the **Image File Format** step, select the desired image file format options and click **Next**.
10. Provide a name for your newly created export profile and click **Finish**.
11. In the **Export Settings** dialog box, check the **Enabled** box for the newly created export profile.
12. Open the **<Project Name> Properties (Project → Project Properties...)** dialog box and make sure that the **Export root path** on the **General** tab is left empty. This means that the export profile will send data to Blue Prism.

Creating a script export profile


To be able to export data from ABBYY FlexiCapture to Blue Prism via a web service, you need to configure a script export profile in the Document Definition.

To create an export profile for Blue Prism:

1. On the Project Setup Station open your ABBYY FlexiCapture project.

 **Note:** Make sure that all the necessary [libraries are connected](#) to the Document Definition.

2. Click **Project** → **Document Definitions...** to open the list of Document Definitions available for the project, select the Document Definition for which you want to specify new export settings, and click **Edit...**
3. Click **Document Definition** → **Export Settings...**
4. Click the **Add...** button to start the export profile creation wizard.
5. In the **Select the Type of Destination** step, select **Custom export (script)** from the **Type** drop-down list. Leave the other settings unchanged or modify them as described in ABBYY FlexiCapture Help.
6. In the **Script Export** step, click the **Edit Script...** button, select **C# .Net** script language and paste into the script editor one of the two sample scripts available in the connector files: **BluePrism - ExportScript - Configure by script.cs** or **BluePrism - ExportScript - Configure by XML.cs**. For detailed instructions on using each of these scripts, see [Using a script to specify export settings](#) and [Using an XML file to specify export settings](#) below. You can always edit this script later, but for the moment, save the changes and close the script editor. Detailed instructions for setting up your export script will be provided below.
7. In the **Select the Destination Name** step, specify a name for your export profile and click **Finish**.
8. The newly created export profile will appear in the list of available export profiles in the export settings dialog box. To make ABBYY FlexiCapture use this profile on Export stage, select the box next to the profile in the **Enabled** column.
9. Click **OK** and close the Document Definition editor. Next, click the **Publish** button to publish your Document Definition.

 **Note:** If documents are being processed within the project at the time when you add your new export profile, update them to the latest version by pressing **Alt+Shift+U** or by selecting **Update to Latest Version** from their shortcut menu.

Once the processing is completed, the document and its metadata are sent from the export stage to Blue Prism via the ABBYY FlexiCapture 12 Listener web service. The export process is logged in the Task Log on the Processing Server.

 **Note:** The event logs are also available on the **Processing Monitor** tab of the Administration and Monitoring Console.

When the export completes successfully, the ABBYY FlexiCapture 12 Listener web service will save the export results on the Blue Prism server in the file format specified by the user.

Using a script to specify export settings

One advantage of using a script is that all the export settings will be automatically used by all the ABBYY FlexiCapture stations from which data are exported to Blue Prism. When [using an XML file](#), you can only specify static settings, whereas scripts allow you to specify different file naming rules, file locations, and field mappings depending on the data contained in the exported document.

When working with ABBYY FlexiCapture Cloud, you also need to use a script to specify export settings, since ABBYY FlexiCapture Cloud does not provide the ability to store an XML file with configuration on processing stations.

However, to modify the export settings, you will have to make changes to the script and, consequently, publish a new version of the Document Definition.


Please use the script named **BluePrism - ExportScript - Configure by script.cs** from the connector files.

Using an XML file to specify export settings

One advantage of using an XML file is that you don't have to edit the script code or the Document Definition. All modifications can be made by editing the XML file, which is much simpler than editing the script code. However, the XML file should be located on every ABBYY FlexiCapture processing station. And you will also have to synchronize it manually on all of the ABBYY FlexiCapture stations from which data is to be exported to Blue Prism.

To specify export settings in an XML file:

1. As your export script, use the **BluePrism - ExportScript - Configure by XML.cs** file from the ABBYY FlexiCapture Integration Solution for Blue Prism files.
2. Create an XML file named **<Project name>_<Document Definition name>.xml**. This naming scheme will allow you to have multiple XML files for different Document Definitions.
3. In the registry of the computer with a processing station, locate HKEY_LOCAL_MACHINE\SOFTWARE\ABBYY\FlexiCapture\12.0\Connectors\BluePrism and in its "XmlFolder" string value field, specify the path to the folder where the settings file is to be stored.
4. In the registry of the computer with a processing station, locate the HKEY_LOCAL_MACHINE\SOFTWARE\ABBYY\FlexiCapture\12.0\Connectors\ and set its "BluePrism" string value field to **true**.

 **Note:** If you do not have the necessary keys in the HKEY_LOCAL_MACHINE \ SOFTWARE registry branch, create them.

 **Note:** In the code of **BluePrism - ExportScript - Configure by XML.cs**, you can also find some other possible naming schemes for your XML files.

Configuration file fields


This section describes the fields of the **BluePrism - ExportScript - Configure by script.cs** and **BluePrism - ExportScript - Configure by XML.cs** configuration files.

Server contains the address of the server where the ABBYY FlexiCapture 12 Listener web service is located: `<Server>http://BluePrism:8181/ws/FlexiCapture12Listener</Server>`.

Username contains the name of the user in Blue Prism. For example, `<Username>username</Username>`.

Password contains the Blue Prism user's password. For example, `<Password>password</Password>`.

FileName contains the file name template for the document sent to the web service. For example, `<FileName><Batch></FileName>`.

 **Note:** The name of the document may have an unchanging static part and a changing dynamic part. The dynamic part is defined by tags, which are replaced by the ABBYY FlexiCapture document property values at the time of export. Each tag must be enclosed in angle brackets. In the XML file:

- '<' stands for '<'
- '>' stands for '>'

Possible tags for the dynamic part of the name:

Note: These dynamically changing tags are case-sensitive and the register of the characters used in the tags above should be preserved.

- *Project* for the name of the project in ABBYY FlexiCapture
- *Batch* for the name of the batch
- *DocumentDefinition* for the name of the Document Definition in ABBYY FlexiCapture
- *SourceFile* for the name of the source file
- *Identifier* for the document identifier in the batch
- *BatchType* for the name of the batch type
- *Time* for the current time in yyyy-MM-dd_HH-mm-ss format

If you use the FlexiCapture 12 VBO to send image files to ABBYY FlexiCapture, the batch created for processing an image will be assigned a FileNameWithoutExtension registration parameter. This parameter will receive the value from the FileName input parameter (from the VBO). You can also use the value of this registration parameter in your script for naming export files as follows:

<FileNameWithoutExtension>. Other custom registration parameters can be used to name files in the following format: <RegParam:ParamName>. You can also use the values of index fields as follows: <Index:IndexField>.

The following is an example of a document name with a static part:

```
<FileName>My_static_prefix_&lt;DocumentDefinition&gt;_&lt;Identifier&gt;_and_postfix_</FileName>
```

The following is an example of a document name without a static part:

```
<FileName>&lt;Project&gt;_&lt;Identifier&gt;</FileName>
```

FieldPairs contains a collection of field pairs.

If your export settings are stored in an XML file, map the fields as follows:

```
<FieldPairs>
  <FieldPair>
    <AfcField>Invoice Layout\InvoiceNumber</AfcField>
    <DmsField>InvoiceNumber</DmsField>
  </FieldPair>
</FieldPairs>
```

where:

- *AfcField* is a full path to the FlexiCapture Document Definition field from which data are to be read at the time of export.
- *DmsField* is field Name in the Fields collection in the Blue Prism FlexiCapture 12 Listener process.

If your export settings are specified directly in the script (**BluePrism - ExportScript - Configure by script.cs**), map the fields as follows:

```
{ @"Invoice Layout\InvoiceNumber", "InvoiceNumber" },
```

where the first value is the full path to the field in ABBYY FlexiCapture Document Definition and the second value is the name of the field in the Fields collection in the Blue Prism FlexiCapture 12 Listener process.

ExportImageSavingOptions contains the image saving options to be used at the time of export, such as the format of the exported image, its quality, and redacted areas. For the detailed description of the saving options, please refer to [ABBYY FlexiCapture Developer's Help](#).