ABBYY FlexiCapture SDK

Quick Start Guide

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About FlexiCapture SDK

ABBYY FlexiCapture Software Development Kit (SDK) represents the latest generation of ABBYY's data capture SDK technology. It enables developers to quickly develop solutions for extracting data from fixed, semi-structured, and unstructured documents, while the latest AI technologies keep improving the recognition quality of those documents. FlexiCapture SDK is ideal for system integrators and service providers who develop integrated data capture solutions.

Key Features

- Comprehensive set of recognition technologies

- Out-of-the-box invoice, receipt, and PO processing

- Artificial intelligence and machine learning

- Basic API-based setup

- Advanced classification

- Learning by feedback

NOTE:

- Before using FlexiCapture SDK, we recommend that you attend an ABBYY FlexiCapture Basic Class.

- Please contact your ABBYY representative for details.

- ABBYY FlexiCapture SDK assumes you are an experienced Windows .NET, Java, or scripting languages programmer
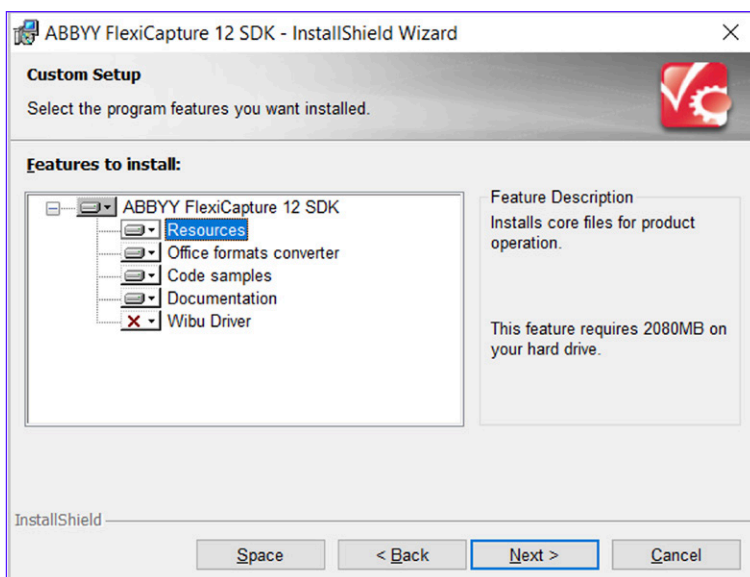
ABBYY FlexiCapture SDK Installation

1. Run the product installation.

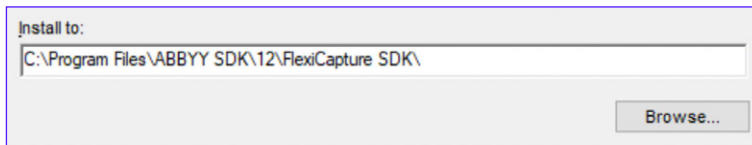| AutoRun.exe | Application | 1 104 KB |
autorun.inf	Setup Information	1 KB
setup.exe	Application	1 007 KB
Setup.ini	Configuration sett...	2 KB

2. Read and accept a License Agreement.
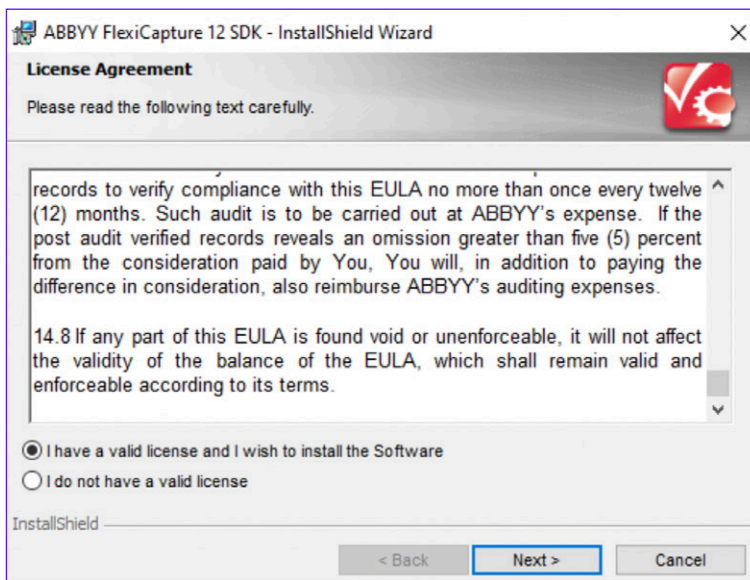
3. Select the program features you want installed.

4. Select a target folder for installation.

5. Set up network license parameters if you have a network license.

NOTE: In case you have a Trial Online license, DO NOT specify any details and just move forward with Next button.
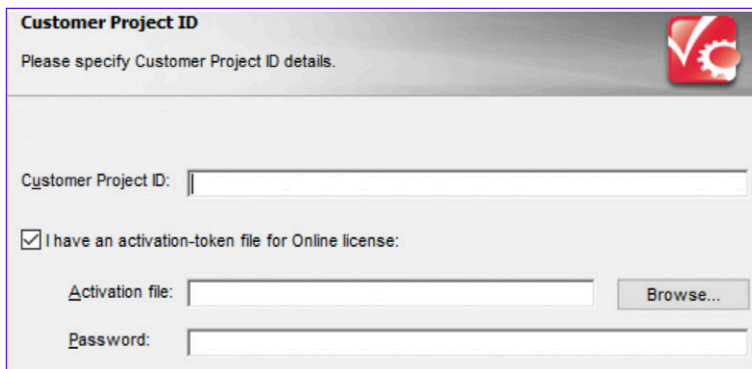
6. Enter your Customer Project ID.

Use the files from the email with the license details. Enter a path to the activation token file and password for that file.

7. Start using the product.

Application Development and Testing

The ABBYY FlexiCapture SDK distribution pack contains a set of sample source code. These samples show how to use the product in different scenarios so that you can build your solution faster. A detailed description of the samples can be found in the **Code Samples Library** provided with this distribution pack. You can access the library by clicking on *Windows Start Menu > Programs > ABBYY FlexiCapture 12 SDK > Code Samples Library.*

Application development with ABBYY FlexiCapture SDK consists of two mandatory steps:

- FlexiCapture project creation and setup

- FlexiCapture SDK integration into your application

FlexiCapture Project Creation and Setup

The FlexiCapture project contains the actual logic of the data capture scenario, including document definitions and project-specific settings.

To get an understanding of how FlexiCapture projects work, it is useful to review the sample projects provided with the FlexiCapture SDK installation. However, depending on the complexity of the use-case, additional FlexiCapture knowledge might be required, which can be obtained by attending FlexiCapture training classes. Please contact your ABBYY representative for additional information.

Creating a FlexiCapture project is a crucial task in the capture process. You will need to define the rules of finding the objects contained in a document and specify what should be extracted from the document. This could be done in two ways: either using FlexiCapture Developer's Package or using the API within FlexiCapture SDK.

1. Using FlexiCapture Developer's Package

In the initial email that you should have received, there is a trial license number with a download link for the ABBYY FlexiCapture 12 Developer's Package application. The Developer's Package is used for designing and testing a FlexiCapture project before integrating it into your application with FlexiCapture 12 SDK.

For additional details, please see the Help file, which can be found here:
http://help.abbyy.com/en-us/flexicapture/12/distributed_administrator/introduction_ag.

2. Using the API of FlexiCapture SDK

You can create a FlexiCapture project directly in the FlexiCapture 12 SDK using one of the following methods:

- **CreateReceiptProject:**

- **CreateInvoiceProject method of the Engine object:** Creates an empty FlexiCapture project for invoice recognition. After creation of the project, additional setup can be performed for invoice recognition.
  A detailed description of invoice processing via FlexiCapture SDK can be found in the **"Recognizing Invoices with ABBYY FlexiCapture SDK"** article in the Developer's Help file
  (Start > Programs > ABBYY FlexiCapture 12 SDK > Developer's Help > Guided Tour > Tutorial > Recognizing Invoices with ABBYY FlexiCapture SDK).

- **CreateProject method of the Engine object:** Creates an empty FlexiCapture project for processing all types of documents. After creation of the project, additional fields can be created corresponding to those needing to be extracted from the documents using the *DocumentDefinitions* object. You can train the field extraction technology later using information from field extraction verification.
  A detailed description can be found in the **"Fields Extraction Training"** article in the Developer's Help file *(Start > Programs > ABBYY FlexiCapture 12 SDK > Developer's Help > Guided Tour > Tutorial > Fields Extraction Training).*

FlexiCapture SDK Integration Into Your Application

As soon as you have a configured FlexiCapture project, it can be integrated into the application code based on the ABBYY FlexiCapture SDK. The easiest way to start is to use the **"Hello" sample** (see the **Code Samples Library described above**).

"Get started" ("Hello" sample) shows the main steps you need to perform to make the ABBYY FlexiCapture SDK work for you. The recognition procedure uses the Project object and its main methods:

1. Creating the Engine object:

```
IEngine engine = engineLoader.Engine;
```

2. Specifying the FlexiCapture project and opening the project:

```
string projectName = Path.Combine(samplesFolder,@"SampleProject\Invoices_eng.
fcproj");
IProject project = engine.OpenProject(projectName);
```

3. Creating a new batch and opening it:

```
IBatch batch = project.Batches.AddNew();
batch.Open();
```

4. Adding images to the batch:

```
batch.AddImage(Path.Combine(samplesFolder, @"SampleImages\Invoices_1.tif"));
batch.AddImage(Path.Combine(samplesFolder, @"SampleImages\Invoices_2.tif"));
batch.AddImage(Path.Combine(samplesFolder, @"SampleImages\Invoices_3.tif"));
```

5. Recognizing the images:

```
batch.Recognize(null, RecognitionModeEnum.RM_ReApplyDocumentDefinitions,
null);
```

6. Exporting — you can either export with default parameters (Document Definition-wise), or use custom parameters (per batch or per each document):

```
IExportParams exportParams = engine.CreateExportParams(ExportDestinationTypeEn
um.EDT_File);
```

7. Setting up export parameters:

```
IFileExportParams fileExportParams = exportParams.FileExportParams;
fileExportParams.RootPath = Path.Combine(samplesFolder, "Export");
fileExportParams.FileFormat = FileExportFormatEnum.FEF_XLS;
```

8. Performing the export:

```
project.Export(null, exportParams);
```

9. When all operations with the batch and the project are finished, these objects must be closed:

```
batch.Close();
project.Close();
```

10. Unloading the engine to finish the process:

```
unloadEngine();
```

A required FlexiCapture Project file is already created for the sample images. The sample FlexiCapture Project, with the included basic code, is a great starting point for creating your own project. A FlexiCapture project will allow you to test, using the "Hello" code sample with your own documents.

Now you are **ready to start with your own development**. The ABBYY FlexiCapture 12 SDK Tutorial will walk you through all basic steps you need to perform. You can find the Tutorial at
Start > Programs > ABBYY FlexiCapture 12 SDK > Developer's Help > Guided Tour > Tutorial.

NOTE: Most of the samples show the standard method to **load the Engine object**, which is Loading FCEngine.dll manually using the "naked" interface. There are two more ways to load the Engine object in ABBYY FlexiCapture 12 SDK. Each of the loading methods has its own specifics, affecting the use of the object in different circumstances. More details about different ways to load the Engine object, as well as samples of code, can be found at *Start > Programs > ABBYY FlexiCapture 12 SDK > Developer's Help > Guided Tour > Advanced Techniques > Programming Aspects > Different Ways to Load the Engine.*

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