

ABBYY® FineReader PDF 15

User's Guide

Information in this document is subject to change without notice and does not bear any commitment on the part of ABBYY.

The software described in this document is supplied under a license agreement. The software may only be used or copied in strict accordance with the terms of the agreement. It is a breach of the "On legal protection of software and databases" law of the Russian Federation and of international law to copy the software onto any medium unless specifically allowed in the license agreement or nondisclosure agreements.

No part of this document may be reproduced or transmitted in any form or by any means, electronic or other, for any purpose, without the express written permission of ABBYY.

Contents

Introducing ABBYY FineReader 8

- About ABBYY FineReader 9
- What's New in ABBYY FineReader PDF 15 11

The New Task window 14

- Viewing and editing PDFs 16
- Quick conversion 18
 - Creating PDF documents 21
 - Creating Microsoft Word documents 23
 - Creating Microsoft Excel spreadsheets 25
 - Other formats 27
- Advanced conversion 27
- Comparing documents 31
- Scanning and saving documents 34
 - Scanning to the OCR Editor 37
 - Scanning to PDF 39
 - Scanning to Microsoft Word 41
 - Scanning to Microsoft Excel 43
 - Scanning to image files 45
 - Scanning to other formats 47

PDF Editor 48

- Viewing PDF documents 49
 - Viewing modes 50
 - Navigating PDF documents 53
 - Background recognition 55
 - Keyword search 56
 - PDF security features 57
- Copying data from PDF documents 58
 - Copying an area as an image 58
 - Copying an area as text 59
 - Copying an area as a table 61
- Reviewing PDF documents 63
 - Comments 63
 - Marking up text 64
 - Drawing shapes 66
 - Adding a Text block annotation to a PDF document 69
 - Collaborating on PDF documents 70
 - Adding stamps 75
- Working with PDF content 78
 - Inserting and editing text 79

Contents

- Inserting and editing pictures 87
- Inserting and editing hyperlinks 88
- Recognizing text 90
- Working with pages 91
- Adding bookmarks 95
- Adding headers and footers 97
- Adding watermarks 100
- Adding file attachments 101
- Viewing metadata 102
- Enhancing page images 103
- Working with interactive PDF forms 104
 - Filling out forms 105
 - Creating forms 107
 - Editing forms 109
 - Text field 115
 - Drop-down list 120
 - Check box 125
 - Radio button 128
 - Button 131
 - Signature field 141
 - List box 144
- Signing PDF documents 148
 - Digital signature 149
 - Text signature 151
 - Picture signature 152
- Protecting PDF documents with passwords 152
 - Passwords and permissions 153
 - Deleting confidential information from PDF documents 154
- Creating PDF documents 155
 - Creating PDF documents from selected pages 155
 - Using a virtual printer to create PDF documents 155
- Saving and exporting PDF documents 156
 - Saving PDF documents 157
 - Saving in PDF/A 158
 - Saving in other formats 160
 - Reducing the size of your PDF documents 160
 - Sending PDF documents to the OCR Editor 161
 - E-mailing PDF documents 161
 - Printing PDF documents 162
- OCR Editor 163**

Contents

Launching the OCR Editor 163
 OCR Editor interface 164
 Obtaining documents 168
 Opening images and PDFs 169
 Scanning paper documents 170
 Recognizing documents 171
 OCR projects 172
 Group work with OCR projects 177
 Improving OCR results 178
 If your document image has defects and OCR accuracy is low 179
 If areas are detected incorrectly 182
 Editing area properties 186
 If the complex structure of a paper document is not reproduced 187
 If you are processing a large number of documents with identical layouts 188
 If tables and pictures are not detected 189
 If a barcode is not detected 192
 If an incorrect font is used or some characters are replaced with "?" or "□" 193
 If your printed document contains non-standard fonts 194
 If your document contains many specialized terms 197
 If the program fails to recognize certain characters 198
 If vertical or inverted text was not recognized 200
 Checking and editing texts 201
 Checking recognized text 202
 Using styles 205
 Editing hyperlinks 206
 Editing tables 207
 Removing confidential information 207
 Copying content from documents 208
 Saving OCR results 209
 Saving in PDF 211
 Saving editable documents 212
 Saving tables 214
 Saving e-books 215
 Saving in HTML 216
 Saving images 217
 Sending OCR results to the PDF Editor 218
 E-mailing OCR results 219
 Sending OCR results to Kindle 220
Integration with other applications 220
 Integration with Windows Explorer 221

Contents

Integration with Microsoft SharePoint 224

Automating and scheduling OCR 225

Automating document processing with ABBYY FineReader 226

ABBYY Hot Folder 229

ABBYY Compare Documents 234

Launching ABBYY Compare Documents 235

Comparing documents 236

The main window 238

Improving comparison results 239

Viewing comparison results 241

Saving comparison results 243

ABBYY Screenshot Reader 244

Reference 248

How to set ABBYY FineReader PDF 15 as your default PDF viewer 249

Types of PDF documents 251

Scanning tips 253

Taking photos of documents 256

Options dialog box 259

Format settings 262

 PDF settings 263

 DOC(X)/RTF/ODT settings 267

 XLS(X) settings 270

 PPTX settings 271

 CSV settings 271

 TXT settings 272

 HTML settings 273

 EPUB/FB2 settings 274

 DjVu settings 275

Supported OCR and document comparison languages 277

Supported document formats 284

Document features to consider prior to OCR 287

Image processing options 290

OCR options 293

Working with complex-script languages 296

Supported interface languages 300

Current date and time on stamps and in headers and footers 301

Fonts required for the correct display of texts in supported languages 304

Regular expressions 306


Contents

| | |
|--|------------|
| Installing, activating, and registering ABBYY FineReader PDF 15 | 308 |
| System requirements | 309 |
| Installing and starting ABBYY FineReader | 310 |
| Activating ABBYY FineReader | 311 |
| Registering ABBYY FineReader | 313 |
| Data privacy | 313 |
| Appendix | 313 |
| Glossary | 314 |
| Keyboard shortcuts | 320 |
| Technical support | 331 |
| Third-party software | 331 |

Introducing ABBYY FineReader

This chapter provides an overview of ABBYY FineReader and its features.

Chapter contents




- [About ABBYY FineReader](#)  9
- [What's New in ABBYY FineReader PDF 15](#)  11

About ABBYY FineReader

ABBYY FineReader PDF 15 is a universal PDF tool for managing documents in the digital workplace. Powered by ABBYY's AI-based OCR and document-conversion technologies, FineReader unlocks the information contained within a document to increase business productivity. FineReader makes it easy and efficient to digitize, retrieve, edit, convert, protect, share, and collaborate on all kinds of PDF and paper documents in the modern working world.

What you can do with ABBYY FineReader PDF 15:

- Work with any type of PDF, including scanned documents
 - [Edit text](#) ^[79] (even whole paragraphs, also within table cells), [hyperlinks](#) ^[88], and [pictures](#) ^[87] throughout a document.
 - [Search by keywords](#) ^[56] in the text, comments, bookmarks, and metadata within a document.
 - [Rearrange, add, delete](#) ^[91] and [enhance \(rotate, crop, skew\)](#) ^[103] pages in PDFs.
 - [Copy text, tables, and pictures](#) ^[58] from PDFs, scans, or photos in a few clicks.
 - [Export PDFs into Microsoft Word, Excel, or another editable format](#) ^[156].
 - [Add comments and annotations](#) ^[63] to documents.
 - Add [watermarks](#) ^[100], [headers and footers, bates numbering,](#) ^[97] and [stamps](#) ^[75] to PDFs.
 - [Apply and verify digital signatures](#) ^[149].
 - [Protect PDFs](#) ^[153] with passwords and encryption.
 - [Remove sensitive information](#) ^[154] from documents through redaction.
 - [Create / combine PDF documents](#) ^[157], including industry standards [PDF/A for long-term archiving](#) ^[158] and PDF/UA for accessibility.
 - [Fill out PDF forms](#) ^[105].
 - [View](#) ^[49] and [print](#) ^[162] PDFs.
 - [Identify differences](#) ^[234] in the text from two versions of the same document, whether the versions be PDFs, scans, images, Microsoft Word documents, or any combination of supported digital files.
 - [Save and share](#) ^[243] these differences as a Microsoft Word document in Track Changes mode.
- [Scan and convert documents](#) ^[14]
 - Scan and convert PDF and paper documents into editable and searchable formats (including Microsoft Word, Microsoft Excel, searchable PDF, PDF/A, PDF/UA, and many more) to further edit, reuse, or store them.

- Convert paper documents, document images, and PDFs quickly and accurately - while retaining their original layout, formatting, and structure - with the advanced OCR Editor.
- Improve quality and correct distortions in the digital images of documents (scans/photographs) before converting them, either automatically or manually.
- Quickly check how recognized text matches up with the original document and make any necessary changes with a built-in text editor and verification tools before saving.
- Improve the accuracy of converting documents with advanced tools: adjust or specify document areas, train the program to recognize unusual or decorative fonts, and create user dictionaries and languages for specific terminology, abbreviations, codes, etc.
- [Compare texts to identify differences](#)  between two versions of the same document*
 - ABBYY FineReader PDF 15 can compare two versions of the same document even if they are in two different formats. For example, you can compare a scanned document and the same document in Microsoft Word (in either DOC and DOCX formats).
 - Save and share the differences as a simple list of changes, as an entire Microsoft Word document in Track Changes mode, or as an entire PDF with highlighted text mark-ups and comments.
- [Automate your personal document conversion routines with ABBYY Hot Folder](#) *
 - ABBYY Hot Folder is a conversion scheduling tool included with ABBYY FineReader PDF 15 that watches for documents in user-defined folders and converts them on a schedule with pre-set parameters.
- [Take a snapshot of any part of the screen with ABBYY Screenshot Reader](#) 
 - If a screenshot contains text or tables, it can also be extracted and saved as an editable format.**

* This feature is not available with all versions of ABBYY FineReader. Please visit [our home page](#) for more information.

** In order to use ABBYY Screenshot Reader, you must first register your copy of ABBYY FineReader.

What's New in ABBYY FineReader PDF 15

Editing PDFs

- **Editing text within paragraphs**

Now, editing text in PDFs of any kind – including scanned documents – can be done within a whole block of text. When you add or delete text, it automatically flows from line to line, which provides you with a convenience and freedom similar to editing in a word processor like Microsoft Word.

- **Reformatting text**

You can also change the text formatting (font type and size, typeface, color, line spacing, text alignment, and direction) either for the whole paragraph or for only a selection of text.

- **Editing page layout**

You can even change the layout of any page in a PDF. Add or delete paragraphs, change their positioning or order, and make them wider, narrower, higher, or lower to align them with rest of the page. Throughout the process, the text will automatically flow into the layout to fit with the changes you make.

- **Editing table cells**

Each cell in a table can now be edited individually, as a separate paragraph, and it will not affect content in the other cells in the same row.

Viewing PDFs

- **Faster viewer**

FineReader's PDF viewer has become 1.5x faster. Opening any kind of PDF is now as quick as you would expect.

Creating PDFs

- **Creating interactive PDF forms**

Create your own fillable PDF forms from a blank document or by adding fields to an existing PDF. Choose from fillable fields, drop-down lists, multiple-choice questions, action buttons, and more. Edit and rearrange the forms as needed.

Converting PDFs

- **Detecting text-layer quality**

Detect the quality of a text layer when working with digital PDFs. If the text layer in a page is problematic (corrupted, encoding problems, etc.), FineReader applies OCR to convert the whole page rather than extracting the text layer. This allows for the most accurate results when converting digitally-created PDFs into editable formats.

- **Detecting text in fields and annotations**

When converting an interactive PDF form or a PDF with annotations into an editable format, FineReader ensures that the text from fields and certain kinds of annotations (such as a Text Box or Typewriter) is accurately and reliably extracted.

- **Improved layout retention**

Reconstructing paragraphs when converting digital PDFs into editable formats has been improved as well.

Comparing documents

- **Export in Track Changes mode**

Now, you can export the comparison results as a Microsoft Word document highlighting the differences in Track Changes mode, the mode commonly used in organizations, particularly in the legal field.

- **Even more accurate comparisons**

Thanks to the improvements in converting digital PDFs, you can compare such documents with any other type of supported format even more precisely than before.

- **New comparison language**

Comparing documents in Armenian is now possible, with 38 comparison languages in total.

Improved OCR

ABBYY's latest OCR technology provides improvements to a variety of features in ABBYY FineReader PDF 15: more reliable detection of headers and footers; more accurate document conversion in Japanese and Korean; improved retention of table structure when saving to Excel in languages written from right to left; and better automatic tagging when saving to tagged PDFs (including PDF/UA).

Improvements for organizations

- **Remote User licenses**

Based on access for named users, Remote User licenses allow organizations to use FineReader with desktop and application virtualization solutions, such as Microsoft Remote Desktop Services (RDS), Citrix XenApp, and Citrix Virtual Apps and Desktops. Please refer to FineReader's Administrator Guide for detailed information.

- **Improved product customization with GPO**


The list of possibilities to customize FineReader for specific users/workstations using GPO (Group Policy Objects) has increased to include the following options:

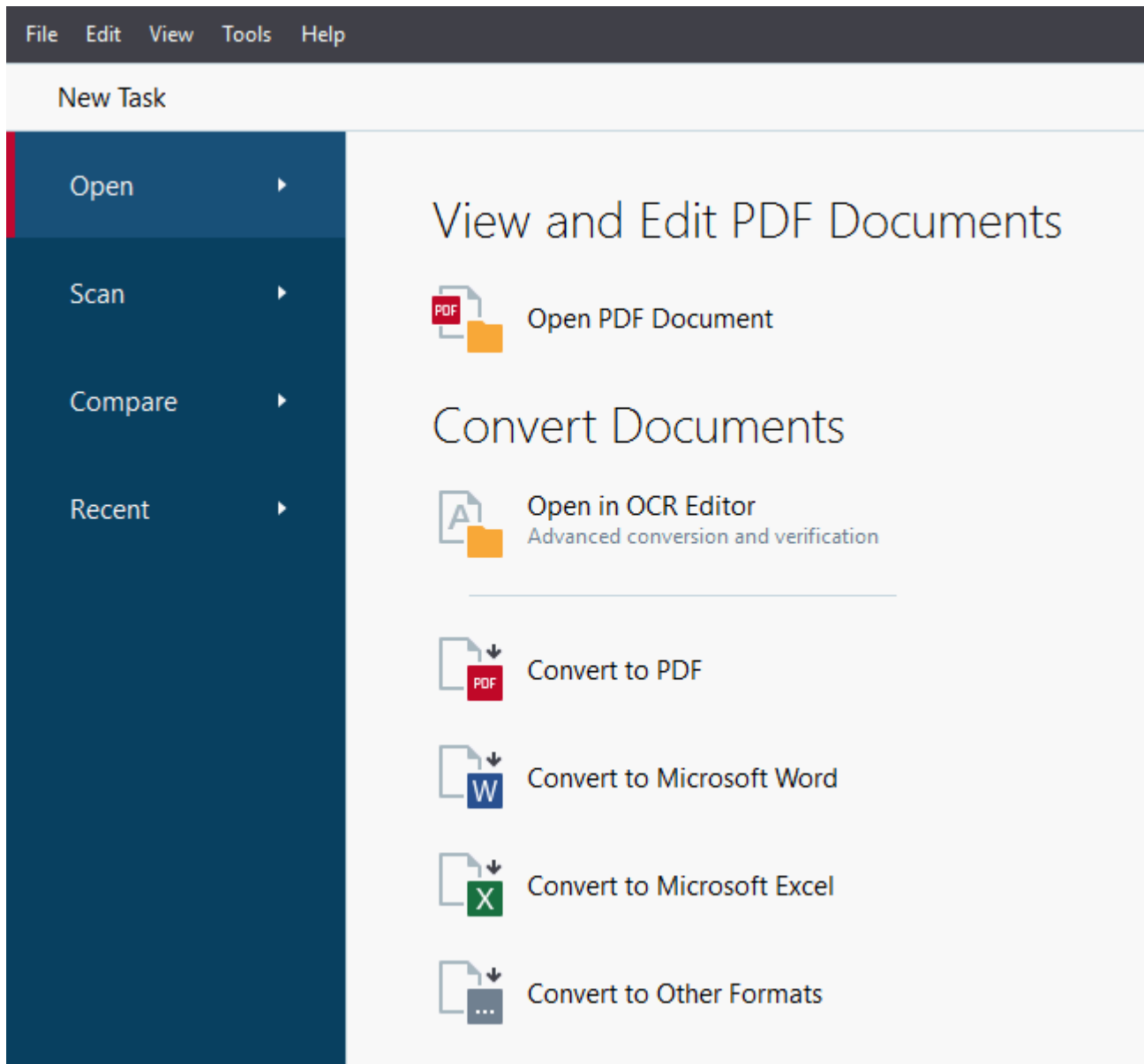
- Define the maximum number of workstation CPUs used by FineReader.
- Set a user inactivity timeout to force the release of licenses for workstations that use concurrent licenses.
- Take advantage of ADMX/ADML templates.

We would like to extend our sincere appreciation for all the users who have contributed feedback and helped us broaden FineReader's capabilities to make it more useful in daily work.

The New Task window

When you launch ABBYY FineReader, a **New Task** window opens, where you can easily open, scan, create, or compare documents. If you don't see the **New Task** window (e.g. if you closed it or if you initiated an ABBYY FineReader task by right-clicking a file in Windows Explorer), you can always open it

by clicking the  **New Task** button on the main toolbar.

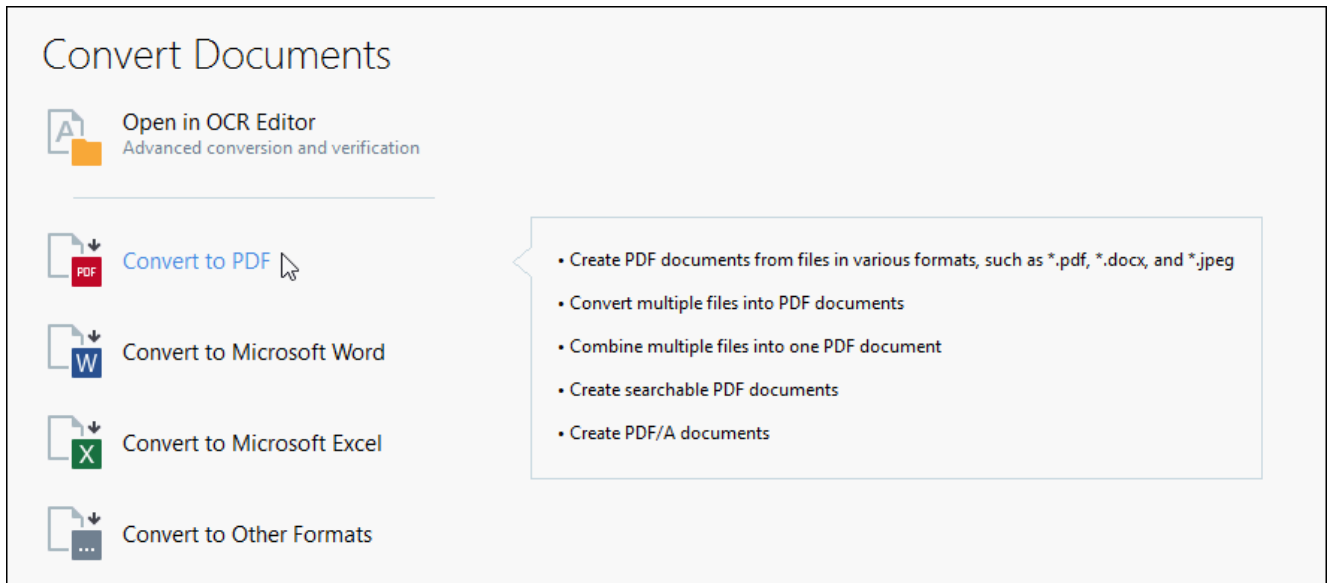


To start processing a document, select a task:

1. In the left-hand pane:
 - Click **Open** if you already have documents that you need to process.
 - Click **Scan** if you need to scan paper documents first.
 - Click **Compare** if you want to compare two versions of the same document.
 - Click **Recent** to resume work on a previously saved PDF document or OCR project.

2. In the right-hand pane, select the appropriate task.

✎ For your convenience, when you hover the mouse cursor over a task, a pop-up window appears listing the most common scenarios covered by that task.



✎ The settings for all ABBYY FineReader tasks are specified in the **Options** ²⁵⁹ dialog box. To open this dialog box, click **Options** at the bottom of the left-hand pane.

Chapter contents

- [Viewing and editing PDF documents](#) ¹⁶
- [Quick conversion](#) ¹⁸
- [Advanced conversion](#) ²⁷
- [Comparing documents](#) ³¹
- [Scanning and saving documents](#) ³⁴

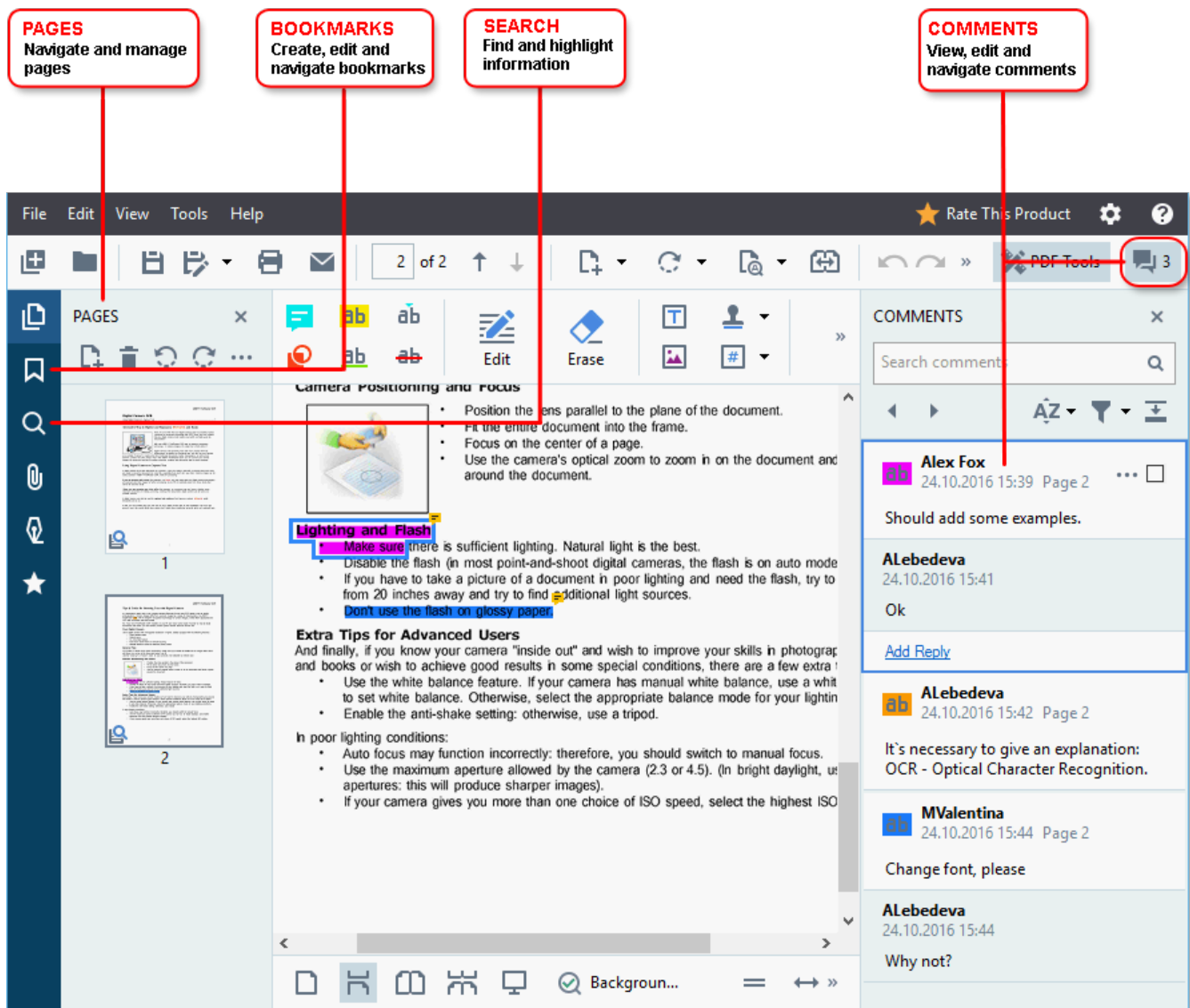
Viewing and editing PDFs

With ABBYY FineReader, you can easily view, edit, comment, and search inside any type of PDF documents, even those that were obtained by simply scanning a paper document and so do not contain any searchable or editable text.

Viewing PDF documents and adding your comments

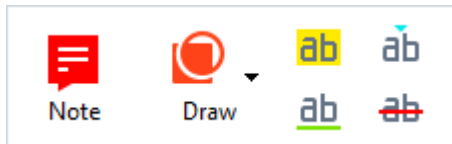
On the **New Task** screen, click the **Open** tab and then click **Open PDF Document**. The selected document will be opened in the PDF Editor for [viewing](#)^[49] and [commenting](#)^[63].


Use the [Pages](#)^[53], [Bookmarks](#)^[95], [Search](#)^[56] and [Comments](#)^[70] buttons to navigate around the document.



ABBYY FineReader offers the following commenting tools:

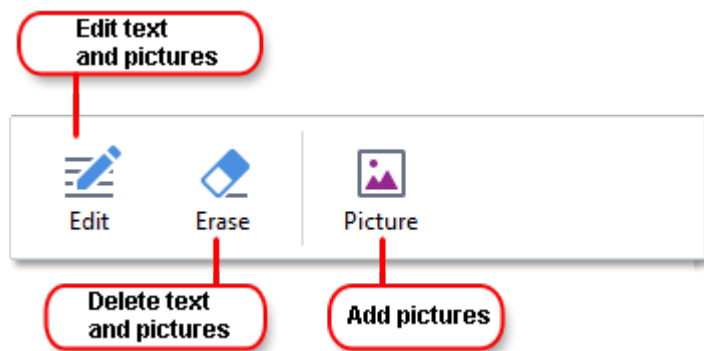
- [Add Note](#)^[63]
- [Highlight](#)^[64], Underline, Strikethrough, and Insert Text
- [Draw](#)^[66] Shape, Line, or Arrow



✔ If you don't see the commenting tools, click the  PDF Tools button.

Editing PDF documents

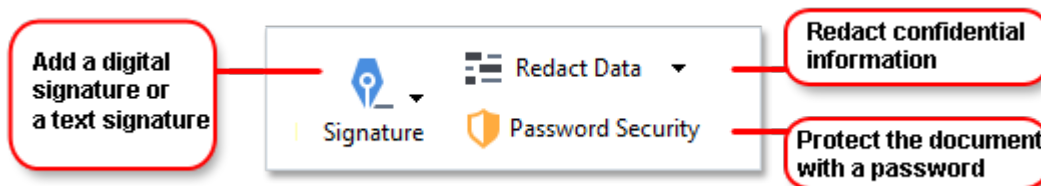
ABBYY FineReader offers the following editing tools:



See also: [Editing text](#)^[79], [Inserting and editing pictures](#)^[87].

Protecting PDF documents^[152]

With ABBYY FineReader, you can:



See also: [Digital signatures](#)^[149], [Removing confidential information from PDF documents](#)^[154], [Passwords and permissions](#)^[153].

Working with interactive forms

ABBYY FineReader PDF 15 allows you to create, edit, fill out, save, and print interactive PDF forms. **See also:** [Working with interactive PDF forms](#)^[104]

When you open a PDF that contains an interactive form, the form fields are highlighted, inviting you to select a value from the drop-down list or type in some information.

✔ If you encounter a form that cannot be filled out by simply typing text in the empty fields, use the **Export** tool to type the necessary information over the form. **See also:** [Filling out forms](#)^[105]

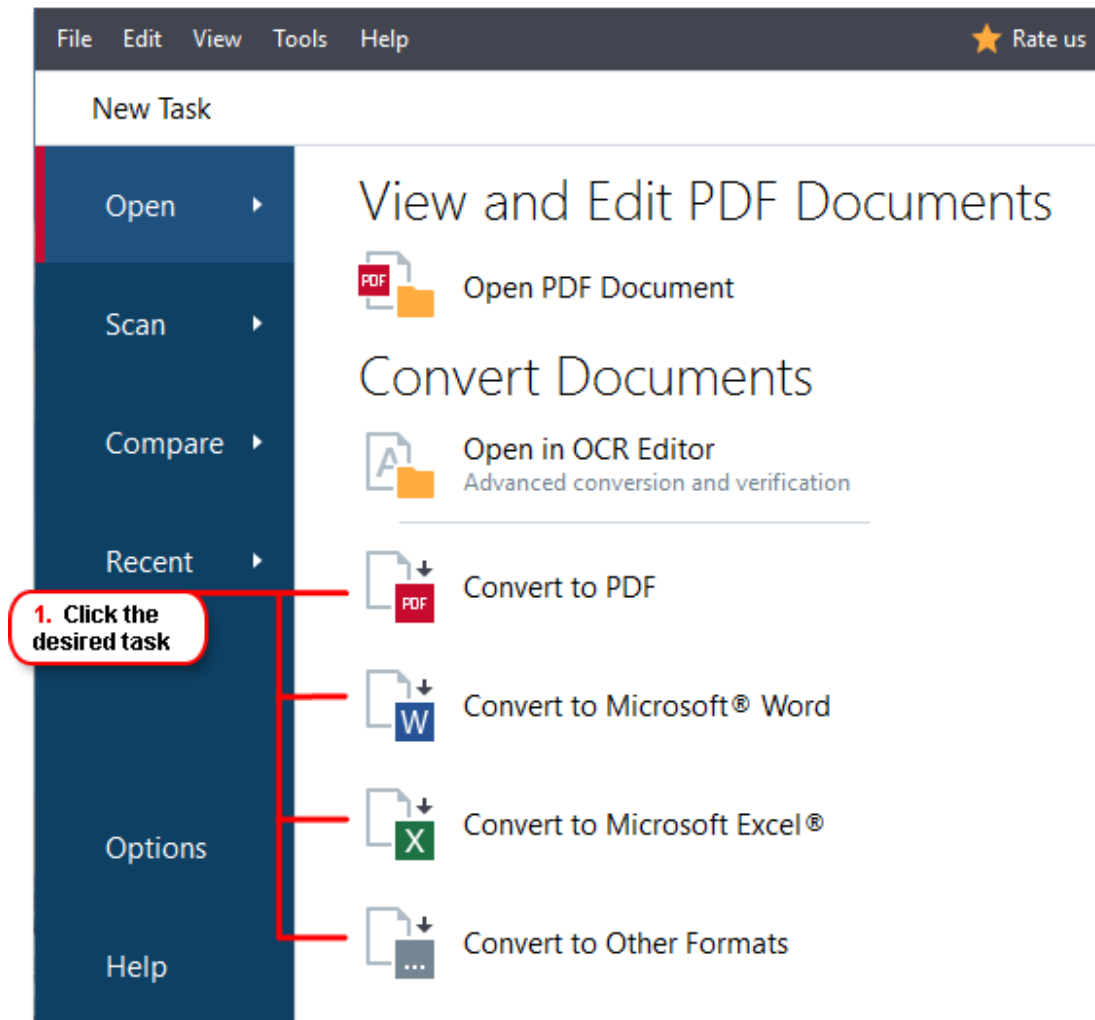
✔ For more information on working with PDF documents, see [Working with PDF documents](#)^[48]

Quick conversion

You can use the built-in tasks on the **Open** tab of the **New Task** screen to convert PDF documents or images or create a new PDF from files in various formats.

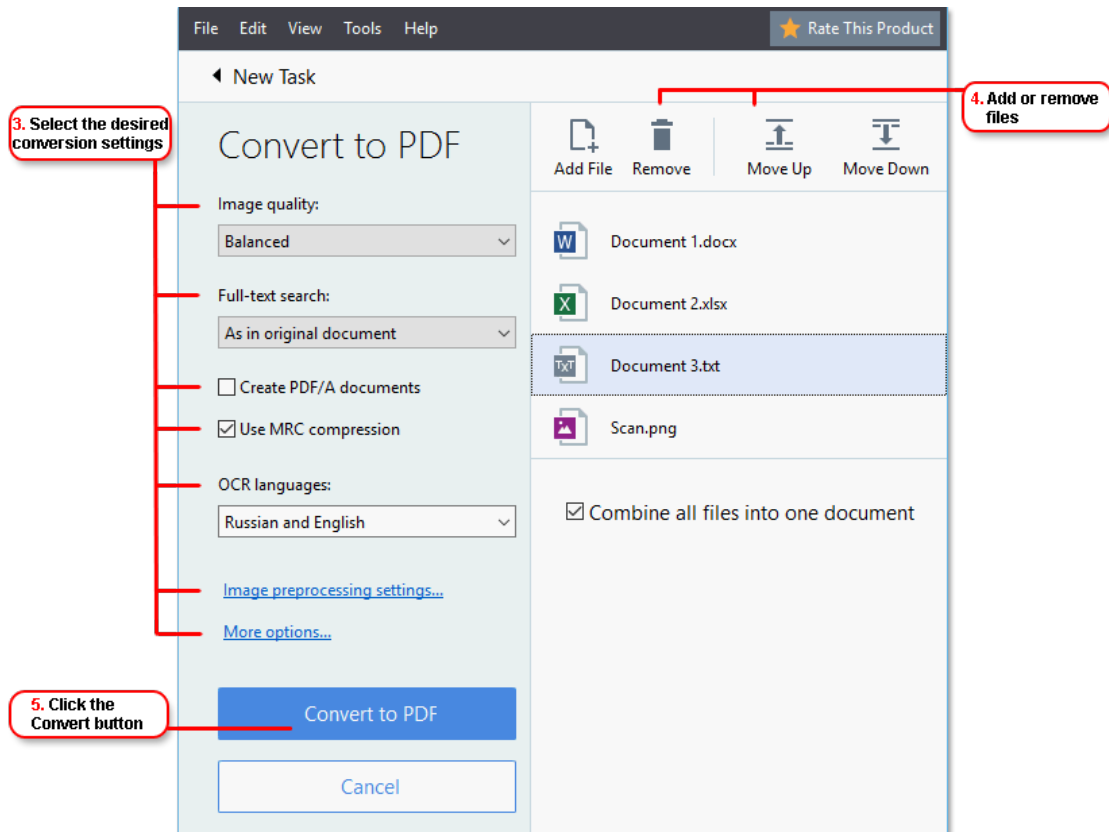
Converting one or more files

1. Click the **Open** tab and then click a desired task:



- **Convert to PDF** creates PDF documents from *.docx, *.html, *.jpeg, and other files. You can also use this task to combine multiple files into one PDF document.
- **Convert to Microsoft Word** creates Word documents from PDF and image files. You can also use this task to combine multiple files into one Microsoft Word document.
- **Convert to Microsoft Excel** creates Excel spreadsheets from PDF and image files. You can also use this task to combine multiple files into one Excel document.
- **Convert to Other Formats** converts PDF and image files into popular formats, including *.odt, *.pptx, *.epub, *.html, and many more.

2. In the dialog box that opens, select one or more files to convert.



3. Specify conversion settings.

These settings determine the appearance and properties of the output document.

4. Add or remove files if necessary.

5. Click the **Convert to <format>** button.

6. Specify a destination folder for the output file.

When the task is completed, the resulting file will be placed into the folder that you specified.

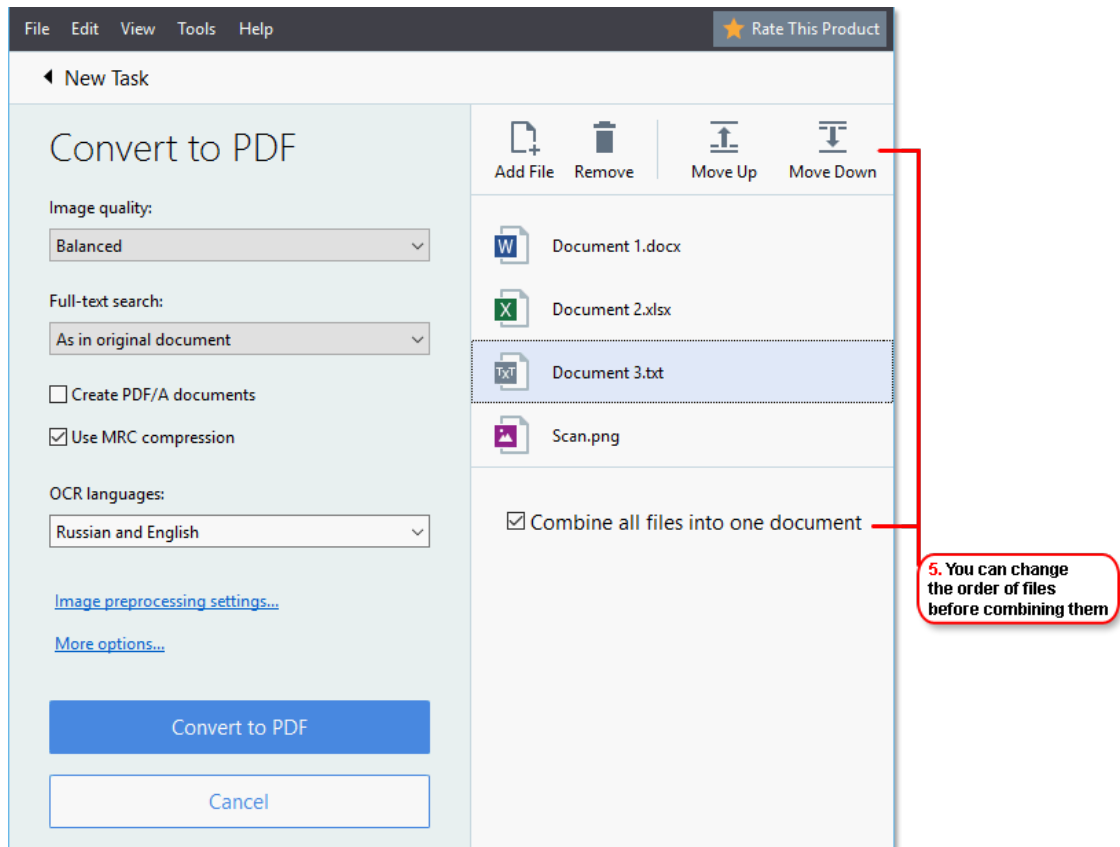
Combining files

1. Click the **Open** tab and then click a desired task.

2. In the dialog box that opens, select the files that you want to convert.

3. Specify conversion settings.

4. Add or remove files if necessary.



5. Arrange the files in the desired order and select the **Combine all files into one document** option.

6. Click the **Convert to <format>** button.

7. Specify a name and a destination folder for the output file.

When the task is completed, the resulting file will be placed into the folder that you specified.

💡 Use [advanced conversion](#) ^[27] for large documents with complicated layouts.

📌 **See also:**

- [Creating PDF documents](#) ^[21]
- [Creating Microsoft Word documents](#) ^[23]
- [Creating Microsoft Excel spreadsheets](#) ^[25]
- [Other formats](#) ^[27]

Creating PDF documents

In the **New Task** window, you can:

- Create PDF documents from files in various formats.
- Convert multiple files to PDF.
- Combine multiple files into one PDF.
- Create searchable PDF documents.
- Create PDF/A-compliant documents.

Converting one or more files

1. Click the **Open** tab and then click **Convert to PDF**.
2. In the dialog box that opens, select one or more files to convert.
3. Specify conversion settings. These settings determine the appearance and properties of the output document.

3.1. **Image quality** The quality of the pictures and the size of the resulting file can be tweaked using the options in the **Image quality** drop-down menu:

- **Best quality**
Select this option to retain the quality of the pictures and the page image. The original resolution will be preserved.
- **Balanced**
Select this option to reduce the size of the output PDF file without too much loss in picture quality.
- **Compact size**
Select this option to obtain a small-sized PDF file at the expense of picture quality.
- **Custom...**
Select this option to customize picture saving. In the **Custom Settings** dialog box, specify desired values and click **OK**.

3.2. **Full-text search** Use this drop-down menu to enable or disable full-text searches in the output document:

- **As in original document** The text on the images will not be recognized. Users will be able to search inside the output document only if the original document has a text layer.
- **Search inside text and images** The text on the images will be recognized. Users will be able to search inside the output document.

- **Disable full-text search** The document will be converted to image-only PDF. Users will not be able to search inside the output document.

3.3. **Create PDF/A documents** Select this option to create a PDF/A-compliant document. A PDF/A-2b document will be created by default. Click **More options...** to select another version of PDF/A.

3.4. **Use MRC compression** Select this option to apply Mixed Raster Content (MRC) compression to reduce file size without noticeable loss in image quality.

3.5. **OCR languages** Select the language(s) of your document. **See also:** [OCR languages](#)^[287].

3.6. **Image preprocessing settings...** Here you can specify some additional manipulations to be performed on your scans and image files to improve their appearance and the quality of conversion. **See also:** [Image processing options](#)^[291].

3.7. **More options...** Open the [PDF](#)^[263] tab of the [Format Settings](#)^[262] dialog box.

4. Add or remove files if necessary.

5. Click the **Convert to PDF** button.

6. Specify a destination folder for the output file.

When the task is completed, the resulting PDF document will be placed into the folder that you specified.

Combining files

1. Click the **Open** tab and then click **Convert to PDF**.

2. In the dialog box that opens, select the files that you want to convert.

3. Specify [conversion settings](#)^[21].

4. Add or remove files if necessary.

5. Arrange the files in the desired order and select the **Combine all files into one document** option.

6. Click the **Convert to PDF** button.

7. Specify a name and a destination folder for the output file.

When the task is completed, the resulting PDF document will be placed into the folder that you specified.

Creating Microsoft Word documents

In the **New Task** window, you can create Microsoft Word documents from PDF documents and images and from files in any of the [supported formats](#)^[284]. You can also convert and combine multiple files into one Microsoft Word document.

Converting one or more files

1. Click the **Open** tab and then click **Convert to Microsoft Word**.
2. In the dialog box that opens, select one or more files to convert.
3. Specify conversion settings. These settings determine the appearance and properties of the output document.

3.1.Keep formatting.

Select the appropriate setting depending on how you plan to use the output document:

- **Exact copy**

The output document will look almost exactly like the original, but will offer limited editing options.

- **Editable copy**

The appearance of the output document may slightly differ from the original, but the document can be easily edited.

- **Formatted text**

The font types, font sizes, and paragraph formatting will be retained. The output text will be placed in one column.

- **Plain text**

Only the paragraph formatting will be retained. The output text will be placed in one column and a single font will be used throughout.

3.2.**OCR languages** Select the language(s) of your document. **See also:** [OCR languages](#)^[287].

3.3.**Keep pictures** Select this option if you want to preserve the pictures in the output document.

3.4.**Keep headers, footers, and page numbers** Select this option to preserve the headers, footers, and page numbers.


3.5.**More options...** Opens the [DOC\(X\)/RTF/ODT](#)^[267] tab of the [Format Settings](#)^[202] dialog box.

4. Add or remove files if necessary.
5. Click the **Convert to Word** button.

6. Specify a destination folder for the output file.

When the task is completed, the resulting Microsoft Word document will be placed into the folder that you specified.

Combining files

1. Click the **Open** tab and then click **Convert to Microsoft Word**.
2. In the dialog box that opens, select the files that you want to convert.
3. Specify [conversion settings](#) .
4. Add or remove files if necessary.
5. Arrange the files in the desired order and select the **Combine all files into one document** option.
6. Click the **Convert to Word** button.
7. Specify a name and a destination folder for the output file.
When the task is completed, the resulting Microsoft Word document will be placed into the folder that you specified.

Creating Microsoft Excel spreadsheets

In the **New Task** window, you can create Microsoft Excel documents from PDF documents and images and from files in any of the [supported formats](#)^[284]. You can also convert and combine multiple files into one Excel document.

Converting one or more files

1. Click the **Open** tab and then click **Convert to Microsoft Excel**.
2. In the dialog box that opens, select one or more files to convert.
3. Specify conversion settings. These settings determine the appearance and properties of the output document.
 - 3.1. **Keep formatting.**
 Select the appropriate setting depending on how you plan to use the output document.
 - **Formatted text**
 The font types, font sizes, and paragraph formatting will be retained.
 - **Plain text**
 Only the paragraphs will be retained. A single font will be used throughout.
 - 3.2. **OCR languages** Select the language(s) of your document. **See also:** [OCR languages](#)^[287].
 - 3.3. **Keep pictures (XLSX only)** Select this option if you want to preserve the pictures in the output document.
 - 3.4. **Create a separate sheet for each page (XLSX only)** Select this option if you want to create a separate Microsoft Excel spreadsheet from each page of the original document(s).
 - 3.5. **More options...** Opens the [XLS\(X\)](#)^[270] tab of the [Format Settings](#)^[262] dialog box.
4. Add or remove files if necessary.
5. Click the **Convert to Excel** button.
6. Specify a destination folder for the output file.
 When the task is completed, the resulting Microsoft Excel file will be placed into the folder that you specified.

Combining files

1. Click the **Open** and then click **Convert to Microsoft Excel**.
2. In the dialog box that opens, select the files that you want to convert.
3. Specify [conversion settings](#)^[25].
4. Add or remove files if necessary.

5. Arrange the files in the desired order and select the **Combine all files into one document** option.
6. Click the **Convert to Excel** button.
7. Specify a name and a destination folder for the output file.
When the task is completed, the resulting Microsoft Excel document will be placed into the folder that you specified.

Other formats

In the **New Task** window, you can convert PDF documents and images into popular formats (*.pptx, *.odt, *.html, *.epub, *.fb2, *.rtf, *.txt, *.csv, *.djvu) and combine multiple files into one document.

Converting one or more files

1. Click the **Open** tab and then click **Convert to other formats**.
2. In the dialog box that opens, select one or more files to convert.
3. Specify conversion settings. These settings determine the appearance and properties of the output document.
 - 3.1. **Select output format** Select a format into which to convert your file.
 - 3.2. **OCR languages** Select the language(s) of your document. **See also:** [OCR languages](#) ²⁸⁷.
 - 3.3. **More options...** Opens the corresponding tab of the [Format Settings](#) ²⁶² dialog box.
4. Add or remove files if necessary.
5. Click the **Convert to <format>** button.
6. Specify a destination folder for the output file.

When the task is completed, the resulting file will be placed into the folder that you specified.

Combining files

1. Click the **Open** tab and then click **Convert to other formats**.
2. In the dialog box that opens, select the files that you want to convert.
3. Specify [conversion settings](#) ²⁷¹.
4. Add or remove files if necessary.
5. Arrange the files in the desired order and select the **Combine all files into one document** option.
6. Click the **Convert to <format>** button.
7. Specify a name and a destination folder for the output file.

When the task is completed, the resulting document will be placed into the folder that you specified.

Advanced conversion

ABBYY FineReader includes an [OCR Editor](#) ¹⁶³, which provides advanced OCR and conversion features.

The OCR Editor allows you to check recognition areas and verify recognized text, preprocess images in

order to improve OCR accuracy, and much more.

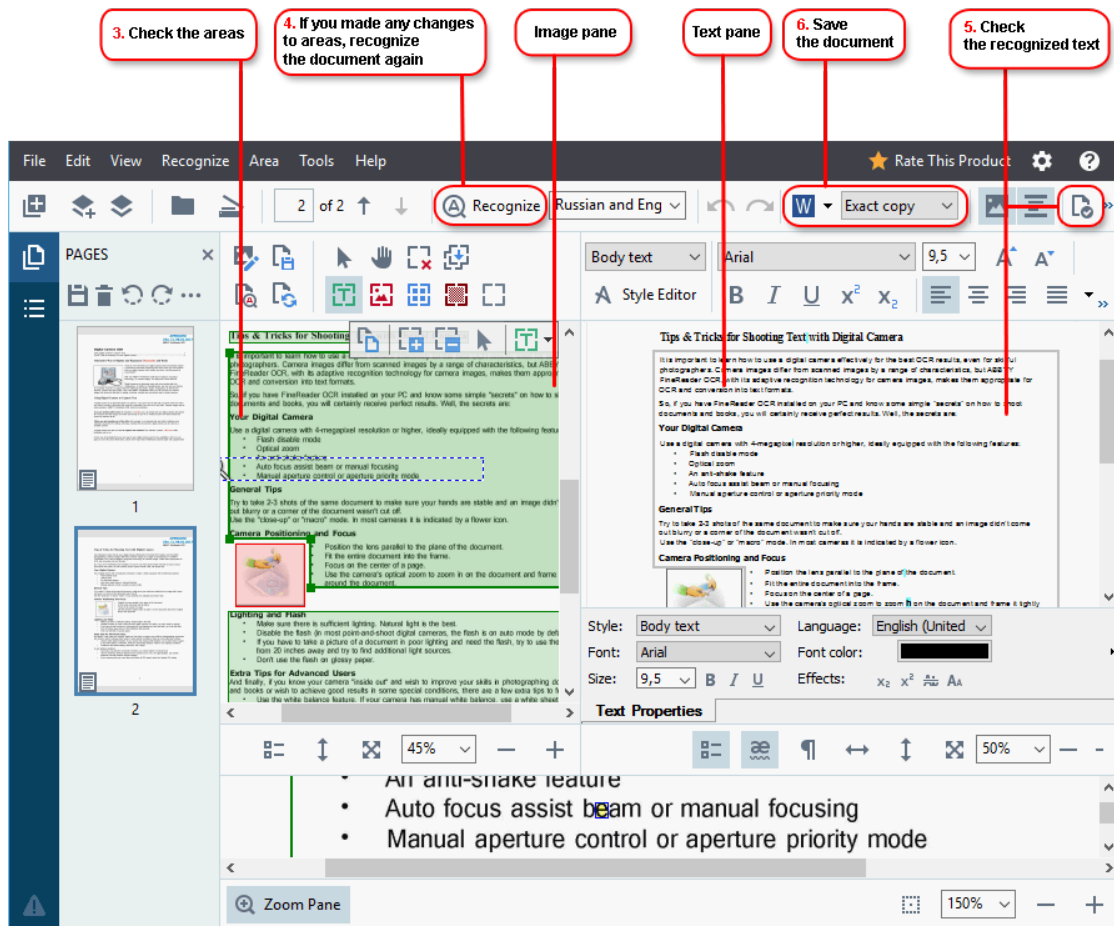
The OCR Editor also offer powerful features for fine-tuning OCR and conversion to get the best possible results. For example, you can [edit recognition areas](#)^[182], [check recognized text](#)^[202], and [train](#)^[194] ABBYY FineReader to recognize non-standard characters and fonts.

1. There are several ways to open the OCR Editor:

- Open the **New Task**^[14] window by clicking **File > New Task**, click the **Open** tab, and then click the **Open in OCR Editor** task.
- Open the **New Task** window and click **Tools > OCR Editor**.
- Open the **New Task** window, and click **File > Open in OCR Editor....**

2. In the **Open Image** dialog box, select the files you want to open.

If you are using the default settings, ABBYY FineReader will automatically analyze and recognize the files you opened. You can change these settings on the **Image Processing** tab of the **Options** dialog box (click **Tools > Options...** to open this dialog box).



3. After you open a document, its image will be displayed in the **Image** pane, and text, picture, table and barcode areas will be marked on the image. Check that the areas have been detected correctly and edit them if necessary.


ABBYY FineReader analyzes documents to detect areas that contain text, pictures, tables, and barcodes.

Sometimes, areas in complex documents may be detected incorrectly. In most cases it is easier to correct automatically detected areas than to draw all areas manually.

You can find tools for drawing and editing areas on the toolbar above the **Image** pane and on the toolbars that appear above text, picture, background picture, and table areas when you select them.

You can use these tools to:

- Add and delete areas
 - Change the type of an area
 - Adjust area borders and move entire areas
 - Add rectangular parts to areas or delete them
 - Change the order of areas
4. If you made any changes to areas, click the **Recognize** button on the main toolbar to recognize the document again.
 5. Check the recognized text in the **Text** pane and correct it if necessary.
 6. [Save the recognized document](#)^[209]. You can select the format in which to save your document from the drop-down list of the **Save/Send** button on the main toolbar (click the arrow next to the button to open the drop-down list).

 For more information about the OCR Editor and its features, see [Working with the OCR Editor](#)^[163].


Comparing documents

(This functionality is not available in some versions of ABBYY FineReader. **See also:**

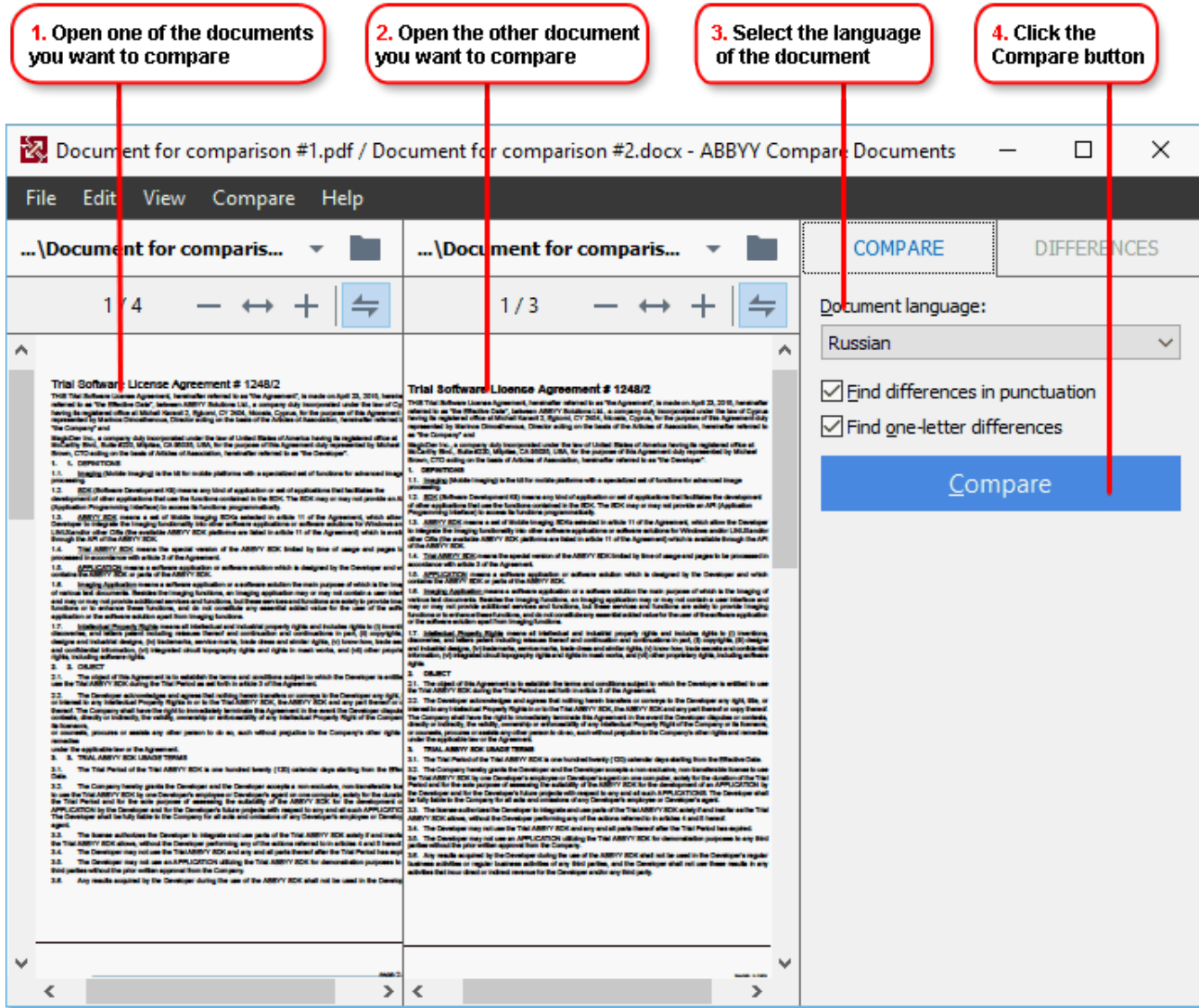
<http://www.ABBYY.com/FineReader>.)

ABBYY FineReader includes ABBYY Compare Documents, an application that lets you compare two versions of a document, even if these versions are in different formats. ABBYY FineReader's document comparison tool lets you detect significant inconsistencies in a text and, for example, prevent the approval or publication of the wrong version of a document.

There are several ways to start ABBYY Compare Documents:

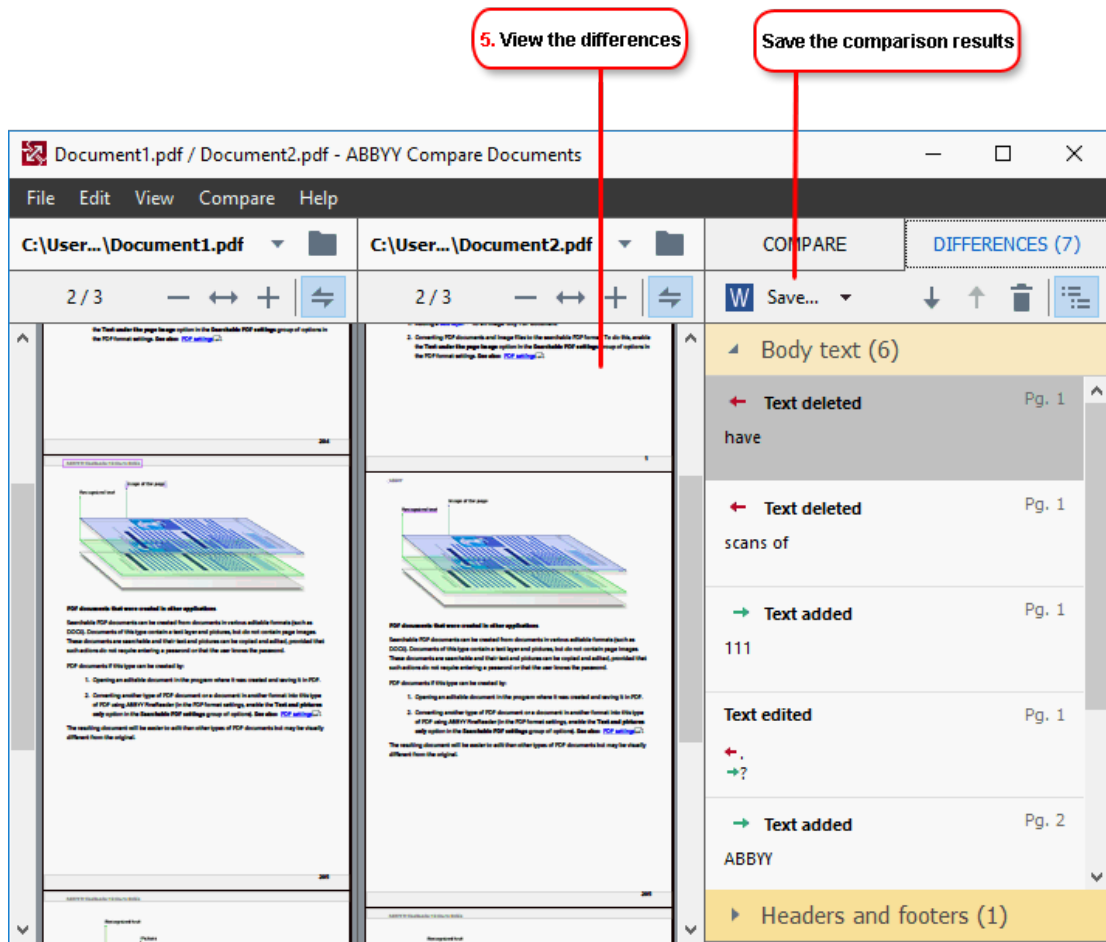
- Open the [New Task](#)¹⁴¹ window, click the **Compare** tab, and then click **Open ABBYY Compare Documents**.
- Click the **Start** button in Windows and click **ABBYY FineReader PDF 15 > ABBYY Compare Documents** (in Windows 10, click the **Start**  button, click the **All Programs** item on the start menu, and then click **ABBYY FineReader PDF 15 > ABBYY Compare Documents**)
- Click **Compare Documents** on the **Tools** menu.
- Right-click a file in [Windows Explorer](#)²²¹ and click **Compare documents...** on the shortcut menu.

Follow the instructions below to compare two documents.



1. Open ABBYY Compare Documents, open one of the versions that you want to compare in the left-hand pane and the other one in the right-hand pane.
2. In the **COMPARE** pane, select the languages of the document from the drop-down list.

3. Click the **Compare** button to compare the documents.



4. Review the differences detected by ABBYY Compare Documents.

The differences between the two versions will be highlighted in each version and listed in the right-hand pane, providing you with a clear picture of the changes made to the document. This makes it easy to see which text was added, removed or edited in each version. Both pages are scrolled simultaneously and the identical fragments are always displayed side by side. Differences can be removed from the list or copied to the Clipboard.

Differences that were removed from the list will not be saved to the difference report.

You can save the comparison results:

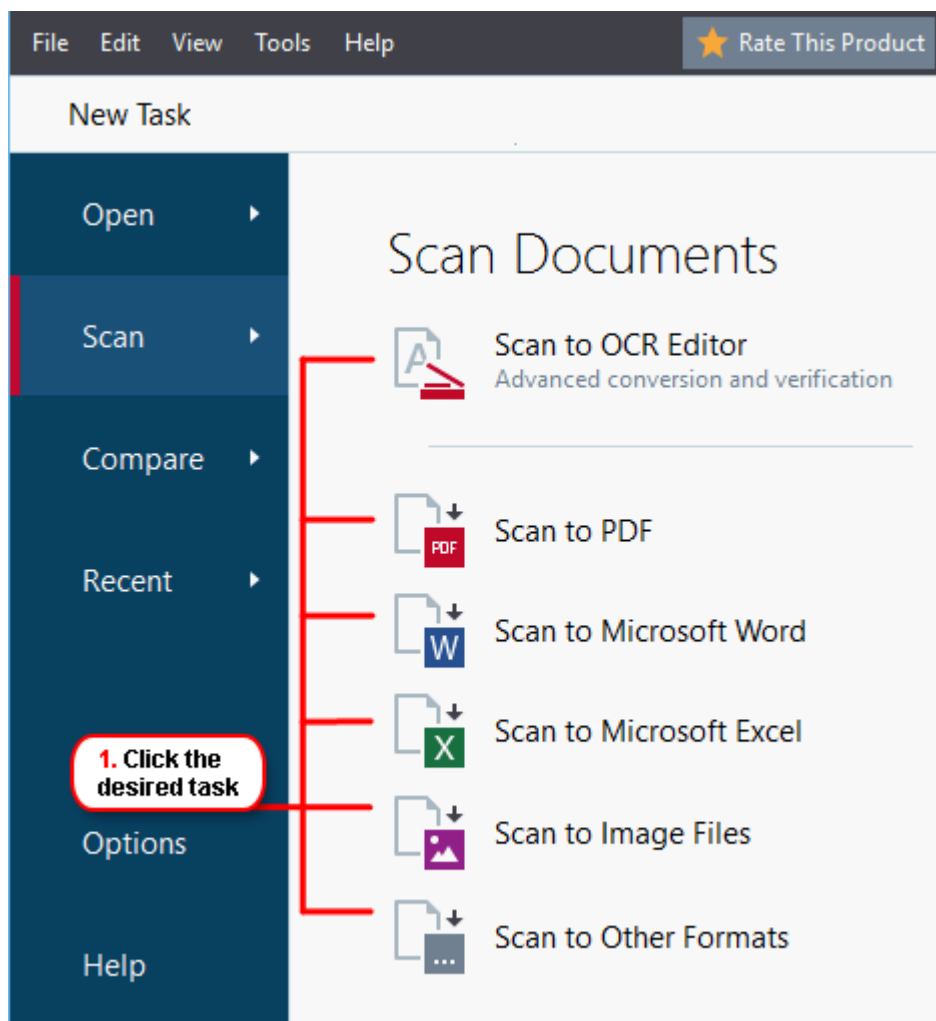
- As a Microsoft Word files where the differences will be shown using the Track Changes feature.
- As a PDF document with comments.
- As a Microsoft Word table containing the differences.

For more information on comparing two versions of the same document, see [ABBYY Compare Documents](#) 234

Scanning and saving documents

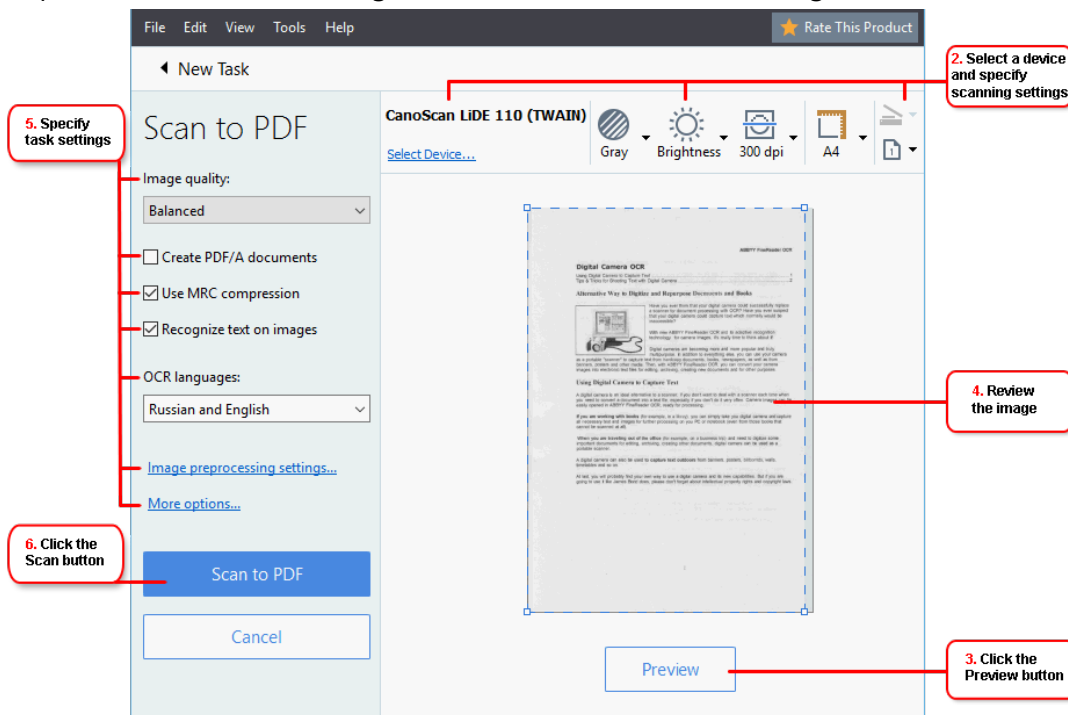
You can use the tasks on the **Scan** tab of the **New Task** window to create digital documents in various formats. You will need a scanner or a digital camera to obtain document images.

1. Click the **Scan** tab and then click a task:









- **Scan to OCR Editor** opens scans in the [OCR Editor](#) ¹⁶³.
- **Scan to PDF** creates PDF documents from images obtained from a scanner or digital camera.
- **Scan to Microsoft Word** creates Microsoft Word documents from images obtained from a scanner or digital camera.
- **Scan to Microsoft Excel** creates Microsoft Excel documents from images obtained from a scanner or digital camera.
- **Scan to Image Files** creates image-only documents from images obtained from a scanner or digital camera.

- **Scan to Other Formats** creates documents in popular formats, such as *.odt, *.pptx, *.epub, and *.html, from images obtained from a scanner or digital camera.



2. Select a device and specify [scanning settings](#) ²⁵³.
3. Click the **Preview** button or click anywhere inside the image.
4. Review the image. If you are not satisfied with the quality of the image, change the scanning settings and click the **Preview** button again.
5. Specify the settings specific to the selected format. These settings determine the appearance and properties of the output document.
6. Click the **Scan to <format>** button.
7. When scanning starts, a dialog box with a progress bar and tips will be displayed.
8. After a page has been scanned, a dialog box prompting you to decide what to do next will be displayed. Click **Scan Again** to scan more pages using the current settings or click **Finish Scanning** to close the dialog box.
9. Depending on the task you selected in step 1, the scanned images will be:
 - Processed and added to an OCR project in the [OCR Editor](#) ¹⁶³.
 - Processed and converted to PDF. Specify the folder where you want to save the resulting document. The document will remain open in the OCR Editor.
 - Processed and converted to the selected format. Specify the folder where you want to save the resulting document. The document will remain open in the OCR Editor.

 **See also:** :

- [Scanning to the OCR Editor](#)  37
- [Scanning to PDF](#)  39
- [Scanning to Microsoft Word](#)  41
- [Scanning to Microsoft Excel](#)  43
- [Scanning to image files](#)  45
- [Scanning to other formats](#)  47

Scanning to the OCR Editor

You can open images from a scanner or camera in the OCR Editor, where you will be able to:

- Draw and edit recognition areas manually
- Check recognized text
- Train ABBYY FineReader to recognize non-standard characters and fonts
- Use other advanced tools to ensure the best possible OCR result.

1. Open the **New Task** window, click the **Scan** tab, and then click the **Scan to OCR Editor** task.
2. Select a device and specify [scanning settings](#) ²⁵³.
3. Click the **Preview** button or click anywhere inside the image.
4. Review the image. If you are not satisfied with the quality of the image, change the scanning settings and click the **Preview** button again.
5. Specify preprocessing and automation settings.

5.1. Automatically process page images as they are added

This option enables or disables automatic processing of newly added pages. If automatic processing is enabled, you can select general document processing options and image preprocessing settings to be used when scanning and opening images:

- **Recognize page images**
Enable this option if you want FineReader to automatically preprocess newly added images using the settings specified in the **Preprocessing Settings** dialog box (click the **Image preprocessing settings (apply to conversion and OCR)** link below to open this dialog box). Analysis and OCR will also be performed automatically.
- **Analyze page images**
Performs image preprocessing and document analysis automatically, but OCR has to be started manually.
- **Preprocess page images**
Preprocesses images automatically. Analysis and OCR have to be started manually.

5.2. OCR languages

Use this option to specify the languages of the document. **See also:** [OCR languages](#) ²⁸⁷.

5.3. Image preprocessing settings...

Opens the **Preprocessing Settings** dialog box where you can specify image preprocessing settings such as detection of page orientation and automatic preprocessing settings.


These settings can significantly improve source images, resulting in greater OCR accuracy.

See also: [Image processing options](#)²⁹¹

5.4. More options...


Opens the **Image Processing**²⁶⁰ tab of the **Options** dialog box. You can also open this dialog box by clicking **Options...** on the **Tools** menu.

6. Click **Scan**.
7. A progress dialog box will be displayed, showing a progress bar and tips.
8. After the page has been scanned, a dialog box prompting you to decide what to do next will appear.
Click **Scan Again** to scan subsequent pages using the current settings or **Finish Scanning** to close the dialog box.
9. After the scanning process is completed, the scanned images will be added to an OCR project in the OCR Editor and processed using the preprocessing and automation settings you specified earlier.

 For more information about the OCR Editor and its features, see [Working with the OCR Editor](#)¹⁶³

Scanning to PDF

The **Scan to PDF** task in the **New Task** window lets you create PDF documents from images obtained from a scanner or a digital camera.

1. Open the **New Task** window, click the **Scan** tab, and then click **Scan to PDF**.
2. Select a device and specify [scanning settings](#) .
3. Click the **Preview** button or click anywhere inside the image.
4. Review the image. If you are not satisfied with the quality of the image, change the scanning settings and click the **Preview** button again.
5. Specify conversion settings. These settings determine the appearance and properties of the output document.

5.1. Image quality This option determines the quality of images and pictures, which affects the size of the resulting output file. The following quality settings are available:

- **Best quality**
Select this option to retain the quality of the pictures and the page image. The original resolution will be preserved.
- **Balanced**
Select this option to reduce the size of the output PDF file without too much loss in picture quality.
- **Compact size**
Select this option to obtain a small-sized PDF file at the expense of picture quality.
- **Custom...**
Select this option to customize picture saving. In the **Custom Settings** dialog box, specify the desired values and click **OK**.

5.2. Create PDF/A documents

Select this option to create a PDF/A-compliant document.


5.3. Use MRC compression

Select this option to apply Mixed Raster Content (MRC) compression to reduce file size without noticeable loss in image quality..

5.4. Recognize text on images

Select this option if you want OCR to start automatically.

5.5. OCR languages

Use this option to specify the languages of the document. **See also:** [OCR languages](#) .

5.6. Image preprocessing settings...

Use this option to specify image preprocessing settings, such as detection of page orientation and automatic preprocessing settings. These settings can significantly improve source images, resulting in greater OCR accuracy. **See also:** [Image processing options](#)


5.7. More options...

Opens the [PDF](#) section of the [Format Settings](#) of the **Options** dialog box, where you can specify additional settings (you can also open this dialog box by clicking **Options...** on the **Tools** menu).

6. Click **Scan to PDF**.
7. A dialog box will be displayed, showing a progress bar and tips.
8. After the page has been scanned, a dialog box prompting you to decide what to do next will appear.
Click **Scan Again** to scan more pages using the current settings or click **Finish Scanning** to close the dialog box.
9. After the scanning is completed, the scanned images will be processed using the settings you specified, converted to PDF, and opened in the OCR Editor.
10. Specify the folder where you want to save the resulting PDF.

Scanning to Microsoft Word

The **Scan to Microsoft Word** task in the **New Task** window lets you create Microsoft Word documents from images obtained from a scanner or a digital camera.

1. Open the **New Task** window, click the **Scan** tab, and then click the **Scan to Microsoft Word** task.
2. Select a device and specify [scanning settings](#)  253.
3. Click the **Preview** button or click anywhere inside the image.
4. Review the image. If you are not satisfied with the quality of the image, change the scanning settings and click the **Preview** button again.
5. Specify conversion settings. These settings determine the appearance and properties of the output document.

5.1. Preserve formatting

Select the appropriate setting depending on how you plan to use the output document.

- **Exact copy**

The output document will look almost exactly like the original, but will offer limited editing options..

- **Editable copy**

The appearance of the output document may slightly differ from the original, but the document can be easily edited.

- **Formatted text**

The font types, font sizes, and paragraph formatting will be retained. The output text will be placed in one column.

- **Plain text**

Only the paragraph formatting will be retained. The output text will be placed in one column and a single font will be used throughout.

5.2. OCR languages

Select the language(s) of your document. **See also:** [OCR languages](#)  287.

5.3. Keep pictures

Select this option if you want to preserve the pictures in the output document.

5.4. Keep headers, footers, and page numbers

Select this option to preserve the headers, footers, and page numbers.

5.5. Image preprocessing settings...

Specify image preprocessing settings, such as detection of page orientation and automatic preprocessing settings. These settings can significantly improve source images, resulting in greater OCR accuracy. **See also:** [Image processing options](#)^[291].

5.6. More options...

Opens the [DOC\(X\)/RTF/ODT](#)^[267] section of the [Format Settings](#)^[262] tab of the **Options** dialog box, where you can specify additional settings (you can also open this dialog box by clicking **Options...** on the **Tools** menu).

6. Click **Scan to Word**.
7. A dialog box will be displayed, showing a progress bar and tips.
8. After the page has been scanned, a dialog box prompting you to decide what to do next will appear.
Click **Scan Again** to scan more pages using the current settings or click **Finish Scanning** to close the dialog box.
9. Specify the folder where you want to save your Microsoft Word document.

When the task is completed, a Microsoft Word document will be created in the folder that you specified. All of the document's pages will also be opened in the OCR Editor.

Scanning to Microsoft Excel

The **Scan to Microsoft Excel** task in the **New Task** window lets you create Microsoft Excel documents from images obtained from a scanner or a digital camera.

1. Open the **New Task** window, click the **Scan** tab, and then click the **Scan to Microsoft Excel** task.
2. Select a device and specify [scanning settings](#) ^[253].
3. Click the **Preview** button or click anywhere inside the image.
4. Review the image. If you are not satisfied with the quality of the image, change the scanning settings and click the **Preview** button again.
5. Specify conversion settings. These settings determine the appearance and properties of the output document.

5.1. Preserve formatting.

Select the appropriate setting depending on how you plan to use the output document.

- **Formatted text**

The font types, font sizes, and paragraph formatting will be retained.

- **Plain text**

Only the paragraphs will be retained. A single font will be used throughout.

5.2. OCR languages

Select the language(s) of your document. **See also:** [OCR languages](#) ^[287].

5.3. XLSX settings:

- **Keep pictures**

Select this option if you want to preserve the pictures in the output document.

- **Create a separate sheet for each page**

Select this option if you want to create a separate Microsoft Excel spreadsheet from each page of the original document(s).

5.4. Image preprocessing settings...

Use this option to specify image preprocessing settings, such as detection of page orientation and automatic preprocessing settings. These settings can significantly improve source images, resulting in greater OCR accuracy. **See also:** [Image processing options](#) ^[291].

5.5. More options...


Opens the [XLS\(X\)](#) ^[270] section of the [Format Settings](#) ^[262] tab of the **Options** dialog box, where you can specify additional settings (you can also open this dialog box by clicking **Options...** on the **Tools** menu).

6. Click **Scan to Excel**.
7. A dialog box will be displayed, showing a progress bar and tips.
8. After the page has been scanned, a dialog box prompting you to decide what to do next will appear.
Click **Scan Again** to scan more pages using the current settings or click **Finish Scanning** to close the dialog box.
9. Specify the folder where you want to save your Microsoft Excel document.

When the task is completed, a Microsoft Excel document will be created in the folder that you specified. All of the document's pages will also be opened in the OCR Editor.

Scanning to image files

The **Scan to Image Files** task in the **New Task** window lets you create image-only documents from images obtained from a scanner or a digital camera.

1. Click the **Scan** tab and then click the **Scan to Image Files** task.
2. Select a device and specify [scanning settings](#) .
3. Click the **Preview** button or click anywhere inside the image.
4. Review the image. If you are not satisfied with the quality of the image, change the scanning settings and click the **Preview** button again.
5. Specify conversion settings. These settings determine the appearance and properties of the output document.

5.1. Select image format

Use this setting to select the desired image file format.

5.2. Compression

If you selected the TIFF format, you will be able to compress scanned images. Image compression reduces file size.

Using different compression methods results in different data compression rates and may result in data loss (loss of image quality). There are two factors you should consider when choosing a compression method: the quality of images in the output file and its size.

ABBYY FineReader lets you use the following compression methods:

- **PACKBITS**

Does not cause data loss and is well suited for compressing black-and-white scans.

- **JPEG (JFIF format)**

This method is used to compress grayscale and color images such as photographs. It compresses images significantly, but at the cost of some data loss. This leads to reduced image quality (blurriness and loss of color saturation).


- **ZIP**

Does not cause data loss and works best on images that contain large single-color areas such as screenshots and black-and-white images.

- **LZW**

Does not cause data loss and works best on images with vector graphics and grayscale images.

5.3. Image preprocessing settings...


Specify image preprocessing settings, such as detection of page orientation and automatic preprocessing settings. These settings can significantly improve source images, resulting in greater OCR accuracy. **See also:** [Image processing options](#) .

6. Click **Scan to <format>**.
7. A dialog box will be displayed, showing a progress bar and tips.
8. After the page has been scanned, a dialog box prompting you to decide what to do next will appear.
Click **Scan Again** to scan more pages using the current settings or click **Finish Scanning** to close the dialog box.
9. Specify the folder where you want to save your output file.

When the task is completed, output files in the specified format will be created in the folder that you specified. All of the document's pages will also be opened in the OCR Editor.

Scanning to other formats


The **Scan to Other Formats** task in the **New Task** window lets you create documents in popular formats (*.pptx, *.odt, *.html, *.epub, *.fb2, *.rtf, *.txt, *.csv, and *.djvu) from images obtained from a scanner or a digital camera.

1. Open the **New Task** window, click the **Scan** tab, and then click the **Scan to Other Formats** task.
2. Select a device and specify [scanning settings](#) .
3. Click the **Preview** button or click anywhere inside the image.
4. Review the image. If you are not satisfied with the quality of the image, change the scanning settings and click the **Preview** button again.
5. Specify conversion settings. These settings determine the appearance and properties of the output document.


5.1. Select output format

Use this option to select the desired format for the output file.


5.2. OCR languages

Select the language(s) of your document. **See also:** [OCR languages](#) .

5.3. Image preprocessing settings...

Specify image preprocessing settings, such as detection of page orientation and automatic preprocessing settings. These settings can significantly improve source images, resulting in greater OCR accuracy. **See also:** [Image processing options](#) .

5.4. More options...

Opens the section with the settings of the selected format on the [Format Settings](#)  tab of the **Options** dialog box, where you can specify additional settings (you can also open this dialog box by clicking **Options...** on the **Tools** menu).









6. Click **Scan to <format>**.
7. A dialog box will be displayed, showing a progress bar and tips.
8. After the page has been scanned, a dialog box prompting you to decide what to do next will appear.
Click **Scan Again** to scan more pages using the current settings or click **Finish Scanning** to close the dialog box.
9. Specify the folder where you want to save your output file.

When the task is completed, output files in the specified format will be created in the folder that you specified. All of the document's images will also be opened in the OCR Editor.

PDF Editor

The PDF Editor in ABBY FineReader is an easy-to-use tool for working with PDF documents. Using the PDF Editor you can view PDF documents, carry out text searches, rearrange pages, add or remove pages, edit document text, copy pictures or text fragments from PDF documents and paste them into other applications, add your comments to PDF documents, and create, fill out, and edit interactive PDF forms. You don't need to convert your PDF to an editable format, even if it only contains scans without a text layer.

Chapter contents

- [Viewing PDF documents](#)  49
- [Copying data from PDF documents](#)  58
- [Reviewing PDF documents](#)  63
- [Working with PDF content](#)  78
- [Working with interactive PDF forms](#)  104
- [Signing PDF documents with a digital signature](#)  148
- [Protecting PDF documents with passwords](#)  152
- [Creating PDF documents](#)  155
- [Saving and exporting PDF documents](#)  156

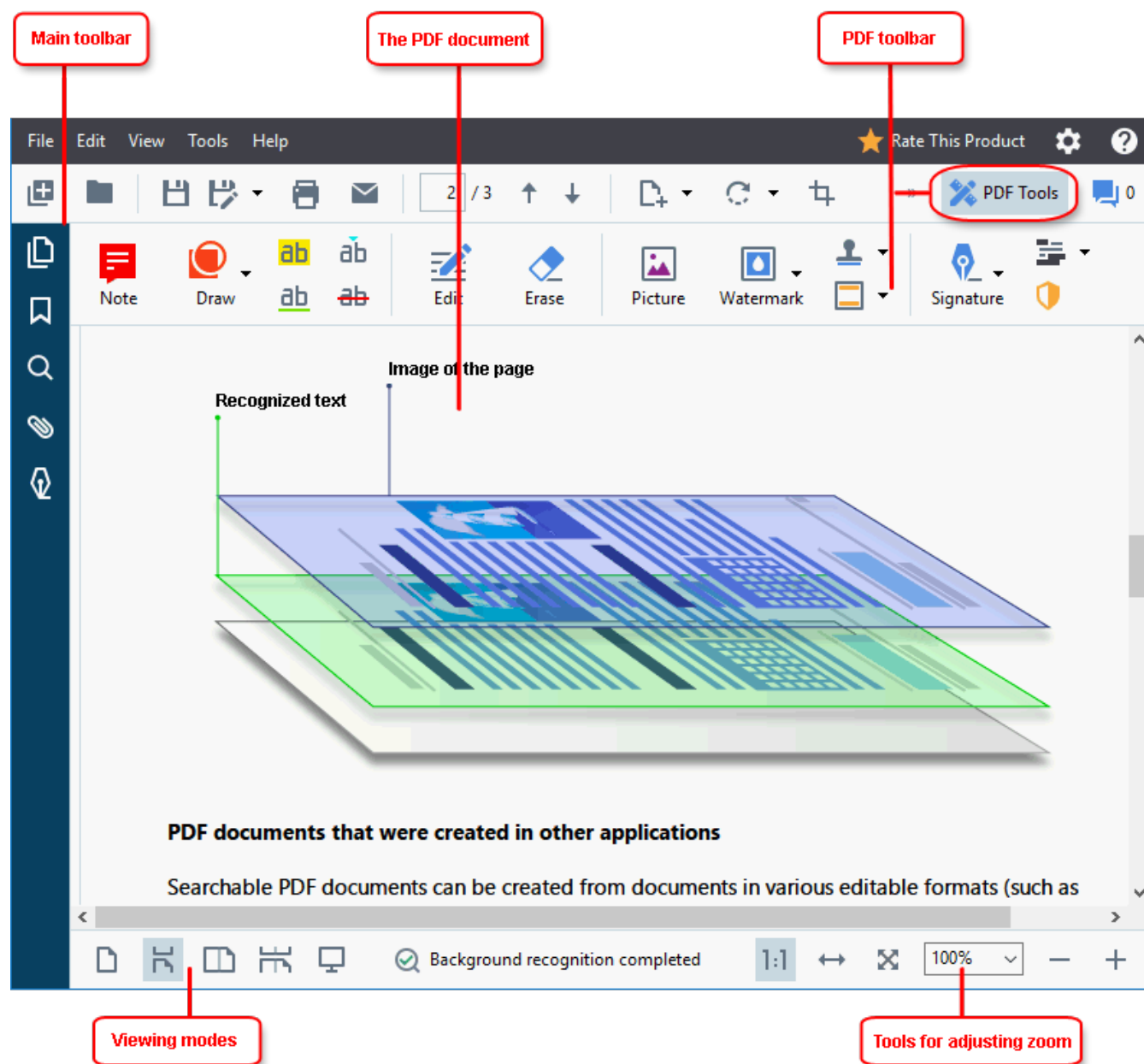
Viewing PDF documents

The PDF Editor allows you to view and search PDF documents and copy text, pictures, and tables inside them.

To open a PDF document in the PDF Editor:

- Open the [New Task](#)^[14] window, click the **Open** tab and then click the **Open PDF Document** task.
- Open the **New Task** window and click **File > Open PDF Document...**

The document will be displayed in the PDF Editor.



To customize the way the document is displayed, use the following settings.

- The viewing modes change the way pages are displayed and scrolled.

See also: [Viewing modes](#)^[50].

- The zoom feature lets you zoom in to and out of the document.



- **Actual Size** displays the page at a scale of 100%.
- **Fit to Width** changes the scale at which the document is displayed so that the width of the document fits to the width of the screen.
- **Best Fit** changes the scale at which the document is displayed so that the height of the document fits to the height of the screen.
- **Zoom Out/Zoom In** lets you adjust the scale manually.

🔧 To show/hide the toolbar with PDF tools, click the **PDF Tools** button on the main toolbar.

Chapter contents

- [Viewing modes](#) ⁵⁰
- [Navigating PDF documents](#) ⁵³
- [Background recognition](#) ⁵⁵
- [Keyword search](#) ⁵⁶
- [PDF security features](#) ⁵⁷

Viewing modes

The PDF Editor has four viewing modes that determine how document pages are displayed and scrolled:

One-Page View displays one page and hides all the other pages.

One-Page Scrolling displays pages one after the other, so that when you get to the bottom of one page, the top of the next page is visible.

Two-Page View displays pages side-by-side, with odd-numbered pages on the left and even-numbered pages on the right.

Two-Page Scrolling displays two pages side-by-side with subsequent pages appearing as you scroll down.

✎ If you want to display even pages on the left and odd pages on the right in one of the two-page viewing modes, click **View > View mode > Odd Pages on the Right**.

There are several ways to change the viewing mode:

- Click one of the buttons on the toolbar at the bottom of the screen:




- Click **View > View mode** and select one of the viewing modes.
- Use the following keyboard shortcuts: Ctrl+1, Ctrl+2, Ctrl+3, and Ctrl+4.

Full-screen mode

The PDF Editor has a full-screen viewing mode, in which the document takes up the entire screen space and no panels or toolbars are visible.

To enter full-screen mode, do one of the following:

- Click the  button on the toolbar at the bottom of the screen.
- Click **View > Full Screen**.
- Press F11.

In the full-screen mode, you can:

- Scroll the document.
- View comments (place the mouse pointer over a commented area to display the comment).
- Change viewing modes and scaling.
 - ✎ To display the bottom toolbar with viewing options, move the mouse pointer to the bottom edge of the screen.
- Go to specific pages in the document.
 - ✎ **See also:** [Navigating PDF documents](#) ^[54].

You can also right-click the document in full-screen view and use the commands on the shortcut menu to:

- [Add comments](#) ^[63] and text insertion points
- Create [bookmarks](#) ^[95]
- [Edit](#) ^[79] text and pictures

To exit the full-screen mode, press F11 or Esc.

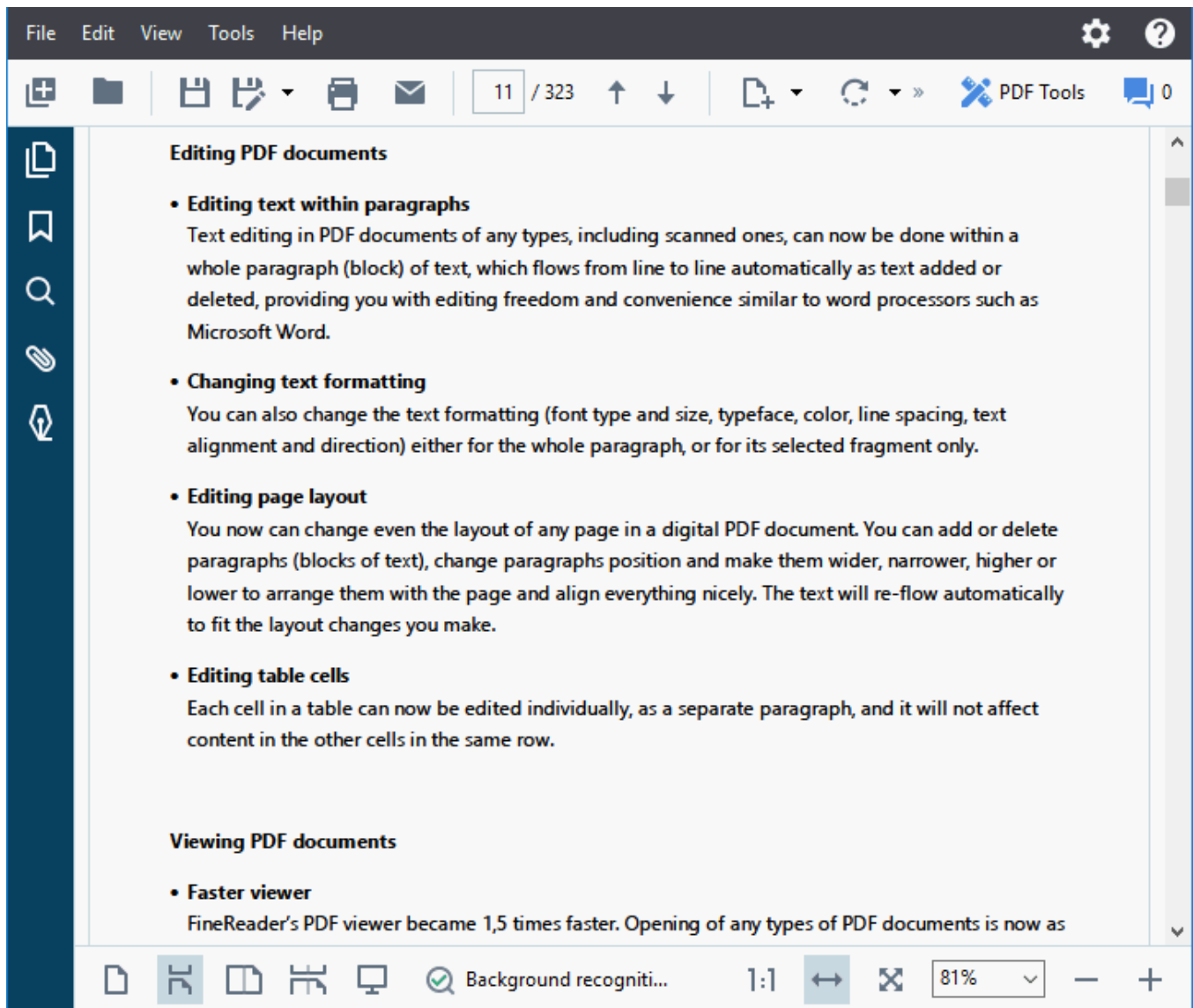
Hiding toolbars and panes when reading PDF documents

When reading a document in the PDF Editor, you may want to hide some or all of the toolbars and panes in order to leave as much screen space for the document as possible. The menu bar, the main toolbar, and the toolbar at the bottom of the screen can't be hidden separately, but you can use the full-screen mode if you want to hide all toolbars and panes.

You can hide the following toolbars and panes:

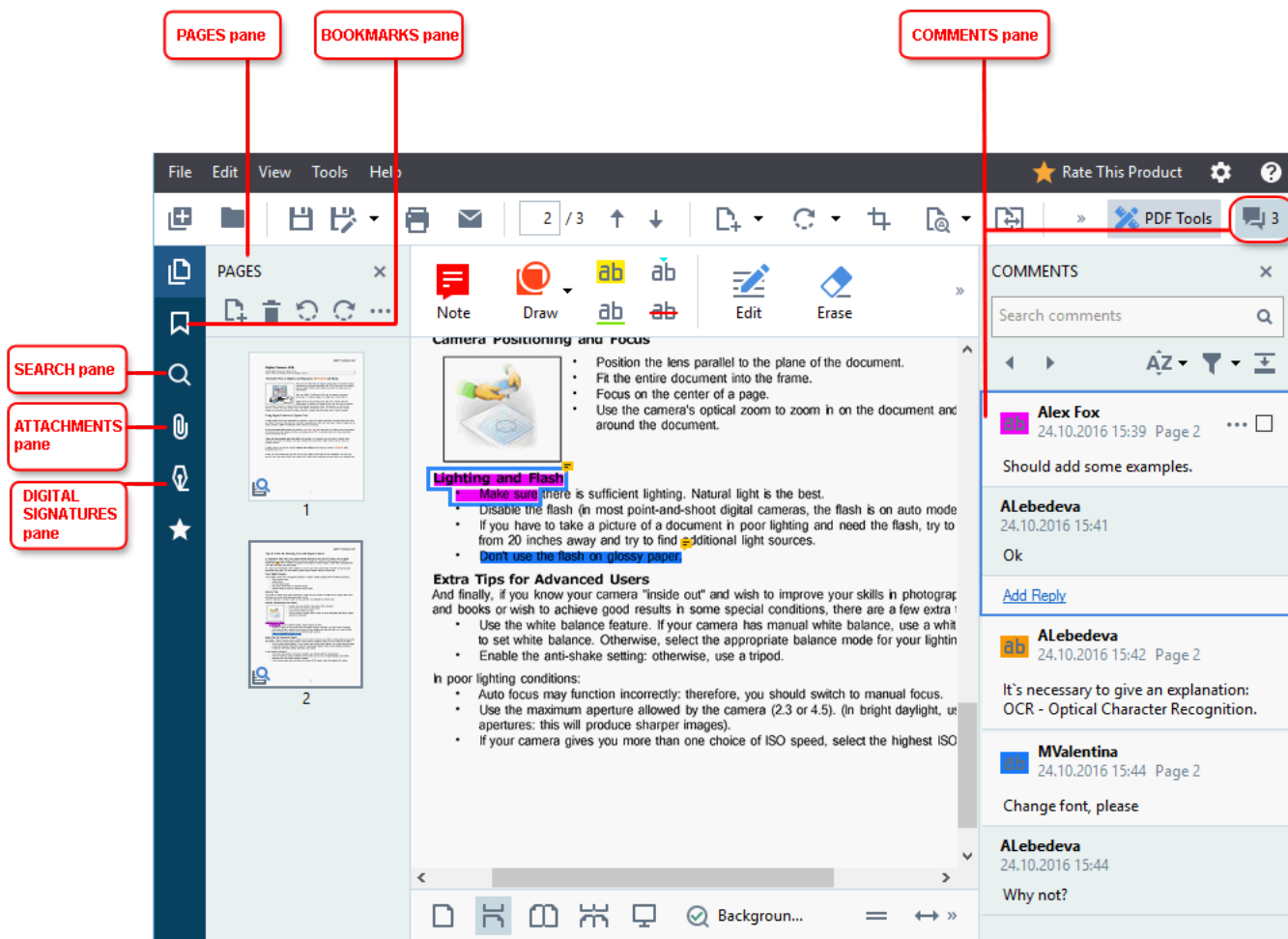
- To hide the navigation pane, press F5 or click **View** and disable the **Show Navigation Pane** option.
- To hide the PDF toolbar, press F6 or click **View** and disable the **Show PDF Tools** option.
- To hide the Comments pane, press F7 or click **View** and disable the **Show Comments Pane** option.

The PDF Editor with the navigation pane, PDF toolbar, and comment pane hidden:



Navigating PDF documents

The PDF Editor offers a number of tools for navigating PDF documents.




- The **PAGES** pane lets you navigate pages quickly, change the order of pages, add pages to the document, or delete them.
- The **BOOKMARKS** pane contains tools for creating, editing, and navigating bookmarks.
- The **SEARCH** pane lets you search and highlight text.
- The **Attachments** pane lets you view and edit attachments.
- The **DIGITAL SIGNATURES** pane lets you view and delete digital signatures.

✎ The keyboard shortcuts for showing and hiding these panes are listed in [Keyboard shortcuts](#)³²⁷.

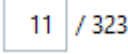
Viewing a specific page

The PDF Editor provides several tools that make it easier to navigate long documents.

To navigate between pages:

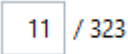
- Use the  buttons on the main toolbar.
- Click **View > Go to Page** and then click **Next Page**, **Previous Page**, **First Page** or **Last Page**.

To quickly open a specific page:

- Type the number of the desired page in the  box on the main toolbar and press Enter.
- Click **View > Go to Page > Page Number...**, type the number of the desired page, and click **OK**.

Navigating pages in the full-screen view

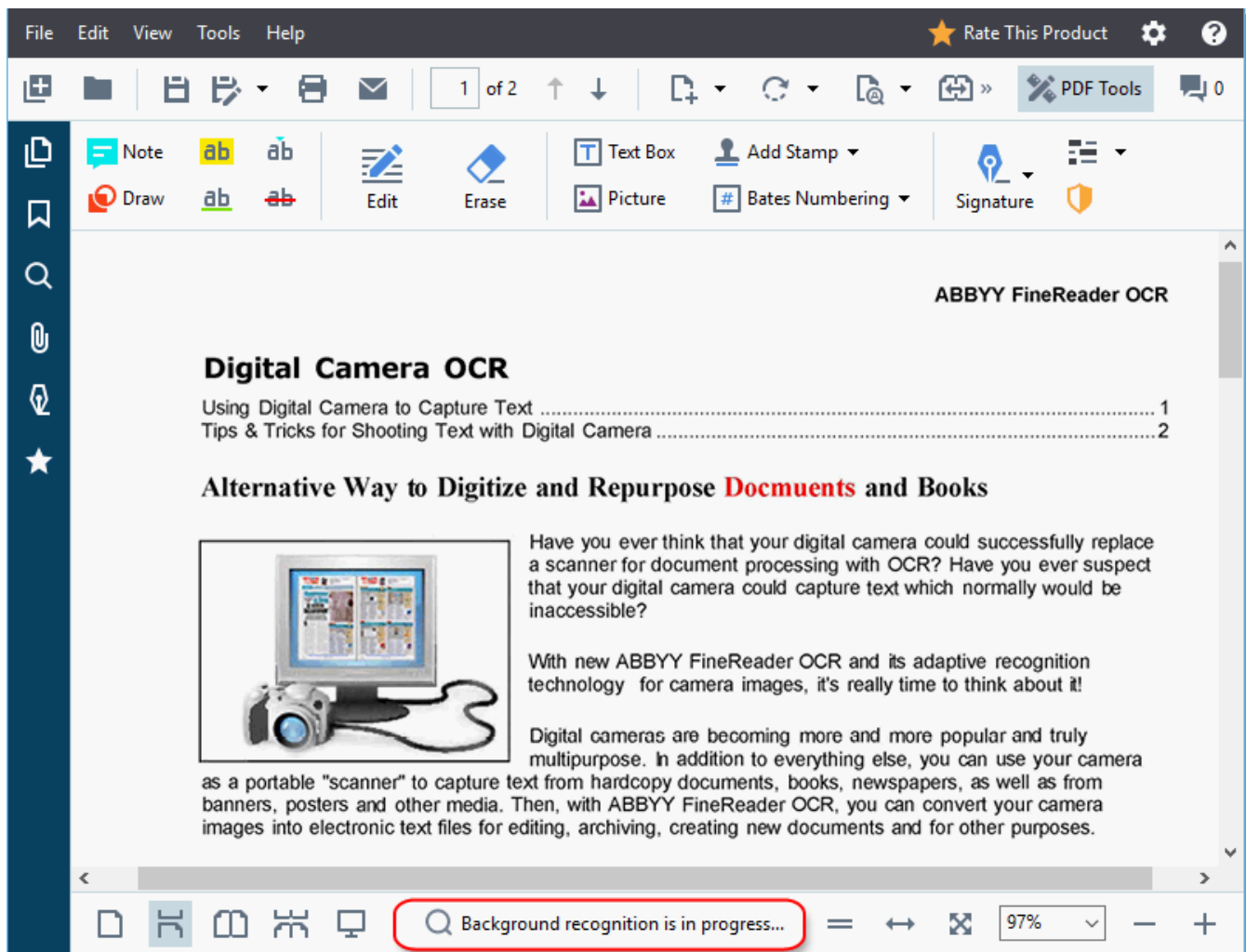
To open a specific page in full-screen view, do the following:

1. Move the mouse pointer to the bottom edge of the screen to bring up the toolbar.
2. Type the number of the desired page in the  box on the toolbar at the bottom of the screen.
3. Press Enter.

Background recognition

The PDF Editor allows you to search and copy text and pictures in PDF documents without a text layer, such as scanned documents and documents created from image files. This is possible thanks to an OCR process that runs in the background.

Background recognition is enabled by default and starts automatically when you open a PDF document.



The background recognition process does not change the contents of the PDF file. Instead, it adds a temporary text layer that will not be available when you open the document in other applications.

💡 If you want to make the document searchable in other applications, you will need to save the text layer created by the background recognition process. To do this, click **File > Recognize Document > Recognize Document...** See also: [Recognizing text](#)⁹⁰.


❗ **Important!** If the search or copy functions don't work properly, check that the right OCR languages are selected for the document. See also: [Document features to consider prior to OCR](#)²⁸⁷.

✍ To disable background recognition, clear the **Enable background recognition in the PDF Editor** option in the [Options](#)²⁵⁹ dialog box.


✍ The background recognition process cannot run on computers with a single-core processor.

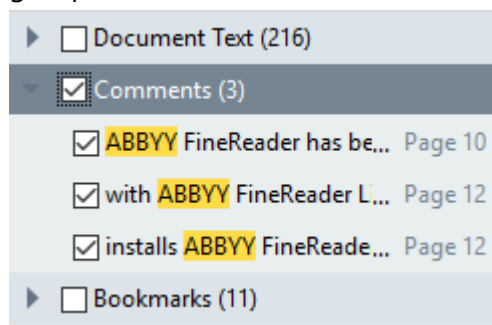
Keyword search

The PDF Editor allows you to find and highlight information in PDF files. Comments, metadata, and bookmarks will be searched along with the text in the document itself, and the results will be displayed in a separate panel. Search results will also be highlighted in the document, and you will be able to apply various effects to these results.

1. Click the  tab in the pane on the left or click **View > Search** to open the **SEARCH** pane.
2. Type the word or phrase you want to find.

Words or phrases that match your query will be highlighted in the document.

 The search results will be arranged into groups and you will be able to highlight entire groups.

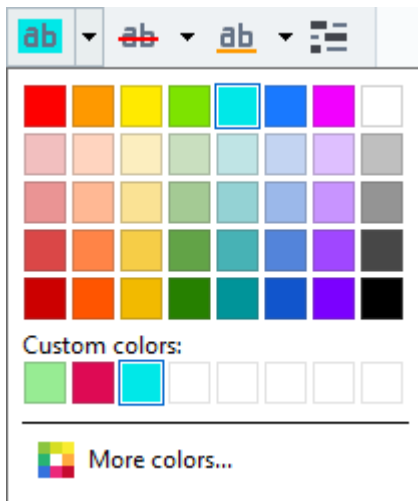


3. You can change search options by clicking on the arrow in the search box and selecting any of the following:
 - **Exact Match** will find only words that are an exact match of the words you typed in the search box.
 - **Match Case** will find only words that match the capitalization in your query.


You can [highlight, cross out, and underline](#) ⁶⁴ search hits in the text. To do this, in the **SEARCH** pane, select the words you want to highlight, cross out or underline and then click the respective tool.

 You can also redact search hits. See [Removing confidential information from PDF documents](#) ¹⁵⁴

To change the color used for text markup, click the arrow next to the respective tool and select the desired color on the color palette that appears.




✎ By default, the markup tools in the **SEARCH** pane use the same colors as the markup tools on the **PDF Tools** toolbar.

✎ To navigate to the next/previous search hit, use the  buttons. You can also select the next search result by pressing F3.

PDF security features

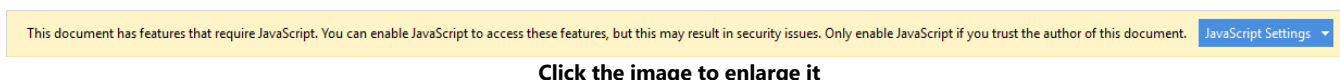
Some PDF documents can harm your computer.

ABBYY FineReader has a number of features that make working with PDF documents safer. The program will ask for your confirmation when you perform the following potentially dangerous actions:

- Opening attachments
- Opening links
- Submitting [form](#)  data.

If you trust the creator of the document, click **Allow**; otherwise, click **Cancel**.

You can also protect your computer from malicious JavaScript code by disabling JavaScript in PDF documents. To disable JavaScript, open the **Options** dialog box, click the **Other** tab, and clear the **Enable JavaScript in PDF documents** option. No when you open a PDF document with JavaScript the following notification will appear at the top of the window:



If you trust the person or entity who sent you the PDF document, you can enable JavaScript by selecting one of the following options from the **JavaScript Settings** drop-down list:

- **Enable JavaScript for This Document Only** to enable JavaScript while the current document is open.
- **Enable JavaScript for All Documents** to open the **Options** dialog box, where you can enable JavaScript for all documents.

Copying data from PDF documents

The PDF Editor allows you to copy any area of a PDF document without recognizing the whole document or converting it into an editable format.


You can **copy** any area **as**:

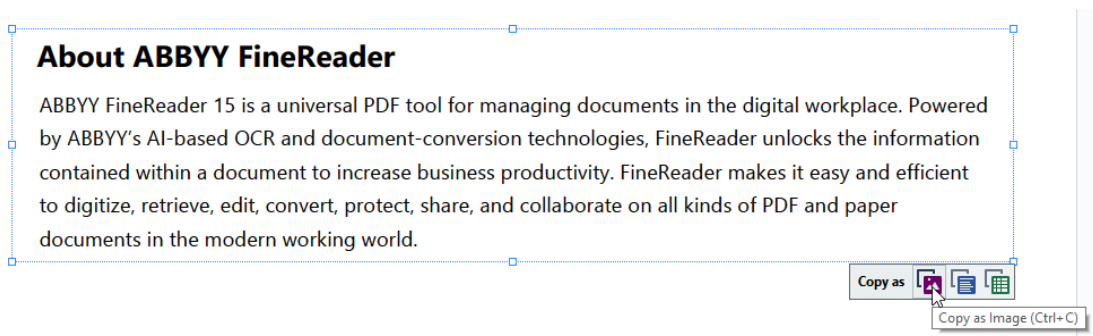
- [an image](#) ⁵⁸;
- [text](#) ⁵⁹;
- [a table](#) ⁶¹.

Copying an area as an image

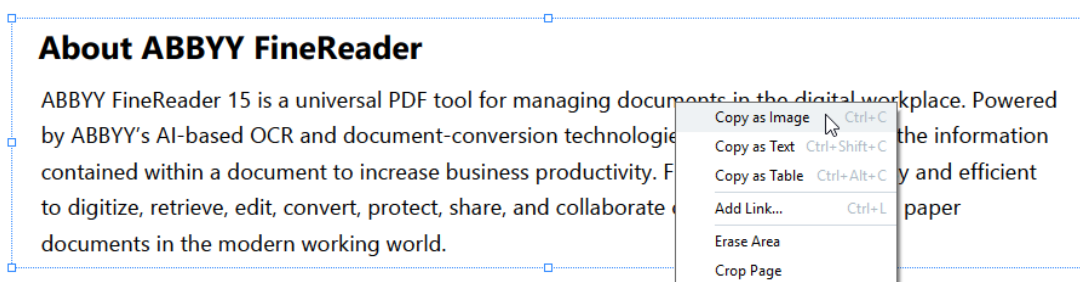
To copy an area of a PDF document as an image:

1. Use the mouse to draw a rectangle around the area that you want to copy.
 - ✎ The area that you mark up has to be confined to a single page.

2. Click the  icon on the toolbar that appears next to the marked up area.



Alternatively, you can right-click the marked up area and then click **Copy as Image** on the shortcut menu or press Ctrl+C on the keyboard.



- ✎ Text from the marked up area will be copied to the clipboard as an image.


3. Paste the copied image into the desired application.

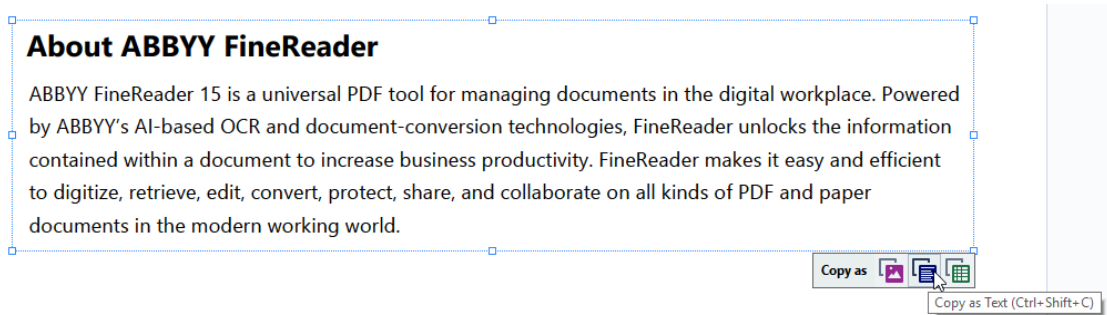
Copying an area as text

To copy an area of a PDF document as text, use one of two methods:

Method 1:

1. Use the mouse to draw a rectangle around the area that you want to copy.
 - ✎ The area that you mark up has to be confined to a single page.

2. Click the  icon on the toolbar that appears next to the marked up area.



Alternatively, you can right-click the marked up area and then click **Copy as Text** on the shortcut menu or press Ctrl+Shift+C on the keyboard.



3. Paste the copied text into the desired application.

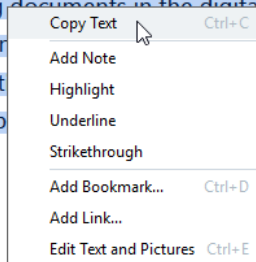
Method 2:

1. Use the mouse to mark up the text strings that you want to copy.
 - ✎ You can mark up text strings on several pages at once.
2. Right-click the marked up text.

3. Click **Copy Text** on the shortcut menu that appears or press Ctrl+C on the keyboard.

About ABBYY FineReader

ABBYY FineReader 15 is a universal PDF tool for managing documents in the digital workplace. Powered by ABBYY's AI-based OCR and document-conversion technology, it locks the information contained within a document to increase business productivity. It's easy and efficient to digitize, retrieve, edit, convert, protect, share, and collaborate on documents in the modern working world.



4. Paste the copied text into the desired application.

You can use Method 2 only for PDF documents with a text layer. If there is no text layer in a PDF document, ABBYY FineReader PDF 15 creates a text layer as a result of the [background recognition](#) process.

✎ If you are unable to mark up text strings with the mouse cursor, make sure that the **Enable background recognition in the PDF Editor** option in the [Options](#) dialog box is selected.

✎ If there are visual differences and recognition errors in the copied text, make sure that the right OCR languages are selected for the document.

See also: [Document features to consider prior to OCR](#).


✎ To save the text layer created by the background recognition process, click **File > Recognize Document > Recognize Document....**

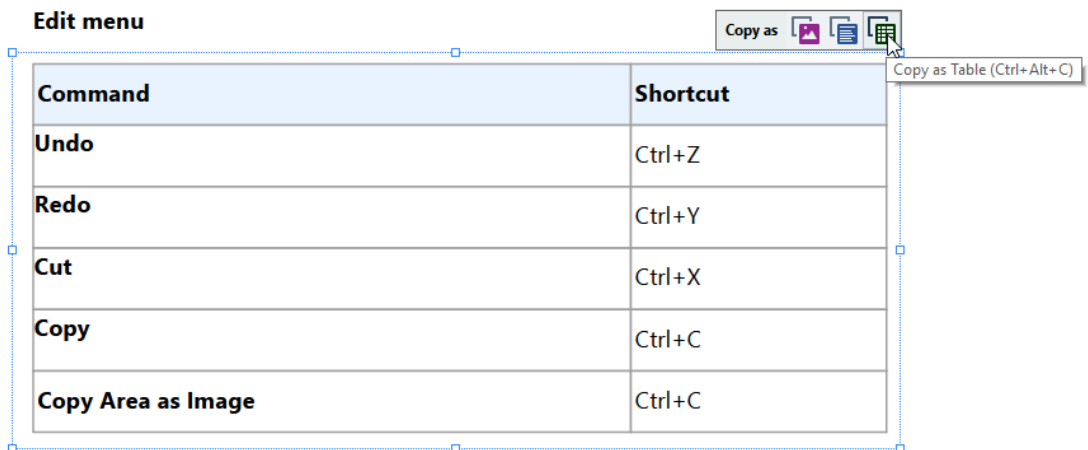
See also: [Recognizing text](#).

Copying an area as a table

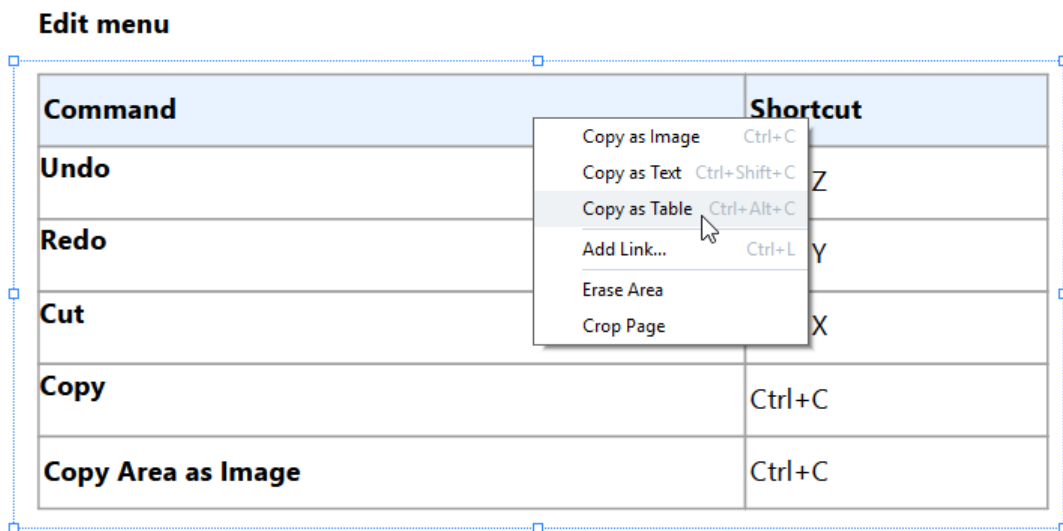
To copy an area of a PDF document as a table:


1. Use the mouse to draw a rectangle around the area that you want to copy.
 - ✎ You can mark up a table or any part of one, as well as plain text, even on the images.
 - ✎ The area that you mark up has to be confined to a single page.

2. Click the  icon on the toolbar that appears next to the marked up area.




Alternatively, you can right-click the marked up area and then click **Copy as Table** on the shortcut menu or press Ctrl+Alt+C on the keyboard.



✎ Before copying a table, you can [change its structure](#) .

3. Paste the copied table into the desired application.


 PDF Editor allows you to change the table structure before copying it. You can:


- add vertical / horizontal separators;
- delete separators;
- split / merge table cells.


After the text from the marked up area has been recognized, a toolbar with table editing tools




| Command | Shortcut |
|--------------------|----------|
| Undo | Ctrl+Z |
| Redo | Ctrl+Y |
| Cut | Ctrl+X |
| Copy | Ctrl+C |
| Copy Area as Image | Ctrl+C |

Use these tools to change the table structure and click the  icon on the table editing toolbar again. The edited table will be copied to the clipboard.

 No changes will be made to the table in the original file.

 You can [edit the table in the original file](#) ²⁰⁷ in the OCR Editor.

 If the table data that has been copied differs significantly from the original document data:

- If the document does not have a text layer, make sure that the right [OCR languages](#) ²⁸⁷ are selected.
- If the page containing the data you want to copy has a text layer of a poor quality, [replace the text layer](#) ⁹⁰ with a new one.

Now, try copying the data again.

Reviewing PDF documents

The PDF Editor includes a number of features for reviewing PDF documents. While reading a document, you can add comments, highlight important fragments, make notes, draw shapes to highlight specific areas, and place stamps on pages.

Chapter contents

- [Adding comments](#) ^[63]
- [Marking up text](#) ^[64]
- [Drawing shapes](#) ^[66]
- [Adding text to PDF documents](#) ^[69]
- [Adding stamps](#) ^[75]
- [Collaborating on PDF documents](#) ^[70]

Comments

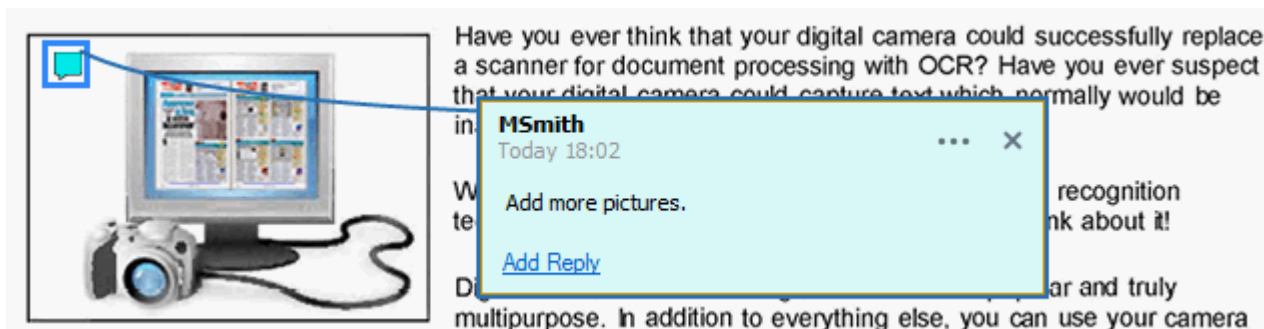
The PDF Editor offers tools for adding notes to any part of a PDF document, making discussing and reviewing PDF documents much simpler.

1. If the **PDF Tools** toolbar is hidden, open it by clicking the **PDF Tools** button on the main toolbar.



Note

2. Click the **Note** tool on the **PDF Tools** toolbar.
3. If you don't like the default note color, select another one on the toolbar that appears above the document.
4. Click where you want the note to appear on the page and type the note.




 You can change the color of an existing note using its shortcut menu.





To find out how to open notes, reply to notes or delete them, see [Collaborating on PDF documents](#) ^[70].


Marking up text

The PDF Editor allows you to indicate what changes should be made to a document. Any editing marks that you add will not alter the text itself but merely indicate what changes must be made and where.

 Annotations related to editing text are only available in documents with a text layer or documents that have been recognized by the background recognition process.

ABBYY FineReader includes the following markup tools:


| | |
|---|-------------------------|
|  | Highlight |
|  | Underline |
|  | Strikethrough |
|  | Add Note to Insert Text |

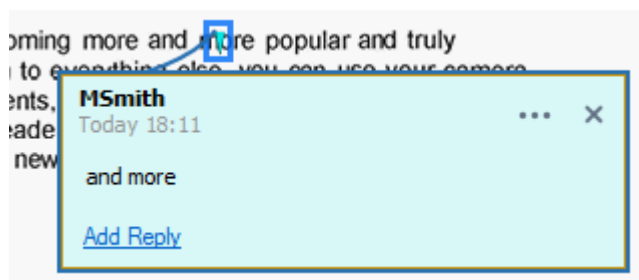
 You can add a comment to any type of annotation by double-clicking the annotation. For more on comments, see [Collaborating on PDF documents](#) ⁷⁰.

To highlight, underline, or cross out a text fragment:

- Select a markup tool on the main toolbar and then select the desired text fragment, or
- Select the desired text fragment and then select a markup tool on the main toolbar.

To indicate an insertion point:

- Click the  tool on the **PDF Tools** toolbar and click the place where you think text needs to be inserted.

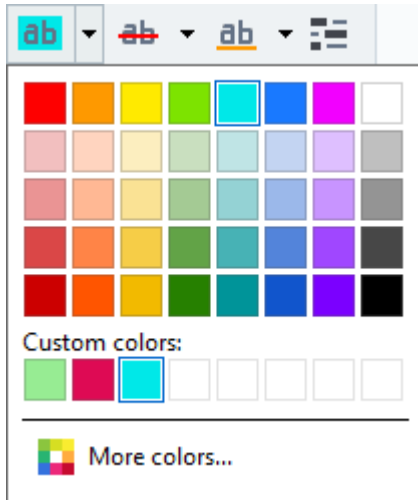


 To change the color of an annotation:

- Right-click the annotation and select the desired color on the shortcut menu or
- Click a markup tool on the main toolbar and then click one of the color boxes on the toolbar that appears above the document.

You can use the search feature to mark up specific text fragments without reading through the entire document to find them.

1. Open the **SEARCH** pane.
2. Type the word or phrase you want to find.
3. In the **SEARCH** pane, select the search hits you want to mark up and click the desired markup tool. If you want to choose a different color, click the arrow next to the markup tool instead of clicking the tool itself and then click the desired color on the color palette that appears.



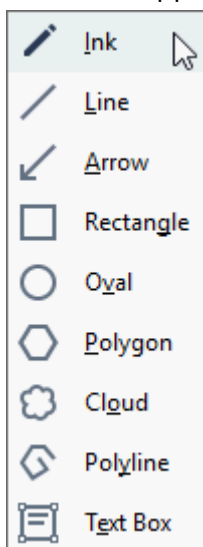
By default, the markup tools in the **SEARCH** pane use the same colors as the markup tools on the **PDF Tools** toolbar.

Drawing shapes

The PDF Editor allows you to draw various markings on the page of a PDF document. You can also add comments to the various shapes that you have drawn.



1. On the **PDF Tools** toolbar, click **Draw**.
2. Select the appropriate drawing tool from the drop-down menu.



- **Ink**
Draws a line when you hold down the left mouse button, letting you draw any shape.

- **Line**

Draws a straight line. If you want to draw a vertical, horizontal or diagonal (sloped at an angle of 45°) line, hold down the **Shift** key.

- **Arrow**

Draws an arrow. If you want to draw a vertical, horizontal or diagonal (sloped at an angle of 45°) line, hold down the **Shift** key.

- **Rectangle**

Draws a rectangle. If you want to draw a square, hold down the **Shift** key.

- **Oval**

Draws an oval. If you want to draw a circle, hold down the **Shift** key.

- **Polygon**

Draws a polygon. Click where you want to place the initial vertex of the polygon. To complete the polygon, click the initial vertex.

- **Cloud**

Draws a cloud. Click where you want to place the initial vertex of the cloud. To complete the cloud, click the initial vertex.


- **Polyline**

Draws a jagged line. Click the page to start drawing, click again when you want to draw the next segment, and double-click where you want the jagged line to end.

- **Text Box**

Draws a rectangle with a nested text annotation. For more details, see [Adding a Text block annotation to a PDF document](#)⁶⁹.

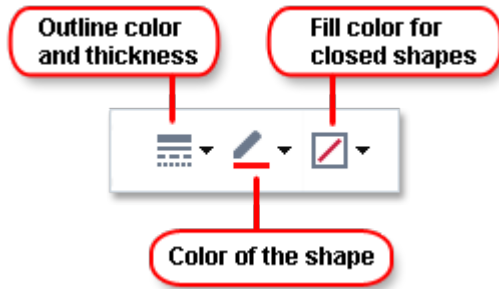
3. Once you have finished drawing the shape, double-click it if you want to type a comment.

 If you are using the **Ink** tool, you will need to disable the drawing tools before you can type a comment.

To draw a set of shapes using the **Ink** tool and add a comment to the entire set:

- Hold down the **Shift** key and draw the figure. You can release the mouse button, but only release the **Shift** key when you are finished drawing.
- Disable the drawing tools, double click one of the shapes in the set, and type your comment.

4. Drawing tools have several settings you can change.



To change these options:

- Right-click a shape you drew on the page and use the commands on its shortcut menu.
- Selecting the desired settings on the **PDF Tools** toolbar before drawing a shape.

✎ For more on using and editing comments, see [Collaborating on PDF documents](#)⁷⁰.



Adding a Text block annotation to a PDF document

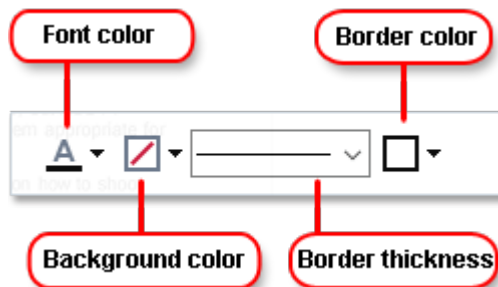
The PDF Editor allows you to add blocks of text to any type of PDF .

✎ A text block is an annotation. Text in a text block is not the body text of a PDF document.

For more information about adding body text to a PDF document, see [Inserting and editing text](#) ^[79].

To add a text block to a PDF document, do the following:

1. Click the  **Draw** icon on the toolbar and select  **Text Box** from the drop-down list. A toolbar with text editing tools will appear beneath the **PDF Tools** toolbar.
2. Click where you want to add text. To change the size of the text block, drag one of the sizing handles in the desired direction.
3. Type your text. You can choose a font type, font size, and font color.




4. Change the size of the text block if necessary.
5. To draw a border around the text block, select the color and thickness of the border.
6. You can also change the background color of the text block or use the **Detect background color** option to use the background color of the page.
 - ✎ By default, a transparent background is used.

You can use the PDF Editor to fill out forms that do not have interactive fields. To do this, simply type text over the form using the **Export** tool.

✎ When you add a text block, a new comment containing text from the block will appear in the **Comments** pane. You can change the status of the comment in the same way you change the status of an annotation. **See also:** [Collaborating on PDF documents](#) ^[70].

Collaborating on PDF documents

The PDF Editor allows you to see and reply to comments made by other reviewers, even if they were created in applications other than ABBYY FineReader. You can also change the status of a comment to inform a reviewer that you have accepted or rejected his/her suggestion.

To view a list of all comments in the document, open the **COMMENTS** pane by clicking the  button on the main toolbar.



There are other ways to open the **Comments** pane:

- Right-click an annotation, stamp or comment and click **Show Comments Pane** on the shortcut menu.
- Click **View** and select **Show Comments Pane**.
- Press F7.

Adding a comment to an annotation



- Double-click the annotation to which you want to add a comment, or
- Right-click the annotation and select the **Add Comment** command on the shortcut menu.

If the **COMMENTS** pane is hidden, a comment box where you can type the comment will appear. If the **COMMENTS** pane is visible, the comment box associated with the annotation will be highlighted.

Opening a comment

- Select the annotation that contains the comment you want to see.

If the **COMMENTS** pane is hidden, a comment box where you can type the comment will appear. If the **COMMENTS** pane is visible, the comment box associated with the annotation will be highlighted.

 If you want a comment to always be visible, double-click its annotation. To hide a comment, click the  button in the upper-right corner of the comment box.

Replying to a comment

1. Select the annotation that contains the comment to which you want to reply.
2. Click **Reply** in the comment box or press Ctrl+Enter and type your reply.

Deleting an annotation or its associated comment or reply

To delete an annotation:

- Select the annotation you want to delete and press Delete on the keyboard or right-click the annotation and click **Delete** on the shortcut menu.
The comment associated with the annotation will also be deleted.
- Select a comment box in the **COMMENTS** pane and press Delete on the keyboard or right-click the comment box and click **Delete**.
The annotation associated with the comment will also be deleted.

To delete a comment in the **COMMENTS** pane:

- Right-click anywhere inside the comment box and select **Delete** on the shortcut menu.
All replies associated with the comment will also be deleted.

To delete all comments and annotations:

- Click **Edit > Delete Comments and Markup...**

To delete a reply:

- Right-click the reply and select **Delete Reply** on the shortcut menu.
In the same manner, you can delete a reply on the **COMMENTS** pane.


Flagging a comment or changing its status

You can assign statuses to comments you have read or flag those comments which you want to revisit later.

To flag a comment:

- Click the box next to the comment in the **COMMENTS** pane or right-click the comment and click **Add Checkmark** on the shortcut menu.

To change the status of a comment:

- Right-click a comment or its annotation, click **Status** on its shortcut menu, and select the desired status.
- Click the  button in the comments box and select the desired status.

Properties of annotations and comments

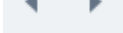
In the **Properties...** dialog box of an annotation or comment, you can change the author or the subject and see how the status of the annotation or comment changed over time. If you have changed the name of the author, you can click the **Set Default** button to use the new name for any annotations and comments you make in the future.

To open the **Properties** dialog box of an annotation or comment:


- Right-click the annotation, stamp or comment and click **Properties...** on the shortcut menu.

The Comments pane

The **COMMENTS** pane displays all annotations added to the document, with or without comments, and all text blocks, stamps, and editorial marks.


- To navigate the comments, use the  buttons.
- You can search for a specific comment, reply or author using the search box at the top of the **COMMENTS** pane.

To sort the comments:

- On the **COMMENTS** pane, click  and then select the desired sorting option from the menu.

You can filter the comments by type, author, flag status, or comment status.



To filter the comments:

- On the **COMMENTS** pane, click  to open the filter menu and then click **Show All Comments**, **Hide Current Comments**, or select the criteria you want to use to filter the comments.

You can filter the comments by:

1. Type
2. Author
3. Page
4. Date
5. Flag Status
6. Status



 To reset the filter, click **Reset**.

If you just want to see the authors and dates of the comments, click  to hide the text of the comments. To display the text again, click .

Adding stamps

The PDF Editor allows you to stamp PDF documents in the same manner as you stamp paper documents. You can select a stamp from the list of available stamps or create your own, adding any desired text, the date and time of stamping, or an image.

To stamp a page:


1. On the **PDF Tools** toolbar, click  **Add Stamp** ▼ and select the desired stamp.
 If the stamp you want to use is not available in the menu, click **Other stamp**.
2. Stamp the page.
3. Move the stamp to the desired location if necessary.

You can add comments to stamps and change their statuses in the same manner as you add comments to annotations. **See also:** [Collaborating on PDF documents](#) ⁷⁰.



How to create a stamp

The PDF Editor allows you to create textual stamps and stamps from images.


To create a stamp from an image:

1. On the **PDF Tools** toolbar, click  **Add Stamp** ▾ > **Create Stamp from Image...**
2. In the dialog box that opens, type a name for your stamp in the **Name** field.
3. Click **Open** to open an image from your hard disk or click **Paste from Clipboard** if you have previously copied an image to the Clipboard.
4. Use the **Stamp size** slider if you need to adjust the size of the image.
5. Click **Save**.

To create a text stamp:

1. On the **PDF Tools** toolbar, click  **Add Stamp** ▾ > **Create Text Stamp...**
2. In the dialog box that opens, type a name for your stamp in the **Name** field.
3. In the **Stamp text** field, type the text that you want to appear on the stamp.
4. From the **Add Date/Time** drop-down list, select the date and time format that you want to use.
 - When you stamp a page, the stamp will contain the date and time of the stamping in the format you specified.
 -  All text elements will be added to the stamp at the position of the cursor in the **Stamp text** field. You can change the order of the stamp elements in this field, add explanatory text, and set up the date and time formats. For more on dates and times, see [Current date and time on stamps and in Bates numbers](#)³⁰¹.
5. In the **Font and border** group of options, select a font type, font size, and [font effects](#)³¹⁴ for the text in the stamp and a color for the stamp.
6. Enable the **Add border** option if you want the stamp to have a border.
7. The **View** box contains a preview of the stamp, so you can see the effects of the changes you make.
8. Click **Save**.

How to edit stamps


1. On the **PDF Tools** toolbar, click  **Add Stamp** ▾ > **Manage Stamps...**
2. In the dialog box that opens, select a stamp and click **Edit...**
3. Specify the desired settings and click **Use**.

How to delete a stamp

To remove a stamp from your document, do one of the following:

- Select the stamp in the document and press Delete.
- Right-click the stamp in the document and select **Delete...** on the shortcut menu.
- Select the comment for the stamp in the **COMMENTS** pane and press Delete.












To remove a stamp from the list:

1. On the **PDF Tools** toolbar, click  **Add Stamp** ▾ > **Manage Stamps...**
2. In the dialog box that opens, select the stamp and click **Delete...**

Working with PDF content

The PDF Editor allows you to modify the contents of PDF documents without the need to convert PDF documents to editable formats.

Chapter contents

- [Inserting and editing text](#)  79
- [Inserting and editing pictures](#)  87
- [Inserting and editing hyperlinks](#)  88
- [Recognizing text](#)  90
- [Working with pages](#)  91
- [Adding bookmarks](#)  95
- [Adding headers and footers](#)  97
- [Adding watermarks](#)  100
- [Adding file attachments](#)  101
- [Viewing metadata](#)  102
- [Enhancing page images](#)  103

Inserting and editing text

The PDF Editor in ABBYY FineReader PDF 15 allows you to insert and edit text in any* PDF document:

- PDF documents created using other applications
- scanned documents
- searchable PDF documents

The following features are available:

- adding new text
- deleting text
- copying and pasting text from the clipboard
- editing the formatting of text inside existing text blocks
- changing the text block size
- moving text blocks on a page
- correcting page orientation, skewing, distorted text, and other defects found in scanned documents

* except PDF documents containing vector graphics text

Inserting new text

New text can be added to a page in the following ways:

- [Add a new text block using the !\[\]\(a9a7cf821bf949be41db724492f295be_img.jpg\) Add Text tool !\[\]\(2c367d84c99049f9805eec6142b5bc5d_img.jpg\).](#)

This is the most convenient way to insert:

- a large volume of text
- an isolated text block

- [Edit an existing text block !\[\]\(4decd7f4d36b8b21e9f05326cc7983ef_img.jpg\).](#)

This is the most convenient way to insert text if you need to add a relatively small volume of text to an already existing text block.

- [Add text using the !\[\]\(79516a995cff76a1aff85c3662aea2c5_img.jpg\) Header and Footer tool !\[\]\(eccb9a483ab0e7e56efdd579e29a52b0_img.jpg\).](#)

This is the most convenient way to insert text if you need to add identical text to several pages at once.

Adding new text using the Add Text tool

To add a new text block to a PDF document:



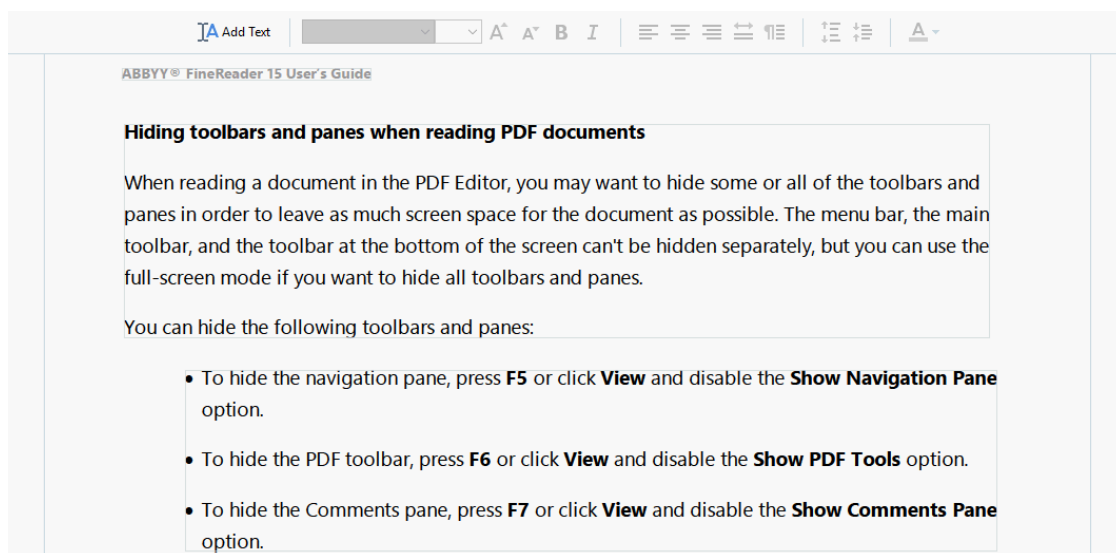
1. Click the **Edit** button to enter the text editing mode. Alternatively, you can click **Tools > Edit Text and Pictures** or press Ctrl + E on the keyboard.

Tip: if the toolbar is not visible, click **PDF Tools** in the upper-right corner.

Note: you might have to wait some time for the program to prepare the document for editing. During this time, a page preparation indicator will be displayed in the left part of the **Text** pane.



The **Text** pane will appear under the toolbar, and text and images on the page will be marked as separate blocks:



Note: when working with scanned documents and searchable PDF documents, it is important to specify the correct languages, especially when background recognition is disabled. For more details, see [Document features to consider prior to OCR](#)²⁸⁷.

Tip: before starting your work with scanned documents and searchable PDF documents, it is sometimes best to [correct the page orientation, skew, distorted text, and other defects](#)⁸⁵.

2. Click the **Add Text** button in the **Text** pane or press Ctrl + T on the keyboard. This will enable the editing tools in the **Text** pane.


3. Place the cursor in the particular spot where you want a new text block to be added and mark out a rectangular shape of the appropriate size for your new text block or left-click once for a text block of a default shape.


Note: the size of the new text block cannot be larger than the page itself.

Note: you can create new text blocks over other objects.

4. Enter your text into the text block that you have just created.

Note: when adding a large volume of text, take care to not go over the edges of the page itself.

5. Finish adding the text. To do this, left-click the area outside of the text block or press the Esc key.
6. Save the changes you have made to the document by clicking the  button in the upper-left part of the PDF editor window. Alternatively, you can click **File** > **Save** or press Ctrl + S on the keyboard.

7. To exit the text editing mode, click the  button or press Ctrl + E on the keyboard.

Editing existing text

To edit text in a PDF document:



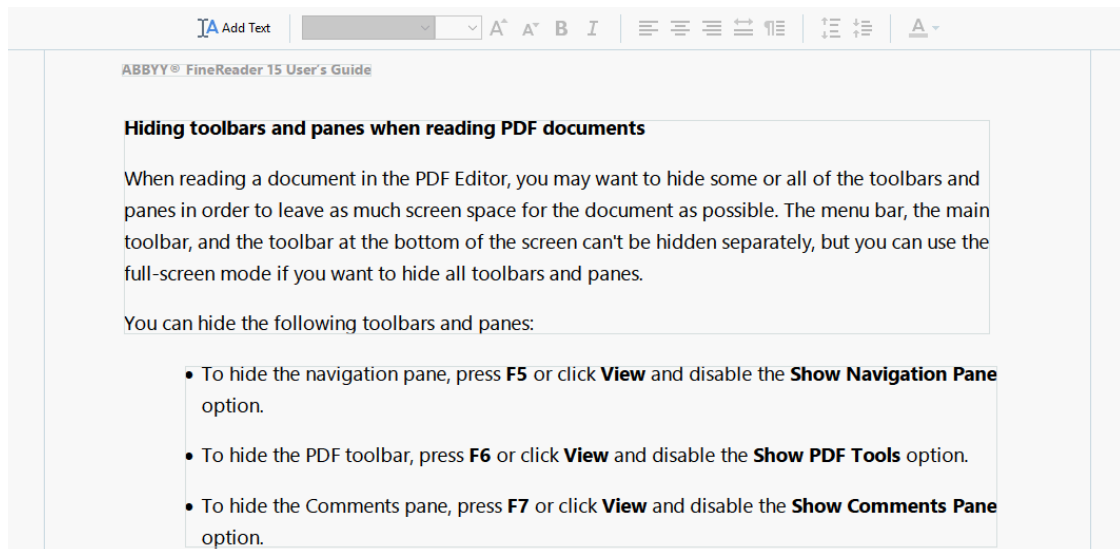
1. Click the **Edit** button on the toolbar to enter the text editing mode. Alternatively, click **Tools > Edit Text and Pictures** or press Ctrl + E on the keyboard.

Tip: if the toolbar is not visible, click the  **PDF Tools** button in the upper-right part of the PDF Editor window.

Note: you might have to wait some time for the program to prepare the text for editing. During this time, a page preparation indicator will be displayed in the left part of the **Text** pane.



The **Text** pane will appear under the toolbar, and text and images on the page will be marked as separate blocks:



Note: when working with scanned documents and searchable PDF documents, it is important to specify the correct languages, especially when background recognition is disabled. For more details, see [Document features to consider prior to OCR](#)^[287].

Tip: before starting your work with scanned documents and searchable PDF documents, it is sometimes best to [correct the page orientation, skew, distorted text, and other defects](#)^[85].

2. Edit the text in the PDF document.
You can:

- **Add new text to an existing text block**

To do this, place the cursor into the text block and type the appropriate text or paste the text from the clipboard.

The program will pick a suitable font automatically.

Note: the name of the current font is displayed in the list in the **Text** pane. A pair of square brackets around a font name means that the font is built into the edited PDF document, but has not been installed on your system. To use this font when typing new text, install it on your system first. Otherwise, the program will pick the default font.

- **Delete text from an existing text block**


To do this, select the text you want to delete and delete it.

- **Delete a text block entirely**

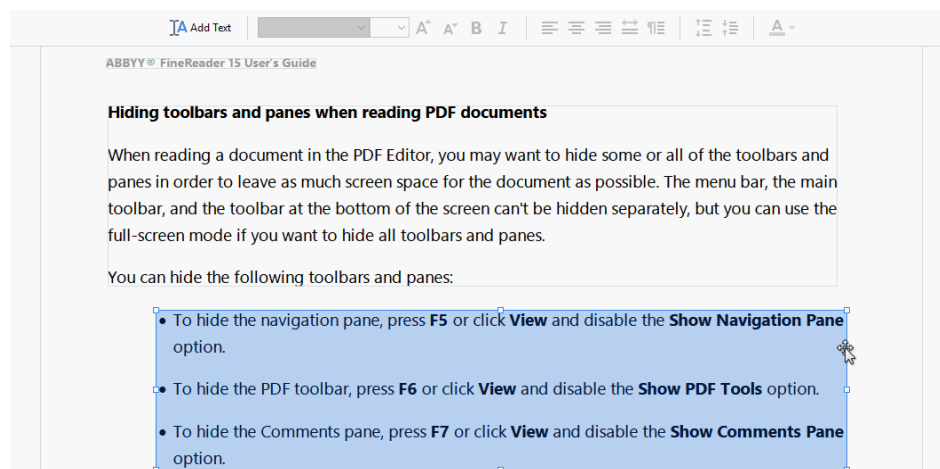
To do this:

- Hold down the Ctrl key and left-click the text block.

Alternatively, you can select a text block by left-clicking inside it, place the cursor on one of the block's edges, and select it by left-clicking it when the cursor's appearance

changes to  .

- Delete the text block by pressing Delete.



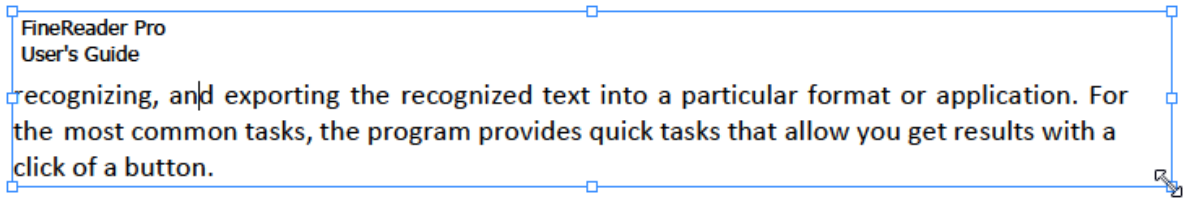
- **Change the formatting of text**


To do this, select the appropriate text inside a text block and edit it using the tools located in the **Text** pane:



- **Change the size of a text block**

To do this, first select the appropriate text block by left-clicking inside it. The text block edges will now have little square icons on them.




Place the cursor on top of one of the square icons. When the cursor's appearance changes to , hold down the left mouse button and drag the cursor so that the text block's size changes to the size that you want.

Note: when changing a text block's size, take care to not go over the edges of the page.

- **Move text blocks around on a page**


To do this, hold down the Ctrl key and place the mouse cursor on a text block. While still holding down the Ctrl key, drag the block to the desired location.


Alternatively, you can select a text block by left-clicking inside it, place the cursor on one of its edges, and move it by holding down the left mouse button when the cursor's

appearance changes to .

Note: when moving a text block, take care to not go over the visible edges of the page.

3. Finish editing the text. To do this, left-click outside the text block or press the Esc key.

4. Exit the text editing mode by clicking the  button or press Ctrl + E on the keyboard.

5. Save the changes you have made to the document by clicking the  button in the upper-left part of the PDF editor window. Alternatively, you can click **File** > **Save** or press Ctrl + S on the keyboard.

Improving text editing in scanned documents

Before starting to edit scanned documents and searchable PDF documents, you can do the following to improve the editing of text:

- **Correct the page orientation, skew, distorted text, and other defects**

To make cosmetic changes to the appearance of a scanned document, click the **Correct Skew and Page Orientation** button in the **Text** toolbar and choose **Correct Skew and Orientation for Current Page** (for a particular page or for the whole document).



Note: the **Correct Skew and Page Orientation** button appears in the **Text** pane only for those pages, where the program has detected text skewing.

- **Re-recognize a page / document**

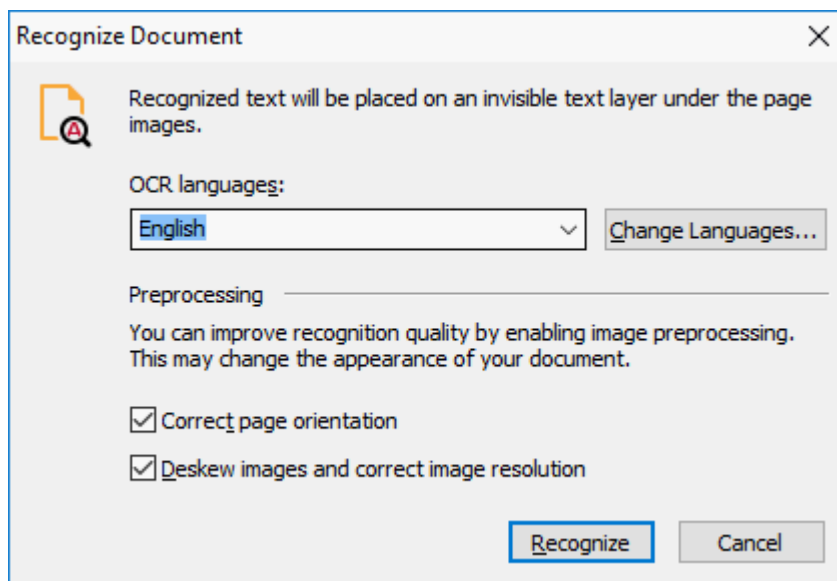
If a page contains a text layer, it will be used when editing the text. To recognize a page from scratch, click the **Text Layer** button in the toolbar and select **Recognize Page and Replace Existing Text Layer...** (for a particular page or for the whole document).



This will open the **Recognize Document** dialog box.

Select the appropriate languages from the drop-down list in its upper half.

Mark the checkboxes next to **Correct page orientation** and **Deskew images and correct image resolution** in the lower part of the window.



Click **Recognize**.

Inserting and editing pictures

The PDF Editor allows you to insert pictures into PDF documents of any type.



1. Click the **Picture** button on the **PDF Tools** toolbar.
2. In the dialog box that opens, select a picture and click **Open**.
3. Move the picture to the desired location on the page.

You can move, rotate, delete, and resize pictures. When you move a picture, it may overlap with other objects on the page. To bring an overlapping picture to the foreground, right-click it and select **Bring Picture to Front**.

To delete a picture:

- To delete a picture in a PDF document created in another application, right-click the picture and click **Delete** on the shortcut menu.
- You can delete a part of the document image and anything that it may contain, including



pictures. To do this, click the **Erase** tool on the **PDF Tools** toolbar and select the area you want to erase.

- ✎ The **Erase** tool deletes pictures and text, automatically selecting the appropriate background color to fill the empty space.

Inserting and editing hyperlinks

ABBYY FineReader allows you to insert hyperlinks into PDF documents of any type and edit existing hyperlinks.

When you point the mouse cursor to a hyperlink, its address is shown in a pop-up box. To follow the link, simply click it.

To insert a hyperlink into a PDF document:

1. Type the text to be used as a hyperlink.
2. Either click **Edit > Add Link...** or select the text, right-click it, and then click **Add Link...** on the shortcut menu.

- Linking to a specific text fragment in the current document

In the Link Editor:

- Select **Page in this document** and enter the number of the page that the link should open, or
- Click **Select specific destination...** and place the mouse cursor where you want to direct users who click the link.
- Linking to a web page

In the Link Editor:

- Select **Web address, e-mail address, file or other resource** and type the URL of the page you want to link to (e.g. <http://www.abbyy.com>).
- Linking to an e-mail address

In the Link Editor:


- Select **Web address, e-mail address, file or other resource** and type the recipient's e-mail address preceded by "mailto:" (e.g. <mailto:office@abbyy.com>).
- Linking to a file

In the Link Editor:

- Select **Web address, e-mail address, file or other resource** and enter the path to the file that the link should open preceded by "file://" (e.g. <file:///D:/MyDocuments/ABBYYFineReader.pdf>).

To edit a hyperlink:

1. Select the hyperlink you want to edit.
2. Right-click the selected link and click **Edit Link...** on the shortcut menu.
3. In the Link Editor, do one of the following:
 - Change the number of the page that the link should open
 - Click **Select specific destination...** and place the mouse cursor where you want to direct users who click the link
 - Change the URL, e-mail address, or path to a file or other resource .


 You can copy the URL, e-mail address or the path to a file or other resource into the Clipboard. To do this, right click the link, select **Copy Link**, and copy the URL, e-mail address, or path.


To delete a hyperlink from a PDF document:


1. Select the hyperlink you want to delete.
2. Right-click the selected link and click **Remove Link** on the shortcut menu.


Recognizing text

[Background recognition](#)⁵⁵ is a process that adds a temporary text layer to a document, enabling you to mark up, copy, and search its text. You can make these capabilities available to other users by adding a permanent text layer to PDF documents. Documents with text layers are practically indistinguishable from their originals. You can also replace an existing text layer in a searchable PDF document.

1. On the main toolbar, click the arrow next to the  **Recognize** ▾ button and select **Recognize Document...** from the drop-down list. Alternatively, click **File > Recognize Document > Recognize Document...** or press Ctrl+Shift+R.
2. In the dialog box that opens, specify the appropriate OCR languages. **See also:** [Document features to consider prior to OCR](#)²⁸⁷.
3. To improve the quality of OCR, enable image processing. Image processing may change the appearance of your document.
 - **Correct page orientation** - The program will detect text orientation and correct if necessary.
 - **Deskew images and correct image resolution** - The program will detect and correct any skew, select the appropriate image resolution, and make some other changes to improve the images.
4. Click the **Recognize** button.
5. As a result, the output document will contain a searchable text layer.

You can also add a text layer when adding pages to a PDF document from a file or when scanning paper documents. To do this, select the **Recognize text on images** option in the **Image Processing Settings** dialog box (click >  **Add Pages** ▾ > **Image Processing Settings** to open this dialog box) and specify the languages of the document. **See also:** [Working with pages](#)⁹³







 If you want to check recognized text, train the program to recognize non-standard fonts and characters, or use some other advanced features of ABBYY FineReader, click the arrow next to the

 **Recognize** ▾ button and then click **Recognize and Verify in OCR Editor**. Alternatively, click **File > Recognize Document > Recognize and Verify in OCR Editor**. **See also:** [Sending PDF documents to the OCR Editor](#)¹⁶¹.

Working with pages





The PDF Editor allows you to delete or add pages to a PDF document, change their order, and insert blank pages.

Adding pages from a file...

1. On the main toolbar, click the  **Add Pages**  button.
2. Click **Add from File...**
 Alternatively, click **Add Pages from File...** in the shortcut menu of the **PAGES** pane or from the drop-down menu that appears if you click the  button.
3. In the dialog box that opens, select the file or files that you want to add to the PDF document and specify the numbers of the pages that you want to add. The files you select must be in any of the [supported formats](#) ²⁸⁴. You can also specify where you want the new pages to be added (e.g. before the first page, before the current page, etc.).
4. Click the **Settings...** button and specify the desired [image processing options](#) ⁹³.
5. Click the **Open** button

The selected files will be converted into PDF and inserted into the current PDF document.

Adding scanned pages...

1. On the main toolbar, click the  **Add Pages**  button.
2. Click **Add from Scanner...**
3. Select a device and specify [scanning settings](#) ²⁵³.
4. Click the **View** button or click anywhere in the scanning area to view the image.
5. If required, click the **Settings...** button and specify the desired [image processing options](#) ⁹³.
6. Click the **Scan** button.

The scanned pages will be inserted into the current PDF document.

Inserting blank pages...


1. In the **PAGES** pane, select the page before or after which you want to insert a blank page.
2. Right-click the page, click **Add Blank Page** on the shortcut menu, and then click **Before Current Page** or **After Current Page**.

Alternatively, click  **Add Pages** > **Add Blank Page**. A blank page will be added after the currently selected page.


Changing the order of pages...

- In the **PAGES** pane, select one or more pages and drag them to the desired place in the document.


Replacing pages...

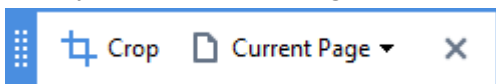
1. In the **PAGES** pane, select the pages you wish to replace.
2. Select **Replace Pages...** in the **Edit** menu, in the context menu of the page or by clicking the  button in the **PAGES** pane.
3. In the opened dialog box, select the PDF document with new pages.
4. In the page replacement dialog box, specify the range of pages to be replaced in the current document and the range of pages in the new document.

Rotating pages...

- In the **PAGES** pane, select one or more pages, right-click them, click **Rotate Pages** on the shortcut menu, and then click **Rotate Right** or **Rotate Left**. Alternatively, click the  the button at the top of the pane and then click **Rotate Pages** > **Rotate Right** (or **Rotate Left**).

Cropping pages...

1. In the **PAGES** pane, select one or several pages.
2. Select **Crop Pages...** on the main toolbar, in the **Edit** menu, in the context menu of the page or by clicking the  button in the **PAGES** pane.
3. On the cropping frame pane:
 - Select the cropping mode: **Separate frame for each page** or **Single frame for all pages**
 - Select the size of the cropping frame
 - Use the option that lets the program automatically determine the size of the cropping frame.
 - ✎ The option of automatic framing sets the boundaries of the cropping frame on the edges of a text and reduces blank areas on document pages.
4. Move the frame edges to set the cropping frame manually.
5. After you set the cropping frame:



- Select the document pages to be cropped
- Click **Crop**

Deleting pages...

- In the **PAGES** pane, select one or more pages, right-click them, and click **Delete Pages...** on the shortcut menu or press the Delete key.

Creating a PDF document from selected pages...

- In the **PAGES** pane, select the desired pages, right-click them, and then click **Create PDF from Selected Pages** on the shortcut menu.

The created document will be opened in a new window.

Image processing options


The PDF Editor offers multiple image processing options to improve the quality of images and OCR.

You can specify image processing options when scanning paper documents or when creating PDF documents from image files.

- **Image quality** The quality of the pictures and the size of the file are determined by the value you select from the drop-down list in the **Image quality** group of options:

- **Best quality**
Select this item to preserve the quality of the page images and pictures. The original resolution of the source images will be preserved.
- **Balanced**
Select this option to reduce the size of the PDF file while keeping the quality of the page images and pictures at a reasonably high level.
- **Compact size**
Select this option to obtain a small-sized PDF file. This may adversely affect the quality of the page images and pictures.
- **Custom...**
Select this option if you want to specify custom options for saving page images and pictures. In the dialog box that opens, specify desired saving options and click **OK**.
- **Recognize text on images** Select this option if you want to add a text layer to the document.

You will get a searchable PDF document that looks almost exactly like the original.


- **Use MRC compression (specify OCR languages below)** Select this option if you want to apply the MRC compression algorithm to recognized pages. MRC compression reduces the size of the output file while preserving the visual quality of the page images.
- **Apply ABBYY PreciseScan to smooth characters on image** Select this option if you want to apply ABBYY PreciseScan technology. ABBYY PreciseScan smoothes characters on a document so that they do not become pixilated when you zoom in.
- **OCR languages** Be sure to select the right OCR languages. **See also:** [Document features to consider prior to OCR](#) 


Adding bookmarks

The PDF Editor allows you to add bookmarks to PDF documents of any type.

You can create a bookmark in the **BOOKMARKS** pane or using a shortcut menu.

1. To create a bookmark in the **BOOKMARKS** pane:

- a. Click the  button on the vertical bar to the left or click **View > Bookmarks**. The **BOOKMARKS** pane will open.

- b. Click  and type a name for your bookmark.


- c. By default, the newly created bookmark will point to the start of the current page.

2. To create a bookmark using a shortcut menu:

- a. Select a text fragment, a picture, or any other place in the document that you want to bookmark.


- b. Right-click the selection and click **Add Bookmark...** on the shortcut menu.

- c. Type a name for your bookmark in the **BOOKMARKS** pane.

 If you bookmark a text fragment, the selected text will be used as the name of the bookmark.

- d. The newly created bookmark will point to the text fragment, picture or other place in the document that you selected.

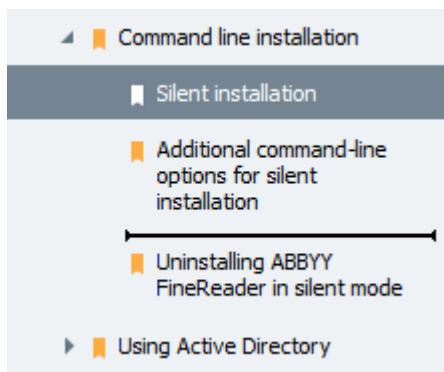
To select a different destination for your bookmark, click **Set Destination** on the shortcut menu of the bookmark and then click where you want the bookmark to be inserted in your document.


 Bookmarks can be nested. A new bookmark will have the same nesting level as the previously selected bookmark. If a new bookmark is the first bookmark in the document, it is placed at the root level.


 Alternatively, you can create a bookmark by clicking **Edit > Add Bookmark...**

Rearranging bookmarks...


1. Select a bookmark in the **BOOKMARKS** pane.
2. Hold down the left mouse button and drag the bookmark to a desired location.




 To create a nested bookmark, drag it onto an existing parent bookmark, wait for the icon of the parent bookmark to change, and release the left mouse button. Alternatively, right-click a bookmark and use the **Move one level left** and **Move one level right** commands on the shortcut menu.


 Rearranging bookmarks or changing their nesting levels will not affect the appearance of the document.


Renaming bookmarks...

1. Select a bookmark in the **BOOKMARKS** pane.
2. Click the  button or click **Rename** on the shortcut menu of the bookmark.
3. Type in a new name.

Deleting bookmarks...

1. Select a bookmark in the **BOOKMARKS** pane.
2. Click the  button or click **Delete** on the shortcut menu of the bookmark.


 You can delete several bookmarks at a time if they are positioned at the same nesting level. While holding down the Ctrl key, select the bookmarks you want to delete and click **Delete**.

 When you delete a parent bookmark, all of its child bookmarks are also deleted.


Adding headers and footers

The PDF Editor allows you to add headers and footers to pages in PDF documents. Headers and footers are recurrent text at the top or bottom of the pages where you can put page numbers, the name of the author, the date or time of creation, or Bates numbers to be used for document indexing.

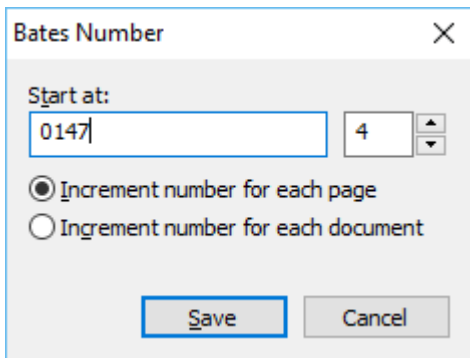
To add a header or footer to your document:

1. Click the  Header and Footer ▾ button.
2. Select the desired type of header or footer from the drop-down menu.

Creating headers/footers...

1. Click the  **Header and Footer** ▼ button and then click **Create Header and Footer...**
2. In the dialog box that opens, choose one of the six possible locations on the page. For greater precision, enter the exact distance between the header or footer and the corresponding edge of the page.
 - 💡 You can select the units used for measuring the distance between the header/footer and the edge of the page from the **Measurement units** drop-down list below the preview pane.
3. In the **Text** field, type the text you want to be placed at the top or bottom of all of the pages of your document.
4. To add page numbers, date, time, or Bates numbers:

- Click the **Page Number** button and select the desired page numbering format from the drop-down list that opens.
The number of each page in the selected format will appear at the top or bottom of the respective page.
- Click the **Bates Number** button.
By default, numbering starts at 1 and all document pages are numbered. To change the default setting, click **Continue from %0...**



Numbering will start at the number you specify in the **Start at** field and will increment either for each page or for each document, depending on your settings. Click **Save** to apply the changes.

- Click the **Date/Time** button and select the desired date or time format.
 - 💡 Each time you click the **Bates Number** button or an item in the **Page Number** or **Date/Time** drop-down list, the corresponding item will be added into the **Text** field after the mouse cursor. You can change the order of the items in this field, add your own explanatory text, or customize the date or time format. For more information about date and time formats, see "[Current date and time on stamps and in headers and footers](#)"³⁰¹."

5. In the **Font** section, select the desired font, font size, [font effects](#)³¹⁴, and font color.
6. In the **Pages** section, specify whether your header/footer should appear on all of the pages or only on some of them.

- Select **All** if you want your header/footer to appear on all of the pages, or select **Page range** and specify a specific range of pages.
- You can put headers/footers only on odd or even pages. To do this, create a header/footer and select **Odd Pages** or **Even Pages** from the **Apply to** drop-down list.

7. Click **Save and Add** to save your changes and add the newly created header/footer to your document.




You can create a new header/footer from an existing one. To do this, click the




Header and Footer ▾

button and select **Manage Headers and Footers...** In the **Manage Headers and Footers** dialog box, select an existing header/footer and click **Copy...**

Editing headers/footers...

1. Click the  Header and Footer ▾ button and select **Manage Headers and Footers...**
2. In the **Manage Headers and Footers** dialog box, select the header/footer you want to modify and click **Edit...**
3. Make the necessary changes and click **Save**.

Deleting a header/footer from the list...

1. Click the  Header and Footer ▾ button and select **Manage Headers and Footers...**
2. In the **Manage Headers and Footers** dialog box, select a header/footer you want to delete and click **Delete**.

Adding watermarks

The PDF Editor allows you to add watermarks into PDF documents. A watermark is some text placed above or beneath the page content. You can use watermarks, for example, to indicate the author of a text or to identify pages containing confidential information.

To add a watermark:




1. Click **Watermark** and then click the **Add Watermark...** item.
2. In the dialog box that opens, select one of the nine possible locations on the page.
 - 💡 You can further adjust the positioning of the watermark by changing the vertical and horizontal offset values.
3. In the **Text** field, enter the text you want to appear on the pages.
 - 📄 You can select the font, font size, and font effects for your watermark text in the settings in the **Font** section.
4. Adjust the orientation and transparency of the watermark:
 - a. In the **Rotate** field, specify a rotation angle (you can also use the slider to the right of the field).
 - b. In the **Transparency** field, enter a transparency value (you can also use the slider to the right of the field).
5. Choose where you want to place your watermark — **Above page content** or **In the background beneath page content**.
6. Specify if the watermark should appear on all of the pages or only on selected pages in the document:
 - a. Select **All** if the watermark should be placed on all the pages.
 - b. Select **Selected** if the watermark should be placed only on the currently selected page.
 - c. Select **Page range** if the watermark should be placed on a range of pages. If you select this option, you must specify a page range in the field below.
7. Review the watermark in the preview pane of the **Add Watermark** dialog box and, if you are satisfied with the result, click **Save and Add**.

💡 You can add multiple different watermarks into the same document.




To delete watermarks from a document, click **Watermark** and then click the **Delete Watermarks** item.

 This command deletes all of the watermarks from the document.

Adding file attachments


Files of any format can be attached to a PDF document.

To view attached files:

- Click the  button in the pane to the left, or click **View > Attachments**.

You can open, save, rename or delete attached files.

In the **ATTACHMENTS** pane:

- Select a file.
- On the  toolbar, click the tool that corresponds to the action you want to perform. Alternatively, click the corresponding command on the shortcut menu.


Viewing metadata

The PDF Editor allows you to view the title and author of a PDF document and some other information. This information is called metadata. Some of the metadata are specified by the author and some are generated automatically. You can also search documents by metadata.


To view metadata, click **File > Document Properties...** to open the **Document Properties** dialog box.

You can change or save any metadata created by the author, provided that the PDF document is not password-protected:

- **Title** contains the title of the document.
- **Author** contains the author of the document.
- **Subject** contains the subject of the document.
- **Keywords** contains keywords that you can use when searching documents.

 The original metadata are preserved when you convert files in various formats to PDF, provided that you have not chosen to delete the metadata and have not specified new export options that will override the existing options.

The metadata of a document also contain the following information about the document and the file:


- **File name** contains the name of the file.
- **Location** contains the path to the folder where the document is stored.
- **File size** contains the size of the file.
- **Page size** contains the size of the current page.
- **Pages** contains the number of pages in the document.
- **PDF producer** contains the name of the application where the document was created
- **Application** contains the name of the application where the document content was created.
- **PDF version** contains the version of PDF.
 -  If the metadata of a document contain information about the compliance with the PDF/A or PDF/UA standard, this will be displayed in the **Document Properties** window.
- **Tagged PDF** contains information about document tags.
- **Fast Web View** specifies if the document supports Fast Web View technology, which speeds up loading documents online.
- **Created** contains the date and time when the document was created.
- **Modified** contains the date and time when the document was last changed.

 ABBYY FineReader allows you to view, edit, [find](#)⁵⁶¹ and [delete](#)¹⁵⁴ metadata.

Enhancing page images

The PDF Editor can enhance the quality of PDF documents created from image files. Depending on the type of an input image, the program will select the appropriate image enhancement algorithms. Besides automatic image enhancement, the PDF Editor can correct page orientation, skew, distorted text lines and other defects, and make characters look smoother with ABBYY PreciseScan technology.

You can specify enhancement options in the **Image Enhancement** dialog box (click **Edit** > **Enhance Page Images...** to open this dialog box).

- **Correct page orientation** Select this option if you want the program to detect and correct page orientation automatically.
 For best recognition results, a page should have the standard orientation, i.e. with horizontal text lines and top-to-bottom reading order. Otherwise, the document may be recognized incorrectly.
- **Deskew images and correct image resolution** Select this option if you want the program to run a number of image processing routines on your images.
 Depending on the type of an input image, the program will select the image corrections to apply, such as skew correction, correction of trapezoid distortions, or adjustment of image resolution.
 This operation may take some time to complete.
- **Apply ABBYY PreciseScan to smooth characters on images** Select this option if you want to apply ABBYY PreciseScan technology, making the characters less pixelated when you zoom in.

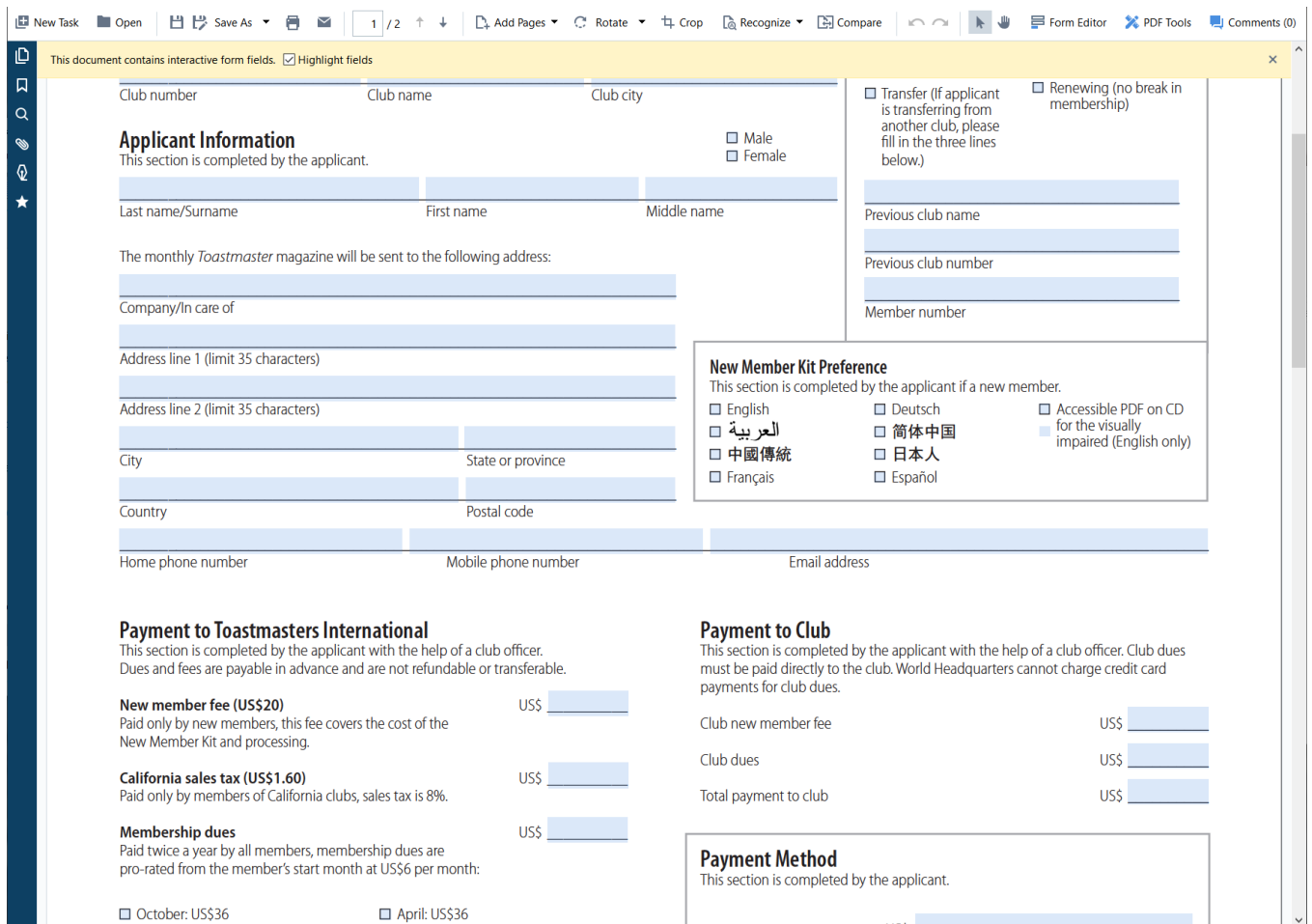
 Be sure to select the right OCR languages. **See also:** [Document features to consider prior to OCR](#)²⁸⁷

Working with interactive PDF forms

Interactive PDF forms are a useful tool for gathering information. They can be filled out faster than printed forms and users are less likely to make errors when completing them.

Interactive PDF forms may contain the following types of fields: [text fields](#)^[115], [drop-down lists](#)^[120], [check boxes](#)^[125], [radio buttons](#)^[128], [buttons](#)^[131], [signature fields](#)^[141], and [list boxes](#)^[144].

ABBYY FineReader PDF 15 includes a PDF editor which allows you to [fill out](#)^[105], [create](#)^[107], and [edit](#)^[109] interactive PDF forms.



With ABBYY FineReader PDF 15, you can easily [print out](#)^[162] completed or blank forms, [save](#)^[156] forms in various formats, or [e-mail](#)^[161] them.

Chapter contents


- [Filling out forms](#)^[105]
- [Creating forms](#)^[107]
- [Editing forms](#)^[109]

Filling out forms

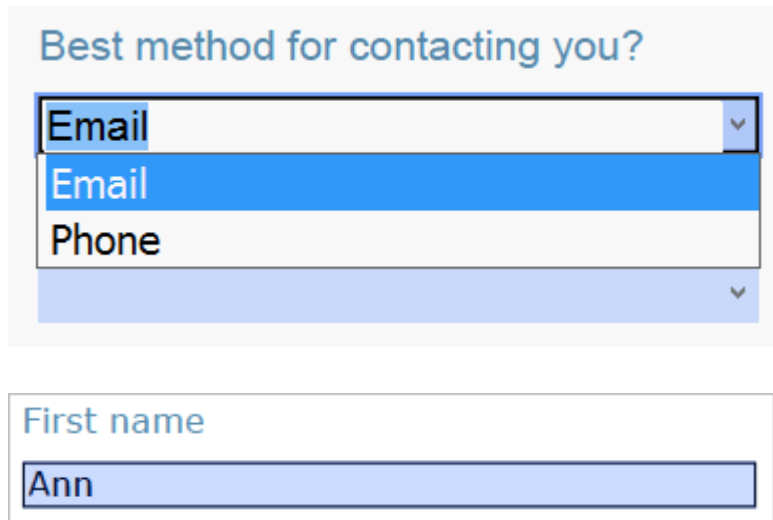
ABBYY FineReader allows you to view, fill out, save, and print interactive forms.

1. If a document contains a form, the following message is displayed:

This document contains interactive form fields. Highlight fields

 To disable the highlighting of interactive form fields, clear the **Highlight fields** in this message or click **View** and clear the check box next to the **Highlight Fields** item.

2. To fill out a form, select values form drop-down lists or type in text from the keyboard.



Best method for contacting you?

Email



Email

Phone

First name


Ann

With ABBYY FineReader you can also:

- Load data into a form
Click **Tools** > **Form Data** > **Load Form Data from File...**, browse to a file with form data, and click **Open**. The form will be populated with data from the file you selected.
 Form data can be loaded from FDF or XFDF files.
- Save form data
Click **Tools** > **Form Data** > **Save Form Data to File...**, specify a name for your file, select an output format, and click **Save**. The form data will be saved to file.
 Form data can be saved in FDF, XFDF, or HTML formats.
- Clear form fields
Click **Edit** > **Form Data** > **Reset Form**. All of the form fields will be cleared.

If JavaScript is disabled in the program settings, some of the elements in PDF forms may be unavailable. For example, data format checks may not be available. You can enable JavaScript by clicking **Options** > **Other** > **Enable JavaScript in PDF documents**.

See also: [PDF security features](#) 

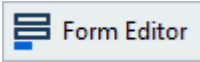
 If no interactive fields are highlighted in your current form, make sure that the **Highlight fields** option is selected in the yellow pane above the form (or that the **Highlight Fields** item is selected on the **View** menu). If the option or menu item is selected but you still don't see any highlighted fields, use the **Export** tool to fill out your form.


See also: [Adding a text block annotation to a PDF document](#)⁶⁹.

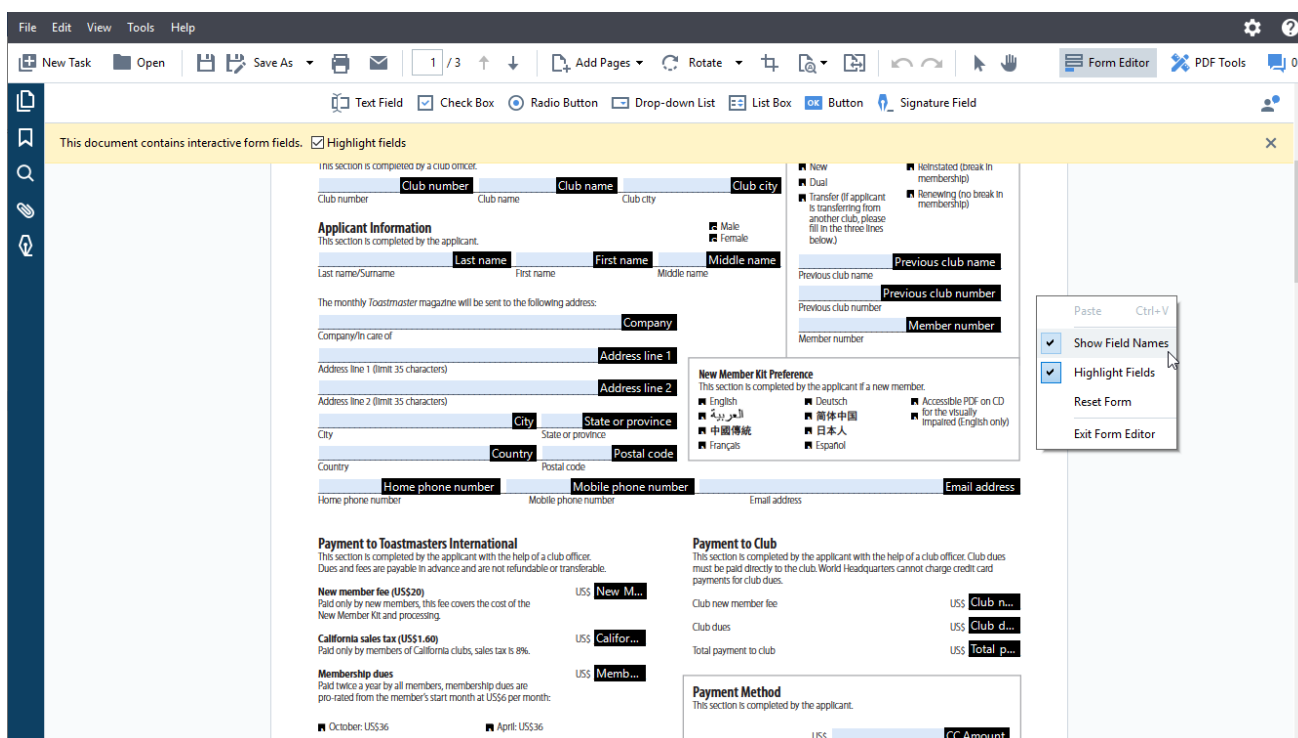
Creating forms


To create a form:

1. In the PDF Editor, create a new document or open an existing one. **See also:** [Viewing PDF documents](#) ⁴⁹

2. Switch to form editing mode by clicking the  button on the main toolbar. This will bring up a new toolbar with tools that allow you to add various types of interactive fields onto your form.

 If your form already contains interactive fields, their names will be displayed on the form. If you do not want to see the field names, right-click anywhere on the form and clear the check box next to the **Show Field Names** item on the shortcut menu. Alternatively, click **View > Show Field Names**.



 In form editing mode, the main PDF tools become unavailable.

3. [Add](#) ¹⁰⁹ and [edit](#) ¹⁰⁹ form fields as required and [adjust their position](#) ¹¹¹ on the page.

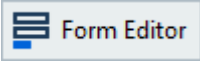
 Fields can only be repositioned within the current page.

 To see your form fields as they will be displayed to the user, [exit form editing mode](#) ¹⁰⁸.


You can add fields of the following types:


- [text field](#) ¹¹⁵
- [drop-down list](#) ¹²⁰
- [check box](#) ¹²⁵
- [radio buttons](#) ¹²⁸

- [button](#)¹³¹
- [signature field](#)¹⁴¹
- [list box](#)¹⁴⁴

4. Exit form editing mode by clicking the  button on the main toolbar. Alternatively, right-click anywhere on the form and select **Exit Form Editor** on the shortcut menu, or just press the Esc key.

5. [Save](#)¹⁵⁶ your form.

 Saving you form as a PDF document (**File > Save As > PDF Document...**) will preserve the interactive fields so that you or other users will be able to fill out the form when they open the PDF file. Saving your form in other formats (e.g. Microsoft Word) will render it non-editable.

 To [fill out](#)¹⁰⁵ your PDF form, [exit form editing mode](#)¹⁰⁸.

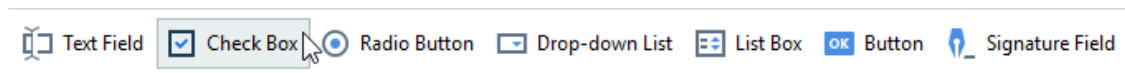
Editing forms

In the PDF Editor, you can perform various operations on interactive form fields in PDF documents. You can:

- [Add](#)^[109] fields.
- [Change](#)^[109] the size of a field and other field properties.
- [Copy](#)^[110] a field or create a [linked copy](#)^[111] of a field.
- [Move](#)^[111] a field to a different position within the current page.
- [Align](#)^[111] fields relative to one another or to the margins.
- [Delete](#)^[113] fields.
- [Clear](#)^[113] data from all fields.

Adding fields

1. Switch to [form editing mode](#)^[107].
2. On the form toolbar, click the type of field that you want to add.

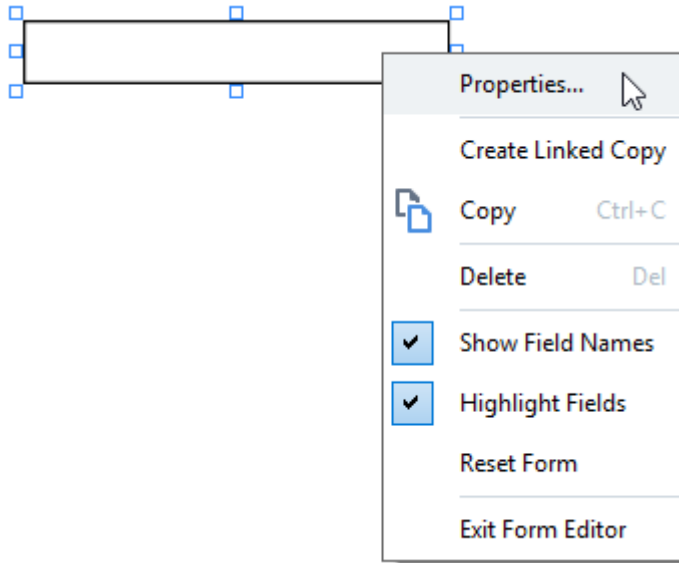


3. Click where you want to add the field. A default-sized field will be added.
 - ✍ To draw a field of any size, do not release the left mouse button and drag the mouse pointer in the desired direction.
 - 💡 When you select the **Radio Button** tool, a radio button is added to the form each time you click your mouse inside the form. Once you have added the required number of radio buttons, press Esc to turn off the tool. **See also:** [Radio buttons](#)^[128]
4. [Edit](#)^[109] the field if required.
5. [Exit form editing mode](#)^[108].

Editing fields

1. Switch to [form editing mode](#)^[107].

2. Double-click the field that you want to edit (or right-click and select **Properties...** on the shortcut menu).



3. In the **Properties** dialog box, change the properties of the field.
 - ✎ The set of properties you see in this dialog box depends on the type of the selected field. Follow the links below to read more about the properties of each type of field:

- [text field](#) ¹¹⁵
- [drop-down list](#) ¹²⁰
- [check box](#) ¹²⁵
- [radio buttons](#) ¹²⁸
- [button](#) ¹³¹
- [signature field](#) ¹⁴¹
- [list box](#) ¹⁴⁴

4. Click **OK** to save your changes.
 - ✎ Clicking **Cancel** discards all changes.
5. [Exit form editing mode](#) ¹⁰⁸

Copying fields

1. While in [form editing mode](#)^[107], right-click the field that you want to copy and select **Copy** on the shortcut menu. Alternatively, select the field with a mouse click and press Ctrl+C on the keyboard.
2. Right-click where you want to copy the field and select **Paste** on the shortcut menu or press Ctrl+V on the keyboard.

✎ Copies will have the same properties as the original field with the exception of **Field Name**.

✎ Only empty [signature fields](#)^[141] can be copied.

Creating a linked copy of a field

While in [form editing mode](#)^[107], right-click the field for which you want to create a linked copy and select **Create Linked Copy** on the shortcut menu. A linked copy will appear next to the original field.

✎ When a user enters data into a field that has linked copies, all of the copies will be automatically populated with the same data. This is useful when the same data has to be entered several times within the same document.

✎ Linked copies will have the same properties as the original field. You can change any property of a linked field. Changing the **Field Name** property will turn a linked copy into a simple copy, i.e. it will no longer be automatically populated with data from the original field.

Moving fields around the page

While in [form editing mode](#)^[107], click the field that you want to move and drag it to the desired location.

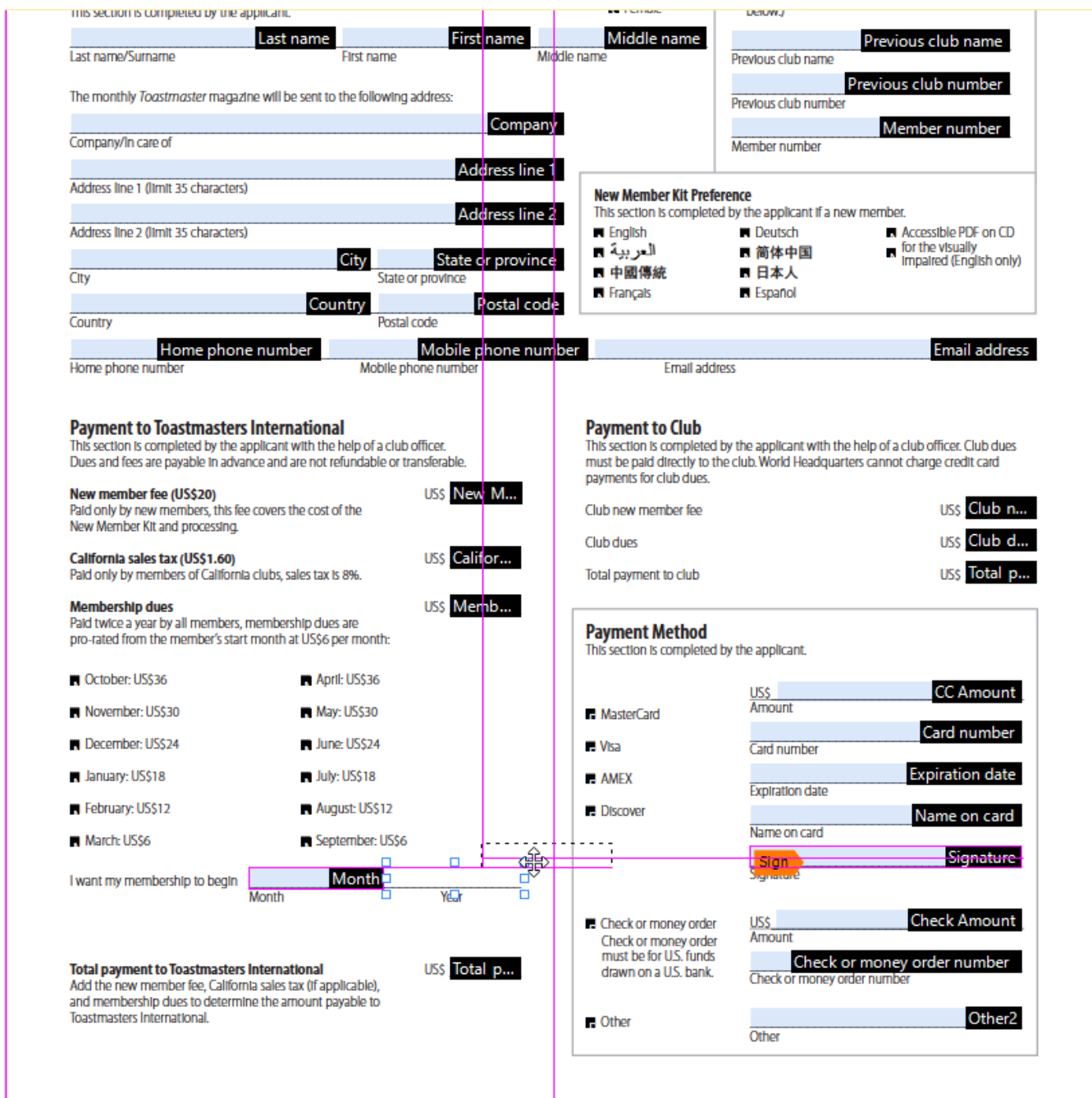
✎ To move multiple fields, select them while holding down the Ctrl key. Next, click any of the selected fields and drag them to the desired location.

✎ Fields can only be moved within the current page.

Aligning fields relative to one another or the page margins

While in [form editing mode](#)^[107], start [moving](#)^[111] a field around the page. Purple-colored guides will appear to help you align the fields relative to one another or the page margins.

✎ If you do not want to see the guides, press and hold down the Ctrl key while moving fields around the page.



To specify coordinates for multiple fields:

1. While in [form editing mode](#)^[107], right-click one of the fields whose coordinates you want to change and select **Properties...** on the shortcut menu. The **Properties** dialog box will open.
2. On the **General** tab, change the values in **X** and/or **Y** boxes^[116].
3. Click **OK** to save your changes.

4. Repeat steps 1 through 3 for all the remaining fields that you want to align. Alternatively, align the remaining field using the purple-colored guides as described above.
 - ✍ To align fields vertically, specify the same value for all the fields in the **X** box.
 - ✍ To align fields horizontally, specify the same value for all the fields in the **Y** box.

Deleting fields

While in [form editing mode](#)¹⁰⁷, click the field that you want to delete and press the Delete key. Alternatively, right-click the field and select **Delete** on the shortcut menu.


✍ To delete multiple fields, select them while holding down the Ctrl key and then press the Delete key (or right-click the selection and select **Delete** on the shortcut menu).

Clearing data from all fields

While in [form editing mode](#)¹⁰⁷, right-click anywhere in your PDF document and select **Reset Form** on the shortcut menu.

Resizing fields

1. While in [form editing mode](#)¹⁰⁷, right-click the field that you want to resize and select **Properties...** on the shortcut menu. The **Properties** dialog box will open.
2. On the **General** tab, change the values in the **Width** and **Height** [boxes](#)¹¹⁶.
3. Click **OK** to save your changes.

✍ You can also resize an interactive field by clicking it, resting your mouse on one of the sizing handles until the mouse pointer changes to , and dragging the handle in the desired direction.

Adding pop-up tips to fields

1. While in [form editing mode](#)¹⁰⁷, right-click the field for which you want to provide a tip and select **Properties...** on the shortcut menu. The **Properties** dialog box will open.
2. On the **General** tab, type the text of the tip in the **Tooltip** [box](#)¹¹⁶.
 - ✍ In the case of radio buttons, type a single tip for entire group in the **Radio Group Tooltip** box.
3. Click **OK** to save your changes.

Making fields required

1. While in [form editing mode](#)¹⁰⁷, right-click the field that you want to make required and select **Properties...** on the shortcut menu. The **Properties** dialog box will open.
✎ Any fields can be made required with the exception of [buttons](#)¹³¹.
2. On the **General** tab, select the **Required** option.
3. Click **OK** to save your changes.

✎ In form editing mode, the [names](#)¹¹⁶ of required fields are highlighted in red.



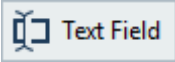
✎ When you exit form editing mode, required fields will have a red-colored frame if the **Highlight fields** option is selected in the yellow pane above the form (or if the **Highlight Fields** item is selected on the **View** menu).



✎ The **Required** option merely informs the user that a particular field must always be completed. It does not limit the user's ability to [save, e-mail or print](#)¹⁵⁶ a PDF form with required fields left empty.

Text field

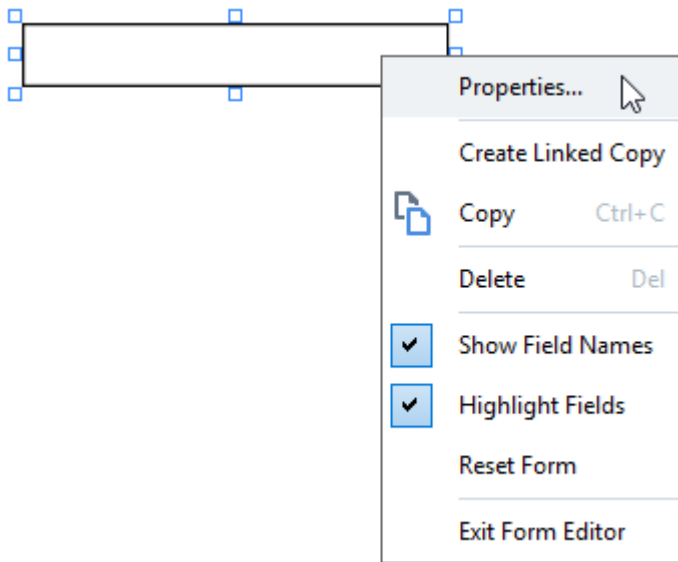
Text Field is intended for textual data.

To add a text field onto your form, switch to form editing mode and click the  **Text Field** tool.

See also: [Adding interactive fields](#) ¹⁰⁹

To edit a text field, right-click the field and select **Properties...** on the shortcut menu.

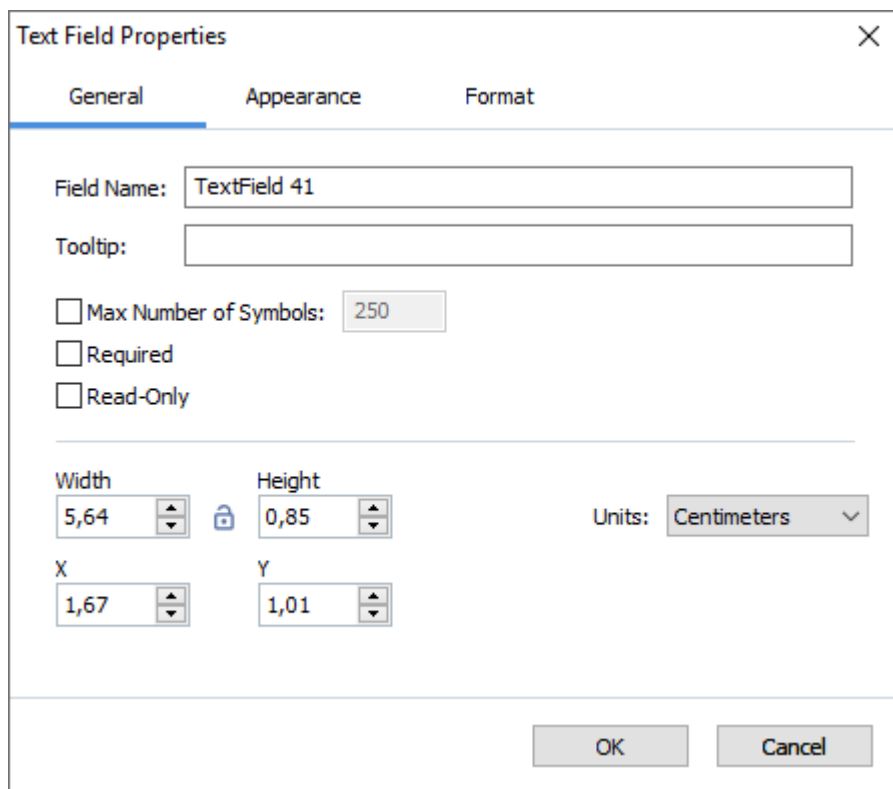
See also: [Editing interactive fields](#)



Text field properties

General tab

On the **General** tab, you can specify the general properties of the text field (field name, pop-up tip, size, etc.).



Field Name - This is a required property. It will be displayed above the field in form editing mode. Each field must have a unique name. Field names must not start or end with a full stop or contain two or more consecutive full stops.

Tooltip - The text of the tip that appears when you point to the field in [fill-out](#)¹⁰⁵ mode.


Max Number of Symbols - The maximum number of characters that can be entered into the field. If no value is specified, text of any length can be entered.

Required - If this option is selected, the field will be marked as [required](#)¹¹³.

Read-Only - If this option is selected, the user will not be able to edit the field.

Width and **Height** - These boxes specify the size of the field in units selected in the **Units** box. The size of a field cannot be 0.

 - The width and height of the field are independent of each other.

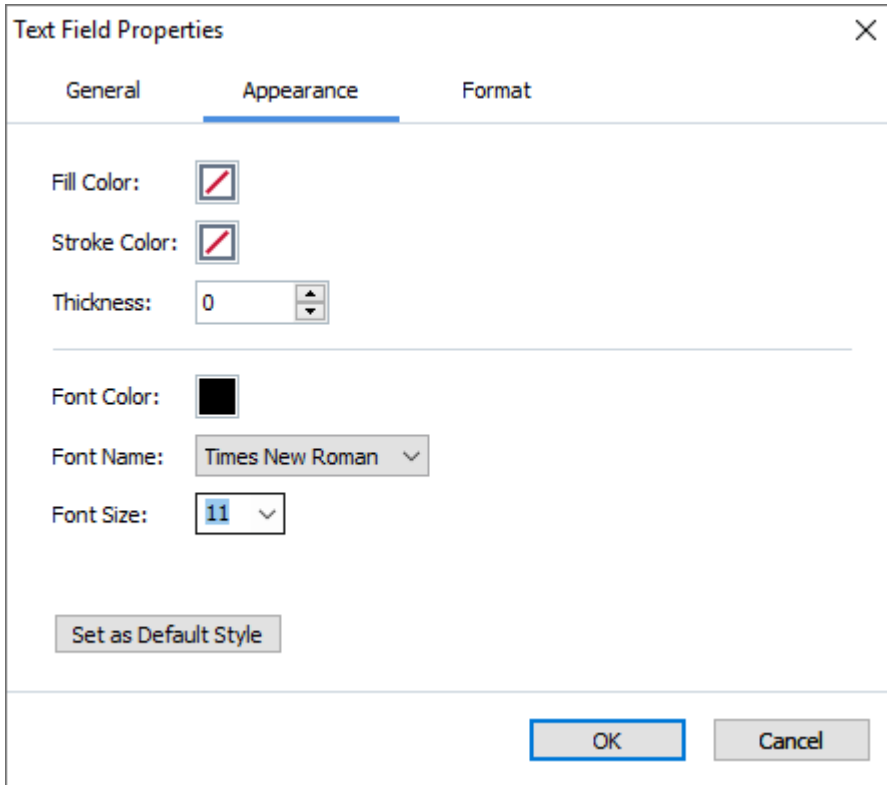
 - The width and height of the field can only be changed in proportion to each other.

X and **Y** - These boxes contain the horizontal and vertical coordinates of the field. The coordinates start from the top left corner of the page.

Units - The measurement units for the field dimensions specified in the **Width** and **Height** boxes. The width and height of a field can be specified in centimeters, inches, or points.

Appearance tab

On the **Appearance** tab, you can specify frame thickness and color, fill color, and font size and color.



Fill Color - The fill color.

Stroke Color - The color of the frame enclosing the field.

Thickness - The thickness of the frame enclosing the field.

Font Color - The color of text typed into the field.

Font Name - The font to be used for text typed into the field.

Font Size - The size of text typed into the field.

Set as Default Style - The current settings will be used for any new text fields that you create.


Format tab

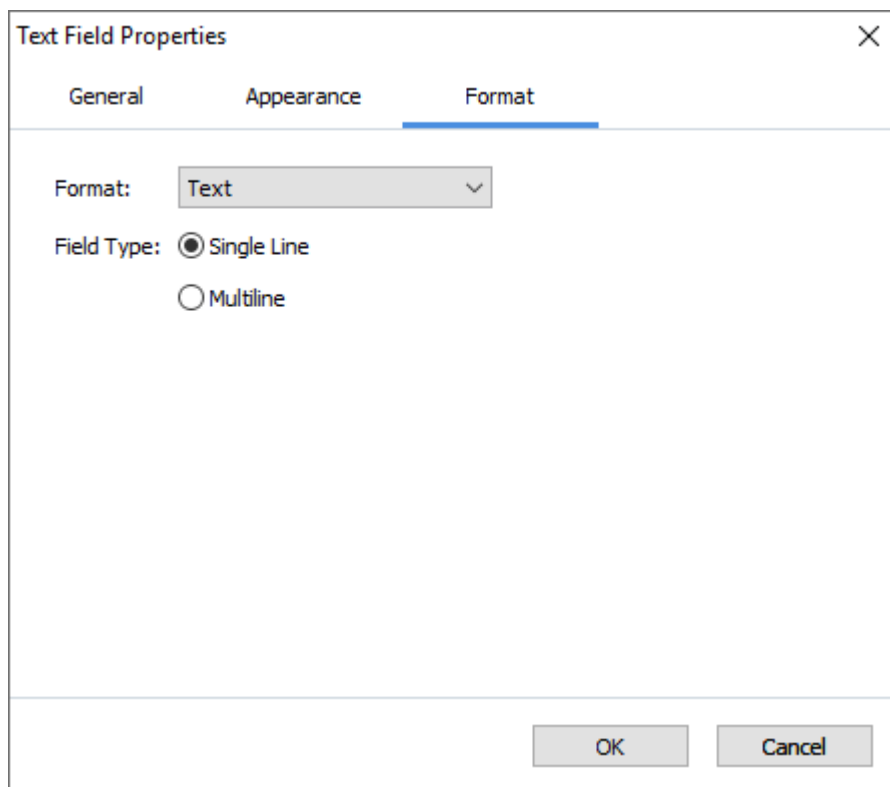
On the **Format** tab, you can specify what type of data can be entered into the field by selecting the desired data type from the **Format** drop-down list. Two data types are available:

- **Text**
- **Date**

Text

Select **Text** from the **Format** drop-down list to allow users to enter any text in this field.

 This format is suitable for entering text, numbers, passwords, e-mail addresses, and other textual data.




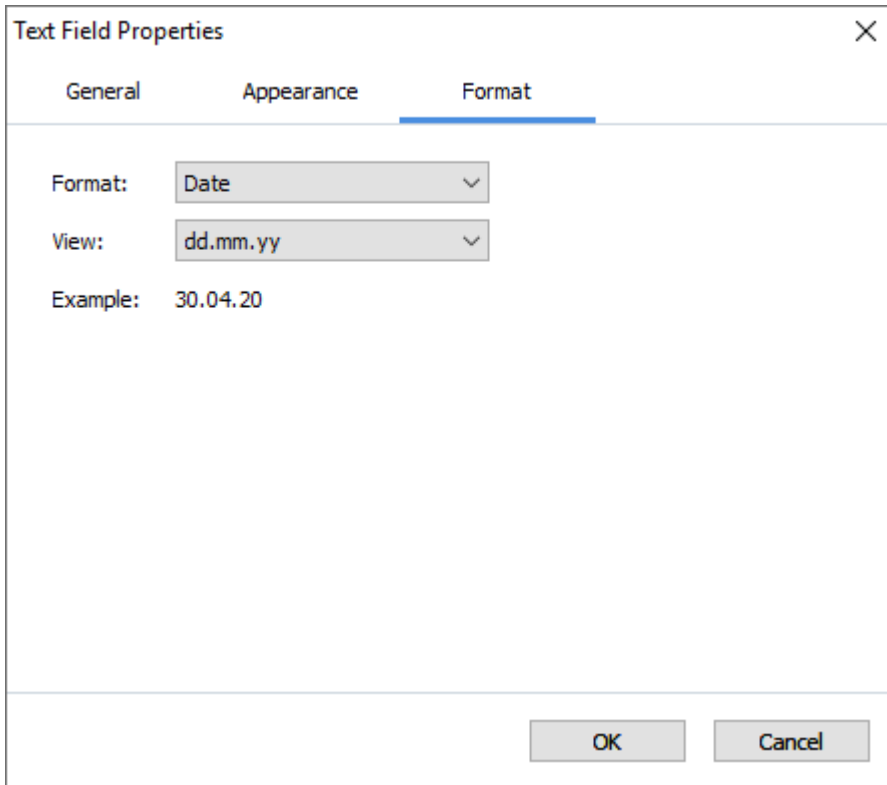
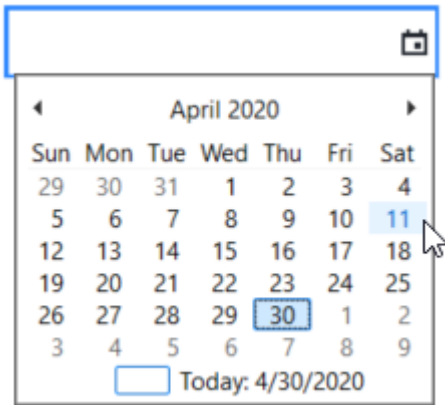
Field Type - Indicates how many lines of text the field may contain.

- **Single Line** - The field may contain only one line of text.
- **Multiline** - The field may contain any number of lines.

Date

Select **Date** from the **Format** drop-down list to allow users to enter a date into this field.

 In fill-out mode, clicking this field will display a calendar, where the user can quickly select a date.



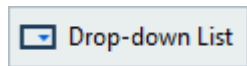
View - The format to be used for the date.

✍ Users will be able to enter a date in any format. However, when a user finishes entering the date, it will be reduced to the format specified in the **View** box.

Drop-down list

Drop-down List allows the user to select a value from the list or to enter a custom value.

To add a drop-down list onto your form, switch to form editing mode and click the

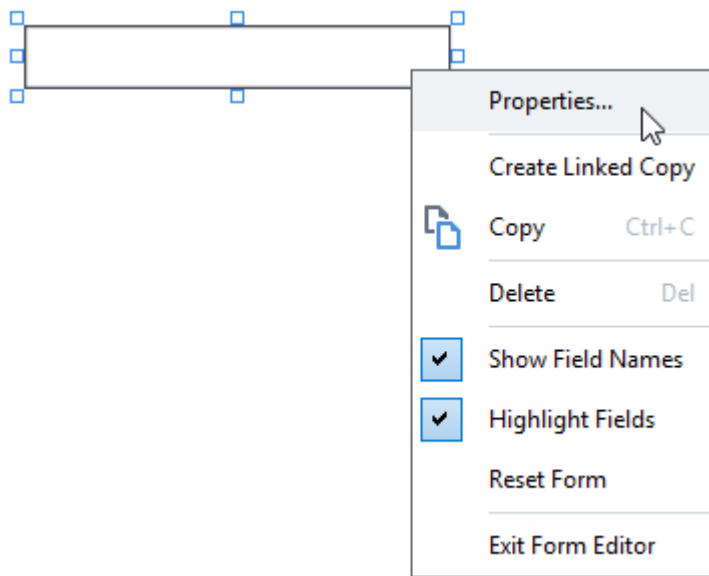


tool.

See also: [Adding interactive fields](#) ¹⁰⁹

To edit a drop-down list, right-click the drop-down list and select **Properties...** on the shortcut menu.

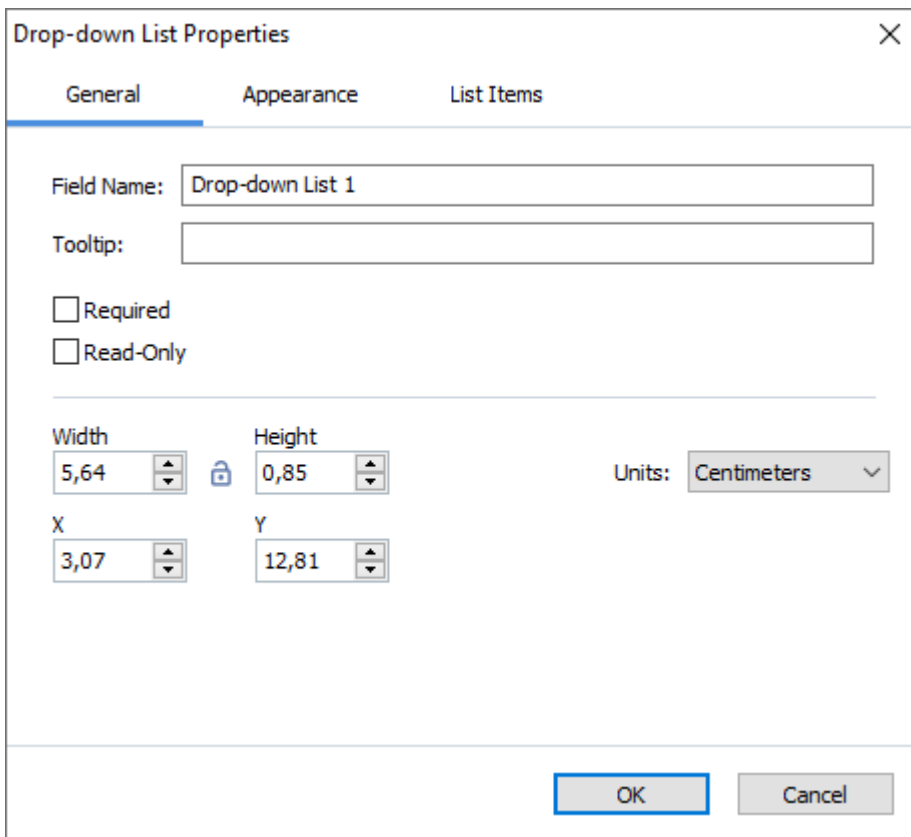
See also: [Editing interactive fields](#)



Drop-down list properties

General tab

On the **General** tab, you can specify the general properties of the drop-down list (field name, pop-up tip, size, etc.).



Field Name - This is a required property. It will be displayed above the field in form editing mode. Each field must have a unique name. Field names must not start or end with a full stop or contain two or more consecutive full stops.

Tooltip - The text of the tip that appears when you point to the field in [fill-out](#)¹⁰⁵ mode.

Required - If this option is selected, the field will be marked as [required](#)¹¹³.

Read-Only - If this option is selected, the user will not be able to edit the field.

Width and **Height** - These boxes specify the size of the field in units selected in the **Units** box. The size of a field cannot be 0.



- The width and height of the field are independent of each other.



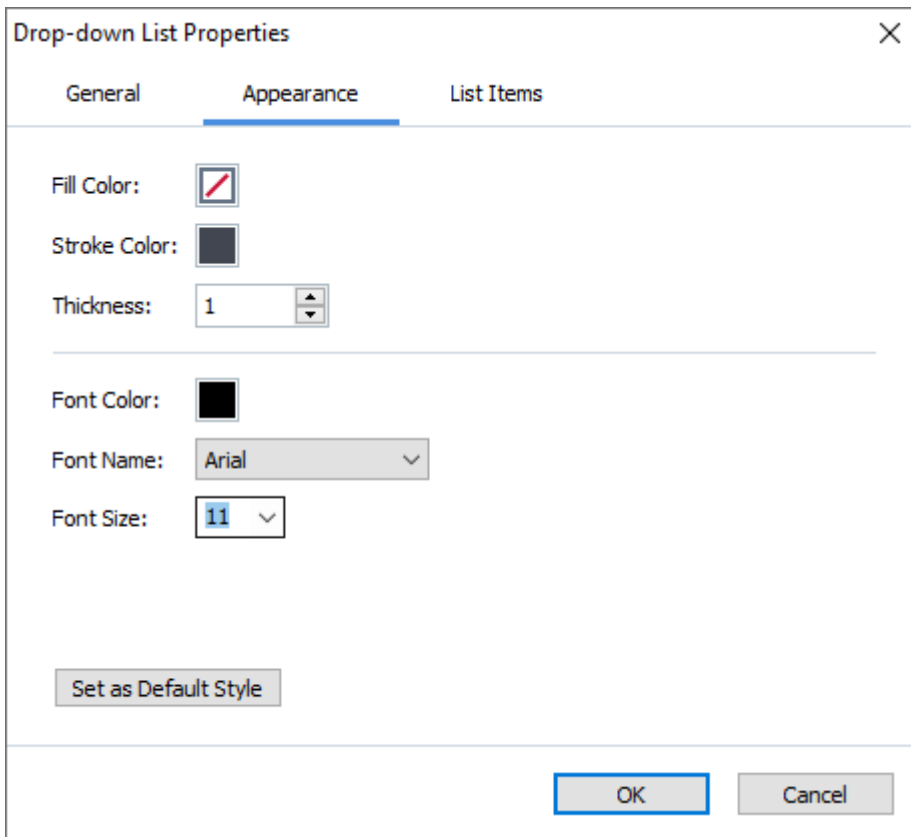
- The width and height of the field can only be changed in proportion to each other.

X and **Y** - These boxes contain the horizontal and vertical coordinates of the field. The coordinates start from the top left corner of the page.

Units - The measurement units for the field dimensions specified in the **Width** and **Height** boxes. The width and height of a field can be specified in centimeters, inches, or points.

Appearance tab

On the **Appearance** tab, you can specify frame thickness and color, fill color, and font size and color.



Fill Color - The fill color.

Stroke Color - The color of the frame enclosing the field.

Thickness - The thickness of the frame enclosing the field.

Font Color - The color of text items selected from the drop-down list.

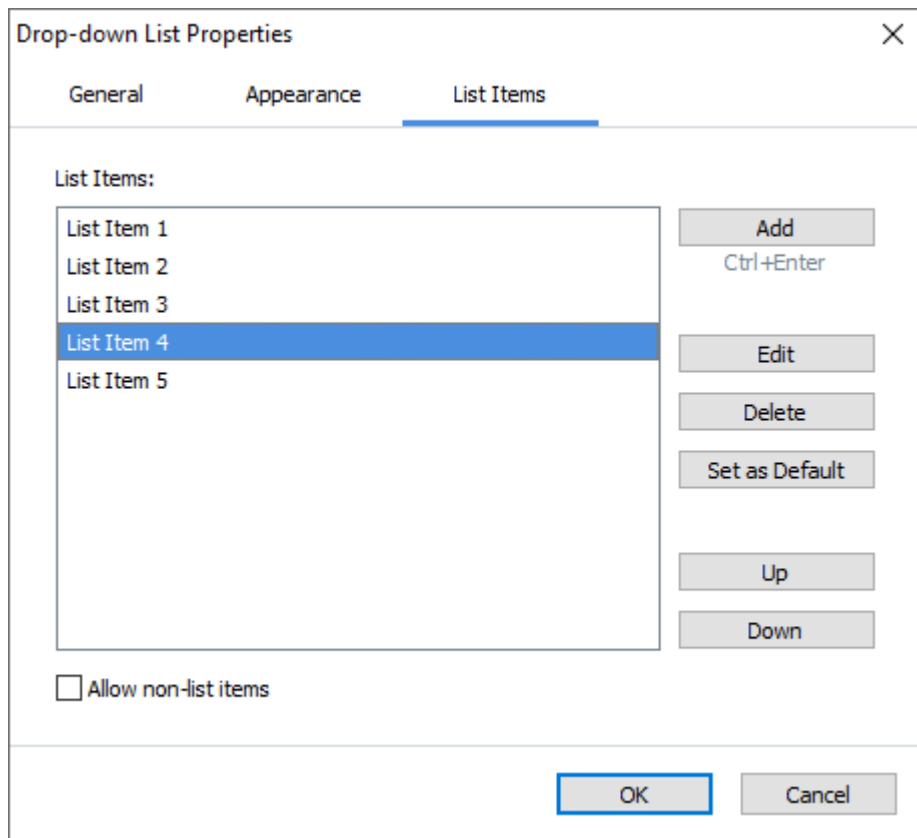
Font Name - The font to be used for text items selected from the drop-down list.

Font Size - The size of text items selected from the drop-down list.

Set as Default Style - The current settings will be used for any new drop-down lists that you create.

List Items tab

On the **List Items** tab, you can edit the list of items by adding, deleting or modifying items. You can also move an item up or down, make an item the default choice, or allow the user to enter a custom value not included on the list.



List Items - Displays all the items that will appear on the drop-down list.

Add - Adds a new item at the end of the list.

Edit - Modifies the selected item.

Delete - Deletes the selected item from the list.

☑ To delete multiple items, click them one by one while holding down the Ctrl key and then click **Delete**.

Set as Default - Make the selected item the default choice. This choice will be suggested to the user by default, but the user will be free to choose any other item from the list. If the user [clears data from all the fields](#)¹¹³, the default choice will be restored.

☑ To specify a different item as the default choice, click that item and then click **Set as Default**.

Unset as Default - Removes the default status from the item that was previously made the default choice.

☑ Use this button if you no longer need to suggest a default choice.

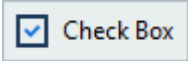
Up - Moves the selected item up in the list.

Down - Moves the selected item down in the list.

Allow non-list items - Allows the user to enter a custom value not included on the drop-down list.

Check box

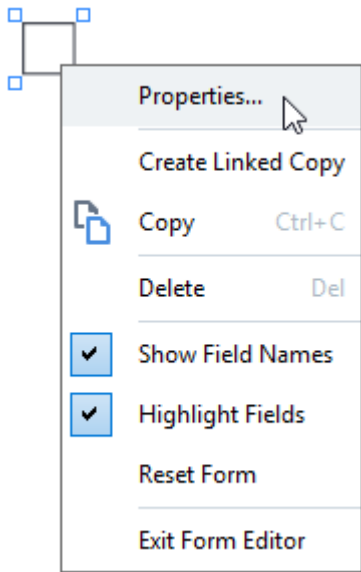
Check Box allows the user to select an option or leave it unselected (i.e. select between *Yes* or *No*).

To add a check box onto your form, switch to form editing mode and click the  tool.

See also: [Adding interactive fields](#) ¹⁰⁹

To edit a check box, right-click the check box and select **Properties...** on the shortcut menu.

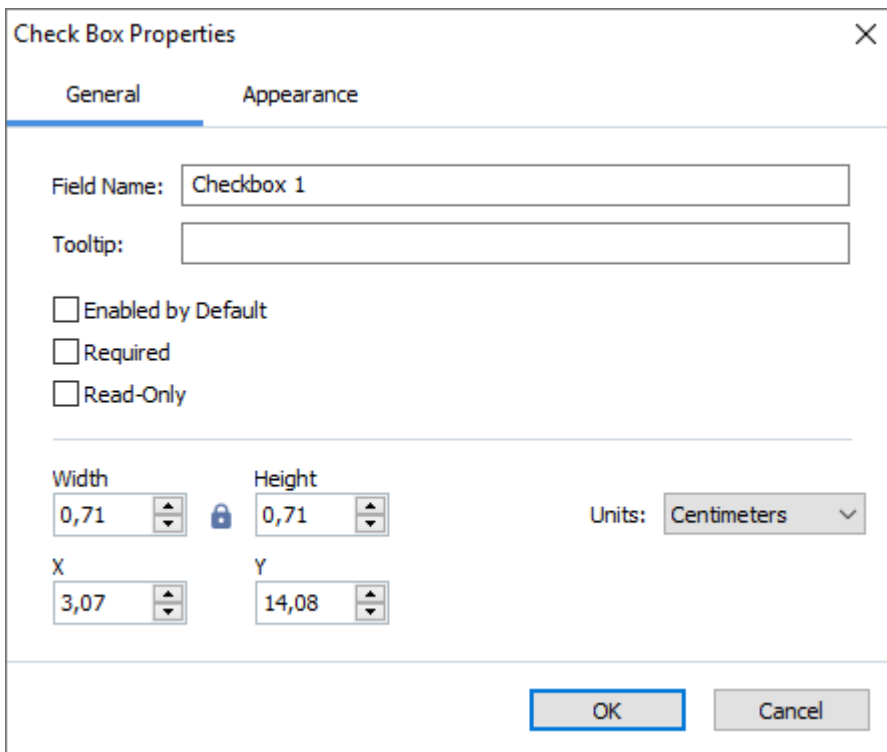
See also: [Editing interactive fields](#)



Check box properties

General tab

On the **General** tab, you can specify the general properties of the check box (field name, pop-up tip, size, etc.).



Field Name - This is a required property. It will be displayed above the field in form editing mode. Each field must have a unique name. Field names must not start or end with a full stop or contain two or more consecutive full stops.

Tooltip - The text of the tip that appears when you point to the field in [fill-out](#)¹⁰⁵ mode.


Enabled by Default - If this option is selected, this check box will be selected by default.

Required - If this option is selected, the field will be marked as [required](#)¹¹³.

Read-Only - If this option is selected, the user will not be able to edit the field.

Width and **Height** - These boxes specify the size of the field in units selected in the **Units** box. The size of a field cannot be 0.

 - The width and height of the field are independent of each other.

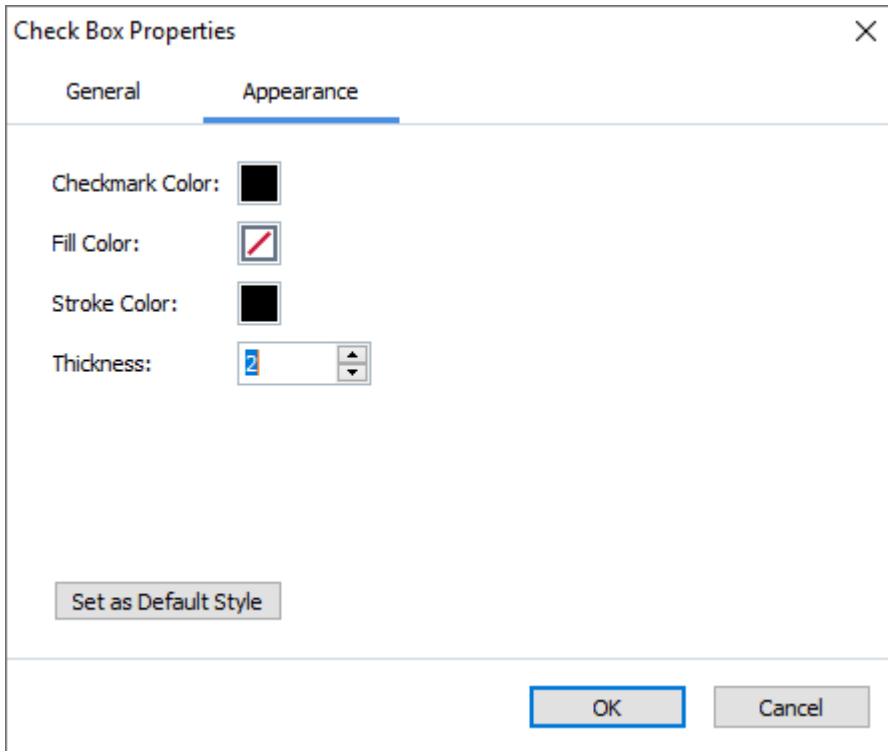
 - The width and height of the field can only be changed in proportion to each other.

X and **Y** - These boxes contain the horizontal and vertical coordinates of the field. The coordinates start from the top left corner of the page.

Units - The measurement units for the field dimensions specified in the **Width** and **Height** boxes. The width and height of a field can be specified in centimeters, inches, or points.

Appearance tab

On the **Appearance** tab, you can specify frame thickness and color, fill color, and the color of the check.



Checkmark Color - The color of the check inside the box.

Fill Color - The fill color.

Stroke Color - The color of the frame enclosing the field.


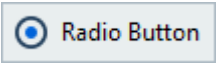

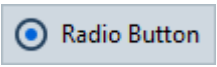

Thickness - The thickness of the frame enclosing the field.

Set as Default Style - The current settings will be used for any new check boxes that you create.

Radio button

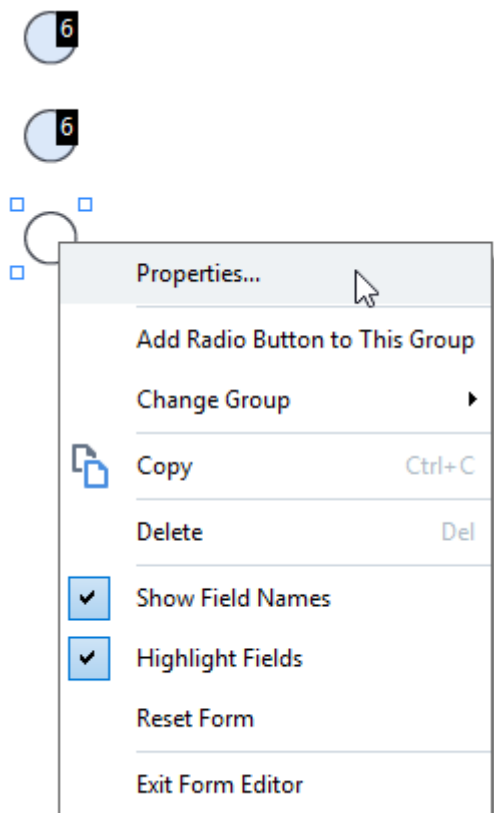
Radio Button allows the user to select only one option from a group of available options.

To add radio buttons onto your form:

1. Switch to [form editing mode](#) .
2. Click the  tool.
3. Click where you want to add a radio button. A default-sized radio button will be added. Continue clicking on the form to add the required number of radio buttons.
 -  You must add at least two radio buttons, because, by their very nature, radio buttons give the user a choice between two or among multiple options.
4. Click the  tool again or press the Esc key to stop adding radio buttons.
 -  All the radio buttons you add before turning off this tool, will form a single group. If you need to add another group of radio buttons, repeat steps 2 through 4.

To edit a radio button, right click that button and select **Properties...** on the shortcut menu.

See also: [Editing interactive fields](#)



Radio button properties

General tab

On the **General** tab, you can specify the general properties of the group of radio buttons (group name, pop-up tip, size, etc.).

Radio Group Name - The name of the group that contains this radio button. This name will be displayed above all the radio buttons in this group when you switch to form editing mode. This is a required field. You can create a group of radio buttons by entering a new name in this field, or you can select an existing group from the drop-down list of groups.

Radio Group Tooltip - The text of the tip that appears when you point to the field in [fill-out](#)¹⁰⁵ mode. The same tip will be displayed for all radio buttons in the group.

Radio Button Name - This is a required field. Each radio button must have a unique name.

Enabled by Default - If this option is selected, this radio button will be selected by default.

Required - If this option is selected, the user will be [required](#)¹¹³ to select a radio button in this group.

Read-Only - If this option is selected, the user will not be able to select a radio button in this group.

Width and **Height** - These boxes specify the size of the field in units selected in the **Units** box. The size of a field cannot be 0.

- The width and height of the field are independent of each other.

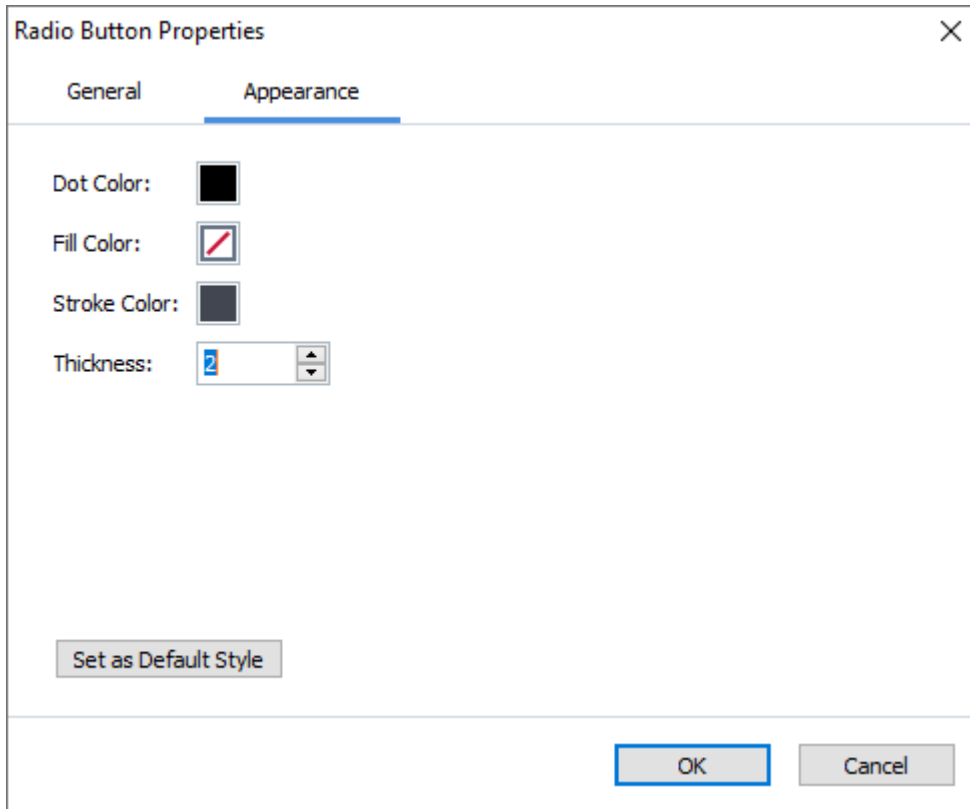
- The width and height of the field can only be changed in proportion to each other.

X and **Y** - These boxes contain the horizontal and vertical coordinates of the field. The coordinates start from the top left corner of the page.

Units - The measurement units for the field dimensions specified in the **Width** and **Height** boxes. The width and height of a field can be specified in centimeters, inches, or points.

Appearance tab

On the **Appearance** tab, you can specify stroke thickness and color, fill color, and the color of the dot.



Dot Color - The color of the dot inside the selected radio button.

Fill Color - The fill color.

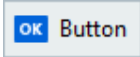
Stroke Color - The color of the frame enclosing the radio button.

Thickness - The thickness of the frame enclosing the radio button.

Set as Default Style - The current settings will be used for any new radio buttons that you create.

Button

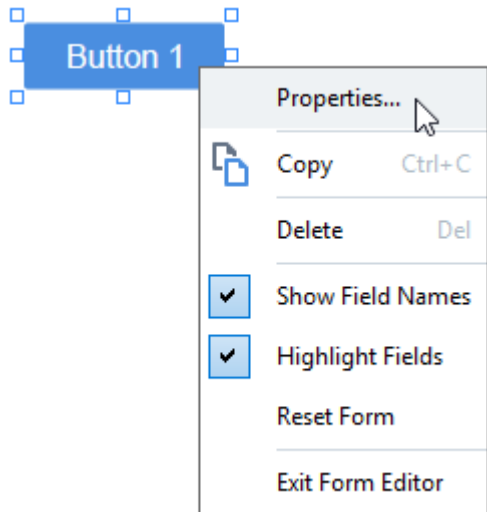
Button allows the user to initiate an action associated with a given button.

To add a button onto your form, switch to form editing mode and click the  tool.

See also: [Adding interactive fields](#) ¹⁰⁹

To edit a button, right-click the button and select **Properties...** on the shortcut menu.

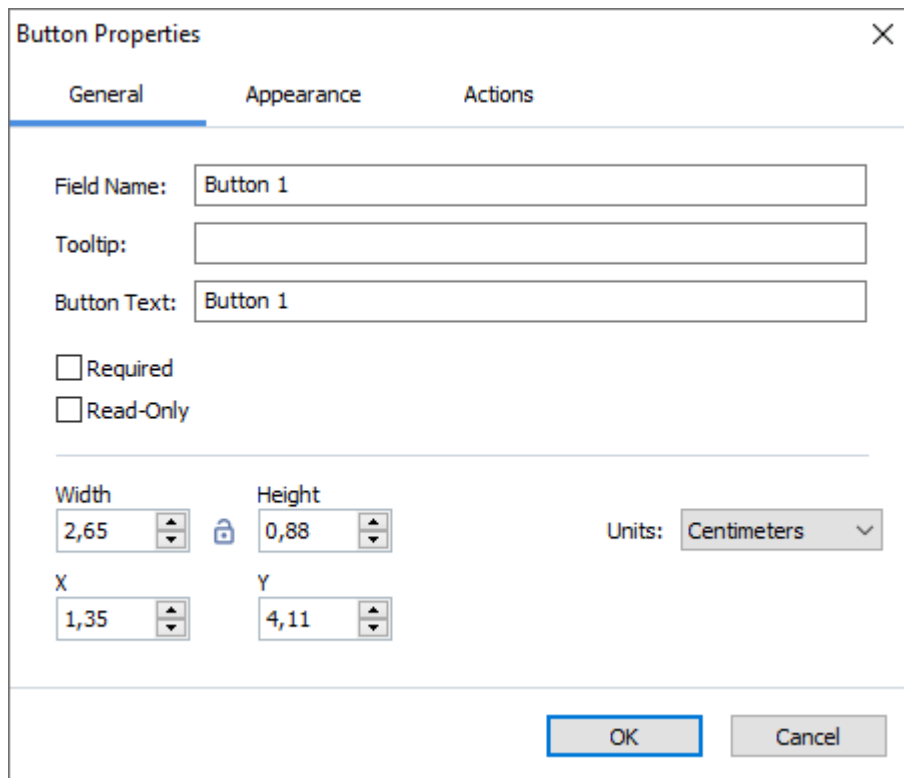
See also: [Editing interactive fields](#)



Button properties

General tab

On the **General** tab, you can specify the general properties of the button (field name, button text, pop-up tip, button size, etc.).



Field Name - This is a required property. It will be displayed above the field in form editing mode. Each field must have a unique name. Field names must not start or end with a full stop or contain two or more consecutive full stops.


Tooltip - The text of the tip that appears when you point to the field in [fill-out](#) ¹⁰⁵ mode.

Button Text - The text to be displayed on the button.

Read-Only - If this option is selected, the user will not be able to click the button.

Width and **Height** - These boxes specify the size of the button in units selected in the **Units** box. The size of a button cannot be 0.

 - The width and height of the button are independent of each other.

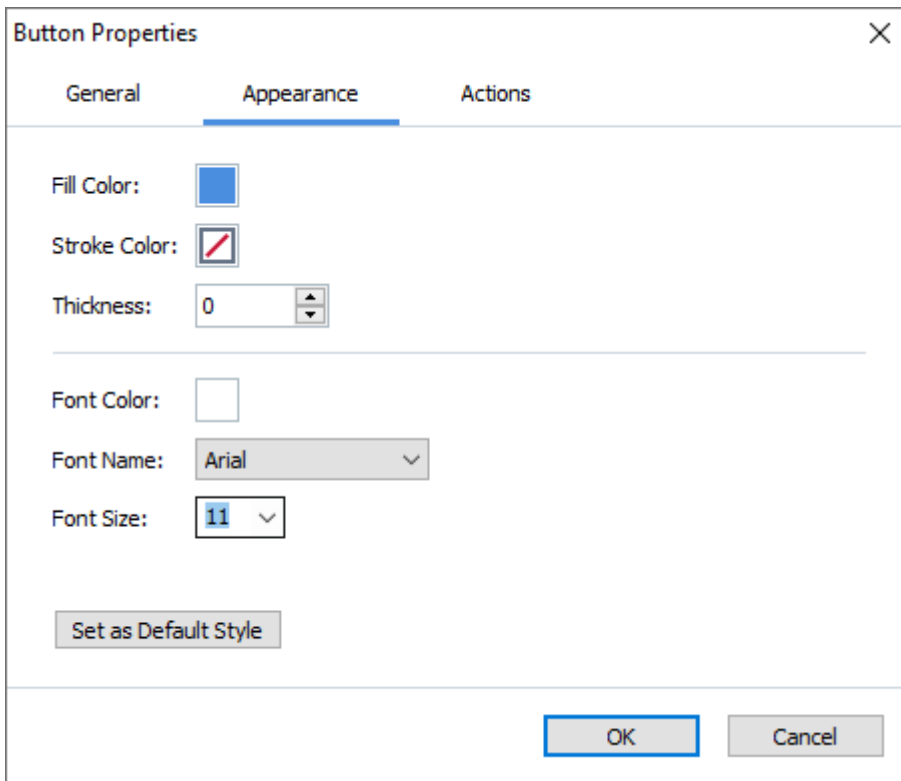
 - The width and height of the button can only be changed in proportion to each other.

X and **Y** - These boxes contain the horizontal and vertical coordinates of the button. The coordinates start from the top left corner of the page.

Units - The measurement units for the button dimensions specified in the **Width** and **Height** boxes. The width and height of a button can be specified in centimeters, inches, or points.

Appearance tab

On the **Appearance** tab, you can specify frame thickness and color, fill color, and font size and color.



Fill Color - The fill color.

Stroke Color - The color of the frame enclosing the button.

Thickness - The thickness of the frame enclosing the button.

Font Color - The color of text on the button.

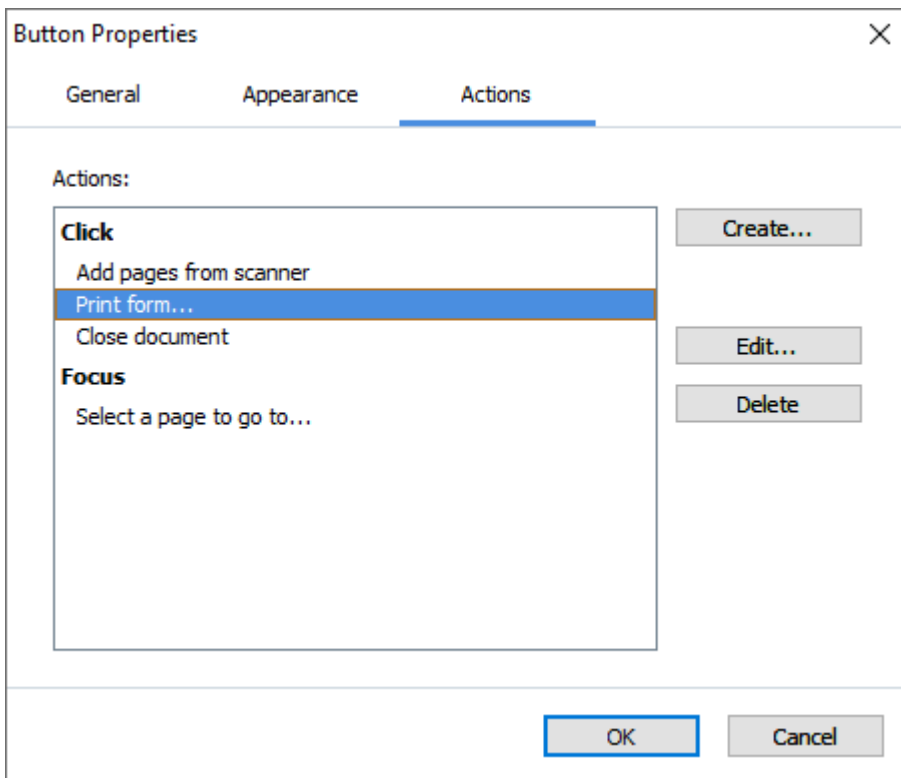
Font Name - The font to be used for the text on the button.

Font Size - The size of the text on the button.

Set as Default Style - The current settings will be used for any new buttons that you create.

Actions tab

On the **Actions** tab, you can add, delete, or modify actions triggered by certain events cause by user activity.



Actions lists all the actions triggered by certain user activity.

Create... adds a [new action](#)¹³⁴.

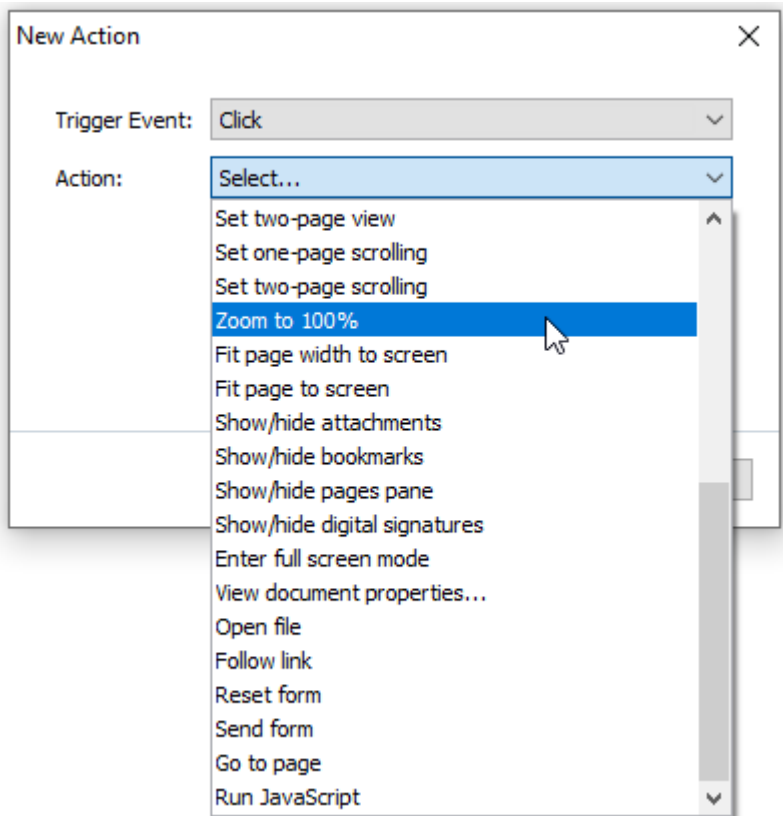
Edit... modifies the selected action.

Delete deletes the selected action.

Adding a new action

To add a new action for your button:

1. Switch to [form editing mode](#)¹⁰⁷.
2. [Open](#)¹⁰⁹ the **Properties** dialog box for the desired button and click the **Actions** tab.
3. Click **Create....** This will open the **New Action** dialog box.



4. Select an event that will trigger an action.
 - **Click** - The user clicks the button.
 - **Drop** - The user releases the left mouse button while the mouse pointer is placed over the button on the form.
 - **Mouse Over** - The user places the mouse pointer over the button on the form.
 - **Mouse Out** - The user removes the mouse pointer from the button on the form.
 - **Focus** - The user places focus on the button using the **Tab** key.
 - **Focus Out** - The user removes focus on the button using the **Tab** key.
5. Select an [action](#)¹³⁶ that will be triggered by the event.
6. Click **Save** to save the action. The action will appear in the **Actions** section of the **Button Properties** window.
 - ☑ Actions are grouped by event. An event may initiate a sequence of actions.
 - ☑ You can move actions between groups with the mouse.

7. Click **OK** to save your changes.

List of possible actions

- **Add pages from scanner** opens the scanning dialog box, where the user can [select a scanning device and specify scanning parameters](#) ^[34]. Newly scanned pages will be appended at the end of the PDF document.
- **Save form as...** opens the document saving dialog box, where the user can save the form as a PDF, FDF, XFDF, or HTML document.
- **Close document** closes the current document.
- **Print form...** opens the [printing dialog box](#) ^[162].
- **Exit application** closes the current application.
- **Search document...** opens the [search pane](#) ^[56].
- **Go to first page** goes to the first page in the current document.
- **Go to last page** goes to the last page in the current document.
- **Go to next page** goes to the next page in the current document.
- **Go to previous page** goes to the previous page in the current document.
- **Go back** goes to the page that was open before the user opened the current page.
- **Go forward** goes to the page from which the user returned to the current page.
- **Select a page to go to...** opens a dialog box where the user can enter the number of the page that he/she wants to open.
- **Set one-page view** switches to [One-Page View](#) ^[50].
- **Set two-page view** switches to [Two-Page View](#) ^[50].
- **Set one-page scrolling** enables [One-Page Scrolling](#) ^[50].
- **Set two-page scrolling** enables [Two-Page Scrolling](#) ^[50].
- **Zoom to 100%** displays the page in its actual size.
- **Fit page width to screen** fits the page into the screen horizontally.
- **Fit page to screen** displays the entire page.
- **Show/hide attachments** opens the [ATTACHMENTS](#) ^[101] pane.
- **Show/hide bookmarks** opens the [BOOKMARKS](#) ^[95] pane.
- **Show/hide pages pane** opens the [PAGES](#) ^[91] pane.
- **Show/hide digital signatures** opens the [DIGITAL SIGNATURES](#) ^[149] pane.

- **Enter full screen mode** switches to [Full Screen](#)⁵⁰ view.
- **View document properties...** opens the **Document Properties** dialog box, where you can [review the document's metadata](#)¹⁰².
- **Open file** opens the document specified in the **File** box. Click **Browse...** to select the document that you want to open.

The screenshot shows a dialog box titled "New Action" with a close button (X) in the top right corner. It contains the following fields and controls:

- Trigger Event:** A dropdown menu with "Click" selected.
- Action:** A dropdown menu with "Open file" selected.
- File:** An empty text input field.
- Browse...:** A button located below the "File" field, highlighted with a blue border.
- Save:** A button at the bottom right.
- Cancel:** A button at the bottom right, to the right of the "Save" button.

- **Follow link** opens the link specified in the **Link** box.

The screenshot shows a dialog box titled "New Action" with a close button (X) in the top right corner. It contains the following fields and controls:

- Trigger Event:** A dropdown menu with "Click" selected.
- Action:** A dropdown menu with "Follow link" selected.
- Link:** An empty text input field.
- Save:** A button at the bottom right, highlighted with a blue border.
- Cancel:** A button at the bottom right, to the right of the "Save" button.

- **Reset form** clears the data from all the fields in the current form.

- **Send form** sends the form data to the e-mail address or server specified in the **Send to** box. In the **File Format** box, you can choose the format to be used when submitting a completed form. The following four choices are available: PDF, FDF, XFDF, or HTML.

The 'New Action' dialog box is titled 'New Action' with a close button (X) in the top right corner. It contains the following fields:

- Trigger Event:** A dropdown menu with 'Click' selected.
- Action:** A dropdown menu with 'Send form' selected.
- Send to:** A text input field with a vertical cursor.
- File Format:** A dropdown menu with 'PDF file' selected.

Below the 'File Format' dropdown, the text 'All form fields will be sent.' is displayed. At the bottom of the dialog, there are two buttons: 'Save' (highlighted with a blue border) and 'Cancel'.

- **Go to page** opens the page specified in the **Page Number** box.

The 'New Action' dialog box is titled 'New Action' with a close button (X) in the top right corner. It contains the following fields:

- Trigger Event:** A dropdown menu with 'Click' selected.
- Action:** A dropdown menu with 'Go to page' selected.
- Page Number:** A text input field with a vertical cursor and a small spinner control to its right.

At the bottom of the dialog, there are two buttons: 'Save' (highlighted with a blue border) and 'Cancel'.

- **Run JavaScript** runs the code entered in the **JavaScript** box.





The 'New Action' dialog box is titled 'New Action' with a close button (X) in the top right corner. It contains the following fields:

- Trigger Event:** A dropdown menu with 'Click' selected.
- Action:** A dropdown menu with 'Run JavaScript' selected.
- JavaScript:** A large text area with a vertical cursor and a scrollbar on the right side.

At the bottom of the dialog, there are two buttons: 'Save' (highlighted with a blue border) and 'Cancel'.

Changing an action

To change an action associated with a button:

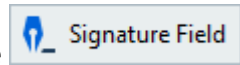
1. Switch to [form editing mode](#) .
2. [Open](#)  the **Properties** dialog box for the desired button and click the **Actions** tab.
3. Click the action that you want to change and then click **Edit...** This will open the **Edit Action** dialog box.
4. Change the values in the [Trigger Event](#)  and [Action](#)  boxes.
5. Click **Save**. The changes you have made will be reflected in the **Actions** section of the **Button Properties** dialog box.
6. Click **OK** to save your changes.

Signature field

Signature Field allows the user to put his/her digital signature to the PDF document.

See also: [Digital signature](#) ¹⁴⁹

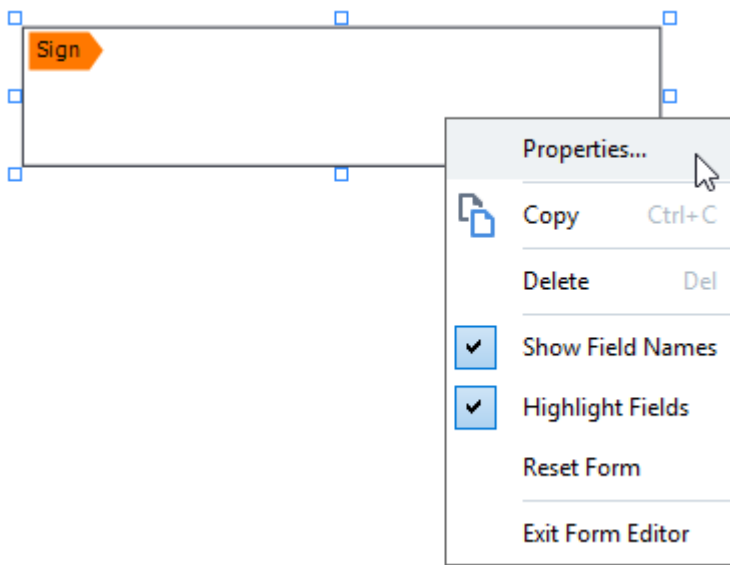
To add a signature field onto your form, switch to form editing mode and click the



See also: [Adding interactive fields](#) ¹⁰⁹

To edit a signature field, right-click the field and select **Properties...** on the shortcut menu.

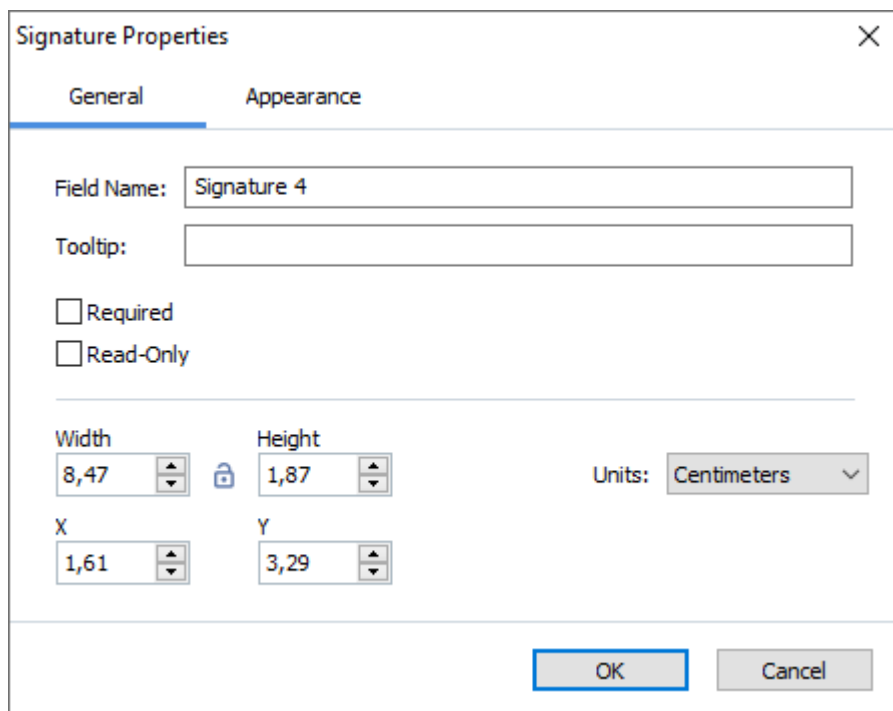
See also: [Editing interactive fields](#)



Signature field properties

General tab

On the **General** tab, you can specify the general properties of the signature field (field name, pop-up tip, size, etc.).



Field Name - This is a required property. It will be displayed above the field in form editing mode. Each field must have a unique name. Field names must not start or end with a full stop or contain two or more consecutive full stops.


Tooltip - The text of the tip that appears when you point to the field in [fill-out](#)¹⁰⁵ mode.

Required - If this option is selected, the user will be [required](#)¹¹³ to put his/her digital signature to the document.

Read-Only - If this option is selected, the user will not be able to edit the field.

Width and **Height** - These boxes specify the size of the field in units selected in the **Units** box. The size of a field cannot be 0.

 - The width and height of the field are independent of each other.

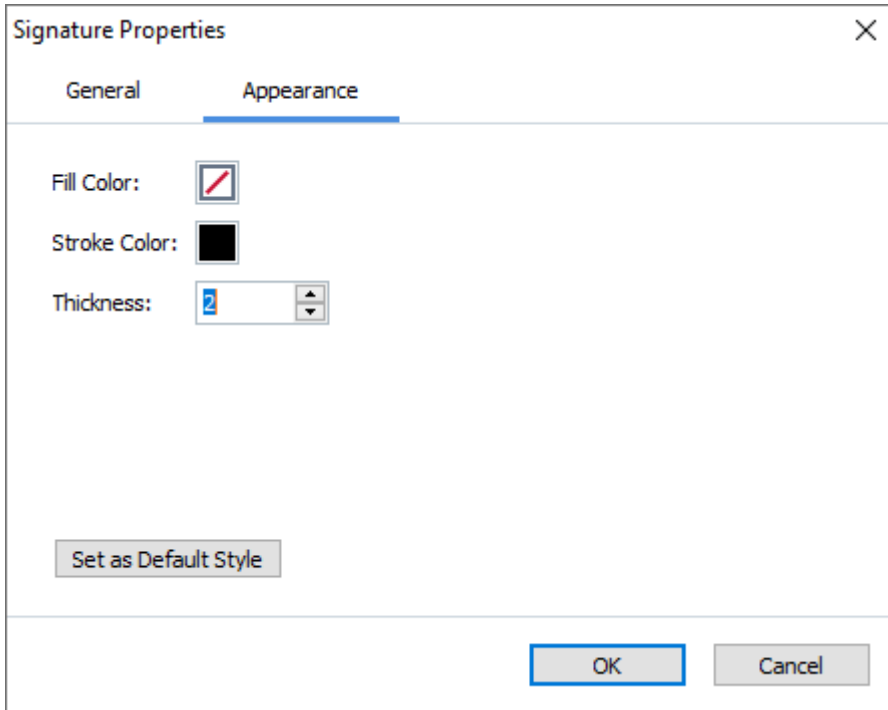
 - The width and height of the field can only be changed in proportion to each other.

X and **Y** - These boxes contain the horizontal and vertical coordinates of the field. The coordinates start from the top left corner of the page.

Units - The measurement units for the field dimensions specified in the **Width** and **Height** boxes. The width and height of a field can be specified in centimeters, inches, or points.

Appearance tab

On the **Appearance** tab, you can specify frame thickness and color and fill color.



Fill Color - The fill color.

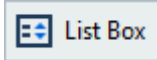
Stroke Color - The color of the frame enclosing the field.

Thickness - The thickness of the frame enclosing the field.

Set as Default Style - The current settings will be used for any new signature fields that you create.

List box

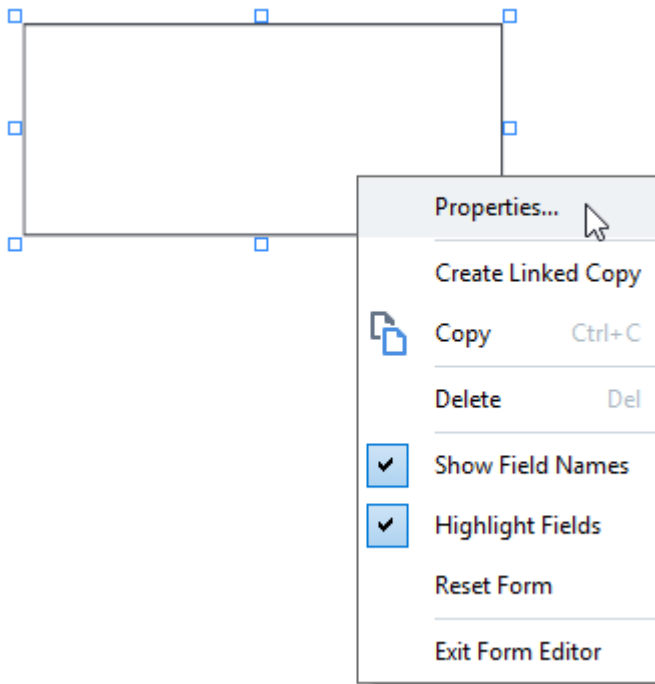
List Box allows the user to select one or more values from a list.

To add a list box onto your form, switch to form editing mode and click the  tool.

See also: [Adding interactive fields](#) ¹⁰⁹

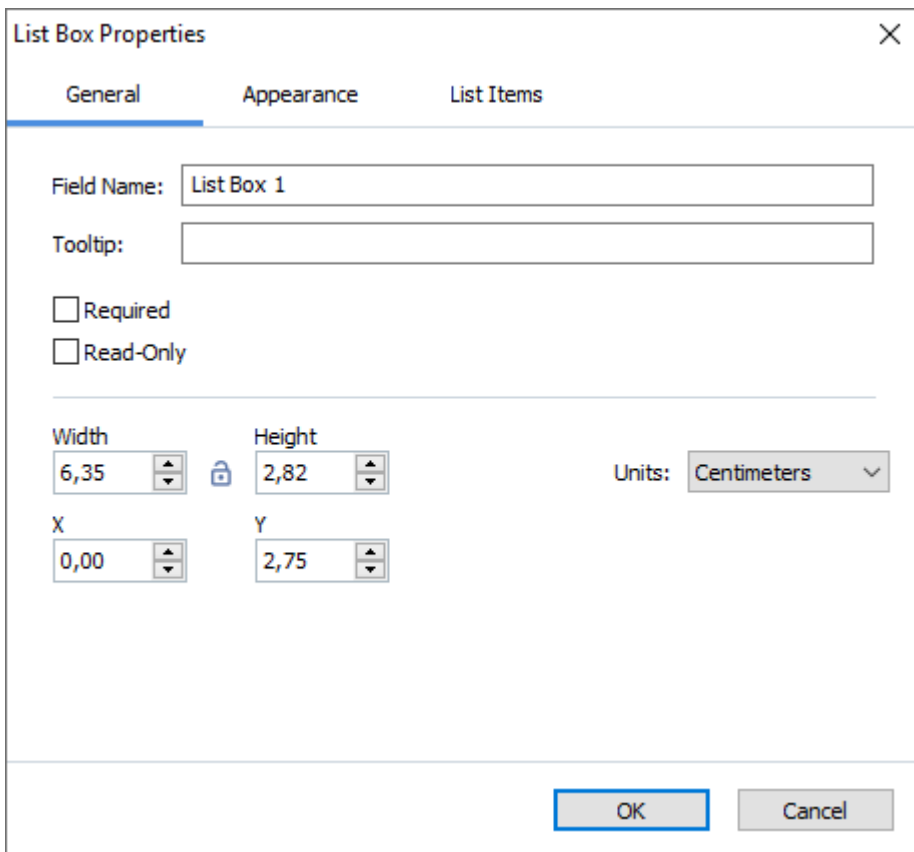
To edit a list box, right-click the list box and select **Properties...** on the shortcut menu.

See also: [Editing interactive fields](#)



General tab

On the **General** tab, you can specify the general properties of the list box (field name, pop-up tip, size, etc.).



Field Name - This is a required property. It will be displayed above the field in form editing mode. Each field must have a unique name. Field names must not start or end with a full stop or contain two or more consecutive full stops.


Tooltip - The text of the tip that appears when you point to the field in [fill-out](#)¹⁰⁵ mode.

Required - If this option is selected, the field will be marked as [required](#)¹¹³.

Read-Only - If this option is selected, the user will not be able to edit the field.

Width and **Height** - These boxes specify the size of the field in units selected in the **Units** box. The size of a field cannot be 0.

 - The width and height of the field are independent of each other.

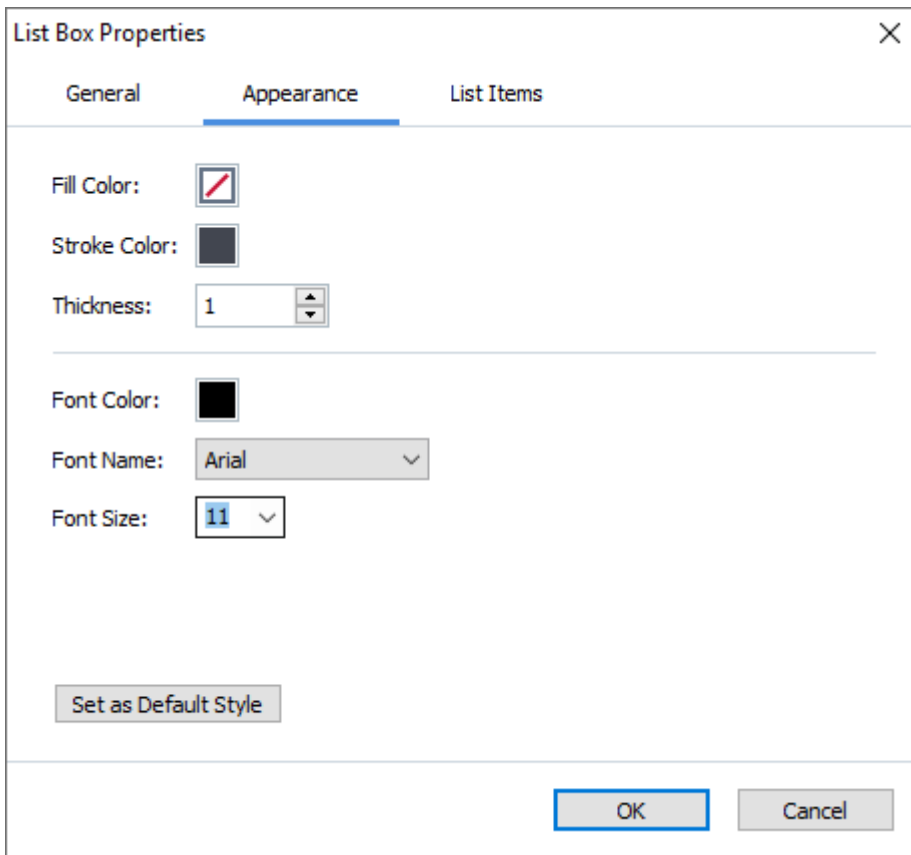
 - The width and height of the field can only be changed in proportion to each other.

X and **Y** - These boxes contain the horizontal and vertical coordinates of the field. The coordinates start from the top left corner of the page.

Units - The measurement units for the field dimensions specified in the **Width** and **Height** boxes. The width and height of a field can be specified in centimeters, inches, or points.

Appearance tab

On the **Appearance** tab, you can specify frame thickness and color, fill color, and font size and color.



Fill Color - The fill color.

Stroke Color - The color of the frame enclosing the field.

Thickness - The thickness of the frame enclosing the field.

Font Color - The color of text items selected from the list.

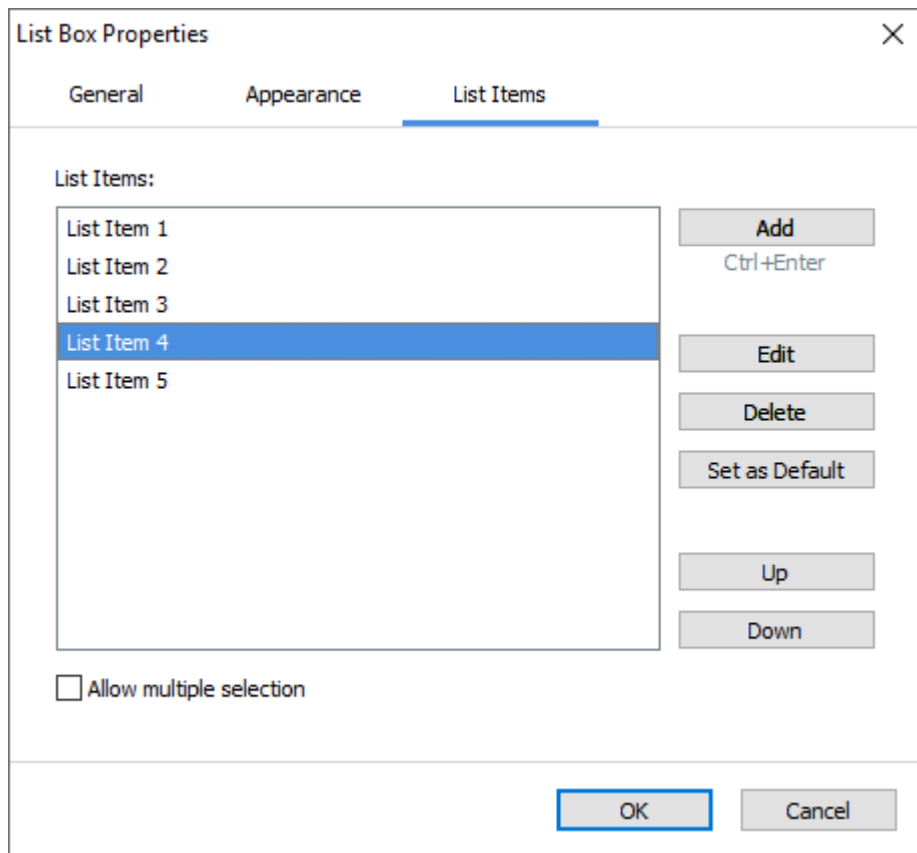
Font Name - The font to be used for text items selected from the list.

Font Size - The size of text items selected from the list.

Set as Default Style - The current settings will be used for any new list boxes that you create.

List Items tab

On the **List Items** tab, you can edit the list of items by adding, deleting or modifying items. You can also move an item up or down, make an item the default choice, or allow the user to select multiple items from the list.



List Items - Displays all the items that will appear in the list box.

Add - Adds a new item at the end of the list.

Edit - Modifies the selected item.

Delete - Deletes the selected item from the list.

✎ To delete multiple items, click them one by one while holding down the Ctrl key and then click **Delete**.

Set as Default - Make the selected item the default choice. If the user [clears data from all the fields](#)¹¹³, the default choice will be restored.

✎ To specify a different item as the default choice, click that item and then click **Set as Default**.

Unset as Default - Removes the default status from the item that was previously made the default choice.

✎ Use this button if you no longer need to suggest a default choice.

Up - Moves the selected item up in the list.

Down - Moves the selected item down in the list

Allow multiple selection - Allows the user to select multiple items from the list.

Signing PDF documents

The PDF Editor allows you to sign documents digitally and to validate any digital signature in a document. You can also add text and picture signatures.

Chapter contents

- [Digital signature](#)  149
- [Text signature](#)  151
- [Picture signature](#)  152

Digital signature

The PDF Editor allows you to sign documents digitally and to validate any digital signature in a document. A digital signature is used to establish the identity of the person that signed the document. Additionally, a digital signature can be used to make sure that a signed document has not been altered.

To sign a document:



1. On the main toolbar, click **Signature** > **Add Digital Signature...**
2. Select the certificate to be used from the **Sign as** drop-down list. To view the properties of a certificate, select it and click **Show Certificate...**
 ✎ If the certificate you want to use is not in the list, you will have to install it. To install a certificate, right-click it in Windows Explorer, click **Install Certificate** on the shortcut menu, and follow the instructions in the Certificate Import Wizard.
3. Select your reason for signing the document from the **Reason** drop-down list or type a new reason.
4. If required, in the **Location** and **Contact** fields, specify the place of signing and your contact details.
5. Select **Add custom image to digital signature** if you want your signature to include an image. Then click the **Select Image...** button to browse to an image file. The image will appear to the left of the signature.
6. Click **Sign**.
7. Select the area where you want to place the signature or simply click the desired location.
8. Save the document.

A signature contains information about the version of the document at the time of signing. If you add a new signature to an already signed document, the previously added signatures will remain valid.

To view the properties of a signature in a document:


- Right-click the signature and click **Show Signature Properties...** on the shortcut menu, or
- Double-click the signature in the **DIGITAL SIGNATURES** pane.

When you open a PDF document, ABBYY FineReader automatically validates the digital signatures in the document, if any. Validation results will be displayed in the **DIGITAL SIGNATURES** pane, which also contains detailed information about the signatures used in the document.

To delete a signature:

- Right-click the signature and click **Remove Signature** on the shortcut menu.

 You can only delete a signature from a document if you have the corresponding digital certificate.

 You can add more than one digital signature to a document.

Text signature

The PDF Editor allows you to add text signatures to your PDF documents.



1. On the **PDF Tools** toolbar, click **Signature** > **Create Text Signature...**
 If you have already created some text signatures, select a signature from the list of available signatures. Alternatively, click **Other Signature** > **Create Text Signature...**
2. In the **Create Text Signature** dialog box that opens, enter some text for the signature.
3. Change the style of the signature, if required.
4. Click **Save**.
5. Place the signature where you want it to appear on the page.
6. You can change the size of the signature, rotate it, or move it to another location in the document.

As a result, your text signature will appear in the document.

Editing signatures



1. On the **PDF Tools** toolbar, click **Signature** > **Other Signature** > **Manage Signatures...**
2. In the dialog box that opens, select a signature and click **Edit...**
 You can edit both text and [picture signatures](#).
3. In the dialog box that opens, change the parameters of your signature and click **Save**.
 If you want to add the edited signature to the document, click **Use** and place the signature where you want it to appear on the page.

Deleting signatures

To delete a signature:



- Select the signature on the document and press the Delete key, or
- Right-click the signature on the document and click **Delete...** on the shortcut menu.


To delete a signature from the list of available signatures:



1. On the **PDF Tools** toolbar, click **Signature** > **Other Signature** > **Manage Signatures...**

2. In the dialog box that opens, select the signature you want to delete and click **Delete...**


 You can delete both text and [picture signatures](#) .

 You can add more than one signature to a document.


Picture signature

ABBYY FineReader allows you to add picture signatures to your PDF documents.



1. On the **PDF Tools** toolbar, click **Signature** > **Create Signature from Image...**
 -  If you have already created some signatures, select a signature from the list of available signatures. Alternatively, click **Other Signature** > **Create Signature from Image...**
2. In the **Create Signature from Image** dialog box, click **Open** to select an image file or click **Paste from Clipboard** to paste the signature currently stored on the Clipboard.
3. You can change the size of your signature and make the background transparent.
4. Click **Save**.
5. Place the signature where you want it to appear on the page.
6. You can change the size of the signature, rotate it, or move it to another location in the document.

As a result, your picture signature will appear in the document.



 You can add any number of signatures to a document.

 You can edit or delete a picture signature. **See also:** [Text signature](#) .

Protecting PDF documents with passwords

When you create a PDF document, you can set passwords to protect it from unauthorized access, editing, and printing.

Chapter contents




- [Passwords and permissions](#) 
- [Deleting confidential information from PDF documents](#) 

Passwords and permissions

When you [create a PDF document](#)^[155], you can set passwords to protect it from unauthorized access, editing, and printing. A PDF document can be protected with a Document Open password and/or Permissions Password.

If a PDF document is protected from unauthorized access, it can only be opened after entering the Document Open Password that was specified by the document's author. If the document is protected from unauthorized editing and printing, these actions will only be possible after entering the Permissions Password specified by the author. The Permissions Password can also be used to open a protected PDF document.


Follow the instructions below to protect a document with a password.

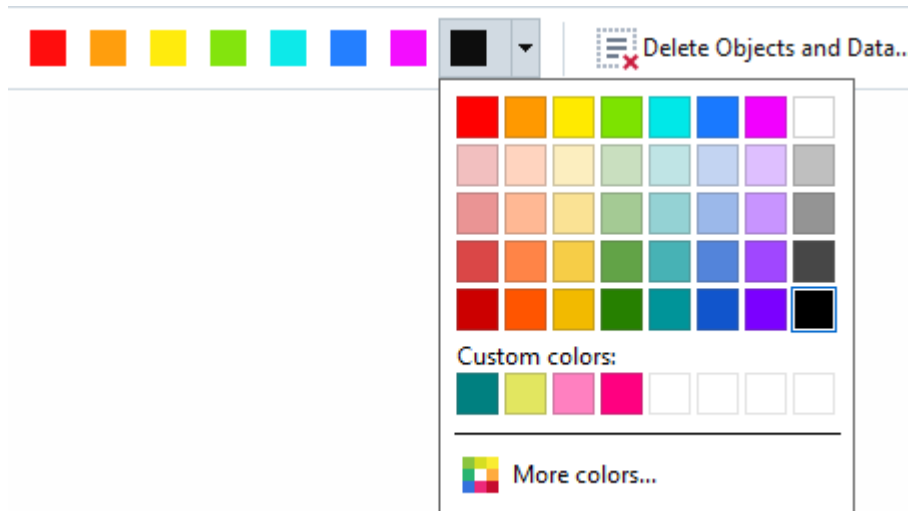
1. Click the  **Password Security** button on the **PDF Tools** toolbar or click **Tools > Security Settings**.
The **Security Settings** dialog box will open.
2. If you want to protect your document from unauthorized opening, select the **Restrict access with a Document Open password** option.
3. Type a Document Open password and confirm it.
 You can disable the **Hide characters** option. In this case, the characters you enter will be displayed on the screen and you won't have to retype your password.
4. If you want to prevent unauthorized printing, editing or copying of your document, select the **Restrict printing and editing with a Permissions password** option.
5. Type a Permissions Password and confirm it.
 The Document Open Password and the Permissions Password must be different.
6. From the **Printing** drop-down list, select a printing resolution for your document.
7. From the **Editing** drop-down list, select allowed editing operations.
8. If you want to allow other users to copy and edit the content of your document, select the corresponding options.
9. Select an encryption level and components to encrypt.
10. Click **OK**.

You will be prompted to confirm the passwords again. You can save the changes to the open document or create a new document.

Deleting confidential information from PDF documents

You can use the PDF Editor to remove confidential information from PDF documents before publishing them. Both text and images can be redacted.


1. On the **PDF Tools** toolbar, click  **Redact Data** or click the arrow next to this tool and select **Redaction Mode**.
2. If you want to change the color of rectangles that will be painted over redacted text, click one of the seven color boxes on the toolbar or click the arrow and select any other desired color from the palette. For even more colors, click **More colors...**



3. Select the text and/or images you want to remove.


As a result, the selected content will be removed from the document and their respective occurrences painted over with the color of your choice.

ABBYY FineReader also allows you to use the **Search** feature to remove sensitive data.

1. Open the **SEARCH** pane.
2. Type in text to find.
3. Select the occurrences you want to redact.
4. Click the  button.


The selected text will be painted over in the document and replaced with asterisks in objects that do not appear in the body text of the document (i.e. in comments, bookmarks, and metadata).




You can delete objects and data that do not occur in the body text of your document (e.g. comments, annotations, bookmarks, attachments, metadata, etc.):

1. Click the arrow next to the  **Redact Data** button and select **Delete Objects and Data...**
2. In the dialog box that opens, select the objects and data to delete and click **Apply**.

Creating PDF documents

Chapter contents

- [Creating PDF documents from selected pages](#) 
- [Using a virtual printer to create PDF documents](#)

 For detailed instructions on creating PDF documents from files, scans, or digital photos, see: [Creating PDF documents](#)  and [Scanning to PDF](#) .

Creating PDF documents from selected pages

The PDF Editor allows you to create PDF documents from selected pages.

1. In the **PAGES** pane, select the pages from which you want to create a PDF.
2. Right-click the pages and click **Create PDF from Selected Pages** on the shortcut menu.
3. The created document will be opened in a new PDF Editor window.

Using a virtual printer to create PDF documents








You can create PDF documents from any applications that allow you to select a printer. PDF-XChange 5.0 for ABBYY FineReader 15 will be used.

1. Open a document from which you want to create a PDF.
2. Open the printing options dialog box.
3. In the list of available printers, select **PDF-XChange 5.0 for ABBYY FineReader 15**.
4. If required, click **Printer Settings...** and adjust the PDF creation settings.
5. Click **Print** to start creating a PDF document.
6. In the dialog box that opens, you can change the name and location of your file, open the document for viewing after it is saved, or e-mail the document. You can also choose to add the PDF document that is being created to an existing PDF document by selecting **Add Files to PDF**.

Saving and exporting PDF documents

The PDF Editor allows you to save, print, and e-mail PDF documents or send them to the OCR Editor for further processing.

Chapter contents

- [Saving PDF documents](#)  157
- [Saving in PDF/A](#)  158
- [Saving in other formats](#)  160
- [Reducing the size of your PDF documents](#)  160
- [Sending PDF documents to the OCR Editor](#)  161
- [E-mailing PDF documents](#)  161
- [Printing PDF documents](#)  162

Saving PDF documents

The PDF Editor allows you to save entire PDF documents or only selected pages. Various saving options are available.


- To save the changes you have made to your current PDF document, click **File > Save**.

Alternatively, click  on the main toolbar.


- To save your current PDF document under a different name or to a different folder, click **File >**

Save As > PDF Document... Alternatively, click  **Save As** on the main toolbar and then click **PDF Document...**

- To save your document as a PDF document where users will be able to select, copy, and edit content, click **File > Save As > Searchable PDF Document**. Alternatively, click **Save As** on the main toolbar and then click **Searchable PDF Document**.

As a result, your PDF document will be converted to searchable PDF using the currently selected saving options. To change the saving options, click the **Options...** button in the saving dialog box and select desired saving options on the [PDF](#)  tab.

- To save a PDF document without a text layer (such PDF documents cannot be searched and their content cannot be selected, copied or edited) click **File > Save As > Image-Only PDF Document**. Alternatively, click **Save As** on the main toolbar and then click **Image-Only PDF Document**.

As a result, your PDF document will be converted to image-only PDF using the currently selected saving options. To change the saving options, click the **Options...** button in the saving dialog box and select desired saving options on the [PDF](#)  tab.

- ✎ To convert only some pages of a document, in the **PAGES** pane, select the pages that you want to save and click **Save As** on the shortcut menu.

Saving in PDF/A

The PDF Editor allows you to save documents in PDF/A, a format intended for long-term storage.


PDF/A documents contain all the information required for their correct display:


- All fonts are embedded into the document (except for non-visible text).
- Only embeddable fonts are used.
- Colors are displayed correctly irrespective of the device.
- The metadata used in the document comply with the applicable standards.

The following are not supported:

- audio, video, and 3D objects
- scripts
- encryption
- links to external content
- copyrighted content (e.g. LZW).

To save a PDF document in PDF/A:

1. Click **File > Save As > PDF Document...**. Alternatively, click the  **Save As** button on the main toolbar and then click **PDF Document...**
2. In the dialog box that opens, specify a name and location for your document.
3. Select **Create PDF/A** and then select a PDF/A [version](#) from the drop-down list.
4. Click **Save**.

 You can create PDF/A-compliant documents from various formats. **See also:** [Creating PDF documents](#)

PDF/A versions

| PDF/A-1 | PDF/A-2 | PDF/A-3 |
|---------|---------|---------|
| B, A | B, A, U | B, A, U |

- 2005: **PDF/A-1** is based on PDF 1.4 and supports the following features:

- **A** – accessible – additional document requirements (tags)
- **B** – basic – basic compliance level

ISO 19005-1:2005 (Cor 1: 2007, Cor 2: 2011).

- 2011: **PDF/A-2** is based on PDF 1.7 and supports additional features:

- **U** - Unicode
- JPEG2000 compression
- transparency
- PDF/A attachments
- digital signatures

ISO 19005-2:2011.


- 2012: **PDF/A-3** supports additional features:

- file attachments in any format


ISO 19005-3:2012.


Saving in other formats

The PDF Editor allows you to save entire PDF documents or individual pages in various formats: Microsoft Word, Microsoft Excel, Microsoft PowerPoint, HTML, images formats, and many more.

1. Click **File** > **Save As** and then click a desired format. Alternatively, click  **Save As** and then click a desired format.
2. In the dialog box that opens, specify a name and location for your document.
3. Open the drop-down list next to **File options** and specify whether you want to create one file for all pages or a separate file for each page.
4. Click **Save**.
5. As a result, your PDF- document will be converted into the format of your choice using the currently selected saving options.

To change the saving options, click the **Options...** button in the saving dialog box and select desired saving options. Alternatively, click **Tools** > **Options...** > **Format Settings**^[262]. The options dialog box will open, displaying the tab of the format that you selected.

 To convert only some of the pages in the document, in the **PAGES** pane, select the pages that you want to convert, right-click them, click **Save As** on the shortcut menu, and then click an output format.

 You can convert PDF and image files into documents in various formats. **See also:** [Creating Microsoft Word documents](#)^[23], [Creating Microsoft Excel documents](#)^[25], and [Other formats](#)^[27].


Reducing the size of your PDF documents


PDF documents that contain page images or a lot of pictures can be very large. The PDF Editor allows you to reduce the size of such documents.

1. Click **File** > **Reduce File Size...**
2. In the dialog box that opens, the following options are available:
 - **Image quality** - Select this option if you want to reduce the size of the file by lowering the quality of the pictures inside the document.
 - **Use MRC compression (specify OCR languages below)** - Select this option if you want to apply the MRC compression algorithm to recognized pages, which considerably reduces file size while preserving the visual quality the page images.
 - **OCR languages** - Be sure to select the right OCR language(s).
3. Click **Apply**.

The compressed PDF document will be opened in a new window.

Sending PDF documents to the OCR Editor

The PDF Editor allows you to send PDF documents to the [OCR Editor](#) , where you can draw recognition areas, check recognized text, train the program to recognize non-standard fonts and characters, and use other advanced features offered by ABBYY FineReader.

- To send a PDF document to the OCR Editor, click the arrow next to the  **Recognize** ▾ button and then click **Recognize and Verify in OCR Editor**.
- To send only some of the pages of the document to the OCR Editor, in the **PAGES** pane, select the pages that you want to send, right-click them and click **Send Selected Pages to OCR Editor** on the shortcut menu.


 When sending the document to the OCR Editor, some of these document objects will be lost:

- attachments
- bookmarks
- comments
- annotations

 Once you are done working with the document in the OCR Editor, you can send it back to the PDF Editor. To do this, click the arrow next to the  **Send** ▾ button and then click **Send to PDF Editor....** Alternatively, click **File > Send To > PDF Editor....**

E-mailing PDF documents


The PDF Editor allows you to send PDF documents by e-mail.

1. Click the  button on the main toolbar or click **File > E-mail....**
2. In the dialog box that opens, change the name of the document if required.
3. Select the pages that you want to e-mail.
4. Click **Create E-mail Message**.

An e-mail message will be created and the PDF document will be attached to this message. Type in the recipient's address and send the message.

Printing PDF documents

The PDF Editor allows you to print PDF documents. Before printing, please make sure your computer has a local or network printer connected to it and that the drivers for the printer are installed.

1. Click the  button on the main toolbar or click **File > Print....**
2. In the dialog box that opens, specify desired printing settings:
 - **Printer** - Select one of the available printing devices.
 - **Copies** - Specify the number of copies to be printed.
 - **Pages to print** - Specify the pages to be printed (you can choose to print all of the pages, selected pages or a range of pages).
 - **Page setup** - Specify paper size and orientation.
 - **Scaling and position** - Specify the number of document pages to place on one printed page and other printing settings, such as scaling and positioning.
 - **Comments and markup** - Select the appropriate action from the list to print comments and markups. To view all comments in the document, click **Show Comments....**
 - **Manually print on both sides** - Select this option if you use duplex printing.
 - **Black and white** - Select this option if you want to print your document in black and white.
3. Click **Print**.

OCR Editor

The OCR Editor uses Optical Character Recognition technology for advanced conversion of document scans, PDF documents, and image files (including digital photos) into editable formats.




In the OCR Editor, you can draw recognition areas, check recognized text, train the program to recognize non-standard characters and fonts, and use some other advanced features to achieve maximum OCR quality.

Chapter contents

- [Launching the OCR Editor](#)  310
- [OCR Editor interface](#)  164
- [Obtaining documents](#)  168
- [Recognizing documents](#)  171
- [Improving OCR results](#)  178
- [Checking and editing texts](#)  201
- [Copying text, tables and pictures from PDF documents](#)  58
- [Saving OCR results](#)  209

Launching the OCR Editor

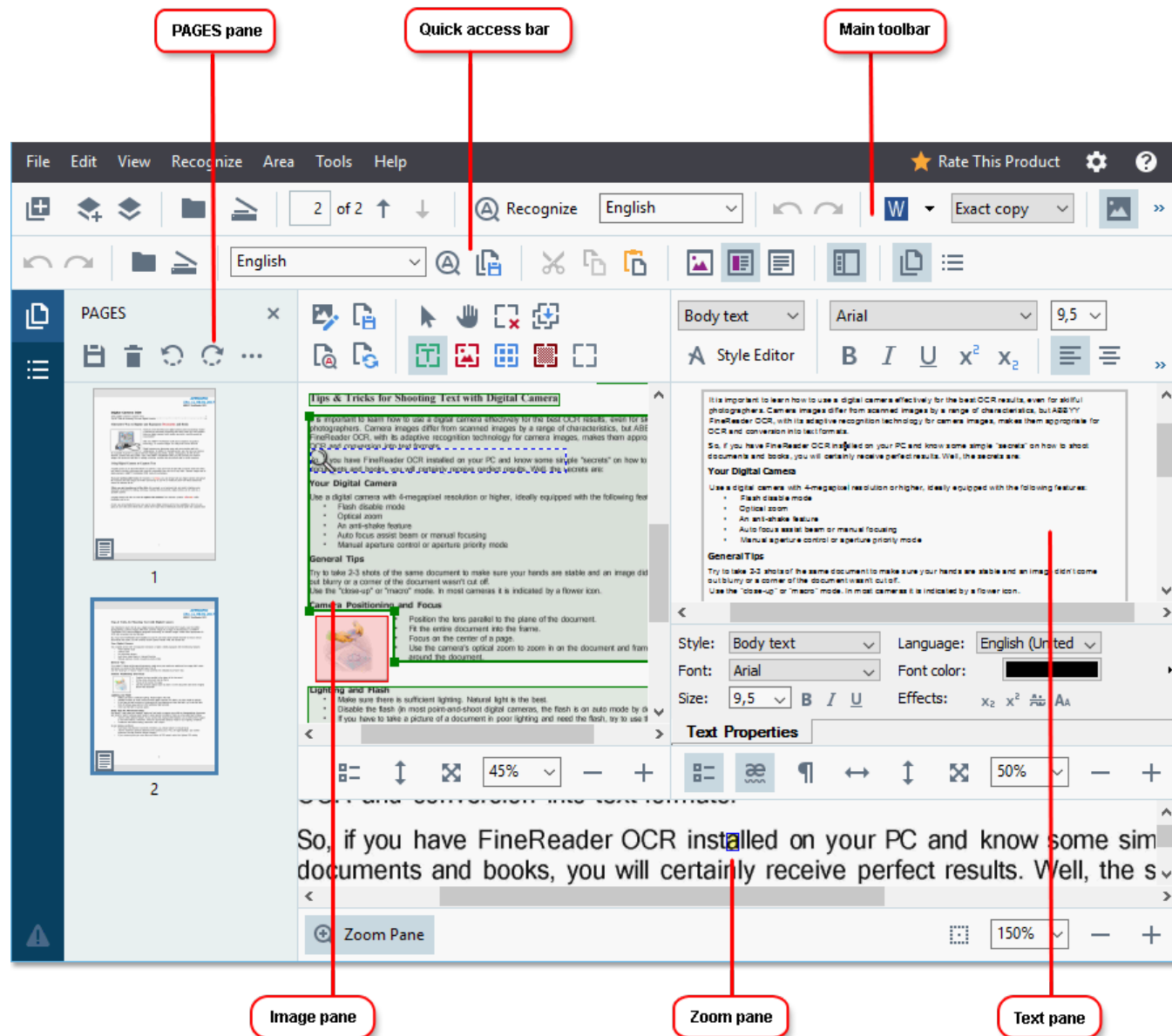
There are several ways to launch the OCR Editor:

- In the **New Task** window, click:
 - [New Task](#)  > **Open** > **Open in OCR Editor**
 - or **New Task** > **Tools** > **OCR Editor**
 - or **New Task** > **File** > **Open in OCR Editor...**
- In the PDF Editor, click:
 - [PDF Editor](#)  > **Tools** > **OCR Editor**.
- Open the Windows **Start** menu and click ABBYY FineReader PDF 15 > **ABBYY FineReader 15 OCR Editor** (or click **Start**  > **All Programs** > ABBYY FineReader PDF 15 > **ABBYY FineReader 15 OCR Editor** in Windows 10).


Tip. You can set up the OCR Editor to either open the last used project or create a new project when it is launched. To do this, click **New Task** > **Options** > **General** and select either **Open a new OCR project** or **Open the last used OCR project**.

OCR Editor interface

The OCR Editor window displays your current OCR project. For more information on working with OCR projects, see [OCR projects](#)¹⁷²



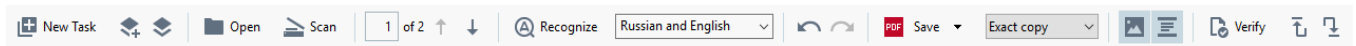
- The **Pages** pane shows the pages contained in the OCR project. Two page views modes are available: thumbnails (shown above) and details, which shows a list of document pages and their properties. To switch between the views, right-click anywhere in the **Pages** pane and select **Navigation Pane > Thumbnails** or **Navigation Pane > Details**. Alternatively, use the **View** menu at the top of the OCR Editor window.
- The **Image** pane displays the image of the current page. Here you can edit [recognition areas](#)¹⁸² and change [area properties](#)¹⁸⁶.
- The **Text** pane displays the recognized text. Here you can check the spelling and edit the recognized text.

- The **Zoom** pane displays an enlarged image of the current line of text or any other image area you are currently working on. In the **Image** pane you see the entire page, whereas in the **Zoom** pane you can examine certain image fragments in greater detail, e.g. compare the image of a character with its recognized counterpart in the **Text** window. To scale the image up or down, use the  controls at the bottom of the pane.

Toolbars

There are several toolbars in the OCR Editor. The toolbar buttons provide easy access to program commands. The same commands can also be invoked by pressing their corresponding [keyboard shortcuts](#)³²⁰.


The **Main Toolbar** features a set of buttons for the most commonly used operations. Using these buttons, you can open a document, scan a page, open an image, recognize pages, and save the results. The main toolbar cannot be customized.



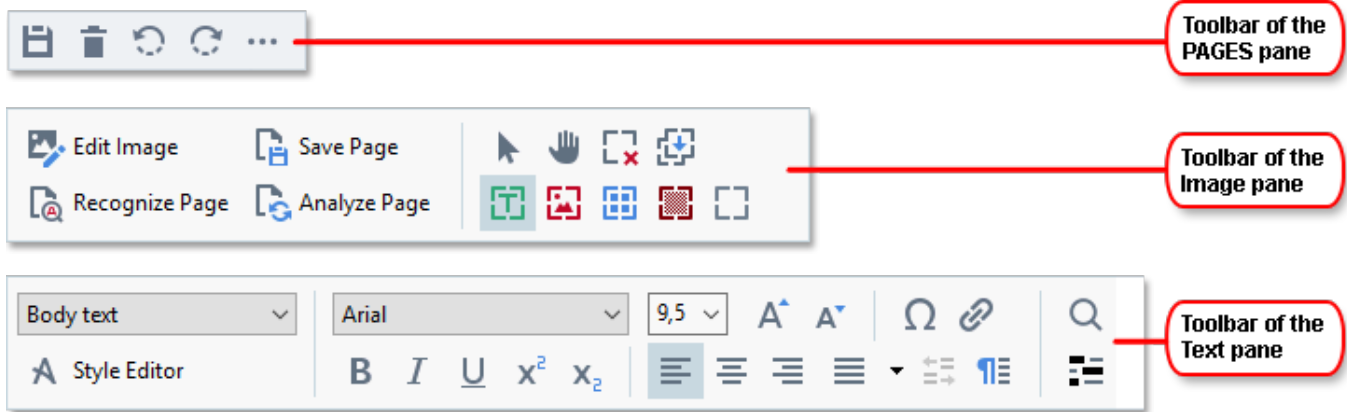
The **Quick Access Bar** is fully customizable and contains the buttons that you use the most. This toolbar is hidden by default. To make it visible, click **View > Toolbars** and select **Quick Access Bar**. Alternatively, right-click anywhere on the main toolbar and select **Quick Access Bar**.



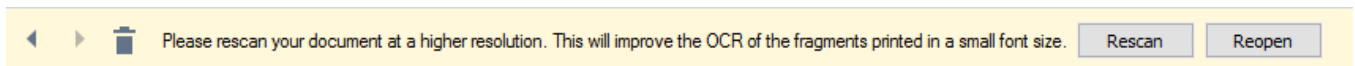
To customize the **Quick Access Bar**:

1. Click **View > Customize...** to open the **Customize Toolbars and Shortcuts** dialog box.
2. On the **Toolbars** tab, select a category from the **Categories** drop-down list.
 The set of commands available in the **Commands** list will change accordingly. The commands are grouped in the same manner as in the main menu.
3. From the **Commands** list, select a command and click >> to add it onto the **Quick Access Bar** or click << to remove it.
4. Click **OK** to save the changes.
5. If you want to reset the **Quick Access Bar** to its default state, click the **Reset All** button.

The toolbars in the **Pages**, **Image**, and **Text** panes contain buttons for commands applicable to objects that can be displayed in the respective pane:





The **Warnings** pane displays warnings and error messages.





To show the **Warnings** pane, click **View** >

Show Warnings

or click the  button in the lower left-hand corner of the OCR Editor window.



Warnings and errors are displayed for the page that is currently selected in the **Pages** pane. To scroll through the warnings and errors and delete unwanted messages, use the  buttons.

Customizing the OCR Editor workspace

- You can temporarily hide the panes that you do not need. To show/hide panes, use the **View** menu or the following keyboard shortcuts:
- F5 — shows or hides the **Pages** pane.
- F6 — shows or hides the **Image** pane.
- F7 — shows or hides the **Image** and **Text** panes.
- F8 — shows or hides the **Text** pane.
- Ctrl+F5 — shows or hides the **Zoom** pane.
- To change the size of a pane, hover the mouse cursor on one of its borders until a double-headed arrow appears and drag the border in the desired direction.
- To change the position of the **Pages** or **Zoom** pane, use the **View** menu or the shortcut menu of the pane.
- To show or hide the **Warnings** pane, click **View** and select or clear the **Show Warnings** item.
- To show or hide the **Properties** bar at the bottom of the **Image** or **Text** pane, select or clear the **Properties** item in the context menu of the pane or click the  button.
- Some of the pane properties can be customized on the [Areas and Text](#)  tab of the **Options** dialog box.

All of the pages of your current OCR project are displayed in the **Pages** pane. Two page views are available.

To change the way the pages are displayed in the **Pages** pane:

- Use the  and  buttons in the **Pages** pane.
- Click **View > Navigation Pane**.
- Right-click anywhere in the **Pages** pane, click **Navigation Pane** in the context menu, and then select the desired item.


To open a page, double-click its thumbnail in the **Pages** pane (in **Thumbnails** view) or double-click its number (in **Details** view). The image of the selected page will be shown in the **Image** pane. If OCR has already been performed on this page, the recognized text will appear in the **Text** pane.

Obtaining documents

After you launch the OCR Editor, you need to open an image file or PDF. This chapter provides instructions on how you can obtain images and PDF documents for subsequent processing in the OCR Editor.

Chapter contents


- [Opening images and PDF documents](#)¹⁶⁹
- [Scanning paper documents](#)

 The quality of OCR depends on the quality of images and PDF documents that you open with ABBYY FineReader. For information on scanning and taking photos of documents and on how to remove common defects from scans and photographs, see [Image processing options](#)²⁹⁰ and [Editing images manually](#)¹⁷⁹.


Opening images and PDFs

ABBYY FineReader allows you to open PDF and image files in any of the [supported formats](#)^[284].


Complete the following steps to open an image or PDF file:

1. In the OCR Editor, click  **Open** on the main toolbar or click **File > Open Image....**
2. In the dialog box that opens, select one or more image or PDF files.
3. If you select a file that contains multiple pages, you can specify a range of pages to open.
4. Select **Automatically process page images as they are added** if you want the image to be processed automatically.

Tip. You can specify which manipulations the program should perform on the image, e.g. what image defects should be rectified or whether the document should be analyzed and recognized automatically. To specify image processing options, click the **Options...** button. See [Image processing options](#)^[290] for details.




 If an OCR project is already open when you open new pages, the selected pages will be appended to the end of this project. If no OCR project is currently open, a new one will be created from the selected pages.

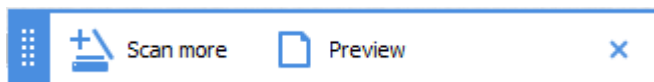
 For more information on working with pages and OCR projects, see [OCR projects](#)^[172].


 Access to some PDF files may be restricted by their authors. Such restrictions include password protection and restrictions on opening the document or copying its content. When opening such files, ABBYY FineReader will request a password.



Scanning paper documents

To scan a document:

1. In the OCR Editor, click  **Scan** on the main toolbar or click **File > Scan Pages....**
2. Select a scanning device and specify [scanning settings](#) .
3. Click the **Preview** button or click anywhere inside the image.
4. Review the image. If it is not satisfactory, change the scanning settings and click the **Preview** button again.
5. Click **Settings...** and specify [image processing options](#) . These options determine the appearance and properties of the output document.
6. Click **Scan**.
7. Once the scanning is completed, a dialog box will appear, offering the following two choices:



- Click **Scan more** if you want to scan more pages using the current scanning settings.
 - Click **Preview** if you want to see the scanned page.
 - Click  to close the dialog box.
8. If an OCR project is already open when you scan new pages, the scanned pages will be appended to the end of this project. If no OCR project is currently open, a new one will be created from the scanned pages

 See [Scanning tips](#)  for some tips on selecting the optimal scanning settings.

Recognizing documents

ABBYY FineReader uses Optical Character Recognition (OCR) technology to convert document images into editable text. Prior to OCR, the program analyzes the structure of the entire document and detects the areas that contain text, barcodes, pictures, and tables. For best OCR results, be sure to select the right [OCR language](#)^[287], [recognition mode](#)^[293], and [print type](#)^[288].


By default, images contained in an OCR project are recognized automatically using the settings currently selected in the program.

Tip. You can disable automatic analysis and OCR for newly added images on the [Image Processing](#)^[260] tab of the **Options** dialog box (click **Tools** > **Options...** to open this dialog box).

In some cases, the OCR process must be started manually. This may be necessary, for example, if you disable automatic OCR, manually draw areas on an image, or change any of the following parameters in the [Options](#)^[259] dialog box:

- the OCR language on the **Languages** tab
- the OCR options on the **OCR** tab
- the fonts to be used on the **OCR** tab

To launch the OCR process manually:

- Click the  **Recognize** button on the main toolbar, or
- Click **Recognize** > **Recognize All Pages**.

Tip. To recognize a selected area or page, use the **Area** or **Recognize** menu or right-click the area or page to call up the context menu.

 **See also:** :

- [OCR options](#)^[293]
- [Document features to consider prior to performing OCR](#)^[287]
- [Editing areas](#)^[182]
- [Improving OCR results](#)^[178]

OCR projects

While working with the program, you can save your interim results in an [OCR project](#)^[314] so that you can resume your work where you left off. An OCR project contains the source images, the text that has been recognized on the images, your program settings, and any user [patterns](#)^[314], languages or language groups that you have created.

This section covers the following topics:



- [Opening a previously saved OCR project](#)^[172]
- [Using settings from earlier versions of ABBYY FineReader](#)^[173]
- [Adding images to an OCR project](#)^[173]
- [Removing pages from an OCR project](#)^[173]
- [Saving an OCR project](#)^[173]
- [Closing an OCR project](#)^[174]
- [Splitting an OCR project into several projects](#)^[174]
- [Reordering pages in an OCR project](#)^[174]
- [Working with document metadata](#)^[175]
- [Working with patterns and languages](#)

Opening an OCR project


When you launch the OCR Editor, a new OCR project is created by default. You can either work this new OCR project or open an existing one.

To open an existing OCR project:

1. Click **File > Open OCR Project...**
2. In the dialog box that opens, select the OCR project that you want to open.

 If you open an OCR project that was created in an earlier version of the program, ABBYY FineReader will try to convert it into the new format used by the current version. This conversion cannot be undone, so you will be prompted to save your OCR project under a different name. The recognized text from the old project will not be carried over into the new project. To recognize the pages in the OCR project, click the  **Recognize** button.

Tip. If you want the last used OCR project to open when you launch the OCR Editor, select **Open the last used OCR project** on the **General** tab of the **Options** dialog box (click **Tools > Options...** to open this dialog box).

You can also right-click an OCR project in Windows Explorer and select **Open OCR project in ABBYY FineReader PDF 15**. OCR projects are marked with the  icon.

Using settings from earlier versions of ABBYY FineReader

ABBYY FineReader lets you import user dictionaries and program settings from files created in earlier versions of the program.

To use dictionaries created in ABBYY FineReader 10, 11, 12 or 14:

1. Click **Tools > View Dictionaries...**
2. In the **User Dictionaries** dialog box, select the language of the dictionary and click **View...**
3. In the **Dictionary for...** dialog box, click **Import...** and specify the path to the dictionary.
4. Select the dictionary file and click **Open**.

Adding images to an OCR project

1. Click **File > Open Image...**
2. In the dialog box that opens, select one or more images and click **Open**. The images will be appended to the end of the open OCR project, and their copies will be saved in the OCR project folder.

You can also right-click images in Windows Explorer and select **Convert with ABBYY FineReader PDF 15 > Open in OCR Editor** on the shortcut menu. The selected files will be added to a new OCR project.

You can also add document scans. **See also:** [Scanning paper documents](#) .


Removing pages from an OCR project

- In the **PAGES** pane, select a page and click **Delete**, or
- Click **Edit > Delete Pages...**, or
- Right-click a page in the **PAGES** pane and select **Delete...** on the shortcut menu

You can select and delete more than one page in the **PAGES** pane.

Saving an OCR project

1. Click **File > Save OCR Project....**
2. In the dialog box that opens, enter a name for your OCR project and specify a folder where it should be stored.

 When you save an OCR project, not only the page images and recognized text are saved, but also any patterns and languages you created while working on the project.

Closing an OCR project

- To close an OCR project, click **File > Close**.

Splitting an OCR project into several projects

When processing large numbers of multi-page documents, it is often more practical to scan all the documents first and only then analyze and recognize them. However, to preserve the original formatting of each paper document correctly, ABBYY FineReader must process each of them as a separate OCR project. ABBYY FineReader includes tools for grouping scanned pages into separate OCR projects.

To split an OCR project:

1. Right-click anywhere in the **PAGES** pane and select **Move Pages to New OCR Project...** on the shortcut menu.
2. In the dialog box that opens, create the necessary number of OCR projects by clicking the **Add OCR Project** button.
3. Move pages from the **PAGES** pane to another OCR project using one of the following methods:
 - Select the pages and drag them with the mouse.
You can also use drag-and-drop to move pages between OCR projects.
 - Use the **Move** and **Return** buttons. The **Move** button will move the pages to the current project.
 - Press Ctrl+Right Arrow to move the selected pages from the **PAGES** pane to the current OCR project or press Ctrl+Left Arrow or Delete to move them back to their original project.
4. When you are done, click **Create** to create a new OCR project or **Create All** to create all projects in one go.


Tip. You can also drag-and-drop selected pages from the **PAGES** pane into another instance of the OCR Editor. The selected pages will be appended to the end of the OCR project.

Reordering pages in an OCR project

1. In the **PAGES** pane, select one or more pages.
2. Right-click anywhere in the **PAGES** pane and select **Reorder Pages...** on the shortcut menu.
3. In the **Reorder Pages** dialog box, choose one of the following:
 - **Reorder pages (cannot be undone)**
This changes all page numbers successively, starting with the selected page.


- **Restore original page order after duplex scanning**


This option restores the original page numbering of a document with double-sided pages. This option is useful if you use a scanner with an automatic feeder to first scan all the odd-numbered pages and then all the even-numbered pages. You can choose between the normal and the reverse order for the even-numbered pages.

 This option will only work if three or more consecutively numbered pages are selected.

- **Swap book pages**


This option is useful if you scan a book written in a left-to-right script and then split the facing pages without specifying the correct language.

 This option will only work if two or more consecutively numbered pages are selected and if at least two of them are facing pages.

 To cancel this operation, select **Undo last operation**.

4. Click **OK**.

The pages in the **PAGES** pane will be rearranged in accordance with their new numbers.


 In **Thumbnails** view, you can change page numbering simply by dragging selected pages to the desired place in the OCR project.

Metadata

Document metadata contain detailed information about the document such as its author, subject, and keywords. Document metadata can be used to sort files and to review document properties. Documents can also be searched by their metadata.




When recognizing PDF documents and certain types of image files, ABBYY FineReader will export the metadata of the source document. You can edit these metadata if necessary.

To add or modify document metadata:

1. Open the **Format Settings**  tab of the **Options** dialog box (click **Tools** > **Options...** to open this dialog box).
2. Click the **Edit Metadata...** button and in the dialog box that opens, enter the name, author, subject, and keywords for the document.
3. Click **OK**.

Working with patterns and languages

You can save and load user patterns and languages.

 For more about patterns, see [If your document contains non-standard fonts](#) . For more about user languages, see [If the program failed to recognize some of the characters](#) .

To save patterns and languages to a file:

1. Open the **OCR** tab of the **Options** dialog box (click **Tools** > **Options...** to open this dialog box).
2. Click the **Save Patterns and Languages...**
3. In the dialog box that opens, type a name for your file and click **Save**.

This file will contain the path to the folder where your user languages, language groups, dictionaries, and patterns are stored.




To load patterns and languages:

1. Open the **OCR** tab of the **Options** dialog box (click **Tools** > **Options...** to open this dialog box).
2. Click the **Load Patterns and Languages...**
3. In the **Load Options** dialog box, select the required *.fnt file and click **Open**.

Group work with OCR projects

ABBYY FineReader provides tools for working on documents together with other users over a network. Multiple users can share the same user languages and dictionaries created for these languages.

To make user dictionaries and languages available to multiple users:

1. Create/open an OCR project and select desired scanning and OCR options for the project.
2. Specify a folder where user dictionaries will be stored. This folder should be accessible to all users.
 -  By default, user dictionaries are stored in **%Userprofile%\AppData\Roaming\ABBYY\FineReader\15\FineReaderShell\UserDictionaries**.
 - To specify a different folder for user dictionaries:
 - a. On the **Areas and Text** tab of the **Options** dialog box (click **Tools > Options...** to open this dialog box), click the **User Dictionaries...** button.
 - b. In the dialog box that opens, click the **Browse...** button and specify the path to your folder.
3. [Save the user patterns and languages](#)  to a file (*.fbt):
 - a. Click the **OCR** tab in the **Options** dialog box (click **Tools > Options...** to open this dialog box).
 - b. Click **Save Patterns and Languages...**
 - c. In the **Save Options** dialog box, specify a folder where the file will be stored. This folder should be accessible to all users.
4. Now other users can access the user languages and dictionaries. To do so, they need to load the *.fbt file you created in step 3 and specify the path to the folder with the user dictionaries you created in step 2.
 -  To be able to access the user dictionaries, patterns, and languages, users must have read/write permissions for the folders where they are stored.

To see the list of available user languages and their parameters, click the **OCR** tab in the **Options** dialog box (click **Tools > Options...** to open this dialog box).












When a user language is being used by several users, users can add words or delete words from the corresponding dictionary, but they cannot change the properties of this language.

When a user dictionary is being edited by a user, other users can use this dictionary to perform OCR and check spelling, but they cannot add or remove words.

Any changes a user makes to a user dictionary will become available to all users who have selected the folder where this dictionary is stored. For the changes to come into effect, users will need to restart ABBYY FineReader.

Improving OCR results

Contents:

- [If your document image has defects and OCR accuracy is low](#)  179
- [If areas are not detected properly](#)  182
- [If the complex structure of a paper document is not reproduced](#)  187
- [If you are processing a large number of documents with identical layouts](#)  188
- [If tables and pictures are not detected](#)  189
- [If a barcode is not detected](#)  192
- [If an incorrect font is used or some characters are replaced with "?" or "□"](#)  193
- [If your printed document contains non-standard fonts](#)  194
- [If your document contains many specialized terms](#)  197
- [If the program fails to recognize certain characters](#)  198
- [If vertical or inverted text was not recognized](#)  200


If your document image has defects and OCR accuracy is low

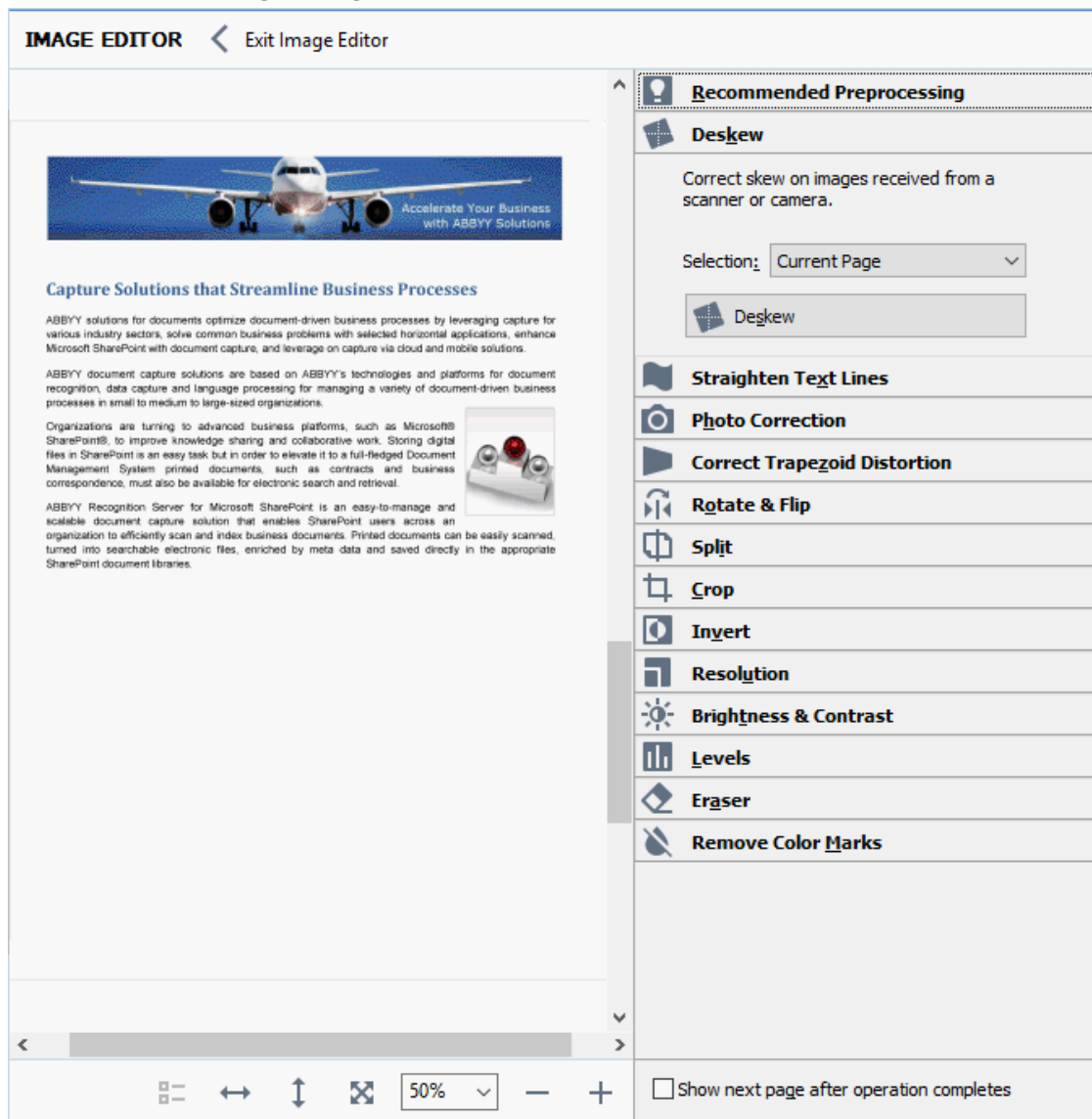
Distorted text lines, skew, noise, and other defects commonly found in scanned images and digital photos can lower OCR quality. ABBYY FineReader provides a variety of [automated](#)²⁹⁰ and [manual](#)¹⁷⁹ tools for removing these defects.

How to edit images manually

If you disabled automatic preprocessing features or want to preprocess specific pages, you can use the Image Editor to manually edit page images.

Follow the instructions below to edit an image manually:

1. Open the OCR Editor and then open the Image Editor:
2. Click  **Edit Image** on the toolbar of the **Image** pane, or
3. Click **Edit > Edit Page Images...**



4. The **IMAGE EDITOR** will open and display the currently selected page. The rightmost panel of the Image Editor contains tools for editing images.

5. Click the tool you want to use and apply it to the image. The resulting changes will be displayed in the **Image** pane. Most of the tools can be applied both to specific pages and to all of the pages in the document. You can specify which pages you want to edit using the **Selection** drop-down list of the tool, where you can select all odd/even pages, the current page or the selected pages if multiple pages are selected in the **PAGES** pane.
6. After you finish editing images, click the **Exit Image Editor** button at the top of the Image Editor.

The image editor contains the following tools:

- **Recommended Preprocessing**

Depending on the type of your image, the program will automatically determine and apply the necessary corrections. Corrections that may be applied include noise and blur removal, color inversion to make the background color lighter than the text, skew correction, straightening of text lines, correction of trapezoid distortions, and cropping of image borders.

- **Deskew**

Corrects image skew.

- **Straighten Text Lines**

Straightens any curved text lines on the image.

- **Photo Correction**

Tools in this group let you straighten text lines, remove noise and blur, and change the document's background color to white.

- **Correct Trapezoid Distortion**

Corrects trapezoid distortions and removes image edges that don't contain any useful data. When this tool is selected, a blue grid appears on the image. Drag the grid's corners to the corners of the image so that the grid's horizontal lines become parallel to the text lines. Click the **Correct** button to apply the changes.

- **Rotate & Flip**

Tools in this group let you rotate images and flip them vertically or horizontally to get the text on the image facing in the right direction.

- **Split**

Tools in this group let you split the image into parts. This can be useful if you are scanning a book and need to split facing pages.

- **Crop**

Removes image edges that don't contain any useful information.

- **Invert**

Inverts image colors. This can be useful if you're dealing with non-standard text coloring (light text on a dark background).

- **Resolution**

Changes the resolution of the image.

- **Brightness & Contrast**

Changes the brightness and contrast of the image.

- **Levels**

This tool lets you adjust the color levels of the images by changing the intensity of shadows, light, and halftones.

To increase the contrast of an image, move the left and right sliders on the **Input levels** histogram. The range of colors between lightest and darkest is divided into 255 increments. The left slider sets the color that will be considered to be the blackest part of the image, and the right slider sets the color that will be considered to be the whitest part of the image. Moving the middle slider to the right will darken the image, and moving it to the left will lighten the image.

Adjust the output level slider to decrease the contrast of the image.

- **Eraser**

Erases a part of the image.

- **Remove Color Marks**

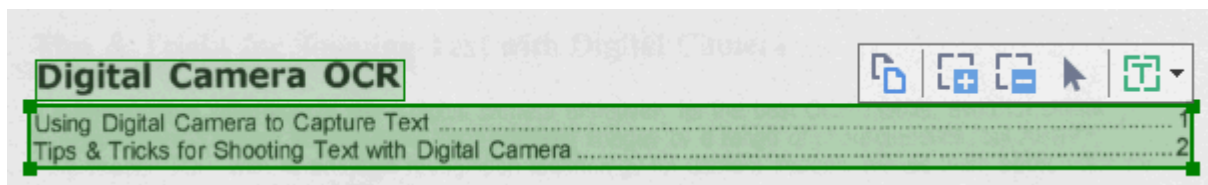
Removes any color stamps and marks made in pen to facilitate the OCR of the text obscured by such marks. This tool is intended for scanned documents with a white background, and should not be used on digital photos and documents with color backgrounds.


If areas are detected incorrectly

ABBYY FineReader analyzes page images prior to OCR and detects different types of areas on these images, specifically text, picture, background picture, table, and barcode areas. This analysis determines which areas will be recognized and in what order. In the user interface, different area types are distinguished by the colors of their borders.

If you click on an area, it will be highlighted and will become [active](#)^[314]. You can also navigate areas by pressing the Tab key. The areas' numbers determine the order in which they are selected when the Tab key is pressed. By default, these area numbers are not visible in the **Image** pane, but you can view them in the **Area Properties** pane of each area. Area numbers will appear on areas when the **Order Areas** tool is selected.

The tools for drawing and editing areas manually can be found on the toolbar at the top of the **Image** pane and on the pop-up toolbars of the text, picture, background picture, and table areas (select an area to view its pop-up toolbar).



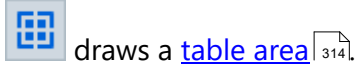
 Once you have adjusted the position or changed the type of an area, be sure to recognize the image again.

You can use area editing tools to:

- [Create a new area](#)^[182]
- [Adjust area borders](#)^[183]
- [Add or remove parts of areas](#)^[183]
- [Select one or more areas](#)^[184]
- [Move areas](#)^[184]
- [Reorder areas](#)^[184]
- [Delete areas](#)^[184]
- [Change the orientation of text in an area](#)^[184]
- [Change the color of area borders](#)

Creating a new area

1. Select one of the tools on the toolbar at the top of the **Image** pane:



2. Hold down the left mouse button and move the mouse pointer to draw an area.


Tip. New areas can be drawn without selecting a tool from the **Image** pane toolbar. You can draw an area on the image using one of the following key combinations:

- Ctrl+Shift draws a text area.
- Alt+Shift draws a picture area.
- Ctrl+Alt draws a table area.
- Ctrl+Shift+Alt draws a background picture area.



You can change the type of an area. Right-click the area whose type you want to change, click **Change Area Type To** on the shortcut menu, and select the desired area type.

Adjusting area borders

1. Place the mouse pointer on an area border.
2. Hold down the left mouse button drag the border in the desired direction.

 You can simultaneously adjust the vertical and horizontal borders of an area by placing the mouse pointer on a corner of the area.

Adding/removing area parts








1. Select the  or  tool on the toolbar of a text, picture or background picture area.
2. Place the mouse pointer inside an area and select a part of the image. This segment will be added to or deleted from the area.
3. Adjust the area border if necessary.

Note:

1. These tools are only available for text, picture, and background picture areas. Area segments cannot be added to or deleted from table or barcode areas.

- Area borders can also be adjusted by using sizing handles. The resulting segments can be dragged in any direction using the mouse. To add a new sizing handle, place the mouse pointer on the desired point on the border while holding down Ctrl+Shift (this will change the mouse pointer to crosshairs) and click the border. A new sizing handle will appear on the area border.


Selecting one or more areas


- Select the , , , , ,  or  tool on the toolbar at the top of the **Image** pane and click the areas you want to select while holding down the Ctrl key. To remove an area from the selection, click it again.

Moving an area


- Select an area and drag it while holding down the Ctrl key.

Reordering areas

- Select the  tool on the toolbar at the top of the **Image** pane or click **Area > Reorder Areas**.
- Select the areas in the order in which their content should appear in the output document.


 The areas are automatically numbered from left to right during page analysis, regardless of the direction of the text on the image.

Deleting an area

- Select the areas you want to delete and press the Delete key.
- Select the areas you want to delete, right-click one of them, and click **Delete** on the shortcut menu.
- Select the  tool and click the areas you want to delete.

To delete all areas:

- Right-click anywhere inside the **Image** pane and click **Delete Areas and Text** on the shortcut menu.

 Deleting an area from an image that has already been recognized will also delete all text from that area in the **Text** pane.

Changing text orientation

- Right-click an area and click **Properties** on the shortcut menu to display its properties in the **Area Properties** pane. In this dialog box, select the desired text orientation from the **Orientation** drop-down list.

For more information about editing text properties in text areas, see [Editing area properties](#)  186.

To change the colors of area borders:

1. Click **Tools > Options...** to open the **Options** dialog box and click the **Areas and Text** tab.
2. Select an area whose color you want to change and then select the desired color.

Editing area properties

When performing automatic document analysis, ABBYY FineReader detects different area types on document pages, such as table, picture, text, and barcode areas. The program also analyzes the document structure and identifies headings and other layout elements, such as headers, footers, and captions.

You can manually change incorrectly defined properties in some text and table areas.

1. Select an area in the **Image** or **Zoom** pane to display its properties in the **Area Properties** pane. This pane displays the following editable properties:

- **Language**

See [OCR languages](#) ²⁸⁷.

- **Function**

Displays the function of the text, i.e. whether it is a header or a footer, a footnote, etc. (applies only to text areas).

- **Orientation**

See [If vertical or inverted text was not recognized](#) ²⁰⁰.

- **Print type**

See [Document features to consider prior to OCR](#) ²⁸⁸.



- **Inversion**

See [If vertical or inverted text was not recognized](#) ²⁰⁰.

- **Direction of CJK text**

See [Working with complex-script languages](#) ²⁹⁸.

Note:

- a. Use the  /  buttons to navigate the properties dialog box if the **Image** pane is not wide enough to fit the entire dialog box.
 - b. Some properties of text in text areas can be changed using the shortcut menu of these areas.
2. After you have made the desired changes, be sure to recognize the document again so that the changes you made to the areas are reflected in the recognized text.

 For more information about areas, see [Editing areas](#) ¹⁸².

If the complex structure of a paper document is not reproduced



Before running the OCR process, ABBYY FineReader PDF 15 analyzes of the logical structure of the document and detects areas containing text, pictures, tables, and barcodes. The program then relies on this analysis to identify which parts of the image need to be recognized and the order in which they should be recognized. This information helps recreate the formatting of the original document.




By default, ABBYY FineReader PDF 15 will analyze documents automatically. In the case of very complex layouts, the program may occasionally make mistakes when determining the type of an area type or locating it's borders. It is often easier to correct faulty areas manually rather than drawing all areas anew.

Use the following tools and commands to correct areas:

- The manual area adjustment tools on the toolbar at the top of the **Image** pane.
- The shortcut menu commands available by right-clicking the selected area in the **Image** pane or the **Zoom** pane.
- Commands on the **Area** menu.

Make sure you recognize the document again after making the desired adjustments, so that the changes you have made to the areas are reflected in the recognized text.

 For more information about areas, see [Editing areas](#) .

OCR settings, area properties, and selected saving options also have an effect on how well the layout of the original document is retrained. **See also:** [OCR options](#) , [Editing area properties](#) , [Saving OCR results](#) .

If you are processing a large number of documents with identical layouts

If you are processing a large number of documents with identical layouts (e.g. forms or questionnaires), analyzing the layout of every page will be very time consuming. To save time, you can analyze only one document in a set of similar documents and save the detected areas as a template. Then you can use this template for the other documents in the set.

To create an area template:

1. Open an image in the OCR Editor and either let the program analyze the layout automatically or draw the areas manually.
2. Click **Area > Save Area Template....** In the dialog box that opens, specify a name for the area template and click **Save**.



To be able to use an area template, you must scan all the documents in the set using the same resolution value.

To apply an area template:

1. In the **PAGES** pane, select the pages to which you want to apply the template.
2. Click **Area > Load Area Template....**
3. In the **Open Area Template** dialog box, select the desired template file (*.blk).
4. In the same dialog box, next to **Apply to**, select **Selected pages** to apply the template to the selected pages.



Tip. If you want to apply the template to all pages in the document, select **All pages**.

5. Click **Open**.

If tables and pictures are not detected

If a table is not detected

[Table areas](#)³¹⁴ contain tables and text that is arranged in a table-like manner. If the program fails to correctly draw a table area around a table, use the **Table** tool to draw the area manually.

1. Click  on the toolbar at the top of the **Image** pane and use the mouse pointer to draw a table area around the table.
2. Right-click the table and click **Analyze Table Structure** on the shortcut menu, or click  on the pop-up toolbar of the table area.
3. Use the pop-up toolbar, the shortcut menu of the table area, or the commands on the **Area** menu to edit the results.
4. Run the OCR process again.

You can also assign the **Table** type to an area of a different type. To do this, right-click the area and click **Change Area Type To > Table** on the shortcut menu.

If ABBYY FineReader failed to correctly detect the rows and columns in a table automatically, you can adjust the layout manually and run the OCR process again.

- You can use commands on the **Area** menu and the shortcut menu of a table area to:
 - **Analyze Table Structure** (automatically analyzes the structure of a table and saves you the trouble of drawing vertical and horizontal separators manually).
 - **Split Cells, Merge Cells, Merge Rows** (allow you to correct any wrongly identified rows or columns).
- Use the pop-up toolbar of the selected table area to add a horizontal or vertical separator, delete table separators, analyze table structure, split table cells, or merge table cells or rows. To do this, click the table area and then click the appropriate tool on the pop-up toolbar:






Tip. Click the  tool on the pop-up toolbar to select objects.

Note:


1. The cell splitting command can only be applied to table cells that were previously merged.
2. To merge or split table cells or rows, select them on the image and then click the appropriate tool or menu command.
3. If the table contains vertical text cells, you may need to change the text properties first.
4. If a table cell only contains an image, select the **Treat selected cells as picture** option on the **Area Properties** pane (to open this pane, right-click an area and click **Properties** on the shortcut menu).


If a cell contains a combination of images and text, select the image to turn it into a dedicated area inside the cell.

 **See also :**

- [If vertical or inverted text was not recognized](#) 
- [Editing areas](#) 
- [Editing area properties](#) 


If a picture is not detected

[Picture areas](#)  contain pictures. You can also use picture areas for text fragments that you don't want to be recognized. If the program fails to correctly draw a picture area around a picture, use the **Picture** tool to draw the area manually.


1. Select the  tool on the toolbar at the top of the **Image** pane and use the mouse pointer to draw a picture area around the picture.

2. Run the OCR process again.

If there is text printed over a picture in your document, draw a [background picture](#)³¹⁴ area around the picture.


1. Select the  tool on the toolbar at the top of the **Image** pane and use the mouse pointer to draw a background picture area around the background picture.
2. Run the OCR process again.

You can also assign the **Picture** or **Background Picture** type to an area of a different type that was detected automatically. To do this, right-click the area whose type you want to change and click **Change Area Type To > Picture** (or **Background Picture**) on the shortcut menu.

 For more on areas, area types, and how to edit them, see [Editing areas](#)¹⁸².

If a barcode is not detected

[Barcode areas](#)³¹⁴ contain barcodes. If your document contains a barcode that you would like to render as a sequence of letters and digits rather than as an image, select the barcode and change the area type to **Barcode**.

 Barcode recognition is disabled by default. To enable it, click **Tools > Options...** to open the **Options** dialog box, click the **OCR** tab, and select the **Convert barcodes into strings** option.


To draw a barcode area and recognize it:

1. Draw an area around a barcode in the **Image** or **Zoom** pane.
2. Right-click the area and click **Change Area Type To > Barcode** on the shortcut menu.
3. Run the OCR process.

ABBYY FineReader PDF 15 can read the following types of barcode:

- Code 3 of 9
- Check Code 3 of 9
- Code 3 of 9 without asterisk
- Codabar
- Code 93
- Code 128
- EAN 8
- EAN 13
- IATA 2 of 5
- Interleaved 2 of 5
- Check Interleaved 2 of 5
- Matrix 2 of 5
- Postnet
- Industrial 2 of 5
- UCC-128
- UPC-A
- UPC-E

- PDF417
- Aztec Code
- Data Matrix
- QR code
- Patch code

 The default barcode type is **Autodetect**, which means that barcode types are to be detected automatically. However, not all barcode types can be detected automatically, and sometimes you may need to select the appropriate type manually on the [Area Properties](#)¹⁶⁷ pane.

ABBYY FineReader can automatically detect the following types of barcode: Code 3 of 9, Code 93, Code 128, EAN 8, EAN 13, Postnet, UCC-128, UPC-E, PDF417, UPC-A, QR code.

If an incorrect font is used or some characters are replaced with "?" or "□"

If you see "?" or "□" instead of letters in the **Text** pane, check to see if the fonts selected to display the recognized text contain all the characters used in your text.

 **See also:** [Required fonts](#)³⁰⁴


You can change the font of a recognized text without running the OCR process again.

To change the font in a short document:

1. Select a text fragment where some characters have the wrong font.
2. Right-click the selection and click **Properties** on the shortcut menu.
3. Select the desired font from the **Font** drop-down list in the **Text Properties** pane. The font in the selected text fragment will change accordingly.

To change the font in a long document [where styles are used](#)²⁰⁵:

1. Click **Tools > Style Editor...**
2. In the **Style Editor** dialog box, select the style you want to edit and change its font.
3. Click **OK**. The font in all of the text fragments using this style will change accordingly.

 If an OCR project was recognized or edited on another computer, the text in the document may be displayed incorrectly on your computer. If this is the case, make sure that all the fonts used in this OCR project are installed on your computer.

If your printed document contains non-standard fonts

If a document you want to recognize contains decorative fonts or special characters (e.g. mathematical symbols), we recommend using the training mode to improve OCR accuracy.


✎ It is not advisable to use the training mode in other cases, as the gains in OCR quality will be insignificant compared to the time and effort you will spend on training.

In training mode, a [user pattern](#)³¹⁴ is created, which can be used when performing OCR on the entire text.

- [Using user patterns](#)¹⁹⁴
- [Creating and training a user pattern](#)¹⁹⁴
- [Selecting a user pattern](#)¹⁹⁶
- [Editing a user pattern](#)

Using user patterns

To use a user pattern to recognize a document:


1. Click **Tools > Options...** to open the **Options** dialog box and click the **OCR** tab.
2. Select the **Use user patterns** option.
 - ✎ If the **Also use built-in patterns** option underneath the **Use user patterns** option is selected, ABBYY FineReader will use its built-in patterns in addition to any user patterns you create.
3. Click the **Pattern Editor...** button.
4. In the **Pattern Editor** dialog box, select a pattern and click **OK**.
5. Click the  **Recognize** button on the main toolbar at the top of the OCR Editor window.

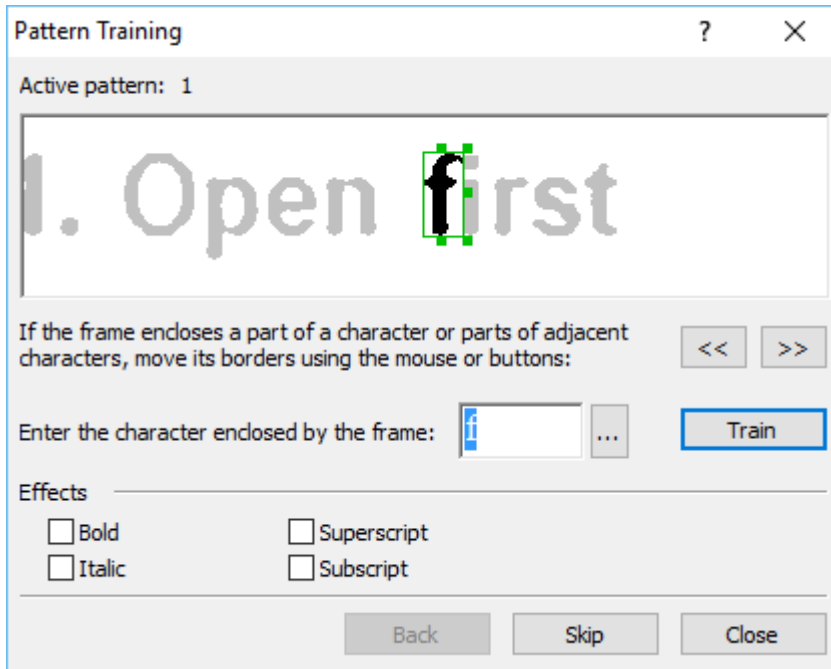
Creating and training a user pattern


To train a user pattern to recognize new characters and ligatures:

1. Click **Tools > Options...** to open the **Options** dialog box and click the **OCR** tab.
2. Select the **Use training to recognize new characters and ligatures** option.
 - ✎ If the **Also use built-in patterns** option underneath the **Use training to recognize new characters and ligatures** option is selected, ABBYY FineReader will use its built-in patterns in addition to any user patterns you create.
3. Click the **Pattern Editor...** button.
 - ✎ Pattern training is not supported for Asian languages.


4. In the **Pattern Editor** dialog box, click the **New...** button.
5. In the **Create Pattern** dialog box, specify a name for the new pattern and click **OK**.
6. Click **OK** in the **Pattern Editor** dialog box and then click **OK** in the **Options** dialog box.

7. Click the  **Recognize Page** button in the toolbar at the top of the **Image** pane.
 If the program encounters a character it does not recognize, the **Pattern Training** dialog will open and display this character.



8. Teach the program to read new **characters** and **ligatures**.
 A ligature is a combination of two or three characters that are "glued together" (for example, fi, fl, ffi, etc.) and are difficult for the program to separate. In fact, better results can be obtained by treating them as single compound characters.
 Words printed in bold or italic type or words in superscript/subscript may be retained in the recognized text by selecting the corresponding options under **Effects**.
 To go back to a previously trained character, click the **Back** button. The frame will jump to its previous location and the latest trained "character image - keyboard character" pairing will be removed from the pattern. The **Back** button navigates between the characters of one word and will not navigate between words.

Important!

- You can only train ABBYY FineReader PDF 15 to read the characters included in the alphabet of the OCR language. To train the program to read characters that cannot be entered from the keyboard, use a combination of two characters to denote these non-existent characters or copy the desired character from the **Insert Character** dialog box (click  to open this dialog box).

- Each pattern may contain up to 1,000 new characters. However, avoid creating too many ligatures, as this may adversely affect OCR quality.

Selecting a user pattern

ABBYY FineReader lets you use [patterns](#)^[314] to improve OCR quality.

1. Click **Tools > Pattern Editor...**
2. In the **Pattern Editor** dialog box, select one of the patterns in the list and click the **Set Active** button.

Some important points to remember:

1. Sometimes the program will not differentiate between very similar yet different characters and recognize them as one and the same character. For example, the straight ('), left ('), and right (') quotes will be stored in a pattern as a single character (straight quote). This means that left and right quotes will never be used in the recognized text, even if you try to train them.
2. For some character images, ABBYY FineReader PDF 15 will select the corresponding keyboard character based on the surrounding context. For example, an image of a small circle will be recognized as the letter O if there are letters immediately next to it, and as the number 0 if there are digits next to it.
3. A pattern can only be used for documents that have the same font, font size, and resolution as the document used to create the pattern.
4. You can save your pattern to a file and use it in other OCR projects. **See also:** [OCR projects](#)^[172].
5. To recognize texts set in a different font, be sure to disable the user pattern. To do this, click **Tools > Options...** to open the **Options** dialog box, click the **OCR** tab, and select the **Use built-in patterns** option.

Editing a user pattern

You may wish to edit your newly created pattern before launching the OCR process. An incorrectly trained pattern may adversely affect OCR quality. A [pattern](#)^[314] should contain only entire characters or [ligatures](#)^[314]. Characters with cut edges and characters with incorrect letter pairings should be removed from the pattern.

1. Click **Tools > Pattern Editor...**
2. In the **Pattern Editor** dialog box, select the pattern you want to edit and click the **Edit...** button.
3. In the **User Pattern** dialog box, select a character and click the **Properties...** button.

In the dialog box that opens:

- In the **Character** field, enter the letter that corresponds to the character.
- In the **Effects** field, specify the desired font effect (bold, italic, superscript or subscript).

To delete a character that has been trained incorrectly, click the **Delete** button in the **User Pattern** dialog box.

If your document contains many specialized terms

ABBYY FineReader PDF 15 checks recognized words against its internal dictionary. If your text contains too many specialized terms, abbreviations or proper names, you can improve OCR quality by adding them to a user dictionary.

1. Click **Tools > View Dictionaries...**
2. In the **User Dictionaries** dialog box, select the appropriate language and click **View...**
3. In the dialog box that opens, type the word you want to add and click the **Add word** button (or select a word you want to delete and click the **Delete** button).

If the dictionary already contains the word you are trying to add, a warning message will be displayed.



You can import user dictionaries created in ABBYY FineReader 9.0, 10, 11, 12 and 14:

1. Click **Tools > View Dictionaries...** button.
2. In the **User Dictionaries** dialog box, select the appropriate language and click the **View...**
3. In the dialog box that opens, click the **Import...** button and select the user dictionary you want to import (it will have the *.pmd, *.txt or *.dic extension).

If the program fails to recognize certain characters

ABBYY FineReader PDF 15 uses data about the [document language](#)²⁸⁷ when recognizing text. The program may fail to recognize some characters in documents with uncommon elements (e.g. code numbers) because the document language might not contain these characters. To recognize such documents, you can create a custom language that has all of the necessary characters. You can also [create groups of several OCR languages](#)¹⁹⁹ and use these groups when recognizing documents.

How to create a user language

1. Open the **Options** dialog box (click **Tools** > **Options...** to open this dialog box), click the **Languages** tab.
2. Click the **New...** button.
3. In the dialog box that opens, select the **Create a new language based on an existing one** option, select the language which you want to use as a base for the new language, and click **OK**.
4. The **Language Properties** dialog box will open. In this dialog box:
 - a. Type a name for your new language.
 - b. The language you selected in the **New Language or Group** dialog box is displayed in the **Source language** drop-down list. You can select a different language from this drop-down list.
 - c. The **Alphabet** contains the alphabet of the base language. If you want to edit the alphabet, click the  button.
 - d. The **Dictionary** option group contains several options for the dictionary that will be used by the program when recognizing text and checking the result:
 - **None**
The language will not have a dictionary.
 - **Built-in dictionary**
The program's built-in dictionary will be used.
 - **User dictionary**
Click the **Edit...** button to specify dictionary terms or import an existing custom dictionary or a text file with Windows-1252 encoding (terms must be separated by spaces or other characters that are not in the alphabet).
 Words from the user dictionary will not be marked as misspelled when the spelling in the recognized text is checked. They may be written in all lower-case or all upper-case letters, or may begin with an upper-case letter.

| Word in the dictionary | Words that will not be considered misspelled during a spelling check |
|------------------------|--|
| abc | abc, Abc, ABC |
| Abc | abc, Abc, ABC |
| ABC | abc, Abc, ABC |
| Abc | aBc, abc, Abc, ABC |

- The **Regular expression** allows you to create a user dictionary using regular expressions.

📄 **See also:** [Regular expressions](#)³⁰⁶

e. Languages can have several additional properties. To change these properties, click the **Advanced...** button to open the **Advanced Language Properties** dialog box, where you can specify:

- Characters that can begin or end a word
- Non-letter characters that appear separately from words
- Characters that may appear inside words but should be ignored
- Characters that cannot appear in texts that are recognized using this language (prohibited characters)
- The **Text may contain Arabic numerals, Roman numerals, and abbreviations** option

5. You can now select the newly created language when choosing OCR languages.

📄 For more on OCR languages, see [OCR languages](#)²⁸⁷

By default, the user language is saved in the folder of the OCR project. You can also save all user patterns and languages as a single file. To do this, open the **Options** dialog box (click **Tools** > **Options...** to open this dialog box), click the **OCR** tab, and then click the **Save Patterns and Languages...** button.

Creating a language group

If you are going to use a particular language combination regularly, you may wish to group the languages together for convenience.

1. Open the **Options** dialog box (click **Tools** > **Options...** to open this dialog box) and click the **Languages** tab.
2. Click the **New...** button.

3. In the **New Language or Group** dialog box, select the **Create a new group of languages** option, and click **OK**.
4. The **Language Group Properties** dialog box will open. In this dialog box, specify a name for the language group and select the languages you want to include in the group.
 - ✎ If you know that your text will not contain certain characters, you may wish to explicitly specify these so-called prohibited characters. Doing this can increase the speed and accuracy of OCR. To specify these characters, click the **Advanced...** button in the **Language Group Properties** dialog box and enter the prohibited characters in the **Prohibited characters** field.
5. Click **OK**.

The new group will appear in the drop-down list of languages on the [main toolbar](#)¹⁶⁵.

By default, user language groups are saved in the folder of the [OCR project](#)¹⁷². You can also save all user patterns and languages as a single file. To do this, open the **Options** dialog box (click **Tools** > **Options...** to open this dialog box), click the **OCR** tab, and then click the **Save Patterns and Languages...** button.

Tip. You can use the drop-down list of languages on the main toolbar to select a language group.

1. Select **More languages...** from the drop-down list of languages on the main toolbar.
2. In the **Language Editor** dialog box, select the **Specify OCR languages manually** option.
3. Select the desired languages and click **OK**.

If vertical or inverted text was not recognized

A fragment of recognized text may contain a large number of errors if the orientation of the fragment was detected incorrectly or if the text in the fragment is [inverted](#)³¹⁴ (i.e. light text is printed on a dark background).

To solve this problem:

1. In the **Image** pane, select the area or the table cell that contains vertical or inverted text.
2. Right-click the area and click **Properties** on the shortcut menu to open the **Area Properties** pane. Next:
 - Select the direction of the text from the **Direction of CJK text** drop-down list, or
 - Select **Inverted** from the **Inversion** drop-down list.
3. Run the OCR process again.

✎ For more information about areas, see [Editing areas](#)¹⁸².


Checking and editing texts

Once the OCR process is completed, the recognized text appears in the **Text** pane. The characters recognized with low confidence are highlighted, so that you can easily spot any OCR errors and correct them.







You can edit recognized text either directly in the **Text** pane or in the **Verification** dialog box (click **Recognize > Verify Text...** to open this dialog box). In the **Verification** dialog box, you can review low-confidence words, correct spelling errors, and add new words to the user dictionary.

ABBYY FineReader also allows you to change the formatting of output documents.

To change the formatting of recognized texts, use the buttons on the main toolbar of the **Text** pane and the buttons in the **Text Properties** pane (right-click anywhere in the **Text** pane and then click **Properties** on the shortcut menu to display this pane).

 When recognizing a text, ABBYY FineReader identifies the styles used in the text. All the identified styles are displayed in the **Text Properties** pane. You can edit the styles to change the formatting of the entire text. When saving recognized texts in DOCX, ODT or RTF, all the existing styles can be preserved.

See also :

- [Checking recognized text](#)  202
- [Using styles](#)  205
- [Editing hyperlinks](#)  206
- [Editing tables](#)  207
- [Removing confidential information](#)  207
- [Saving editable documents](#)  212




Checking recognized text

You can edit recognized text either directly in the [Text](#) pane or in the [Verification](#) dialog box (click **Recognize > Verify Text...** to open this dialog box). In the **Verification** dialog box, you can review low-confidence words, correct spelling errors, and add new words to the user dictionary.

Checking texts in the Text pane


You can check, edit, and format OCR results in the **Text** pane.

The toolbar of the **Text** pane contains buttons that let you check the spelling in recognized texts. Use

the  /  buttons to go to the next/previous low-confidence word or character. If the low-confidence characters are not highlighted, click the  button on the toolbar at the top of the **Text** window.

To verify a low-confidence word in the **Text** pane:

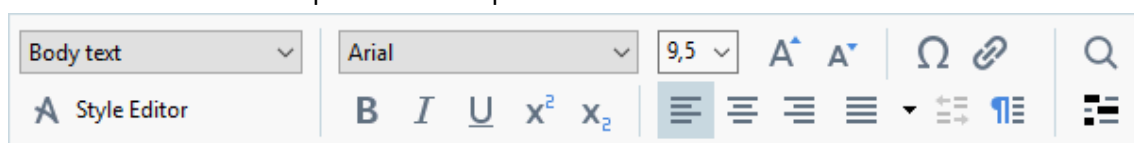
1. Click the word in the **Text** pane. The image area with this word will be highlighted in the **Image** pane. At the same time, the **Zoom** pane will display a magnified image of the word.
2. Correct the word in the **Text** window, if necessary.

Tip. You can insert symbols that are not available on your keyboard by clicking the  button. Alternatively, use the **Verification** dialog box.



This method is convenient when you need to compare the source and output documents.

The text formatting tools can be found:

- on the toolbar at the top of the **Text** pane




- in the **Text Properties** pane (right-click anywhere in the **Text** pane and then click **Properties** on the shortcut menu to display this pane)

Use the  /  buttons to move around the **Text Properties** pane if the **Text** window is too narrow and you cannot see the entire pane.

To learn how you can change the appearance of the main window and the tools available on its toolbars, see [OCR Editor Window](#) and [Toolbars](#).

Checking the recognized text in the Verification dialog box

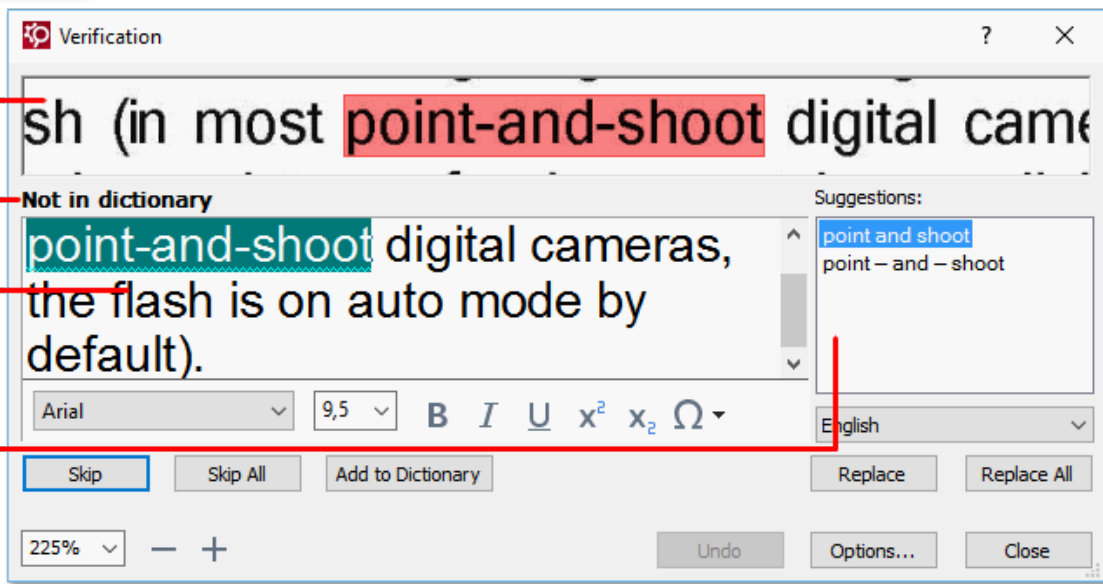
ABBYY FineReader offers a **Verification** dialog box, where you can check and correct words that contain low-confidence characters. To open the **Verification** dialog box, click  **Verify** on the main toolbar or click **Recognize > Verify Text...**

This box displays the part of the document image that contains the low-confidence word



Error type

Recognized text

Suggestions from the dictionary

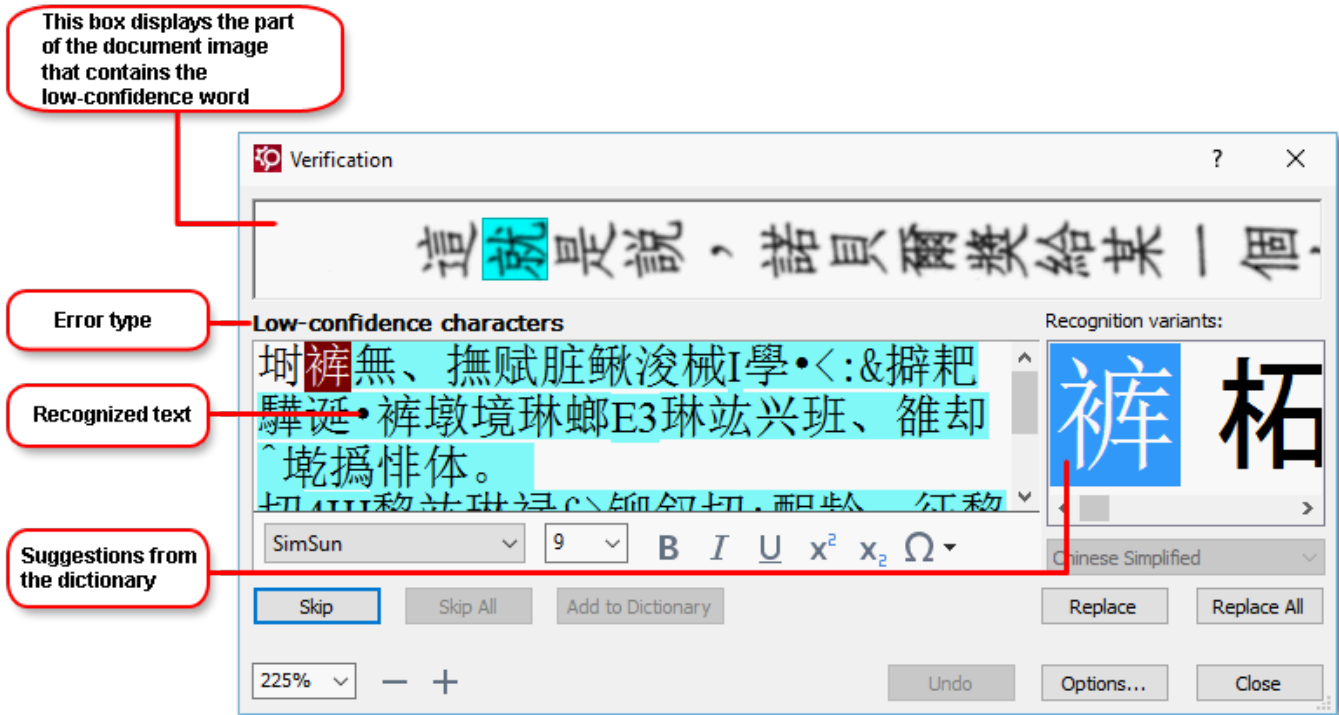


In the **Verification** dialog box, you can:

- Skip a highlighted word without making any changes. When you click **Skip**, the highlighting is removed.
Replace the highlighted word with one of the suggested variants.
- Simply select the correct suggestion in the box to the right and click **Replace**.
- Add the highlighted word to the dictionary by clicking the **Add to Dictionary** button. Next time the program encounters this word, it will no longer treat it as an error.
 **See also:** [Working with user dictionaries](#)²⁰⁴.
- Change the font and apply font effects.
- Insert non-keyboard characters into the text. Click the  and select **More Symbols...** In the dialog box that opens, from the **Subset** drop-down list, select the subset that contains the symbol that you need (e.g. Basic Greek or Currency Symbols). Next, double-click the character that you wish to insert. Alternatively, you can specify the Unicode code point of the character in the **Character code** field.

Tip. To change the checking options, click **Options...**

When checking texts written in Chinese, Japanese or Korean, the program will suggest similar-looking characters for characters recognized with low confidence.



Working with user dictionaries

When recognizing a text, ABBYY FineReader checks recognized words against its dictionaries. If your text contains too many specialized terms, abbreviations or proper names, you can improve OCR quality by adding them to a user dictionary.

📌 User dictionaries may not be available for some of the [supported languages](#)²⁷⁷.

To add a word to the user dictionary, do one of the following:

- In the **Verification** dialog box (click **Recognize** > **Verify Text...** to open this dialog box), click the **Add to Dictionary** button, or
- In the **Text** window, right-click the word you wish to add and then click **Add to Dictionary** on the shortcut menu



📌 When adding a word to a user dictionary, make sure that the right language is selected.

Using styles

When recognizing a text, ABBYY FineReader detects the styles and formatting used in the original document. These styles and formatting are reproduced in the output document. You can review and edit the document styles and create new styles in the **Text** pane.

To apply a style to a text fragment:

1. Select the desired text fragment in the **Text** pane.
2. Right-click the selected fragment and click **Properties** on the shortcut menu.
3. Select the desired style in the **Text Properties** pane.

 When saving recognized texts in DOCX, ODT or RTF, all the existing styles can be preserved. **See also:** [DOC\(X\)/RTF/ODT format](#) 

To create, change, and merge styles:

1. Click **Tools > Style Editor...**
2. In the **Style Editor** dialog box, select the desired style and modify its name, font, font size, character spacing, and scale.
3. To create a new style, click the **New** button. The newly created style will be added to the list of existing styles, where you can modify it.
4. To merge multiple styles into one, select the styles to merge and click the **Merge...** button. In the **Merge Styles** dialog box, specify the style into which to merge the selected styles.
5. Click **OK** to save the changes.


You can navigate between text fragments printed in identical styles. To do this, in the **Style Editor** dialog box, select the desired style and click **Previous Fragment** or **Next Fragment**.

Editing hyperlinks

ABBYY FineReader detects hyperlinks and recreates their destination addresses in the output document. Detected hyperlinks are underlined and displayed in blue.

When viewing the recognized document in the **Text** pane, rest the mouse pointer on a hyperlink to view its address. To follow a hyperlink, right-click it and click the **Open Hyperlink** command on its shortcut menu, or click the hyperlink while holding down the Ctrl key.

To add, delete or change the text or address of a hyperlink:

1. In the **Text** pane, select the text of the desired hyperlink.
2. To delete a hyperlink, right-click it and then click **Remove Hyperlink** on the shortcut menu.
3. To add a hyperlink or change the text of a hyperlink, right-click it and click the **Hyperlink...** command on its shortcut menu, or click  on the main toolbar at the top of the **Text** pane. In the **Edit Hyperlink** dialog box, you can:

- Edit the text of the link in the **Text to display** field.
- Select or change the hyperlink type in the **Link to** group:
 - Select **Web page** to link to an Internet page.
In the **Address** field, specify the protocol and the URL of the page (e.g. <http://www.abbyy.com>).
 - Select **Local file** to link to a file.
Click **Browse...** to browse for the file that the hyperlink will point to (e.g. file:///D:/MyDocuments/ABBYY FineReaderGuide.pdf).
 - Select **E-mail address** if you want users to be able to send an e-mail message to the address contained in the hyperlink by simply clicking it.
In the **Address** field, specify the protocol and the e-mail address (e.g. <mailto:office@abbyy.com>).

Editing tables

You can edit recognized tables in the **Text** pane. The following commands are available:


- Merge table cells
Use the mouse to select the table cells to be merged and click **Area > Merge Table Cells**.
- Split table cells
Click a table cell to split and click **Area > Split Table Cells**.
💡 This command can only be applied to table cells that have been previously merged.
- Merge table rows
Use the mouse to select the table cells to be merged and click **Area > Merge Table Rows**.
- Delete cell contents
Select the cell or cells whose contents you want to delete and press the Delete key.

✍ By default, the table editing tools are not displayed on the toolbar. You can add the table editing tools to the toolbar in the **Customize Toolbars and Shortcuts** dialog box (click **View > Toolbars > Customize...** to open this dialog box).

✍ For detailed instructions on how to add buttons to the toolbars, see [Toolbars](#) 165.

Removing confidential information

With ABBYY FineReader PDF 15, you can remove confidential information from recognized texts.


1. Click **Tools > Redaction Mode** or click the  button on the main toolbar at the top of the **Text** pane.
2. In the **Text** pane, use the marker to black out the text you wish to obliterate.

Tip. If you black out some characters by mistake, you can undo the last redaction by pressing Ctrl+Z on the keyboard or by clicking the **Undo** button on the main toolbar.

3. Save your document.

The redacted text will appear as dots in the output document. If the saving format you selected supports text and background colors, the redacted text fragments will appear as black rectangles.






To switch off the redaction mode, either

- Click the **Tools > Redaction Mode** once again, or
- Click the  button on the main toolbar once again.

Copying content from documents

ABBYY FineReader allows you to copy text, pictures, and tables from documents and paste them to other applications. You can copy content from scanned pages and images without recognizing the entire document or converting it to an editable format. The selected content will be copied to the Clipboard. You can then paste it into any application that supports pasting from the Clipboard.

To copy content:

1. Use the , ,  or  tool in the **Image** pane to select the fragment of the document you want to copy.
2. Right-click the fragment and click **Recognize and Copy Text** on the shortcut menu or click  button on the pop-up toolbar.
3. Paste the content into another application.

To save several pages:

1. Select the pages in the **PAGES** pane.
2. Right-click the selected pages, click **Save As**, and select a desired format, or select **Send To** and select the application into which you want to insert the recognized pages.

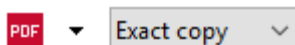
Saving OCR results

OCR results can be saved to a file, sent to another application or to the PDF Editor, copied to the Clipboard, or e-mailed. You can also send OCR results to Kindle.com, where they will be converted to the Kindle format and become available for download onto your Kindle device. You can save either the entire document, or selected pages only.

 Be sure to select the appropriate saving options before clicking **Save**.


To save recognized text:

1. On the main toolbar, click the arrow next to the **Save** button and select a document saving mode and page objects to preserve.



 Available file formats are listed beneath each mode.

There are five format saving modes:


- **Exact copy** produces a document whose formatting corresponds to that of the original. Recommended for documents with complex formatting, such as promotion booklets. Note, however, that this option limits your ability to change the text and format of the output document.
 - **Editable copy** produces a document whose formatting may differ slightly from that of the original. Documents produced in this mode are easy to edit.
 - **Formatted text** retains the fonts, font sizes, and paragraphs, but does not retain the exact spacing or locations of the objects on the page. The text produced will be left-aligned (texts in right-to-left scripts will be right-aligned).
 -  Vertical texts will be changed to horizontal in this mode.
 - **Plain text** does not retain text formatting.
 - **Flexible layout** produces an HTML document with the positions of the objects as close to the original as is technically possible.
2. On the [Format Settings](#)²⁶² tab of the **Options** dialog box, select the desired saving options and click **OK**.
 3. On the [main toolbar](#)¹⁶⁵, click the arrow to the right of the **Save** button and select the appropriate option, or use the commands on **File** menu.

 ABBYY FineReader allows you to save pages as images. **See also:** [Saving images](#)²¹⁷.










Supported applications:

- Microsoft Word 2016 (16.0), 2013 (15.0), 2010 (14.0), 2007 (12.0)
- Microsoft Excel 2016 (16.0), 2013 (15.0), 2010 (14.0), 2007 (12.0)

- Microsoft PowerPoint 2016 (16.0), 2013 (15.0), 2010 (14.0), 2007 (12.0)
- Apache OpenOffice Writer 4.1
- LibreOffice Writer 5.1
- Adobe Acrobat/Reader (8.0 and later)

 To ensure the best compatibility between ABBYY FineReader and the applications listed above, make sure you install the latest available updates for these applications.

 **See also :**

- [Saving in PDF](#)  ²¹¹
- [Saving editable documents](#)  ²¹²
- [Saving tables](#)  ²¹⁴
- [Saving e-books](#)  ²¹⁵
- [Saving in HTML](#)  ²¹⁶
- [Saving an image of a page](#)  ²¹⁷
- [Sending OCR results to the PDF Editor](#)  ²¹¹
- [E-mailing OCR results](#)  ²¹⁹
- [Sending OCR results to Kindle](#)  ²²⁰

Saving in PDF


ABBYY FineReader allows you to save entire PDF documents or selected pages. Various saving options are available.


- To save a PDF document that will allow users to select, copy, and edit its content, click the arrow next to the **Save As** button on the [main toolbar](#)¹⁶⁵ and select **Searchable PDF Document**. Alternatively, click **File > Save As > Save as Searchable PDF Document...**

The document will be saved as a searchable PDF. To change the saving options, click the **Options...** button in the saving dialog box and select desired saving options on the [PDF](#)²⁶³ tab.

- To save a PDF document that will not allow users to select, copy, and edit its content, click the arrow next to the **Save As** button on the [main toolbar](#)¹⁶⁵ and select **Image-Only PDF Document**. Alternatively, click **File > Save As > Save as Image-Only PDF Document...**



The document will be saved as an image-only PDF. To change the saving options, click the **Options...** button in the saving dialog box and select desired saving options on the [PDF](#)²⁶³ tab.

 To save only some pages of the document, on the **PAGES** pane, select the pages that you want to save and on the shortcut menu, click **Save As > Searchable PDF Document** (or **Image-Only PDF Document**).

 You can select additional saving options on the [Format Settings](#)²⁶² > **PDF** tab of the **Options** dialog box (click **Tools > Options...** to open this dialog box).


Saving editable documents


ABBYY FineReader allows you to save OCR results in editable formats. When choosing a format, consider how you intend to use the document.


- [Saving documents in DOC\(X\)/RTF/ODT](#) 
- [Saving documents in PPTX](#) 
- [Saving plain text \(TXT\)](#)



DOC(X)/RTF/ODT

To save your text in DOCX/RTF/ODT:

- Click the arrow next to the **Save As** button on the [main toolbar](#)  and select **Microsoft Word Document**, **RTF Document** or **ODT Document**. If the format that you need is not displayed in the list, select **Save in Other Formats...** and in the dialog that opens, select the required format. Alternatively, click **File > Save As** and select the desired saving format.


The document will be saved in the format that you specified. To change the saving options, click the **Options...** button in the saving dialog box and select desired saving options on the [DOC\(X\)/RTF/ODT](#)  tab.


 To save only some pages of the document, on the **PAGES** pane, select the pages that you want to save and on the shortcut menu, click **Save As > Microsoft Word Document. RTF Document ODT Document**


 You can select additional saving options on the [Format Settings](#)  > **DOC(X) / RTF / ODT** tab of the **Options** dialog box (click **Tools > Options...** to open this dialog box).



PPTX

To save your text in PPTX:

- Click the arrow next to the **Save As** button on the [main toolbar](#)  and select **Microsoft PowerPoint Presentation**. If the format that you need is not displayed in the list, select **Save in Other Formats...** and in the dialog that opens, select the required format. Alternatively, click **File > Save As > Microsoft PowerPoint Presentation**.

The document will be saved in the PPTX format. To change the saving options, click the **Options...** button in the saving dialog box and select desired saving options on the [PPTX](#)  tab.

 To save only some pages of the document, on the **PAGES** pane, select the pages that you want to save and on the shortcut menu, click **Save As > Microsoft PowerPoint Presentation**.


 You can select additional saving options on the [Format Settings](#)  > **PPTX** tab of the **Options** dialog box (click **Tools > Options...** to open this dialog box).


TXT

To save your text in TXT:

- Click the arrow next to the **Save As** button on the [main toolbar](#)¹⁶⁵ and select **TXT Document**. If the format that you need is not displayed in the list, select **Save in Other Formats...** and in the dialog that opens, select the required format. Alternatively, click **File > Save As > TXT Document**.

The document will be saved in the TXT format. To change the saving options, click the **Options...** button in the saving dialog box and select desired saving options on the [TXT](#)²⁷² tab.

 To save only some pages of the document, on the **PAGES** pane, select the pages that you want to save and on the shortcut menu, click **Save As > Text Document**.

 You can select additional saving options on the [Format Settings](#)²⁶² > **TXT** tab of the **Options** dialog box (click **Tools > Options...** to open this dialog box).

Saving tables


ABBYY FineReader allows you to save tables in the XLS, XLSX, and CSV formats.


XLS and XLSX

To save your text in XLS or XLSX:

- Click the arrow next to the **Save As** button on the [main toolbar](#)^[165] and select **Microsoft Excel Workbook**. If the format that you need is not displayed in the list, select **Save in Other Formats...** and in the dialog that opens, select the required format. Alternatively, click **File > Save As > Microsoft Excel Workbook**.

The document will be saved in the format that you specified. To change the saving options, click the **Options...** button in the saving dialog box and select desired saving options on the [XLS\(X\)](#)^[270] tab.

 To save only some pages of the document, on the **PAGES** pane, select the pages that you want to save and on the shortcut menu, click **Save As > Microsoft Excel Workbook**.


 You can select additional saving options on the [Format Settings](#)^[262] > **XLS(X)** tab of the **Options** dialog box (click **Tools > Options...** to open this dialog box).


CSV

To save your text in CSV:

- Click the arrow next to the **Save As** button on the [main toolbar](#)^[165] and select **CSV Document**. If the format that you need is not displayed in the list, select **Save in Other Formats...** and in the dialog that opens, select the required format. Alternatively, click **File > Save As > CSV Document**.

The document will be saved in the CSV format. To change the saving options, click the **Options...** button in the saving dialog box and select desired saving options on the [CSV](#)^[271] tab.

 To save only some pages of the document, on the **PAGES** pane, select the pages that you want to save and on the shortcut menu, click **Save As > CSV Document**.

 You can select additional saving options on the [Format Settings](#)^[262] > **CSV** tab of the **Options** dialog box (click **Tools > Options...** to open this dialog box).

Saving e-books

ABBYY FineReader PDF 15 allows you to scan paper books and convert them into the EPUB, FB2, and DjVu formats. You will be able to read the resulting e-books on tablets (including iPads), and on other mobile devices and [upload](#)^[220] them to your Kindle.com account.


 You can also save an e-book in the HTML format. For details, see [Saving in HTML](#)^[216].


Saving in FB2 or EPUB

To save your text in FB2 or EPUB:

- Click the arrow next to the **Save As** button on the main toolbar and select **FB2 Document** or **EPUB Document**. If the format that you need is not displayed in the list, click **Save in Other Formats...** and select the required format. Alternatively, click **File > Save As > FB2 Document** (or **EPUB Document**).

The document will be saved in the format that you specified. To change the saving options, click the **Options...** button in the saving dialog box and select desired saving options on the [EPUB/FB2](#)^[274] tab.

 To save only some pages of the document, on the **PAGES** pane, select the pages that you want to save and on the shortcut menu, click **Save As > Electronic Publication (EPUB)** (or **FictionBook (FB2)**).


 You can select additional saving options on the [Format Settings](#)^[262] > **EPUB / FB2** tab of the **Options** dialog box (click **Tools > Options...** to open this dialog box).


Saving in DjVu

To save your text in DjVu:

- Click the arrow next to the **Save As** button on the [main toolbar](#)^[165] and select **DjVu Document**. If the format that you need is not displayed in the list, select **Save in Other Formats...** and in the dialog that opens, select the required format. Alternatively, click **File > Save As > DjVu Document**.

The document will be saved in the format that you specified. To change the saving options, click the **Options...** button in the saving dialog box and select desired saving options on the [DjVu](#)^[275] tab.

 To save only some pages of the document, on the **PAGES** pane, select the pages that you want to save and on the shortcut menu, click **Save As > DjVu Document**.


 You can select additional saving options on the [Format Settings](#)^[262] > **DjVu** tab of the **Options** dialog box (click **Tools > Options...** to open this dialog box).


Saving in HTML

To save your text in HTML:

- Click the arrow next to the **Save As** button on the [main toolbar](#)¹⁶⁵ and select **HTML Document**. If the format that you need is not displayed in the list, select **Save in Other Formats...** and in the dialog that opens, select the required format. Alternatively, click **File > Save As > HTML Document**.

The document will be saved in the format that you specified. To change the saving options, click the **Options...** button in the saving dialog box and select desired saving options on the [HTML](#)²⁷³ tab.

 To save only some pages of the document, on the **PAGES** pane, select the pages that you want to save and on the shortcut menu, click **Save As > HTML Document**.

 You can select additional saving options on the [Format Settings](#)²⁶² > **HTML** tab of the **Options** dialog box (click **Tools > Options...** to open this dialog box).

Saving images

ABBYY FineReader allows you to save both recognized text and page images, including scans.

To save one or more images:

1. In the **PAGES** pane, select the pages you want to save.
2. Click **File > Save As > Page Images....**
3. In the dialog box that opens, select the disk and folder to save the file to.
4. Select an image format you want to save the image in.
 - 💡 If you want to save multiple pages to one file, choose the TIFF format and select **Create a single file for all pages**.
 - 📄 For details, see [Supported document formats](#) ²⁸⁴.
5. Specify a file name and click **Save**.

Tip. When saving in TIFF, you can select the image format and compression method. Image compression lets you decrease file size. Methods used for image compression differ by compression rate and data loss. Two factors define the choice of compression method: the resulting image quality and file size.

ABBYY FineReader offers the following compression methods:


- **ZIP** No data loss occurs. This compression algorithm is used for images containing large sections in one color. For example, this compression algorithm is suitable for screenshots and black-and-white images.
- **JPEG** This compression algorithm is used for gray and color images such as photos. This method provides high-density compression but causes data loss and results in poorer image quality (blurred outlines and poor color palette).
- **CCITT Group 4** No data loss occurs. This compression algorithm is commonly used for black-and-white images created in graphical programs or for scanned images. **CCITT Group 4** is a commonly used compression method that is suitable for virtually all images.
- **Packbits** No data loss occurs. This compression algorithm is used for black-and-white scans.
- **LZW** No data loss occurs. This compression algorithm is used for graphic design and grayscale images.


When saving to image-only PDF, the program uses the parameters you specified on the [Format Settings](#) ²⁶² > **PDF** tab of the **Options** dialog box (click **Tools > Options...** to open this dialog box).

Sending OCR results to the PDF Editor

ABBYY FineReader allows you to send OCR results from the OCR Editor to the [PDF Editor](#)⁴⁸, where you can add notes and comments to the document and use other features offered by ABBYY FineReader for working with PDF documents.

To send OCR results to the PDF Editor:


- On the toolbar, click the arrow next to the  **Send** button and select **Send to PDF Editor...**
- Click **File > Send To > PDF Editor...**

Once you are done working with the document in the PDF Editor, you can send it back to the OCR Editor. To do this, on the toolbar at the top of the OCR Editor window, click the arrow next to the  **Recognize** button and from the drop-down list, select **Recognize and Verify in OCR Editor**. To send only some pages of the document, on the **PAGES** pane, select the pages that you want to send, right-click them and click **Send Selected Pages to OCR Editor** on the shortcut menu.

 When sending the document back to the OCR Editor, the following document objects will be lost:

- attachments
- bookmarks
- comments
- annotations

E-mailing OCR results

ABBYY FineReader allows you to e-mail OCR results in any of the [supported formats](#)  with the exception of HTML.

To e-mail a document:

1. Click **File > E-mail > Document....**
2. In the dialog box that opens, select:
 - A saving format
 - One of the three saving options: save all pages to one file, save each page to a separate file, or split the document into files based on blank pages
3. Click **OK**. An e-mail message with an attachment will be created. Specify the recipient and send the message.


You can also e-mail the images of document pages.

To e-mail page images:

1. Click **File > E-mail > Images....**
2. In the dialog box that opens, select:
 - A saving format
 - **Send as multi-page image file** if you want to send the images as a multi-page image file.
3. Click **OK**. An e-mail message with an attachment (or attachments) will be created. Specify the recipient and send the message.

Sending OCR results to Kindle

ABBYY FineReader allows you to send OCR results to the Kindle.com server, where they will be converted into the Kindle format and made available for download onto your Kindle device.

 To use this feature, you need a Kindle account on Kindle.com.

1. Click the arrow next to the **Save As** button on the [main toolbar](#)¹⁶⁵ and then click **Send to Amazon Kindle...**
2. In the dialog box that opens, specify:
 - The address of your Kindle account
 - One of the three saving options: save all pages to one file, save each page to a separate file, or split the document into files based on blank pages
 - A name for the file
3. Click **OK**.

An e-mail message with an attachment (or attachments) will be created. Send this e-mail message to Kindle.com and the converted file will soon be available for download onto your Kindle device.

Integration with other applications

ABBYY FineReader integrates with Windows Explorer, allowing you to initiate the processing of PDF documents, office documents, and image files by simply right-clicking them.

You can also make and save changes to PDF documents stored on a Microsoft SharePoint server.

Chapter contents

- [Integration with Windows Explorer](#)²²¹
- [Integration with Microsoft SharePoint](#)²²⁴

Integration with Windows Explorer

ABBYY FineReader integrates with Windows Explorer. As a result, ABBYY FineReader commands will appear when you right-click a file in any of the [supported formats](#)^[284], enabling you to open and edit PDF documents, perform OCR on image files, convert files, combine multiple files into one PDF, and compare files.

To open and process a PDF directly from Windows Explorer:

1. In Windows Explorer, select one or more PDF files.
2. Right-click the files(s) and select one of the following commands:
 - **Edit with ABBYY FineReader PDF 15** opens PDF files in the PDF Editor
 - ✎ For more information on working with PDF documents in the PDF Editor, see [Working with PDF documents](#)^[48]
 - **Convert with ABBYY FineReader PDF 15** - converts PDF files into various formats:
 - **Convert to searchable PDF document**
 - **Convert to image-only PDF document**
 - **Convert to Microsoft Word document**
 - **Convert to Microsoft Excel document**
 - **Convert to another format**
 - **Open in OCR Editor** opens PDF files in the OCR Editor.
 - ✎ For more information on working with the OCR Editor, see [Working with the OCR Editor](#)^[163]
 - ✎ If you select multiple files in Windows Explorer, clicking **Convert with ABBYY FineReader PDF 15** on the shortcut menu will open the **New Task** window. For more information on the available conversion settings, see [Creating PDF documents](#)^[21], [Creating Microsoft Word documents](#)^[23], [Creating Microsoft Excel documents](#)^[25], and [Other formats](#)^[27]
 - **Compare with...** opens PDF files in the ABBYY Compare Documents application.
 - ✎ For more information about comparing documents, see [ABBYY Compare Documents](#)^[234]
 - **Combine into one PDF...** combines multiple files into one PDF.
 - **Compare documents...** compares two versions of the same document.


To process files in editable formats directly from Windows Explorer:

1. In Windows Explorer, select one or more files in editable formats.
2. Right-click the files(s) and select one of the following commands:

- **Convert to PDF with ABBYY FineReader PDF 15...** converts files to PDF. When creating PDF documents from Microsoft Word, Microsoft Excel, and Microsoft PowerPoint files, ABBYY FineReader will preserve the structure of the original document, and any bookmarks and hyperlinks.
- **Convert to PDF and send...** converts files to PDF and attaches them to an e-mail message.
- **Compare with...** opens files in the ABBYY Compare Documents application.
- **Combine into one PDF...** combines multiple files into one PDF.
- **Compare documents...** compares two versions of the same document.

To process image files directly from Windows Explorer:


1. In Windows Explorer, select one or more image files.
2. Right-click the files(s) and select one of the following commands:
 - **Convert with ABBYY FineReader PDF 15** converts image files into various formats
 - **Convert to searchable PDF document**
 - **Convert to image-only PDF document**
 - **Convert to Microsoft Word document**
 - **Convert to Microsoft Excel document**
 - **Convert to another format**
 - **Open in OCR Editor** opens image files in the OCR Editor.
 - **Combine into one PDF...** combines multiple files into one PDF.
 - **Compare with...** opens image files in the ABBYY Compare Documents application.

 The commands actually available to you on the Windows Explorer shortcut menu depend on the number and format of the selected files.

If you don't see the ABBYY FineReader commands on the Windows Explorer shortcut menu...

If you can't see the ABBYY FineReader commands on the Windows Explorer shortcut menu, this means that you chose not to integrate ABBYY FineReader with Windows Explorer when installing the program.

To integrate ABBYY FineReader with Windows Explorer:

1. Click **Start** > **Settings** > **Control Panel** (or click **Start**  > **Settings** > **System** > **Apps & features** in Windows 10) and then click **Programs and Features**.
2. In the list of installed applications, select **ABBYY FineReader** and click **Change/Remove**.
3. Follow the instructions of the setup program.

Integration with Microsoft SharePoint


ABBYY FineReader allows you to open, edit, and save files stored in Microsoft SharePoint document libraries.

To process a PDF document stored on a Microsoft SharePoint server:


1. Open the PDF document in the ABBYY FineReader PDF Editor.
2. Check out the document to prevent other users from changing it. To do this, click **File > SharePoint® > Check Out.**
 - ✎ If the document has already been checked out by another user, save a copy of the document on your computer.
3. Edit the PDF document.
 - ✎ For more information on working with PDF documents in the PDF Editor, see [Working with PDF documents](#)^[48].
4. Check in the document, so that other users can see your changes. To do this, click **File > SharePoint® > Check In....**
 - ✎ If you don't want to save the changes to the server, click **Discard Check Out....**
5. In the dialog box that opens, select **Version type** of the document if version control is enabled on the server and enter your comment.

Select the **Keep the document checked out after checking in the current version** option if you want to upload all of your changes to the server without checking in the document.
6. Click **Check In.**


💡 To integrate ABBYY FineReader with SharePoint installed on Microsoft Windows Server 2012/2008, you need to install the **Desktop Experience** component:

1. Click **Start**  **> Administrative Tools > Server Manager.**
2. In the **Server Manager** window, click **Manage > Add Roles and Features.**
3. The **Add Roles and Features Wizard** will open.
4. In the **Features** section, select the **Desktop Experience** item from the **User Interfaces and Infrastructure** drop-down list .
5. In the dialog box that opens, click **Add Features.**
6. In the **Add Roles and Features Wizard** window, click **Next > Install.**
7. After the component is installed, click **Close.**

Automating and scheduling OCR

- [Automating document processing with ABBYY FineReader](#)  ²²⁶

Processing multiple documents often involves repeating the same actions multiple times.

ABBYY FineReader includes [built-in automated tasks](#)  ¹⁴. If you need more flexibility, you can create custom automated tasks from a wide range of available processing steps.

- [Scheduled processing](#)  ²²⁹

ABBYY FineReader includes ABBYY Hot Folder, a scheduling agent that lets you process documents when your computer is not in use, e.g. overnight. Scheduled tasks can be created for specific folders. You can specify all the necessary image opening, OCR, and saving options for a task.

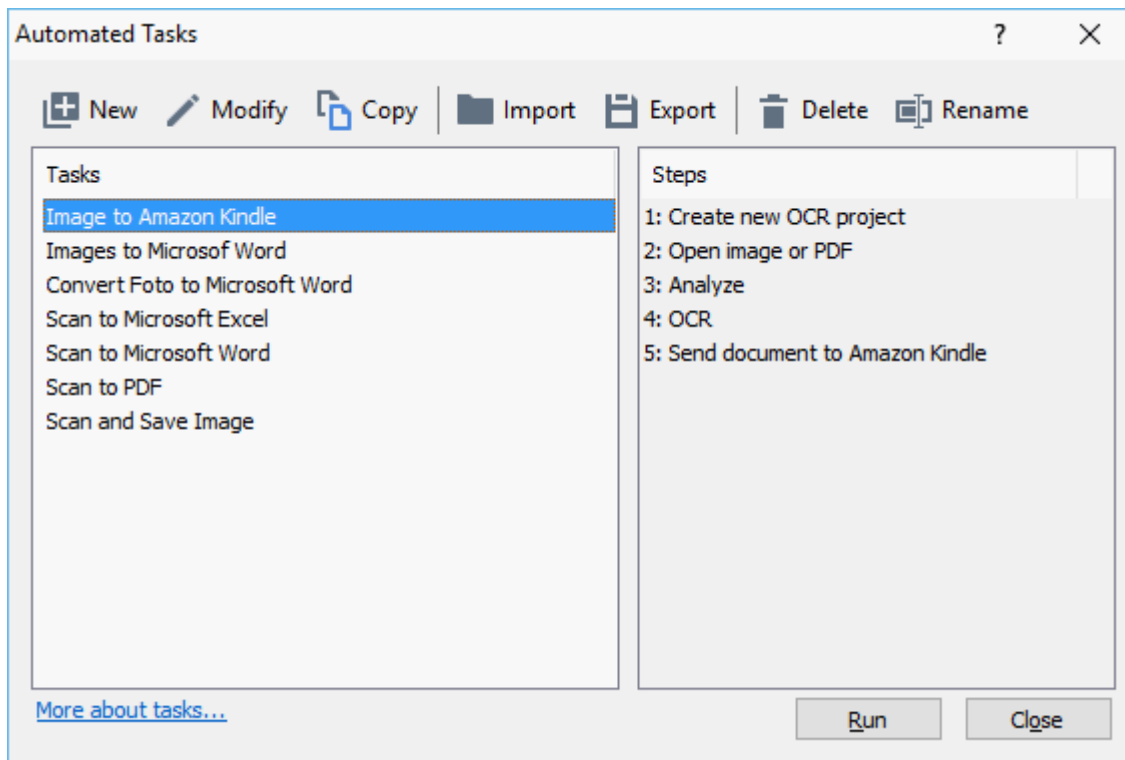
Automating document processing with ABBYY FineReader

(Not available in some versions of ABBYY FineReader. **See also:** <http://www.ABBYY.com/FineReader>)

In ABBYY FineReader, you can use built-in and custom automated tasks to process your documents. You can organize your tasks in the [Automated Tasks...](#)³¹⁴ dialog box.

- To open the **Automated Tasks** dialog box, click **Tools > Automated Tasks**.

The toolbar at the top of the **Automated Tasks** dialog box contains buttons for creating, modifying, copying, deleting, importing, and exporting tasks.



To process a document using an automated task, start the task in **Tasks** window.

Creating Custom Automated Tasks

You can create your own automated tasks if you need to include processing steps that are not available in the built-in automated tasks. The order of steps in an automated task must correspond to the order of processing operations in the OCR Editor.

1. On the toolbar, click **New**.
2. In the left-hand pane, choose an OCR project to be used:
 - **Create new OCR project**
If you choose this option, a new OCR project will be created when you start the task. You will also need to specify which document options to use when processing your documents: the global options specified in the program or the options specified in this particular task.

- **Select existing OCR project**

Select this option if you want the task to process images from an existing OCR project.

- **Use current OCR project**

Select this option if you want the task to process images from the current OCR project.

3. Choose how you will obtain images:

- **Open image or PDF**

Select this option if you want the task to process images or PDF documents from a particular folder (you will need to specify the folder in this case).

- **Scan**

Select this option if you are going to scan some pages (the current scanning settings will be used).

Note:

a. This step is optional if earlier you chose the **Select existing OCR project** or **Use current OCR project** command.

b. If images are added to an OCR project that already contains images, only the newly added images will be processed.

c. If an OCR project to be processed contains some pages that have already been recognized and some pages that have already been analyzed, the recognized pages will not be processed again and the analyzed pages will be recognized.

4. Add the **Analyze** step to detect areas on the images and configure this step:

- **Analyze the layout automatically**

ABBYY FineReader will analyze the images and identify the areas based on their content.

- **Draw areas manually**

ABBYY FineReader will ask you to draw the appropriate areas manually.

- **Use an area template**

Select this option if you want an existing [area template](#)³¹⁴ to be used when the program analyzes the document. You will need to either specify a template or choose to have the program prompt you to select one every time the task starts. For details, see [If you are processing a large number of documents with identical layouts](#)¹⁸⁸.


5. Add an **OCR** step if you need the images to be recognized. The program will use the OCR options you selected in the **OCR project** step.

 When you add an **OCR** step the **Analyze** step is added automatically.

6. Add an **OCR** step to save the recognized text in a format of your choice, e-mail the text or images, or create a copy of the OCR project. A task may include multiple saving steps:

- **Save document**

Here you can specify the name of the file, its format, file options and the folder where the file should be saved.

 To avoid specifying a new folder each time the task is started, select **Create a time-stamped subfolder**.

- **Send document**


Here you can select the application in which to open the resulting document.

- **E-mail document**

Here you can specify the name of the file, its format, file options, and the e-mail address to which the file should be sent.

- **Save images**

Here you can specify the name of the file, its format, file options, and the folder where the image file should be saved.

 To save all images to one file, select **Save as one multi-page image file** (applicable only to images in TIFF, PDF, JB2, JBIG2, and DCX).

- **E-mail images**


Here you can specify the name of the file, its format, file options, and the e-mail address to which the image file should be sent.

- **Save OCR project**

Here you can specify the folder to which the OCR project should be saved.


Specify which options the program should use to save the results. You can choose between the global options specified in the program at the time of saving or the options which you specified for this particular task.


7. Remove any unnecessary steps from the task by clicking the  button.

 Sometimes, removing one step will also cause another step to be removed. For instance, if you remove the **Analyze** step, the **OCR** step will also be removed, as OCR cannot be carried out without analyzing an image.

8. Once you have configured all the required steps, click **Finish**.

The newly created task will appear in the **Tasks** window.

 To save an automated task, click **Export** on the toolbar at the top of the **Automated Tasks** dialog box and specify a name and folder for the task.


 To load a previously created automated task, click **Import** on the toolbar at the top of the **Automated Tasks** and select the file of the task that you want to import.

ABBYY Hot Folder

(Not available in some versions of ABBYY FineReader. **See also:** <http://www.ABBYY.com/FineReader>)

ABBYY FineReader includes **ABBYY Hot Folder**, a scheduling agent that allows you to select a folder with images that ABBYY FineReader should process automatically. You can schedule ABBYY FineReader to process documents when you don't use your computer, e.g. overnight.



To process images in a folder automatically, create a processing task for that folder and specify the image opening, OCR, and saving options. You must also specify how often ABBYY FineReader should check the folder for new images (at regular intervals or only once) and set the start time for the task.

 For tasks to start, your computer must be turned on and you must be logged on.

Installing ABBYY Hot Folder



By default, ABBYY Hot Folder is installed on your computer together with ABBYY FineReader PDF 15. If, during custom installation of ABBYY FineReader PDF 15, you chose not to install the **ABBYY Hot Folder** component, you can install it later by following the instructions below.

To install ABBYY Hot Folder:

1. Click the **Start** button on **Control Panel** and then click **Control Panel**.
2. Click **Programs and Features**.
 -  If you use Windows 10, click **Start**  > **Settings** > **System** > **Apps & features**.
3. Select **ABBYY FineReader PDF 15** from the list of installed programs and click **Change**.
4. In the **Custom Setup** dialog box, select the **ABBYY Hot Folder** item.
5. Follow the instruction in the installation wizard.

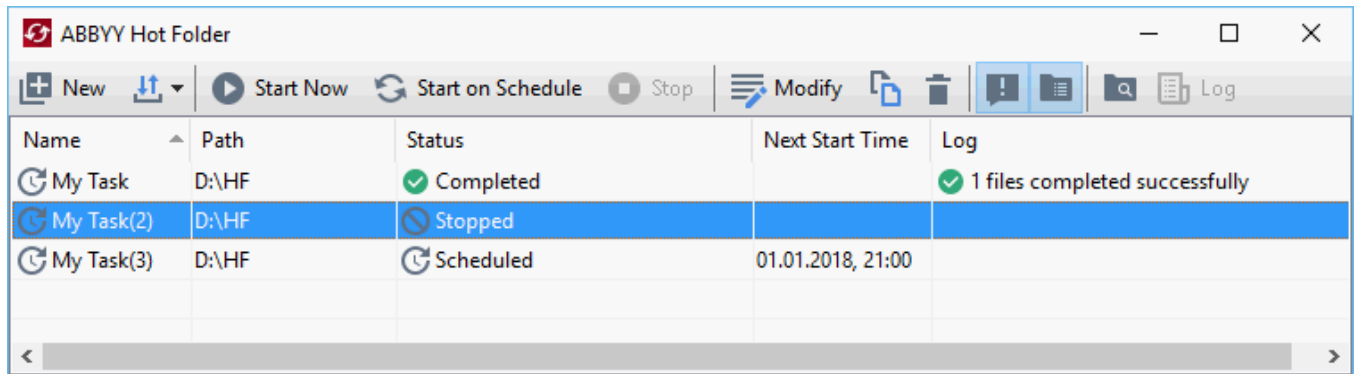
Launching ABBYY Hot Folder

To launch ABBYY Hot Folder:

- Click **Start** > **ABBYY FineReader PDF 15** and then click **ABBYY Hot Folder** (**Start**  > **All Programs** > **ABBYY FineReader PDF 15** > **ABBYY Hot Folder**, if you use Windows 10), or
- click in **ABBYY FineReader PDF 15** and then click **Hot Folder**, or
- click the  icon on the Windows taskbar (this icon will appear after you have set up at least one task).

When you launch **ABBYY Hot Folder**, its main window opens.

Use the toolbar buttons at the top of the window to set up, copy, and delete tasks, to initiate processing, and to view reports.



The set-up tasks are displayed in the **ABBYY Hot Folder** main window. For each task, the complete path to its folder, its status, and the time of the next processing session are displayed.


A task may have one of the following statuses:

| Status | Description |
|------------------------|---|
| Running... | The images in the folder are being processed. |
| Scheduled | You chose to check the hot folder for images only once at start time. The start time is indicated in the Next Start Time column. |
| Watching... | You chose to check the hot folder for images repeatedly. The start time is indicated in the Next Start Time column. |
| Stopped | The processing has been paused by the user. |
| Completed | The processing is completed. |
| Error (see log) | An error occurred when processing images in this folder. The full text of the error can be found in the task log. To find out the cause of the error, select the failed folder and click the View Log button on the toolbar. |


You can save any task for future use:

1. Click > **Export...**
2. In the dialog box that opens, specify the name of the task and the folder where it should be stored.
3. Click **Save**.

To load a previously saved task:


1. Click  > **Import...**
2. In the dialog box that opens, select a task and click **Open**.

To create a new task:

1. On the ABBYY Hot Folder toolbar, click the **New** button.
2. In the **Task name** field, type a name for the task.
3. Specify a schedule for the task:
 - **Run once** (the task will be run once at the time you specify)
 - **Recurring** (the task will be run every minute, once a day, once week or once a month at the specified time).
4. Specify the folder or OCR project that contains the images to be processed.
 - **File from folder** allows you to process images in local and network folders.
 - **File from FTP** allows you to process images in folders on an FTP server. If login and password are required in order to access the FTP folder, enter them in the **User name** and **Password** fields respectively. If no login and password are required, select the **Anonymous user** option.
 - **File from Outlook** allows you to process images in your mail box.
 - **OCR project** opens images stored in an OCR project.
 - ✎ For more about document colors, see [Document features to consider prior to OCR](#) 
 - Under **Original files** specify whether original files should be kept, deleted or moved.
5. In the **Analyze and recognize images** step, configure the document analysis and OCR options.
 - From the **Document language** drop-down list, select the language of the texts to be recognized.
 - ✎ You can select more than one OCR language.
 - Under **Document processing settings**, specify whether a document should be recognized or analyzed or whether its page images should be preprocessed. If required, specify additional OCR and image preprocessing options by clicking **Recognition Options...** or **Preprocessing Options...** respectively.
 - Specify whether the program should detect areas automatically or use an area template for the purpose.

6. From the **Save results** drop-down list, select how documents should be saved.
 - a. From the **Save as** drop-down list, select a destination format.

Tip. Click **Options...** if you want to specify additional saving options.

 When saving to PDF, specify whether the text on the images should be recognized or whether the images should be converted to image-only PDF documents.


- b. In the **Folder** field, specify a folder where documents should be saved after processing.
- c. From the **Output** drop-down list, select a saving method:
 - **Create a separate document for each file (retains folder hierarchy)** creates a separate document for each file.
 - **Create a separate document for each folder (retains folder hierarchy)** creates one document for all files stored in a particular folder.
 - **Create one document for all files** creates one document for all files.
- d. In the **File name** field, enter a name to be assigned to documents after processing.


Tip. You can specify several saving steps for a folder in order to save processing results in multiple formats.

7. Click **Create Task**.

The configured task will be displayed in the ABBYY Hot Folder main window.

 Task files are stored in **%Userprofile%\AppData\Local\ABBYY\FineReader\15\HotFolder**.

 For tasks to start, your computer must be turned on and you must be logged on.

To see a notification message each time a task has been completed, click .

A notification message will be displayed in a pop-up window above the Windows taskbar.

Changing task properties

You can change the properties of an existing task.

1. Stop the task whose properties you wish to change.
2. Click **Modify** on the toolbar at the top of the ABBYY Hot Folder window.
3. Make the necessary changes and click **Create Task**.

Processing log

Images in a hot folder are processed according to your defined settings. ABBYY Hot Folder keeps a detailed log of all the operations.

The log file contains the following information:

- The name of the task and its settings
- Errors and warnings (if any)
- Statistics (number of processed pages, number of errors and warnings, number of uncertain characters)

To enable logging, click  on the toolbar.

The log will be saved as a TXT file in the same folder that contains the files with recognized text.

To view a log:

1. In the ABBYY Hot Folder main window, select the task you wish to inspect.
2. Click the **Log** button on the toolbar at the top of the ABBYY Hot Folder window.

ABBYY Compare Documents







ABBYY Compare Documents is a universal software solution that allows you to compare two different versions of the same document in different formats.

ABBYY Compare Documents lets you detect significant inconsistencies in the text and helps prevent the approval or publication of the wrong version of a document.

Main features


- Compare documents that are in different formats. You can compare a Microsoft Word document with its PDF version, a scan with its ODT version, and any other combination of formats that are supported by ABBYY FineReader PDF 15.
- Examine the differences in a handy side-by-side view. Clicking a difference in the results pane will immediately highlight the corresponding fragment in both versions.
- View only substantial changes such as deleted, added or edited text. Minor differences in formatting, fonts, spaces, and tabs will be ignored.
- Save documents as Microsoft Word files where the differences will be shown using the Track Changes feature.
Note: a saved document is a recognized version of the original document, meaning that there can be visual differences and recognition errors. Hence, a document of this type should only be used for viewing the differences.
- Save documents as PDF files, with each difference marked with a comment.
- Save comparison results as a Microsoft Word table containing the differences.

Chapter contents


- [Launching ABBYY Compare Documents](#)  235
- [Comparing documents](#)  236
- [The main window](#)  238
- [Improving comparison results](#)  239
- [Viewing comparison results](#)  241
- [Saving comparison results](#)  243

Launching ABBYY Compare Documents

There are many ways to launch ABBYY Compare Documents:

- Open the [New Task](#)^[14] window, click the **Compare** tab and then click the **Open ABBYY Compare Documents** task.
- In the **New Task** window, click **Tools > Compare Documents** (similarly, ABBYY Compare Documents can be launched from the [PDF Editor](#)^[48] and the [OCR Editor](#)^[163]).
- Click **Start > ABBYY FineReader PDF 15 > ABBYY Compare Documents**. (In Windows 10, click **Start**  and then click **All Programs > ABBYY FineReader PDF 15 > ABBYY Compare Documents**.)

There are several other ways to open a document in ABBYY Compare Documents:

- In the PDF Editor, click the  **Compare** button on the main toolbar.
- In the PDF Editor, click **File > Compare Documents**.
The document that is open in the PDF Editor will be opened in ABBYY Compare Documents. You will then need to open another version of this document to compare the two.
- In [Windows Explorer](#)^[221], right-click a file and click **Compare with...** on the shortcut menu.
- In Windows Explorer, select two files, right-click one of them, and click **Compare documents...** on the shortcut menu.



ABBYY Compare Documents is not available in some versions of ABBYY FineReader. **See also:**

<http://www.ABBYY.com/FineReader>

Comparing documents


To compare two versions of a document, complete these steps:

1. Launch ABBYY Compare Documents.

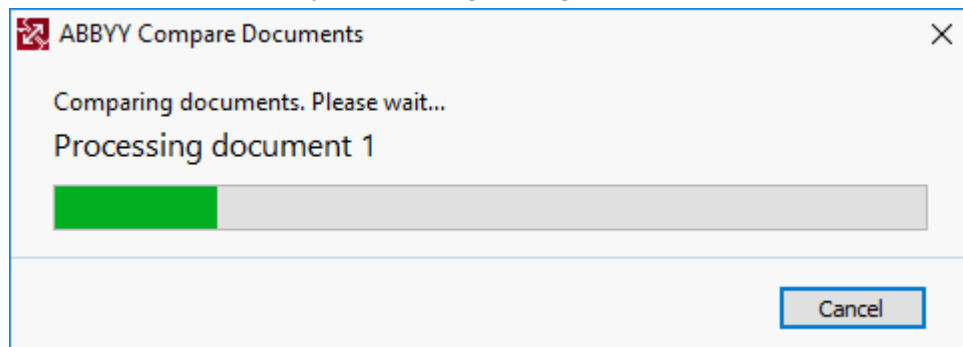
See also: [Launching ABBYY Compare Documents](#) ²³⁵

2. Open the documents in ABBYY Compare Documents. The documents have to be in one of the [supported formats](#) ²⁸⁴.

To open a document, do one of the following:

- Drag and drop a document onto one of the two of the display areas.
 - Click anywhere on a display area and browse to the file location.
 - Click the  button on the toolbar of a display area and browse to the desired document.
 - Click one of the display areas and then click on the **File > Open Document...**
 - ☑ You can switch between the display areas by pressing Ctrl+Tab or Alt+1/Alt+2.
 - ABBYY Compare Documents remembers recently compared pairs of documents. To open one of the recently compared documents, select it from the drop-down list at the top of a display area.
 - To open a recently compared pair of documents, click **File > Recent Comparisons** and select a pair of documents from the list.
 - ☑ You can also open a pair of recently compared documents from the **New Task** window: click the **Compare** tab and then select a pair of documents under **Recent Comparisons**.
3. Select the [language of the documents](#) ²⁷⁷ from the list on the **COMPARE** tab.
 4. Click the **Compare** button on the **COMPARE** tab of the rightmost pane or click the **Compare Documents** command on the **Compare** menu.

A window will be displayed, showing a progress bar, comparison tips, and warnings.



After the documents have been compared, a list of differences will appear in the **DIFFERENCES** tab. All differences will be highlighted in both documents.

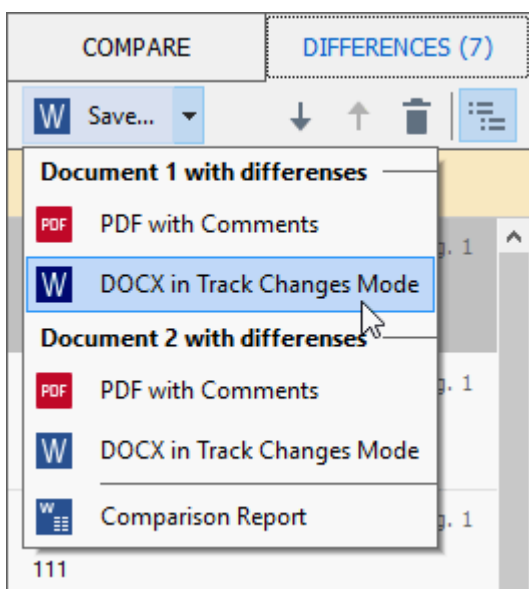
You can **Save the Comparison Results:**

- As a Microsoft Word file where the differences will be shown using the Track Changes feature.

Note: a saved document is a recognized version of the original document, meaning that there can be visual differences and recognition errors. Hence, a document of this type should only be used for viewing the differences.

- As a PDF document with comments.
- As a Microsoft Word table containing the differences.

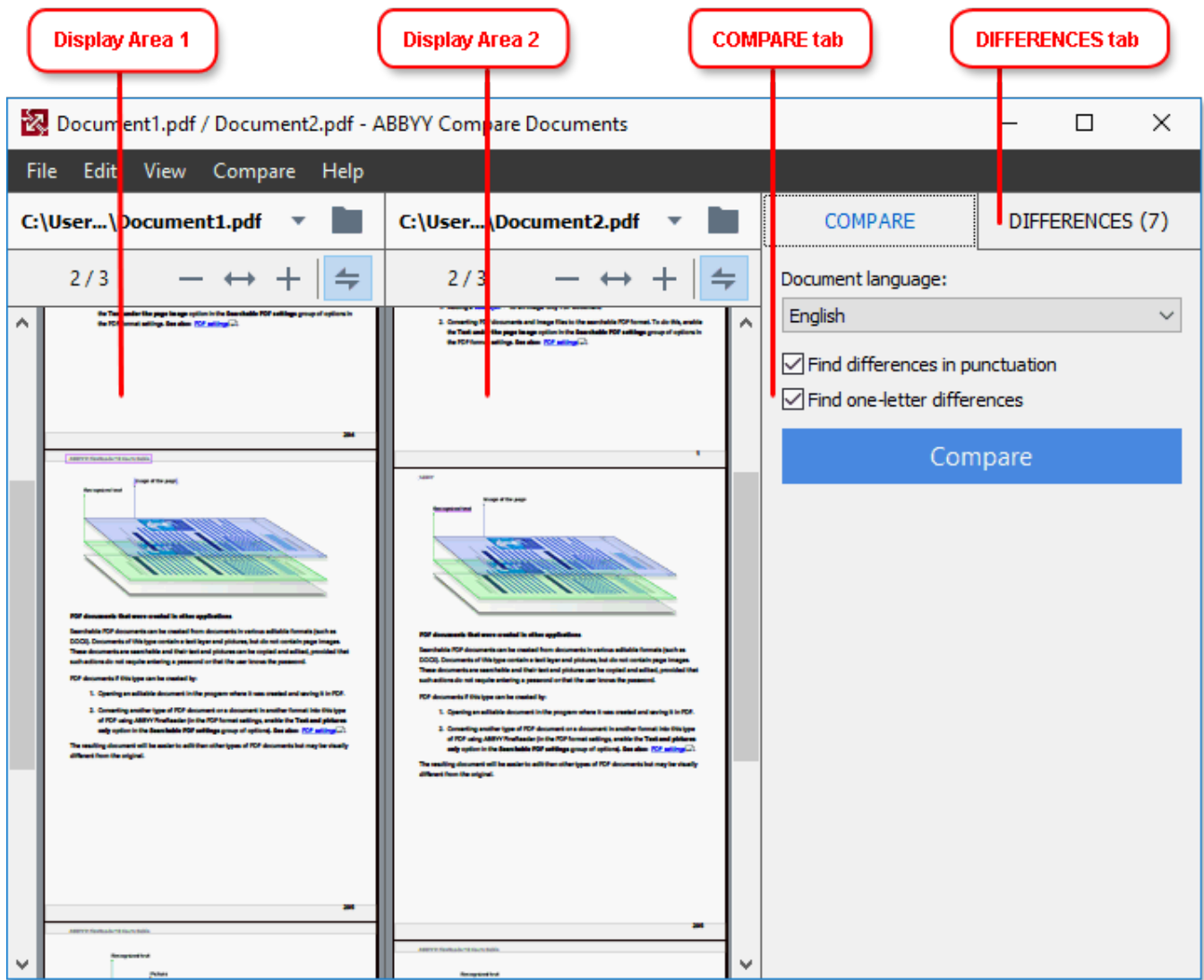
To save the comparison results, click the **Save...** button in the **DIFFERENCES** tab. By default, the differences will be saved in the last selected file format. If you want to save the differences in a different format, choose the appropriate format in the drop-down list next to the **Save...** button.



See also: [Viewing comparison results](#)^[241], [Saving comparison results](#)^[243]

The main window


When you launch ²³⁵ ABBYY Compare Documents, its main window opens.



Display Area 1 shows the first document.

Display Area 2 shows the second document.

Tip. You can change the way the documents are displayed:

- Zoom in by pressing Ctrl+=, zoom out by pressing Ctrl+-, or reset the zoom level by pressing Ctrl+0. You can also do this using the commands on the shortcut menu of the document and the  buttons above the document.
- Change the way the display areas are shown by clicking **View > Split Document Pane Horizontally**. This will split the display pane horizontally, i.e. one document will be displayed above the other.
- The **COMPARE** tab of the rightmost pane contains comparison settings.

- The **DIFFERENCES** tab of the rightmost pane contains a list of differences between the documents (the list only appears after you compare the documents).

For more about the types of differences that can be detected and how to navigate them, see [Viewing comparison results](#)^[241].

Improving comparison results

ABBYY Compare Documents offers a number of additional options to achieve more accurate document comparison. To configure these options, do one of the following:

- Click the **COMPARE** tab in the rightmost pane.
- Click **Compare > Advanced**.


COMPARE tab

This tab contains the following settings:

- **Find differences in punctuation**
Select this option to detect differences in punctuation and hyphenation.
- **Find one-letter differences**
Select this option to detect differences in spelling.

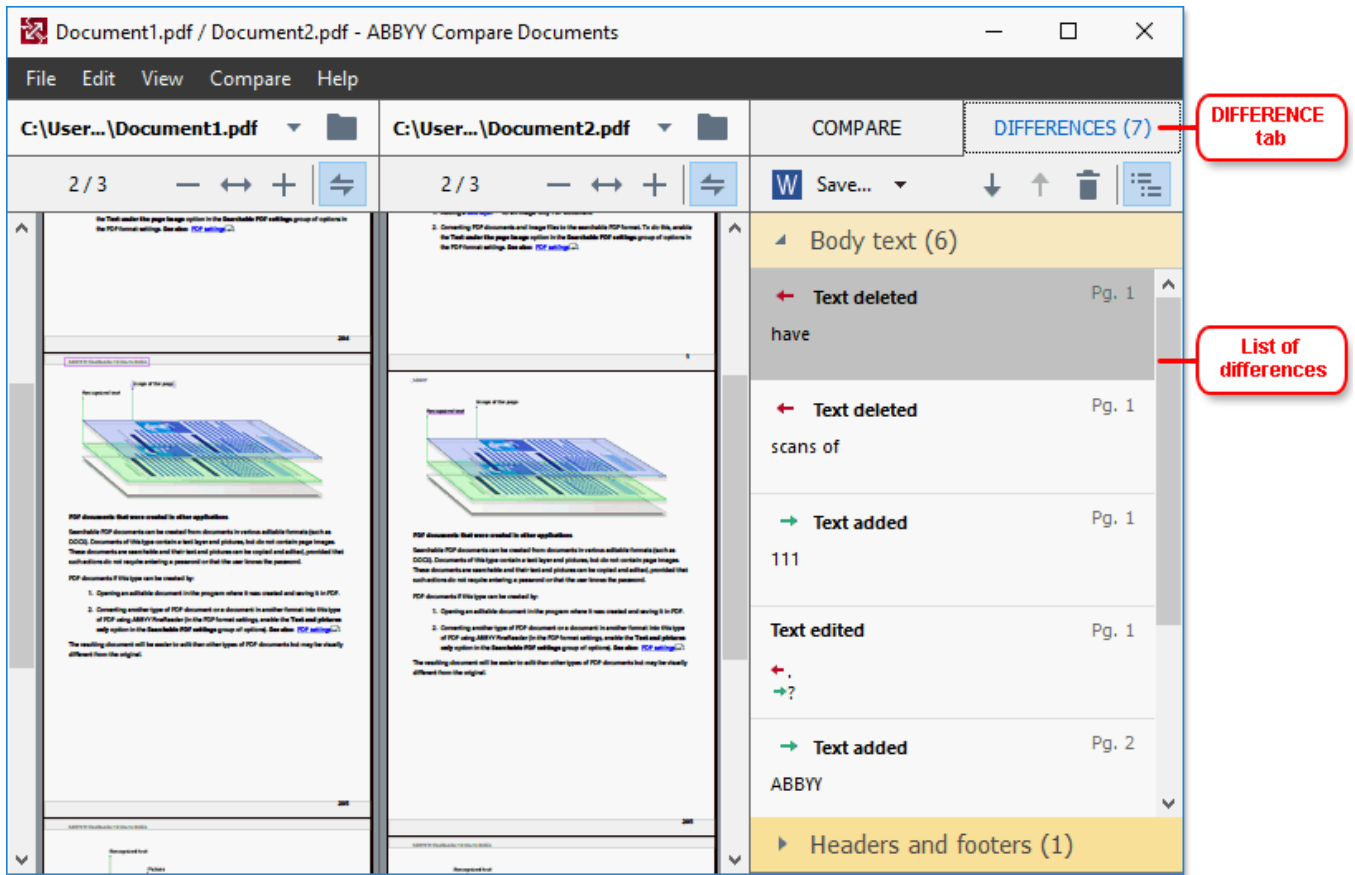
Advanced options

The following advanced options are available:



- **PDF recognition mode**
Selecting the right recognition mode is crucial for accurate comparison of PDF documents. ABBYY Compare Documents offers three PDF recognition modes:
 - **Use Only Text from PDF**
This is the default mode for PDF documents with a text layer. ABBYY Compare Documents will use the text layer for comparison.
 - **Automatically Choose between OCR and Text from PDF**
When this mode is selected, ABBYY Compare Documents will check the quality of the original text layer. If the program determines the original text layer is good enough, it will use the original text layer. Otherwise, it will recognize the document and use the resulting text layer instead.
 - **Use OCR**
In this mode, the program uses optical character recognition to extract text from documents. The documents will take longer to compare in this mode, but the comparison results will be more reliable.
 These options are intended for PDF documents that contain a text layer and pictures. Such PDF documents are typically created by converting editable document files to PDF. Other kinds of PDF documents, such as searchable or image-only PDF documents, do not require any additional OCR options and are always processed in the **Use OCR** mode.
- **Find Headers and Footers Automatically**
Disable this option if the document has no headers or footers.
- **Reset Advanced Options**
Select this command to revert to the default settings.

Viewing comparison results


The differences that the program has detected are highlighted in the two texts and are also listed separately in the pane on the right.



ABBYY Compare Documents can find the following types of differences:

-  **Text deleted**
-  **Text added**
- **Text edited**

Each item in the list of differences contains a deleted, inserted or edited text fragment and the numbers of the pages where this text occurs in each document. To copy a difference to the Clipboard, right-click it and click **Copy Difference** on the shortcut menu or select it and click **Edit > Copy Difference**.

 If a text fragment has been edited, both the old and the new versions of the fragment will be listed in the rightmost pane.

The number of detected differences is displayed in two locations:




- On the red bar that appears at the top of the display area after you compare the documents:



Differences found in body text: 7. Total: 9.

- Next to the title of the **DIFFERENCES** tab of the rightmost pane: DIFFERENCES (9)

When you select a difference on the **DIFFERENCES** tab, the differing text will be displayed in both documents side-by-side.

To navigate the differences, do one of the following:

- Click a difference in one of the two documents.
- Use the following [keyboard shortcuts](#) : Ctrl+Right Arrow/Ctrl+Left Arrow.
- Use the  and  buttons on the **DIFFERENCES** tab.
- Click **Compare** and then click **Next Difference** or **Previous Difference**.


 You can also scroll the two versions simultaneously to see the changes in a side-by-side view. Simultaneous scrolling is enabled by default. To disable it, click **Fit to Width** on the **View** and clear the **Synchronize Scrolling** item, or right-click a document and disable the **Synchronize Scrolling** option on the shortcut menu, or click the  button above one of the documents.

Grouping differences


ABBYY Compare Documents groups detected differences so that you can ignore minor changes and focus on substantial discrepancies.


Detected differences may be placed in one of three groups:

- **Body text**
This group contains the substantial differences found in the body text of the two documents.
- **Headers and footers**
This group contains the differences in the headers and footers of the two documents (e.g. differences in page numbers).
- **Numbering**
This group contains the differences in the numbers contained in the two documents, e.g. differences in the numbering of lists.

To disable the grouping of differences, click the  button on the **DIFFERENCES** tab of the rightmost pane.

To remove a difference from the list, do one of the following:

- Click the  button on the **DIFFERENCES** tab.
- Right-click the difference and click **Ignore Difference** on the shortcut menu.

 To remove several differences at a time, select them while holding down the Ctrl key.

✎ To ignore all identical differences, choose the **Ignore Identical Differences** command in the shortcut menu.

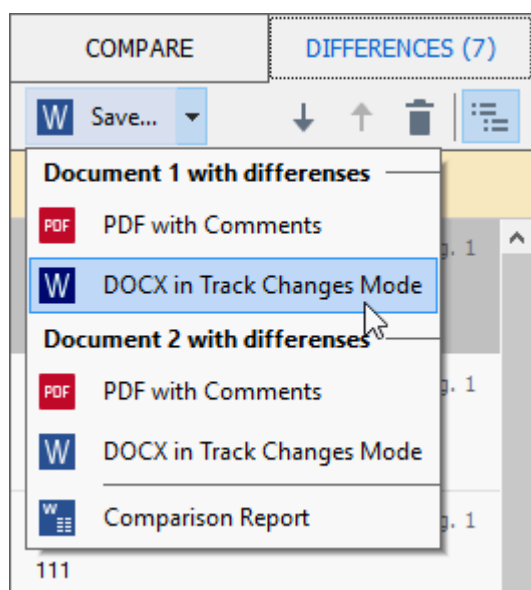
✎ Any differences that you have removed from the list will not be shown in the comparison report.

Saving comparison results

You can save:

1. One of the documents as a Microsoft Word file where the differences will be shown using the Track Changes feature.

To do this, click the **Save...** button in the **DIFFERENCES** tab and choose the **DOCX in Track Changes Mode** for **Document 1 / Document 2**.



Note: a saved document is a recognized version of the original document, meaning that there can be visual differences and recognition errors. Hence, a document of this type should only be used for viewing the differences.

2. One of the documents as a PDF file with the detected differences as comments.

To do this, click the **Save...** button in the **DIFFERENCES** tab and choose the **PDF with Comments** for **Document 1 / Document 2**.

3. The difference list as a Microsoft Word table.

To do this, click the **Save...** button in the **DIFFERENCES** tab and choose **Comparison Report**.


ABBYY Screenshot Reader

ABBYY Screenshot Reader is an easy-to-use application for creating screenshots and capturing text from the screen.

ABBYY Screenshot Reader features:

- Create screenshots
- Turn screenshots into editable text
- All the benefits of ABBYY OCR technology

ABBYY Screenshot Reader has a straightforward and intuitive interface, which means that you do not need any specialist knowledge to be able to make screenshots and recognize text in them. Simply open any window of any application and select the section of the computer screen which you wish to "photograph." You can then recognize the screenshot and save the image and the recognized text.


 ABBYY Screenshot Reader is available to registered users of certain ABBYY products. For details on how to register your copy of ABBYY FineReader PDF 15, see [Registering ABBYY FineReader](#)^[313].

- [Installing and starting ABBYY Screenshot Reader](#)^[244]
- [Making screenshots and recognizing text](#)^[245]
- [Additional options](#)^[246]
- [Tips](#)


Installing and starting ABBYY Screenshot Reader

By default, ABBYY Screenshot Reader is installed on your computer together with ABBYY FineReader PDF 15.

To start ABBYY Screenshot Reader, click the ABBYY Screenshot Reader icon  on the taskbar.

 There are several other ways to start ABBYY Screenshot Reader:

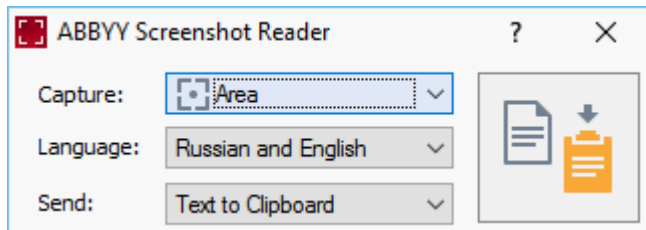
- Open the **New Task** window of ABBYY FineReader PDF 15 and click **Screenshot Reader** on the **Tools** menu.
- Open the PDF Editor and click **Screenshot Reader** on the **Tools** menu.
- Open the OCR Editor and click **Screenshot Reader** on the **Tools** menu.
- In Microsoft Windows, click the **Start** button and then click **ABBYY FineReader PDF 15 >**

ABBYY Screenshot Reader on the **Start** menu. If you are using Windows 10, click the  button and then click **All Programs > ABBYY FineReader PDF 15 > ABBYY Screenshot Reader** on the **Start** menu.

Making screenshots and recognizing text

ABBYY Screenshot Reader can create screenshots of selected areas on the screen of your computer and save them to a file, copy them to the Clipboard, or send them to the [OCR Editor](#) ¹⁶³.

When you launch ABBYY Screenshot Reader, the **ABBYY Screenshot Reader** window appears on the screen of your computer.




The **ABBYY Screenshot Reader** window contains tools for recognizing text and tables on the screen of your computer, for creating screenshots of selected screen areas, and for setting up the application.

To make a screenshot or to recognize a text fragment:

1. Select a screen capture method from the **Capture** drop-down list.
 - **Area**
Lets you select an area to capture.
 - **Window**
Captures a specific part of the screen (e.g. a window, a part of a window, or a toolbar).
 - **Screen**
Captures the entire screen.
 - **Timed Screen**
Captures the entire screen after a 5-second delay.
2. Select the language of the text you want to recognize from the **Language** drop-down list.
3. In the **Send** drop-down list, select the application to which you want to send the image or recognized text.
The text and screenshots will be:
 - Copied to the clipboard (when you select **Text to Clipboard**, **Table to Clipboard**, or **Image to Clipboard** from the **Send** drop-down list).
 - Placed in a new document (when you select **Text to Microsoft Word** [1] or **Table to Microsoft Excel** [2] from the **Send** drop-down list).
 - Saved as a file (when you select **Text to File**, **Table to File** or **Image to File** from the **Send** drop-down list). The **Save As** dialog box will open and you will need to specify the name and format of the file.

- Opened in the OCR Editor of ABBYY FineReader PDF 15 (when you select **Image to OCR Editor** [3] from the **Send** drop-down list). Select this item if the screen area contains both text and pictures.
- Attached to a newly created e-mail message as a *.bmp file (when you select **Image to E-mail** from the **Send** drop-down list).

 This item requires:

- [1] **Microsoft Word**
- [2] **Microsoft Excel**
- [3] **ABBYY FineReader PDF 15**



4. Click the button.


Depending on the item you select in the Screenshot list, the screenshot will be created automatically or a capture tool will appear enabling you to select the desired area:

- If you selected **Area** from the **Capture** drop-down list, an area of the screen will be selected.
- To adjust the borders of an area, place the mouse pointer on a border and drag it while holding down the left mouse button. To move an area, select the area and drag it to the desired location. When you have selected the desired area, click the **Capture** button.
- If you selected **Window** from the **Capture** drop-down list, place the mouse pointer over the desired area and when a color frame appears, click the left mouse button.
- If you selected **Screen** or **Timed Screen** from the **Capture** drop-down list, the screenshot will be created without any further input.

Notes.

1. To cancel screen capture, press the Esc key or click the right mouse button.
2. To cancel recognition, click the **Stop** button or press the Esc key.

Additional options

To select additional options, right-click on the ABBYY Screenshot Reader  icon on the taskbar and then click Options. The following options are available:

- **Always on Top**
Keeps the ABBYY Screenshot Reader toolbar on top of all the other windows when switching between applications.

- **Run at Startup**

Launches ABBYY Screenshot Reader each time you start your computer.

- **Enable Sounds**

Plays a sound notification when ABBYY Screenshot Reader copies a screen area to the Clipboard.

Tips

1. Working with texts written in several languages

Select a text fragment written entirely in one language. Before starting the recognition process, make sure that the language you selected from the **Language** drop-down list is the same as the language of the text fragment. Select the correct language if it isn't.

2. If the required language is not in the list, select **More languages...** from the **Language** drop-down list and select the desired language in the dialog box that opens.

If you cannot find the required language in the list of available languages:

- ABBYY Screenshot Reader does not support this language. For a full list of supported languages, please see <http://www.abbyy.com>. The list of supported languages may vary in different editions of the application.

- This language may have been disabled during custom installation. To install OCR languages:

- a. Open the Control Panel by clicking the **Start > Control Panel**.

- b. In the **Control Panel** window, click the **Add or Remove Programs** item.

 If you are using Windows 10, click the  button and then click **Settings > System > Apps & features**.

- c. Select **ABBYY FineReader PDF 15** from the list of installed software and click the **Change** button.

- d. Select desired languages in the **Custom Setup** dialog box.

- e. Follow the on-screen instructions in the setup program.
















3. If the selected area contains both text and pictures:

In the **Send** drop-down list, click **Image to OCR Editor**. The screenshot will be added to an OCR project in the OCR Editor of ABBYY FineReader PDF 15, where you can process and recognize it. If the OCR Editor is already open, the image will be added to the current OCR project. Otherwise, a new OCR project will be created and the image will be added to this new project.

Reference

This chapter provides answers to some frequently asked questions.

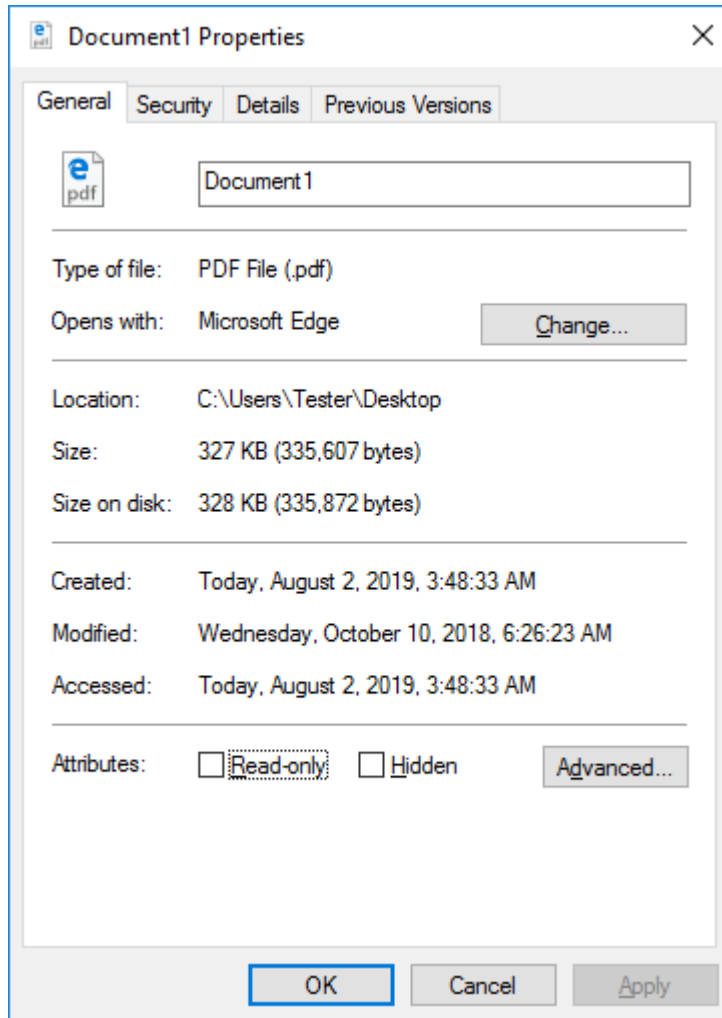
Chapter contents

- [Types of PDF documents](#)  251
- [Scanning tips](#)  253
- [Taking photos of documents](#)  256
- [Options dialog box](#)  259
- [Format settings](#)  262
- [Supported OCR and document comparison languages](#)  277
- [Supported document formats](#)  284
- [Document features to consider prior to OCR](#)  287
- [Image processing options](#)  290
- [OCR options](#)  293
- [Working with complex-script languages](#)  296
- [Supported interface languages](#)  300
- [Current date and time on stamps and in Bates numbers](#)  301
- [Fonts required for the correct display of texts in supported languages](#)  304
- [Regular expressions](#)  306

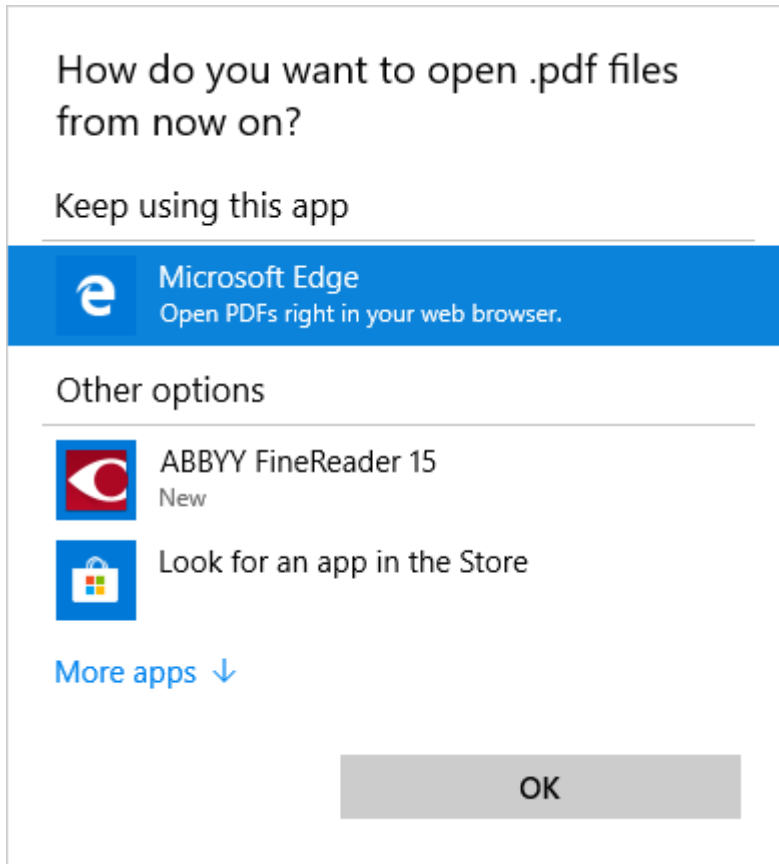
How to set ABBYY FineReader PDF 15 as your default PDF viewer

To set ABBYY FineReader PDF 15 as your default PDF viewer:

1. Right-click any PDF file in Windows Explorer and click **Properties** in the shortcut menu. The **Properties** dialog box will open.



2. On the **General** tab click the **Change** button to change the application that you use to open PDF files.
A list of applications will open.



3. In the list of applications, select ABBYY FineReader PDF 15.
Note. If you don't see ABBYY FineReader PDF 15 in the list, try scrolling down. To see more applications, click **More apps**.
4. Click **OK**.

Types of PDF documents

The features of a PDF document depend on the program in which it was created. Some PDF documents are searchable and have text you can copy, while in other documents this only becomes possible when you open them in special applications like ABBYY FineReader. There are three types of PDF documents.

Image-only PDF documents

Image-only PDF documents are created from scans of hard-copy documents. They only contain the images of pages and don't have a text layer. Image-only PDFs are not searchable, and the text they contain cannot be modified or marked up in PDF viewing applications.

ABBY FineReader PDF 15 uses a special [background OCR process](#)^[55] that creates a temporary text layer in image-only documents, making it possible to search and copy their text and even [edit page images](#)^[79]. Moreover, ABBYY FineReader PDF 15 lets you [save this text layer](#)^[90] in the document so that the text in the document can be searched and copied into other applications. **See also:** [PDF settings](#)^[263].

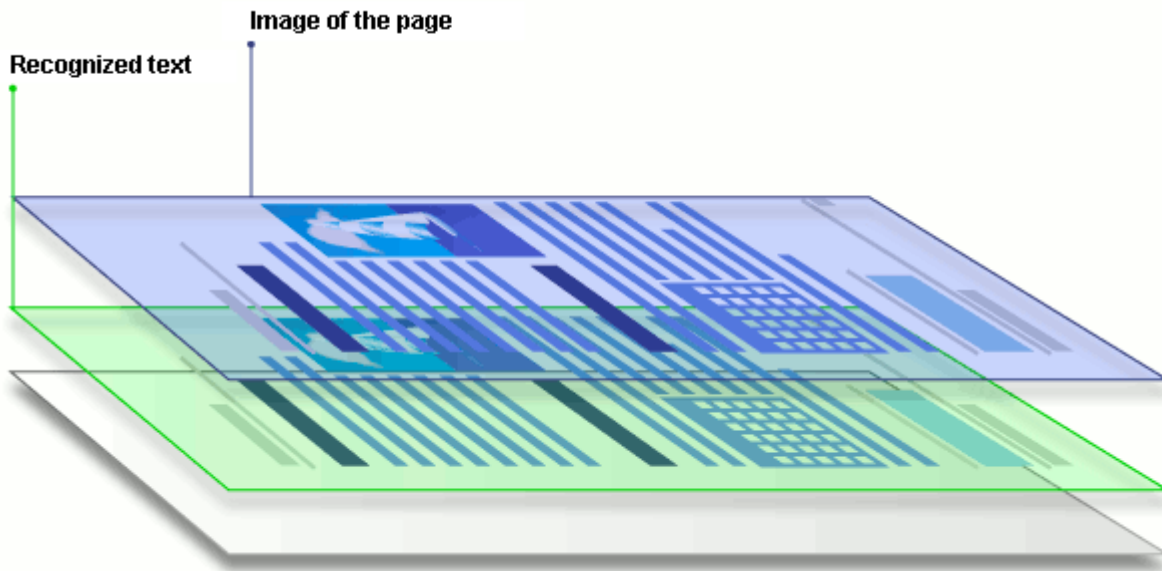
Searchable PDF documents

Searchable PDF documents consist of the images of pages with an invisible text layer placed underneath. Documents of this type are usually created by scanning a paper document, recognizing it, and saving the recognized text into a text layer.

When you open a PDF document in ABBYY FineReader, it will analyze the document to determine if it contains a usable text layer. **See also:** [OCR options](#)^[293]. If a text layer is present, the text in the document can be searched and copied in any PDF application. Unlike many other PDF applications, ABBYY FineReader also lets you edit the text in searchable PDF documents.

In ABBYY FineReader, searchable PDF documents can be created by:

1. Adding a [text layer](#)^[90] to an image-only PDF document.
2. Converting PDF documents and image files to the searchable PDF format. To do this, enable the **Text under the page image** option in the **Searchable PDF settings** group of options in the PDF format settings. **See also:** [PDF settings](#)^[263].



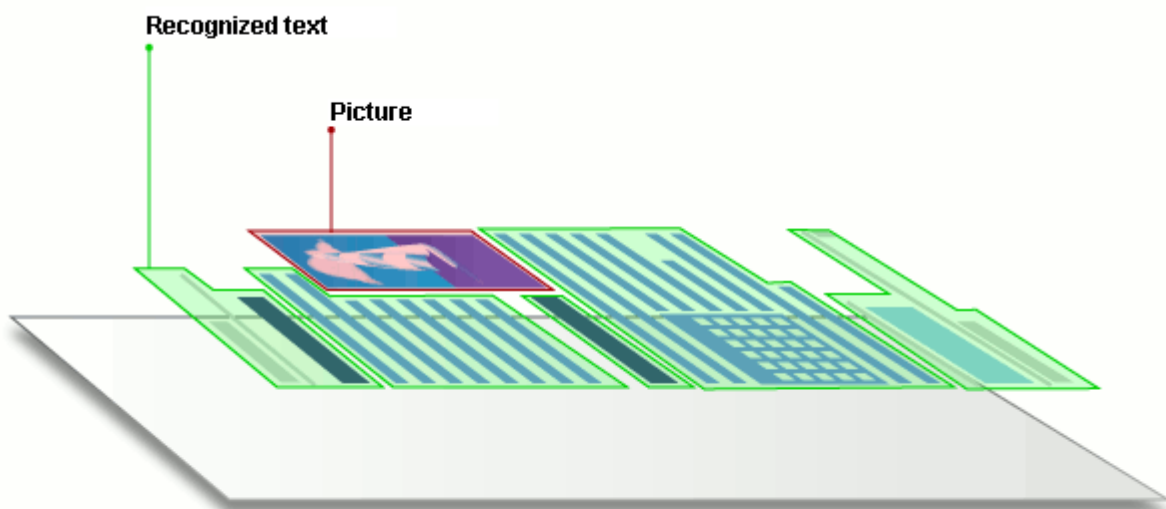
PDF documents that were created in other applications

Searchable PDF documents can be created from documents in various editable formats (such as DOCX). Documents of this type contain a text layer and pictures, but do not contain page images. These documents are searchable and their text and pictures can be copied and edited, provided that such actions do not require entering a password or that the user knows the password.

PDF documents of this type can be created by:

1. Opening an editable document in the program where it was created and saving it in PDF.
2. Converting another type of PDF document or a document in another format into this type of PDF using ABBYY FineReader (in the PDF format settings, enable the **Text and pictures only** option in the **Searchable PDF settings** group of options). **See also:** [PDF settings](#)²⁶³.

The resulting document will be easier to edit than other types of PDF documents but may be visually different from the original.




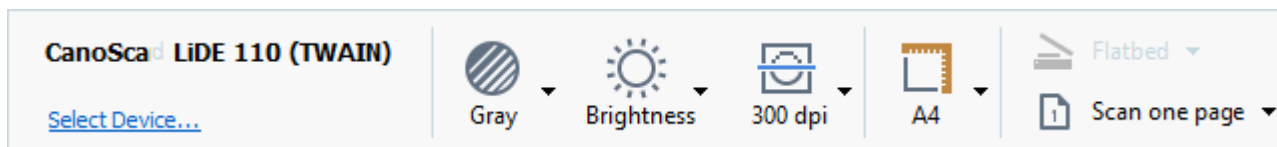
Scanning tips

You can set the scanning settings in the ABBYY FineReader scanning dialog box.

- Make sure that the scanner is properly connected to your computer and turn it on. Consult your scanner documentation to ensure it is set up correctly. Be sure to install the software provided with your scanner. Some scanners have to be turned on before turning on the computer they are connected to.
- Try to make sure that the pages in the scanner are positioned as straight as possible. Place your documents face down on the scanner, making sure they are properly adjusted. Skewed images may be converted incorrectly.
- If you need to scan documents that were printed with a regular printer, use the grayscale mode and a resolution of 300 dpi for best results. Recognition quality depends on the quality of the hard-copy document and on the settings used for scanning the document. Poor image quality may have an adverse effect on the quality of conversion. Be sure to select the scanning parameters [appropriate for your document](#) ²⁸⁷.

There are several ways to open the scanning interface:

- Open the **New Task** screen, click the **Scan** tab, and then click **Scan to OCR Editor** or another task on this tab.
- In the **OCR Editor**, click the **Scan** button on the main toolbar.
- In the PDF Editor, click the  **Add Pages** ▼ button on the main toolbar and then click **Add from Scanner...** on the menu shown below.



You can specify the following scanning settings:

Color mode

Lets you select the scanning mode: color, grayscale (the best mode for OCR) or black-and-white.

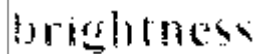

Brightness

Changes the scanning brightness.

ABBYY FineReader will display a warning message during scanning if the [brightness](#) ³¹⁴ setting is too low or too high. You may also need to adjust the brightness setting when scanning in black-and-white mode.

 The 50% setting works well in most cases.

If the resulting image contains too many "sketchy" or "thick" letters, troubleshoot using the table below.


| Image defect | Recommendations |
|---|--|
| brightness | This image is suitable for text recognition. |
|  Characters are very thin and sketchy | <ul style="list-style-type: none"> • Lower the brightness to make the image darker. • Use the grayscale scanning mode (brightness is adjusted automatically in this mode). |
|  Characters are very thick and are stuck together | <ul style="list-style-type: none"> • Increase the brightness to make the image lighter. • Use the grayscale scanning mode (brightness is adjusted automatically in this mode). |

Scanning resolution

Changes the scanning resolution.

Recognition quality depends on the resolution of the document image. Poor image quality may have an adverse effect on the quality of conversion.

We recommend scanning documents at 300 [dpi](#) ³¹⁴.

 For best recognition results, vertical and horizontal resolutions must be the same.

Setting the resolution too high (over 600 dpi) slows down OCR. Increasing the resolution beyond this point does not yield substantially improved OCR results.

Setting an extremely low resolution (less than 150 dpi) adversely affects OCR quality.

You may need to adjust the resolution of your images if:

- The resolution of your image is less than 250 dpi or higher than 600 dpi.
- If the image has a non-standard resolution.
Some faxes, for example, have a resolution of 204 by 96 dpi.

Crop Image

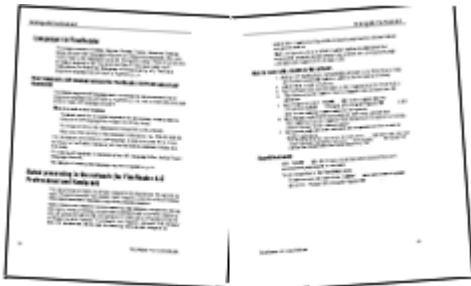
Lets you select a preset scanning area size or specify the scanning area manually.

Multi-page document scanning options:

Specify settings for scanning multi-page documents if your scanner supports the following features: duplex scanning, automatic document feeding (ADF), delays between automatic scans, etc.

Scanning facing pages

When you scan a book, a scanned image will typically contain two facing pages.




To improve OCR quality, images with facing pages need to be split into two separate images. ABBYY FineReader PDF 15 features a special mode that automatically splits such images into separate pages within the OCR project.

Follow the instructions below to scan facing pages from a book or to scan dual pages.

1. Click **Tools > Options...** to open the **Options** dialog box and then click the **Image Processing** tab.
2. Select the **Split facing pages** option in the **Image preprocessing settings (apply to conversion and OCR)** group of options.
 - ☑ Make sure your scans have the correct orientation or enable the **Correct page orientation** option. If a scan with facing pages does not have the correct orientation (e.g. it is upside-down), facing pages will not be split.
3. Scan the facing pages.

✎ There are other image processing options you can specify. **See also:** [Image processing options](#)²⁹¹

You can also split facing pages manually:

1. Open the Image Editor by clicking the  **Edit Image** button on the toolbar of the **Image** pane.
2. Use the tools in the **Split** section of the leftmost pane to split the page.

✎ See also:

- [Image processing options](#)²⁹⁰
- [Document features to consider prior to OCR](#)²⁸⁷
- [If your document image has defects and OCR accuracy is low](#)¹⁷⁹

Taking photos of documents

Scanning isn't the only way to acquire images of your documents. You can photograph documents with a camera or a mobile phone and then [open the photographs in ABBYY FineReader](#)¹⁶⁹ and recognize them.

When taking pictures of documents, a number of factors should be kept in mind to make the photo better suited for OCR. These factors are described in detail in the sections that follow:

- [Camera requirements](#)²⁵⁶
- [Lighting](#)²⁵⁶
- [Taking photos](#)²⁵⁷
- [How to improve an image](#)

Camera requirements


Your camera should meet the following requirements in order to obtain document images that can be reliably recognized.

Recommended camera characteristics

- Image sensor: 5 million pixels for A4 pages. Smaller sensors may be sufficient for taking pictures of smaller documents such as business cards.
- Flash disable feature
- Manual aperture control, i.e. availability of Av or full manual mode
- Manual focusing
- An anti-shake (image stabilization) feature or ability to use a tripod
- Optical zoom

Minimum requirements

- Image sensor: 2 million pixels for A4 pages
- Variable focal distance

 For detailed information about your camera, please refer to the documentation supplied with your device.


Lighting

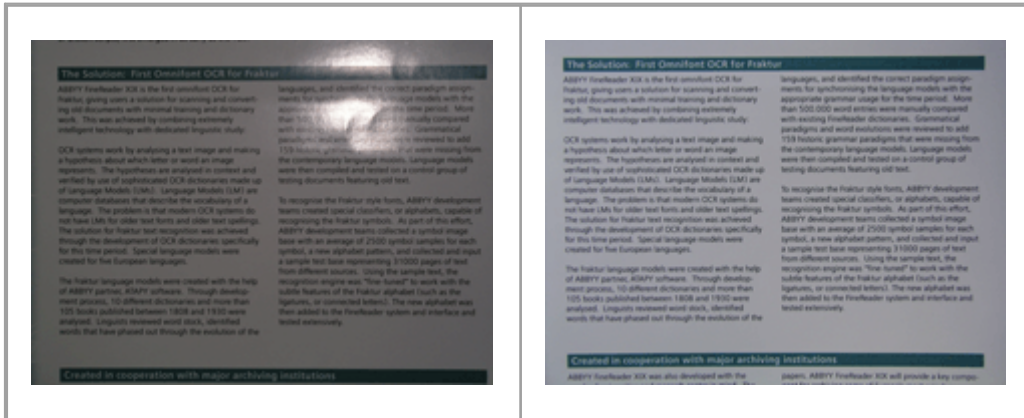
Lighting greatly affects the quality of the resulting photo.

Best results can be achieved with bright and evenly distributed light, preferably daylight. On a bright sunny day, you can increase the aperture number to get a sharper picture.

Using a flash and additional lighting sources

- When using artificial lighting, use two light sources positioned so as to avoid shadows or glare.
- If there is enough light, turn the flash off to prevent sharp highlights and shadows. When using the flash in poor lighting conditions, be sure to take photos from a distance of approximately 50 cm.

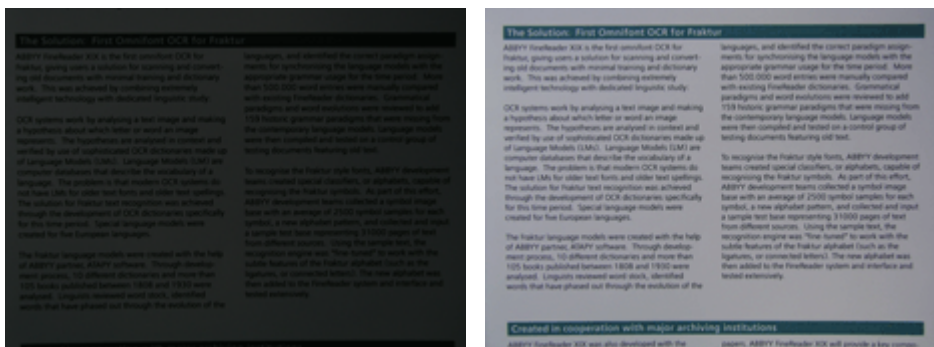
 We advise against using the flash when taking pictures of documents printed on glossy paper. Compare an image with glare and a good quality image:



If the image is too dark

- Set a lower aperture value to open up the aperture.
- Set a higher ISO value.
- Use manual focus, as automatic focus may fail in poor lighting conditions.

Compare an image that is too dark with a good quality image:



Taking photos

To obtain good quality photos of documents, be sure to position the camera correctly and follow these simple recommendations.

- Use a tripod whenever possible.

- The lens should be positioned parallel to the page. The distance between the camera and the document should be selected so that the entire page fits within the frame when you zoom in. In most cases, this distance will be between 50 and 60 cm.
- Even out the paper document or book pages (especially in the case of thick books). The text lines should not be skewed by more than 20 degrees, otherwise the text may not be converted properly.
- To get sharper images, focus on the center of the image.



- Enable the anti-shake feature, as longer exposures in poor lighting conditions may cause blur.
- Use the automatic shutter release feature. This will prevent the camera from moving when you press the shutter release button. The use of automatic shutter release is recommended even if you use a tripod.

How to improve an image if:


- The image is too dark or its contrast is too low.
Solution: Try using brighter lighting. If that is not an option, try setting a lower aperture value.
- The image is not sharp enough.
Solution: Autofocus may not work properly in poor lighting or when taking pictures from a close distance. Try using brighter lighting. Use a tripod and self-timer to avoid moving the camera when taking the picture.

If an image is only slightly blurry, the **Photo Correction** tool in the Image Editor of the OCR Editor may help get better results. **See also:** [If your document image has defects and OCR accuracy is low](#)¹⁷⁹

- A part of the image is not sharp enough.
Solution: Try setting a higher aperture value. Take pictures from a greater distance at maximum optical zoom. Focus on a point between the center and the edge of the image.
- The flash causes glare.
Solution: Disable the flash or try using other light sources and increasing the distance between the camera and the document.

Options dialog box

The **Options** dialog box contains a variety of options that let you decide how documents will be scanned, opened, recognized, and saved into various formats, as well as change OCR languages, the language of the interface, the print type of input documents, and some other options.

 There are several ways to open the **Options** dialog box:


- In the **New Task** screen, click the **Options** button in the lower-left corner.
- In the **New Task** screen, click **Tools > Options....**
- In the PDF Editor, click **Tools > Options....**
- In the OCR Editor, click **Tools > Options....**

Buttons, links or commands that open the **Options** dialog box will also be available when you convert or scan files in the **New Task** screen, on toolbars and on shortcut menus of toolbars in the PDF Editor and the OCR Editor, and in the dialog boxes that appear when you save documents.

The **Options** dialog box has seven tabs, each of which contains settings specific to certain ABBYY FineReader functionality.

General

On this tab, you can:

- Choose which part of the program will open when you start ABBYY FineReader PDF 15: the **New Task** screen, the OCR Editor with a new OCR project, or the OCR Editor with the most recently used OCR project.
- Specify which device you want to use to get images, and choose a scanning interface. ABBYY FineReader uses a built-in dialog box to display the [scanning settings](#) . If the scanning interface of ABBYY FineReader PDF 15 is incompatible with your scanner, you can use your scanner's native interface. The scanner's documentation should contain a description of this dialog box and its elements.
- Make FineReader the default program for opening PDF documents.


 If you install ABBYY FineReader on a computer running Windows 7 on which no default PDF viewing application is selected, ABBYY FineReader will automatically become the default program for opening PDF documents.

Image Processing

This tab contains three groups of options:

- **Enable background recognition in the PDF Editor**

When this option is enabled, all pages that are opened in the PDF Editor will be recognized automatically. This process runs in the background and adds a temporary text layer to PDF documents, making it possible to search them and copy their text.

Use the link at the bottom of this group to specify the language(s) of your document.

- **Automatically process page images as they are added to the OCR Editor**

This option enables or disables automatic processing of newly added pages. If automatic processing is enabled, you can select general document processing options and image preprocessing settings to be used when scanning and opening images:

- **Recognize page images (includes preprocessing and analysis)**

Newly added images in the OCR Editor will be preprocessed using the settings specified in the **Image preprocessing settings (apply to conversion and OCR)** group of options. Analysis and recognition will also be performed automatically.

- **Analyze page images (includes preprocessing)**


Image preprocessing and document analysis are performed automatically, but OCR has to be started manually.

- **Preprocess page images**

Only preprocessing is carried out automatically. Analysis and OCR have to be started manually.

- **Image preprocessing settings (apply to conversion and OCR)**

ABBYY FineReader PDF 15 lets you automatically remove common defects from scans and digital photos.

 **See also:** [Background recognition](#)⁵⁵, [Image processing options](#)²⁹⁰, and [Working with complex-script languages](#)²⁹⁶

Languages


This tab contains OCR language options. **See also:** [Document features to consider prior to OCR](#)²⁸⁷

OCR

On this tab, you can select recognition options:

- The [PDF recognition mode](#)²⁹³
- Whether to use thorough or fast recognition
- The [type of the document](#)²⁸⁸

- Whether the program should detect structural elements (lets you choose which elements to preserve when exporting results to Microsoft Word)
- Whether the program should recognize barcodes
- Training (lets you use user patterns when recognizing texts)
- Fonts (lets you choose the fonts to be used in recognized texts)

 **See also:** [OCR options](#)^[293], [If the printed document contains non-standard fonts](#)^[194]

Format Settings

On this tab, you can adjust the settings of output file formats. **See also:** [Format settings](#)^[262]

Other


On this tab, you can:

- Specify [the interface language](#)^[300] of ABBYY FineReader PDF 15.
- Specify how many processor cores FineReader may use for OCR.
- Specify whether ABBYY FineReader PDF 15 should automatically check for and install updates.
- Specify whether you want to send anonymized ABBYY FineReader PDF 15 configuration data to ABBYY for purposes of improving the software.
- Specify whether you want to see marketing messages in ABBYY FineReader PDF 15 dialog boxes.
- Enable or disable [JavaScript](#)^[57] in PDF documents.
- Specify whether ABBYY FineReader PDF 15 should automatically detect URLs in PDF documents.


Click **Reset...** at the bottom of the dialog box if you want to revert to the default settings.

Areas and Text*

On this tab you can:

- Specify verification settings for low-confidence characters.
- Specify verification settings for non-dictionary words:
- Ignore words with digits and special characters.
- Check non-dictionary compounds.
 -  A compound word is a word made up of two or more words.
- Specify whether you want to correcting spaces before and after punctuation marks.

- View and edit user dictionaries.
- Choose a font for displaying plain text.
- Choose the color and thickness of frames of different area types in the **Image** window, the highlight color for low-confidence characters, and other display options.

 **See also:** [Checking recognized text](#)^[202], [If the program fails to recognize certain characters](#)^[198], [Editing area properties](#)^[186]

* This tab is only available in the OCR Editor.

Format settings

ABBYY FineReader offers flexible format settings which determine the look and feel of output documents.

- [PDF settings](#)^[263]
- [DOC\(X\)/RTF/ODT settings](#)^[267]
- [XLS\(X\) settings](#)^[270]
- [PPTX settings](#)^[271]
- [CSV settings](#)^[271]
- [TXT settings](#)^[272]
- [HTML Settings](#)^[273]
- [EPUB/FB2 settings](#)^[274]
- [DjVu settings](#)^[275]

PDF settings

The following settings are available:

Image quality

If your text contains a lot of pictures or if you choose to save the page image together with the recognized text, the resulting PDF file may be quite large. The quality of the pictures and the size of the resulting file can be tweaked using the options in the **Image quality** drop-down list:

- **Best quality**

Select this option to retain the quality of the pictures or the page image. The original resolution of the source image will be preserved.

- **Balanced**

Select this option to reduce the size of the PDF file while keeping the quality of the pictures or page image at a reasonably high level.

- **Compact size**

Select this option to greatly reduce the size of the output PDF file. The resolution of the pictures and page image will be reduced to 300 dpi, affecting their quality.

- **Custom...**

Select this option if you want to specify custom image quality settings. In the **Custom Settings** dialog box, select the desired settings and click **OK**.

Create PDF/A

Enable this option if you want to create a PDF/A document and select the PDF/A version that you want to use.

Create PDF/UA (requires OCR)

Enable this option if you want to create a PDF/UA document. Please be aware that the resulting document may not look exactly like the original.

Protect documents with passwords

This option allows you to protect your PDF document with a password to prevent unauthorized opening, printing, or editing. Click the **Settings...** button and specify protection settings in the dialog box that opens:

- **Document Open password**

If your document has a Document Open password, users will be able to open it only after entering the password you specify. To set a password for your document:

1. Enable the **Restrict access with a Document Open password** option.
2. Type the password and confirm it.

Disable the **Hide characters** option if you want the characters of your password to be visible in the **Document Open password** field.

- **Permissions password**

This password protects the PDF document from unauthorized editing and printing and prevents users who do not know the password from copying its content into another application. Users will be able to perform all of these actions only after entering the password you specify. To set this password:

1. Enable the **Restrict printing and editing with a Permissions password** option.
2. Type the password and confirm it.

Disable the **Hide characters** option if you want the characters of your password to be visible in the **Permissions password** field.

Next, select the actions you want to allow users to perform.

- The **Printing** drop-down list contains options that allow or restrict printing the document.
- The **Editing** drop-down list contains options that allow or restrict editing the document.
- The **Allow copying text, images, and other content** option allows users to copy content (text, pictures, etc.) from your document. If you want to prohibit such actions, make sure this option is not selected.
- The **Allow screen readers to read text** option allows screen reader software to read text from the document when it is open. If you want to prohibit such actions, make sure this option is not selected.

- **Encryption level**

The **Encrypt** drop-down list contains options that encrypt password-protected documents.

- **128-bit AES** is a fairly strong encryption algorithm based on the AES standard.
- **256-bit AES** is a strong encryption algorithm based on the AES standard.

Select one of the options from the **Encrypt** drop-down list. **All document contents** encrypts the entire document, while **All document contents except metadata** leaves the document's data unencrypted and readable.

Delete objects and data

Enable this option if you don't want to preserve various objects contained in the PDF document, then click the **Select...** button to select which objects you don't want to keep:


- **Comments and markup**
Notes, annotations, shapes, and text blocks will not be saved.
- **Links, media, actions, scripts, and form data**
Interactive elements will not be saved.
- **Bookmarks**
Bookmarks will not be saved.
- **Attachments**
Attached files will not be saved.

Use one paper size for all page images

If this option is disabled, the original paper size of the page images will be retained. Enable this option if you want to use a specific paper size in your PDF document.

Use MRC compression (requires OCR)

Selecting this option will apply the MRC compression algorithm, which greatly reduces file size and preserves the visual quality the image.

 The **Use MRC compression (requires OCR)** option is available for searchable PDF documents when the **Text under the page image** option is enabled.

Apply ABBYY PreciseScan to smooth characters on page images

Enable this option if you want to use the ABBYY PreciseScan technology to smooth out the characters in the document. As a result, characters will not look pixelated even when you zoom in on the page.

Searchable PDF settings

This group of options lets you decide what elements of your PDF document you want to save. Depending on how you are planning to use your document, select one of the following options:

- **Text and pictures only**

This option saves only the recognized text and the associated pictures. The page will be fully searchable and the size of the PDF file will be small. The appearance of the resulting document may slightly differ from the original

- **Text over the page image**

This option saves the background and pictures of the original document and places the recognized text over them. Usually, this PDF type requires more disk space than **Text and pictures only**. The resulting PDF document will be fully searchable. In some cases, the appearance of the resulting document may slightly differ from the original.

- **Text under the page image**

This option saves the entire page as an image and places the recognized text underneath. The text layer makes it possible to search the document and copy text, while the page images insure that the document looks virtually the same as the original.

Create bookmarks from headings

Select this option if you wish to create a table of contents from the document headings.

Create PDF tags

Select this option to add PDF tags to the output PDF document.

Apart from text and pictures, PDF files can contain information about the document structure, such as logical parts, pictures, and tables. This information is stored in PDF tags. A PDF file equipped with PDF tags may be reflowed to fit different screen sizes and will display well on handheld devices.

Fonts

When saving texts in PDF, you can use either Adobe fonts or the Windows fonts installed on your computer. To specify the font set to be used, select one of the following items from the drop-down list:

- **Use predefined fonts**

The PDF file will use Adobe fonts, for example: Times New Roman, Arial, Courier New.

- **Use Windows fonts**

The file will use the Windows fonts installed on your computer.

To embed fonts in the PDF document, select the **Embed fonts** option. This will make the document file larger, but the document will look the same on all computers.

 The **Embed fonts** is only available for **Text and pictures only** and **Text over the page image** PDF documents.

Preserve document metadata, such as authors and keywords

Preserves the [metadata](#)¹⁰² of the document when it is saved in the PDF format. This option is enabled by default.

If you want to make changes to the document's metadata, click the **Edit Metadata...** button, make the desired changes, and click **OK**.

DOC(X)/RTF/ODT settings

The following settings are available:

Document layout

Select the appropriate setting depending on how you plan to use the output document.

1. Exact copy


Preserves the formatting of the original document. This setting is recommended for documents with complex layouts, such as promotion booklets. Note, however, that it limits your ability to change the text and formatting in the output document.

2. Editable copy

Produces a document in which the formatting may differ slightly from that of the original. Documents produced in this mode are easy to edit.

3. Formatted text

Retains paragraphs but does not retain the exact positions of objects on the page and line spacing. The text produced will be left-aligned. Texts in right-to-left scripts will be right-aligned.

 Vertical texts will become horizontal.

4. Plain text

Discards most formatting. Preserves only the font styles if the **Keep bold, italic, and underlined text styles in plain text** option is enabled.

Default paper size

You can select the paper size to be used for saving in RTF, DOC, DOCX, or ODT format from the **Default paper size** drop-down list.

Picture settings

Documents containing a large number of pictures can be very large. The quality of the pictures and the size of the resulting file can be tweaked using the options in the **Keep pictures** drop-down list.

Tip. To change the picture saving settings, click **Custom...**, specify the desired settings in the **Custom Settings** dialog box, and click **OK**.

Text settings

- **Keep headers, footers, and page numbers**

Retains the headers, footers, and page numbers in the output text.

- **Keep line breaks and hyphens**

Retains the original arrangement of text lines in the output text.

- **Keep page breaks**

Retains the original page arrangement.

- **Keep line numbers**

Retains the original line numbering (if any). The line numbers will be saved in a separate field that remains unchanged when you edit the text.


 This feature is available only if the **Editable copy** option is selected in the **Document layout** drop-down list.

- **Keep text and background colors**

Select this option to retain the font color and background color.

- **Keep bold, italic, and underlined text styles in plain text**

Retains font styles when the **Plain text** option is selected in the **Document layout** drop-down list.

 If you disable the detection of headers, footers, the table of contents, numbered lists, and footnotes on the **OCR** tab of the **Options** dialog box (click **Tools** > **Options...** to open this dialog box), these elements will be saved as body text.

Low-confidence characters

Enable the **Highlight low-confidence characters** option if you plan to edit the document in Microsoft Word and not in the **Text** pane of the OCR Editor. When this option is selected, all low-confidence characters will be highlighted in the Microsoft Word document.

Tip. You can change the color use for low-confidence characters on the **Areas and Text** tab of the **Options** dialog box (click **Tools**>**Options...** to open this dialog box).

Preserve document metadata, such as authors and keywords

Preserves the metadata when you save the document. This option is enabled by default.

If you want to make changes to the document's metadata, click the **Edit Metadata...** button, make the desired changes, and click **OK**.

XLS(X) settings


The following settings are available:

Document layout

Select the appropriate setting depending on how you plan to use the output document.

1. Formatted text

Retains the fonts, font sizes, and paragraphs, but does not retain the exact line spacing or locations of the objects on the page. The text produced will be left-aligned. Texts in right-to-left scripts will be right-aligned.

 Vertical texts will become horizontal.

2. Plain text

Does not retain the formatting.

Picture settings

You can save pictures in XLSX documents. Documents containing a large number of pictures can be very large. The quality of the pictures and the size of the resulting file can be tweaked using the options in the **Keep pictures (XLSX only)** drop-down list.

Tip. To change the picture saving settings, click **Custom...**, select the desired settings in the **Custom Settings** dialog box, and click **OK**.

Text settings

- **Keep headers and footers**

Enable this option if you want to keep the headers and footers. If this option is disabled, the headers and footers will not be preserved.

- **Ignore text outside tables**

Saves only the tables and ignores the rest.

- **Convert numeric values to numbers**

Converts numbers into the "Numbers" format in the XLSX document. Microsoft Excel can perform arithmetic operations on such cells.

- **Create separate sheet for each page (XLSX only)**

Select this option to save pages from the source document as separate worksheets.

Preserve document metadata, such as authors and keywords

Preserves the metadata when you save the document. This option is enabled by default.

If you want to make changes to the document's metadata, click the **Edit Metadata...** button, make the desired changes, and click **OK**.

PPTX settings

The following settings are available:

Picture settings

Documents containing a large number of pictures can be very large. The quality of the pictures and the size of the resulting file can be tweaked using the options in the **Keep pictures** drop-down list.

Tip. To change the picture saving settings, click **Custom....** In the **Custom Settings** dialog box, select the desired settings and click **OK**.

Text settings

- **Keep headers and footers**

Preserves the headers and footers in the output document.

- **Keep line breaks**

Retains the original arrangement of text lines. If this option is not selected, the output document will have a single line containing all of the text.

- **Shrink text on overflow**

Decreases the font size of text if the text does not fit into a text block.

Preserve document metadata, such as authors and keywords

Preserves the metadata when you save the document. This option is enabled by default.

If you want to make changes to the document's metadata, click the **Edit Metadata...** button, make the desired changes, and click **OK**.

CSV settings

The following settings are available:

Text settings

- **Ignore text outside tables**

Saves only the tables and ignores the rest.

- **Insert page break character (#12) as page separator**

Saves the original page arrangement.

Delimiter

Specifies the character that will be used to separate the data columns in the output CSV document.

Encoding

ABBYY FineReader detects the [code page](#)³¹⁴ automatically. To change the code page, select the desired code page from the **Encoding** drop-down list.

Preserve document metadata, such as authors and keywords

Preserves the metadata when you save the document. This option is enabled by default.

If you want to make changes to the document's metadata, click the **Edit Metadata...** button, make the desired changes, and click **OK**.

TXT settings

The following settings are available:

Document layout

Select the appropriate setting depending on how you plan to use the output document.

1. Formatted text

Retains the paragraphs but does not retain the exact positions of the objects and line spacing. Additionally, white spaces are used to reproduce paragraph indentations and tables. The text produced will be left-aligned. Texts in right-to-left scripts will be right-aligned.

Vertical texts will become horizontal.

2. Plain text

Does not retain the formatting.

Text settings

- **Keep line breaks**

Retains the original arrangement of text lines. If this option is not selected, each paragraph will be saved as a single line of text.

- **Insert page break character (#12) as page break**

Saves the original page arrangement.

- **Use blank line as paragraph separator**

Separates the paragraphs with blank lines.

- **Keep headers and footers**

Preserves the headers and footers in the output document.

Encoding

ABBYY FineReader detects the [code page](#)³¹⁴ automatically. To change the code page, select the desired code page from the **Encoding** drop-down list.

Preserve document metadata, such as authors and keywords

Preserves the metadata when you save the document. This option is enabled by default.

If you want to make changes to the document's metadata, click the **Edit Metadata...** button, make the desired changes, and click **OK**.

HTML settings

The following settings are available:

Document layout


Select the appropriate setting depending on how you plan to use the output document.

- **Flexible layout**

Preserves the formatting of the original. The output HTML document can be easily edited.

- **Formatted text**

Retains the fonts, font sizes, font styles, and paragraphs, but does not retain the exact line spacing or locations of the objects on the page. The text produced will be left-aligned. Texts in right-to-left scripts will be right-aligned.

 Vertical texts will become horizontal.

- **Plain text**

Does not retain the formatting.

Picture settings

Documents containing a large number of pictures can be very large. The quality of the pictures and the size of the resulting file can be tweaked using the options in the **Keep pictures** drop-down list.

Tip. To change the picture saving settings, click **Custom....** In the **Custom Settings** dialog box, select the desired settings and click **OK**.

Text settings

- **Keep line breaks**

Retains the original arrangement of text lines. If this option is disabled, the output document will have a single line containing all of the text.

- **Keep text and background colors**

Select this option to retain the font color and background color.

- **Keep headers and footers**

Preserves the headers and footers in the output document.

Encoding

ABBYY FineReader detects the [code page](#)³¹⁴ automatically. To change the code page, select the desired code page from the **Encoding** drop-down list.

Book settings

If you are converting a hard-copy book to HTML, enable the **Generate a table of contents and use it to divide the document into files** option. The book can be split into chapters in one of the following ways:

- **Automatically create files based on headings**

ABBYY FineReader PDF 15 will automatically split the document into parts of roughly equal size, save them as separate HTML files, and create links to them in the table of contents.

- **Create files based on level 1 headings**

ABBYY FineReader PDF 15 will automatically split the document into separate HTML files using the highest-level headings.

- **Create files based on level 2 headings**

ABBYY FineReader PDF 15 will automatically split the document into separate HTML files using the highest-level headings and the headings of the next level.

Preserve document metadata, such as authors and keywords

Preserves the metadata when you save the document. This option is enabled by default.

If you want to make changes to the document's metadata, click the **Edit Metadata...** button, make the desired changes, and click **OK**.

EPUB/FB2 settings

The following settings are available:

Document layout

Select the appropriate setting depending on how you plan to use the output document.

- **Formatted text**

Retains the paragraphs but does not retain the exact positions of the objects and line spacing. The text produced will be left-aligned. Texts in right-to-left scripts will be right-aligned.

Vertical texts will become horizontal.

Font styles will be retained only in the EPUB format.

- **Plain text**

Does not retain the formatting.

If you are saving to the EPUB format, you can preserve fonts by selecting the **Formatted text** option from the **Document layout** drop-down list and enabling the **Retain fonts and font sizes (EPUB only)** option below. Select the **Embed fonts** option to embed the document's fonts in the resulting e-book.

Some devices and software cannot display embedded fonts.

Create cover

Enable the **Use the first page as the e-book cover** option if you want to use the first page in the document as its cover.

Picture settings

Documents containing a large number of pictures can be very large. The quality of the pictures and the size of the resulting file can be tweaked using the options in the **Keep pictures** drop-down list.

Tip. To change the picture saving settings, click **Custom....** In the **Custom Settings** dialog box, select the desired settings and click **OK**.

EPUB Settings

You can choose which version of the EPUB format you want to use.

Preserve document metadata, such as authors and keywords

Preserves the metadata when you save the document. This option is enabled by default.

If you want to make changes to the document's metadata, click the **Edit Metadata...** button, make the desired changes, and click **OK**.

DjVu settings

The following settings are available:

Save mode

Select the appropriate setting depending on how you plan to use the output document.

- **Text under the page image**

This option saves the entire page as an image and places the recognized text underneath. As a result, you get a searchable DjVu document that looks almost exactly like the original.

- **Page image only**

This option saves the exact image of the page. The output document will look almost exactly like the original, but the text in the document will not be searchable.

Picture settings

Documents containing a large number of pictures can be very large. The quality of the pictures and the size of the resulting file can be tweaked using the options in the **Image quality** drop-down list.

Tip. To change the picture saving settings, click **Custom....** In the **Custom Settings** dialog box, select the desired settings and click **OK**.

Multiple layers

The DjVu format uses a special compression technique which separates a page image into layers and applies different compression methods to each of them. By default, ABBYY FineReader will automatically determine whether multi-layer compression must be used on a page (i.e. the **Multiple layers** option is set to **Automatic**). Set the **Multiple layers** option to **Always on** if you want to use multi-layer compression on all pages or to **Always off** if you do not want to use multi-layer compression.



Preserve document metadata, such as authors and keywords


Preserves the metadata when you save the document. This option is enabled by default.

If you want to make changes to the document's metadata, click the **Edit Metadata...** button, make the desired changes, and click **OK**.

Supported OCR and document comparison languages

ABBYY FineReader PDF 15 supports 201 OCR languages:

- [Natural languages](#)  277
- [Artificial languages](#)  283
- [Formal languages](#)

 Supported languages may vary in different versions of the product.

Natural languages

- **Abkhaz**
- **Avar**
- **Agul**
- **Adyghe**
- **Azeri (Cyrillic), Azeri (Latin) ****
- **Aymara**
- **Albanian**
- **Altai**
- **English phonetic transcriptions**
- **English*, ****
- **Arabic (Saudi Arabia)**
- **Armenian** (Eastern, Western, Grabar)*
- **Afrikaans**
- **Nahuatl**
- **Basque**
- **Bashkir*, ****
- **Belarusian**
- **Bemba**
- **Blackfoot**
- **Bulgarian*, ****

- **Breton**
- **Bugotu**
- **Buryat**
- **Welsh**
- **Hungarian^{*}, ^{**}**
- **Wolof**
- **Vietnamese^{*}, ^{**}**
- **Hawaiian**
- **Gagauz**
- **Galician**
- **Ganda**
- **Greek^{*}**
- **Guarani**
- **Kawa**
- **Scottish Gaelic**
- **Dakota**
- **Dargwa**
- **Danish^{*}, ^{**}**
- **Tun**
- **Dungan**
- **Zulu**
- **Hebrew^{*}**
- **Yiddish**
- **Ingush**
- **Indonesian^{*}, ^{**}**
- **Irish**
- **Icelandic**

- **Spanish***, **
- **Italian***, **
- **Kabardian**
- **Kazakh**
- **Kalmyk**
- **Karakalpak**
- **Karachay-balkar**
- **Catalan***, **
- **Kashubian**
- **Quechua (Bolivia)**
- **Kikuyu**
- **Kirghiz**
- **Chinese Simplified, Chinese Traditional**
- **Kongo**
- **Korean, Korean (Hangul)**
- **Corsican**
- **Koryak**
- **Xhosa**
- **Kpelle**
- **Crow**
- **Crimean Tatar**
- **Kumyk**
- **Kurdish**
- **Lak**
- **Latin***
- **Latvian***, **
- **Lezgi**

- **Lithuanian***, **
- **Luba**
- **Sorbian**
- **Maya**
- **Macedonian**
- **Malagasy**
- **Malay (Malaysian)**
- **Malinke**
- **Maltese**
- **Mansi**
- **Maori**
- **Mari**
- **Minangkabau**
- **Mohawk**
- **Romanian (Moldova)**
- **Mongol**
- **Mordvin**
- **Miao**
- **German (Luxembourg)**
- **German****, **German (New Spelling)***, **
- **Nenets**
- **Nivkh**
- **Dutch****, **Dutch (Belgian)***, **
- **Nogay**
- **Norwegian (Nynorsk)****, **Norwegian (Bokmal)***, **
- **Nyanja**
- **Ojibway**

- **Ossetian**
- **Papiamentu**
- **Polish^{*}, ^{**}**
- **Portuguese^{**}, Portuguese (Brazilian)^{*}, ^{**}**
- **Occitan**
- **Rhaeto-Romanic**
- **Rwanda**
- **Romanian^{*}, ^{**}**
- **Rundi**
- **Russian^{*}, ^{**}**
- **Russian (Old Spelling)**
- **Russian with stress marks**
- **Sami (Lappish)**
- **Samoan**
- **Zapotec**
- **Swazi**
- **Cebuano**
- **Selkup**
- **Serbian (Cyrillic), Serbian (Latin)**
- **Slovak^{*}, ^{**}**
- **Slovenian^{*}, ^{**}**
- **Somali**
- **Swahili**
- **Sunda**
- **Tabasaran**
- **Tagalog**
- **Tajik**

- **Tahitian**
- **Thai***
- **Tatar*, ****
- **Tok Pisin**
- **Tongan**
- **Tswana**
- **Tuvinian**
- **Turkish*, ****
- **Turkmen (Cyrillic), Turkmen (Latin)**
- **Udmurt**
- **Uighur (Cyrillic), Uighur (Latin)**
- **Uzbek (Cyrillic), Uzbek (Latin)**
- **Ukrainian*, ****
- **Faroese**
- **Fijian**
- **Finnish*, ****
- **French*, ****
- **Frisian**
- **Friulian**
- **Khakass**
- **Hani**
- **Khanty**
- **Hausa**
- **Croatian*, ****
- **Jingpo**
- **Romany**
- **Chamorro**

- **Chechen**
- **Czech^{*}, ^{**}**
- **Chuvash**
- **Chukchee**
- **Swedish^{*}, ^{**}**
- **Shona**
- **Evenki**
- **Even**
- **Eskimo (Cyrillic), Eskimo (Latin)**
- **Estonian^{*}, ^{**}**
- **Sotho**
- **Yakut**
- **Japanese**

- **Old English**
- **Old French**
- **Old German**
- **Old Italian**
- **Old Spanish**
- **Latvian Gothic**


Artificial languages

- **Ido**
- **Interlingua**
- **Occidental**
- **Esperanto**

Formal languages

- **Basic**

- C/C++
- COBOL
- Fortran
- Java
- Pascal
- Simple math formulas
- Numbers

 To find out which fonts are required to display the characters of a specific language, see [Fonts required for the correct display of texts in supported languages](#) ³⁰⁴

*Dictionaries are available for this language, enabling ABBYY FineReader to identify unreliably recognized characters and detect spelling errors in texts written in this language.

**Document comparison language. ABBYY FineReader can compare documents written in 35 languages.

See also: [ABBYY Compare Documents](#) ²³⁴


Supported document formats


The table below lists the formats supported by ABBYY FineReader PDF 15.

| Format | File extension | Input formats for the OCR Editor | Input formats for the PDF Editor / for ABBYY Compare Documents | Saving formats |
|-----------------------------------|----------------|----------------------------------|--|----------------|
| PDF document | *.pdf | + | + | + |
| Editable text formats | | | | |
| Microsoft Word Document | *.doc, *.docx | - | + | + |
| Microsoft Excel 97-2003 Workbook | *.xls, *.xlsx | - | + | + |
| Microsoft PowerPoint Presentation | *.pptx | - | + | + |
| | *.ppt | - | + | - |

| | | | | |
|--|-----------------------------------|---|-------|---|
| Microsoft Visio Drawing | *.vsd, *.vsdx | - | + / - | - |
| HTML Document | *.htm, *.html | - | + | + |
| Rich Text Format | *.rtf | - | + | + |
| Text Document | *.txt | - | + | + |
| Microsoft Office Excel Comma-Separated Values File | *.csv | - | - | + |
| OpenDocument Text | *.odt | - | + | + |
| | *.ods | - | + | - |
| | *.odp | - | + | - |
| FB2 Document | *.fb2 | - | - | + |
| EPUB Document | *.epub | - | - | + |
| Non-editable formats | | | | |
| XPS (requires Microsoft .NET Framework 4) | *.xps | + | + | - |
| DjVu Document | *.djvu, *.djv | + | + | + |
| Images | | | | |
| JPEG | *.jpg, *.jpeg | + | + | + |
| JPEG 2000 | *.jp2, *.j2k, *.jpf, *.jpx, *.jpc | + | + | + |
| PNG | *.png | + | + | + |
| TIFF | *.tiff, *.tif | + | + | + |
| BMP | *.bmp, *.dib, *.rle | + | + | + |
| GIF | *.gif | + | + | - |
| JBIG2 | *.jbig2, *.jb2 | + | + | + |

| | | | | |
|-----|--------------|---|---|---|
| PCX | *.dcx, *.pcx | + | + | + |
|-----|--------------|---|---|---|

 To be able to edit texts in a particular format, you must have the appropriate version of Microsoft Office or Apache OpenOffice installed on your computer.

 ABBYY Compare Documents can save comparison results in the following formats:

- PDF document (*.pdf)
To view PDF files, you must have a PDF viewing application installed on your computer. To see the list of differences, open the Comments pane.
- Microsoft Word Document (*.docx)

 If the metadata of a document contain information about the compliance with the PDF/A or PDF/UA standard, this will be displayed in the **Document Properties** window.

Document features to consider prior to OCR

The quality of images has a significant impact on OCR quality. This section explains what factors you should take into account before recognizing images.

- [OCR languages](#) ²⁸⁷
- [Print type](#) ²⁸⁸
- [Print quality](#) ²⁸⁸
- [Color mode](#)

OCR languages

ABBYY FineReader can recognize both single- and multi-language documents (e.g. written in two or more languages). For multi-language documents, you need to select several OCR languages.

To select OCR languages, click [Options](#) ²⁵⁹ > **Languages** and select one of the following options:

- **Automatically select OCR languages from the following list**
 ABBYY FineReader will automatically select the appropriate languages from the user-defined list of languages. To edit the list of languages:
 1. Make sure the **Automatically select OCR languages from the following list** option is selected.
 2. Click the **Specify...** button.
 3. In the **Languages** dialog box, select the desired languages and click **OK**.
 4. In the **Options** dialog box, click **OK**.
- **Specify OCR languages manually**
 Select this option if the language you need is not in the list.

In the dialog box below, specify one or more languages. If you often use a particular language combination, you can [create a new group](#) ¹⁹⁹ for these languages.

If a language is not in the list, it is either:

1. Not supported by ABBYY FineReader, or
 - 🔗 For a complete list of supported languages, see [Supported OCR languages](#) ²⁷⁷.
2. Not supported by your version of the product.
 - 🔗 The complete list of languages available in your version of the product can be found in the **Licenses** dialog box (click **Help** > **About** > **License Info** to open this dialog box).

In addition to using built-in languages and language groups, you can create your own languages and groups. **See also:** [If the program fails to recognize certain characters](#) ¹⁹⁸

Print type

Documents may be printed using various devices such as typewriters and fax machines. OCR quality may vary depending on how a document was printed. You can improve OCR quality by selecting the correct print type in the [Options](#)²⁵⁹ dialog box.

For most documents, the program will detect their print type automatically. For automatic print type detection, the **Auto** option must be selected in the **Document type** group of options in the **Options** dialog box (click **Tools** > **Options...** > **OCR** to access these options). You can process documents in full-color or black-and-white mode.



You may also choose to manually select the print type as needed.

| | |
|------------------------|---|
| <p>software</p> | <p>An example of typewritten text. All letters are of equal width (compare, for example, "w" and "t"). For texts of this type, select Typewriter.</p> |
| <p>software</p> | <p>An example of a text produced by a fax machine. As you can see from the example, the letters are not clear in some places. There is also some noise and distortion. For texts of this type, select Fax.</p> |

After recognizing typewritten texts or faxes, be sure to select **Auto** before processing regular printed documents.

Print quality

Poor-quality documents with "noise" (i.e. random black dots or speckles), blurred and uneven letters, or skewed lines and shifted table borders may require specific scanning settings.

| | |
|---|--|
| <p>Fax</p> | <p>Newspaper</p> |
|  |  |

Poor-quality documents are best scanned in [grayscale](#)²⁵³. When scanning in grayscale, the program will select the optimal [brightness](#)³¹⁴ value automatically.

The grayscale scanning mode retains more information about the letters in the scanned text to achieve better OCR results when recognizing documents of medium to poor quality. You can also correct some of the defects manually using the image editing tools available in the Image Editor. **See also:** [If your document image has defects and OCR accuracy is low](#)¹⁷⁹

Color mode

If you do not need to preserve the original colors of a full-color document, you can process the document in black-and-white mode. This will greatly reduce the size of the resulting OCR project and speed up the OCR process. However, processing low-contrast images in black-and-white may result in poor OCR quality. We also do not recommend black-and-white processing for photos, magazine pages, and texts in Chinese, Japanese, and Korean.

Tip. You can also speed up the OCR of color and black-and-white documents by selecting **Fast recognition** on the **OCR** tab of the **Options** dialog box. For more about the recognition modes, see [OCR Options](#)²⁹³.

For some additional recommendations on selecting the right color mode, see [Scanning tips](#)²⁵³.



 Once the document is converted to black-and-white, you will not be able to restore the colors. To get a color document, open a file with color images or scan the paper document in color mode.

Image processing options

To customize the scanning and opening of pages in ABBYY FineReader, you can:

- enable/disable [background recognition in the PDF Editor](#)^[290]
- enable/disable [automatic analysis and recognition](#)^[290] of pages when they are added into the OCR Editor
- specify [image preprocessing settings](#)^[291]

You can select desired options either when opening a PDF document, images or scans in the New Task Window or on the **Image Processing** tab of the **Options** dialog box (click **Tools** > **Options...** to open this dialog box).


 Any changes you make in the **Options** dialog box will only be applied to newly scanned/opened images.

The **Image Processing** tab of the **Options** dialog box contains the following options:

Enable background recognition in the PDF Editor

background recognition will be used for all pages you open in the PDF Editor. Background recognition allows you to search and copy text even in documents that do not have a text layer (e.g. documents that contain only scans or that were created from images). No permanent changes are made to the document itself.

On this tab, you can also specify the [OCR languages](#)^[287].

 If you want to enable other users to carry out text searches in this document, click **File** > **Recognize Document** > **Recognize Document...**

Automatic analysis and recognition of images added into the OCR Editor

By default, pages are analyzed and recognized automatically, but you can change this behavior. The following modes are available:

- **Recognize page images (includes preprocessing and analysis)**
When images are opened in the OCR Editor, they will be automatically preprocessed using the settings selected in the **Image preprocessing settings (apply to conversion and OCR)** group of settings. Analysis and OCR are also performed automatically.
- **Analyze page images (includes preprocessing)**
Image preprocessing and document analysis are performed automatically, but OCR has to be started manually.
- **Preprocess page images**
Only preprocessing is carried out automatically. Analysis and OCR have to be started manually. This mode is commonly used for documents with complex structures.

✎ If you do not want the images you add to be automatically processed, clear the **Automatically process page images as they are added to the OCR Editor** option.

This lets you quickly open large documents, recognize only select pages in a document, and [save documents as images](#)²¹⁷.

Image preprocessing settings

ABBYY FineReader lets you automatically correct common defects on scan and digital photos.

By default, this dialog box displays three recommended options:

- **Split facing pages**
Split facing pages The program will automatically split images that contain facing pages into two images containing one page each.
- **Correct page orientation**
The orientation of pages that are added to an OCR project will be automatically detected and corrected if necessary.
- **Use recommended settings for better OCR**
The program will automatically choose and apply the required preprocessing settings.

To display all the settings, click **Show Custom Settings**:

- **Deskew images**
The program will automatically detect skewed pages and correct skew if necessary.
- **Straighten text lines**
The program will automatically detect uneven text lines on images and straighten them without correcting trapezoid distortions.
- **Correct image resolution**
The program will automatically detect will automatically determine the best resolution for images and will change the resolution of images when necessary.
- **Detect page edges ***
The program will automatically detect and crop image edges.
- **Whiten background ***
The program will automatically whiten backgrounds and select the best brightness setting.
- **Reduce ISO noise ***
The program will automatically remove noise from photographs.
- **Remove motion blur ***
The sharpness of blurry digital photos will be increased.

- **Correct trapezoid distortions ***

The program will automatically detect trapezoid distortions and uneven text lines on digital photographs and scans of books.

- **Fix inverted colors on image**

When appropriate, the program will invert the colors of an image so that dark text is printed on a light background.


- **Convert to black and white**


The program will convert color images to black-and white. This will greatly reduce the size of the resulting OCR project and speed up OCR. We do not recommend black-and-white conversion for photos, magazine pages, and texts in Chinese, Japanese, and Korean.

- **Remove color marks**

The program will detect and remove any color stamps and marks made in pen to facilitate the recognition of the text obscured by such marks. This option is designed for scanned documents with dark text printed on a white background. Do not select this option for digital photos and documents with color backgrounds.








* For digital photos only.

 To display only the recommended settings, click **Hide Custom Settings**.


 You can disable all of these options when scanning or opening document pages and still apply any desired preprocessing in the Image Editor of the OCR Editor. **See also:** [If your document image has defects and OCR accuracy is low](#)¹⁷⁹.


OCR options

Selecting the right OCR options is important if you want fast and accurate results. When deciding which options you want to use, you should consider not only the type and complexity of your document, but also how you intend to use the results. The following groups of options are available:

- [PDF recognition modes](#) 
- [Balance between OCR speed and accuracy](#) 
- [Document type](#) 
- [Detection of structural elements](#) 
- [Barcodes](#) 
- [Patterns and languages](#) 
- [Fonts to be used in recognized text](#) 

You can find the OCR options on the **OCR** tab of the **Options** dialog box (click **Tools** > **Options...** to open this dialog box).

 ABBYY FineReader automatically recognizes any pages you add to an OCR project. The currently selected options will be used for OCR. You can turn off automatic analysis and OCR of newly added images on the **Image Processing** tab of the **Options** dialog box (click **Tools** > **Options...** to open this dialog box).

 If you change the OCR options after a document has been recognized, run the OCR process again to recognize the document with the new options.

PDF recognition modes

These settings are intended for PDF documents with text layers and pictures. Such PDF documents are usually created from documents in editable formats. Other types of PDF documents, such as searchable PDFs and image-only PDFs, are always processed in **Use OCR** mode, which is the default mode for these types of PDF. No additional settings are required to process such PDFs.

Three recognition modes are available:

- **Automatically Choose between OCR and Text from PDF**
The program will examine the text layer and use the existing text layer if it contains good-quality text. Otherwise, OCR will be used to create a new text layer.
- **Use OCR**
OCR will be used to create a new text layer. This mode takes more time but is more suitable for documents with poor-quality text layers.

- **Use Only Text from PDF**

This is the default mode for PDF documents with text layers. The program will use the original text layer without running OCR.

balance between OCR speed and accuracy

ABBYY FineReader PDF 15 allows you to perform:

- **Thorough recognition**

In this mode, ABBYY FineReader analyzes and recognizes both simple documents and documents with complex layouts, even those with text printed on a colored background and documents with complex tables (including tables with white grid lines and tables with color cells).

Thorough recognition requires more time but delivers better quality.

- **Fast recognition**

This mode is recommended for processing large documents with simple layouts and good quality images.

Print type

Specifies the type of device that was used for printing the document. **See also:** [Document features to consider prior to OCR](#)^[288]

Detect structural elements

Select the structural elements you want the program to detect: headers and footers, footnotes, tables of contents, and lists. The selected elements will be clickable when the document is saved.

Barcodes

If your document contains barcodes and you wish them to be converted into strings of letters and digits rather than saved as pictures, select **Convert barcodes into strings**. This feature is disabled by default.

Patterns and languages

Recognition with training is used to recognize the following types of text:

- Texts with special symbols (e.g. mathematical symbols)
- Text with decorative elements
- Large volumes of text from low-quality images (over 100 pages)

[Training](#)^[194] is disabled by default. Enable **Use training to recognize new characters and ligatures** to train ABBYY FineReader while performing OCR.

You can use either built-in or your own patterns for recognition.

 You can save and load settings for user patterns and languages. **See also:** [OCR project](#)^[172]

Fonts

Here you can select the fonts to be used when saving recognized text.

To select fonts:

1. Click the **Select Fonts...** button.
2. Select the desired fonts and click **OK**.

Working with complex-script languages

With ABBYY FineReader, you can recognize documents in Arabic, Hebrew, Yiddish, Thai, Chinese, Japanese, and Korean. Some additional factors must be taken into account when working with documents in Chinese, Japanese or Korean and with documents in which a combination of CJK and European languages is used.

- [Recommended fonts](#)  296
- [Disabling automatic image processing](#)  297
- [Recognizing documents written in more than one language](#)  298
- [If non-European characters are not displayed in the Text window](#)  298
- [Changing the direction of recognized text](#)

Recommended fonts

Recognition of text in Arabic, Hebrew, Yiddish, Thai, Chinese, Japanese, and Korean may require additional fonts to be installed. The table below lists the recommended fonts for texts in these languages.

| OCR languages | Recommended font |
|---------------|---|
| Arabic | Arial™ Unicode™ MS |
| Hebrew | Arial™ Unicode™ MS |
| Yiddish | Arial™ Unicode™ MS |
| Thai | Arial™ Unicode™ MS Aharoni David Levenim mt Miriam Narkisim Rod |

| | |
|-----------------------|------------------------------------|
| Chinese (Simplified) | Arial™ Unicode™ MS |
| Chinese (Traditional) | SimSun fonts such as: |
| Japanese, Korean | Example SimSun (Founder Extended), |
| Korean (Hangul) | SimSun-18030, NSimSun. |
| | Simhei |
| | YouYuan |
| | PMingLiU |
| | MingLiU |
| | Ming(for-ISO10646) |
| | STSong |


The sections below contain advice on improving recognition accuracy.

Disabling automatic image processing

By default, any pages you add to an [OCR project](#)^[172] are automatically recognized.

However, if your document contains text in a CJK language combined with a European language, we recommend disabling automatic detection of page orientation and using the dual page splitting option only if all of the page images have the correct orientation (e.g. they were not scanned upside down).

You can enable/disable the **Correct page orientation** and **Split facing pages** options on the **Image Processing** tab of the **Options** dialog box (click **Tools** > **Options...** to open this dialog box).

 To split facing pages in Arabic, Hebrew, or Yiddish, be sure to select the corresponding OCR language first and only then select the **Split facing pages** option. You can also restore the original page numbering by selecting the **Swap book pages** option. **See also:** [OCR projects](#)^[172].

If your document has a complex structure, we recommend disabling automatic analysis and OCR for images and performing these operations manually.

You can turn off automatic analysis and OCR of newly added images on the **Image Processing** tab of the **Options** dialog box (click **Tools** > **Options...** to open this dialog box).

1. Click **Tools** > **Options...** to open the [Options](#)^[259] dialog box.
2. On the **Image Processing** tab, clear the **Automatically process page images as they are added to the OCR Editor** option.
3. Click **OK**.

Recognizing documents written in more than one language

The instructions below are provided as an example and explain how to recognize a document that contains both English and Chinese text. Documents that contain other languages can be recognized in a similar manner.

1. On the main toolbar, select **More languages...** from the list of languages. In the **Language Editor** dialog box, select **Specify OCR languages manually** and select Chinese and English from the list of languages.
2. Scan your pages or open your images.
3. If the program fails to detect all of the areas on an image:
 - Specify areas manually using the [area editing tools](#) ¹⁸²
 - Specify any areas that only contain one language and on the **Area Properties** select English or Chinese as appropriate.
 - 💡 A language can only be specified for areas of the same type. If you selected areas of different types, such as **Text** and **Table**, you will not be able to specify a language.
 - If necessary, select the text direction from the **Orientation** drop-down list (for details, see [If vertical or inverted text was not recognized](#) ²⁰⁰)
 - For texts in CJK languages, the program provides a selection of the text directions in the **Direction of CJK text** drop-down list (for details, see [Editing area properties](#) ¹⁸⁶).

If non-European characters are not displayed in the Text pane

If text in a CJK language is displayed incorrectly in the Text pane, you may have selected the **Plain text** mode.

To change the font used in **Plain text** mode:

1. Click **Tools > Options...** to open the [Options](#) ²⁵⁹ dialog box.
2. Click the **Areas and Text** tab.
3. Select Arial Unicode MS from the **Font used to display plain text** drop-down list.
4. Click **OK**.


If this did not help and text in the **Text** window is still displayed incorrectly, see [Incorrect font is used or some characters are replaced with "?" or "□"](#) ¹⁹³

Changing the direction of recognized text

ABBYY FineReader detects text direction automatically, but you can also specify text direction manually.

1. Activate the Text pane.

2. Select one or more paragraphs.

3. Click the  button on the toolbar in the Text pane.

 You can use the **Direction of CJK text** drop-down list in the **Image** pane to specify the direction of text prior to OCR. **See also:** [Editing area properties](#) .

Supported interface languages

The interface language is selected when ABBYY FineReader is installed. This language will be used for all the messages, dialog boxes, buttons, and menu items. To change the interface language, follow the instructions below:

1. Click **Options...** on the **Tools** menu to open the **Options** dialog box and then select the **Other** tab.
2. Select the desired language from the **Interface language** drop-down menu.
3. Click **OK**.
4. Restart ABBYY FineReader.

ABBYY FineReader PDF 15 supports 23 GUI languages:

- **English**
- **Bulgarian**
- **Hungarian**
- **Vietnamese**
- **Dutch**
- **Greek**
- **Danish**
- **Spanish**
- **Italian**
- **Chinese Traditional**
- **Chinese Simplified**
- **Korean**
- **German**
- **Polish**
- **Portuguese (Brazilian)**
- **Russian**
- **Slovak**
- **Turkish**

- **Ukrainian**
- **French**
- **Czech**
- **Swedish**
- **Japanese**

Current date and time on stamps and in headers and footers

You can create stamps and Bates numbers that display the current date. Use the following tags in the stamp manager or Bates number manager.

| Tag | | Example |
|----------------------------|-------------------------|-----------------|
| <code><d/></code> | Date in short format | 07.02.2013 |
| <code><date/></code> | Date in long format | 7 February 2013 |
| <code><t12/></code> | Time in 12-hour format | 9:22 PM |
| <code><t24/></code> | Time in 24-hour format | 21:22 |
| <code><time/></code> | Time in HH:MM:SS format | 21:22:51 |

By default, the regional settings of your computer will determine the date and time formats. You can specify a different format. For example, `<d=RUS/>`, `<date=USA/>`, or `<time=ENG/>`. The result will be immediately displayed in the preview pane.

Click here to see some examples

`<d=USA/` 2/7/2013

`>`

`<d=ENG/` 07/02/201

`>`

3

`<d=RUS/` 07.02.2013

`>`

`<d=DEU/` 07.02.2013

`>`

`<d=FRA/>` 07/02/201

3

<d=ITA/> 07/02/201
3

<d=ESP/> 07/02/201
3

<d=NLD/ 7-2-2013
>

<d=PO/> 07.02.2013

<d=HUN/ 2013.02.07
>

<d=CZ/> 07.02.2013

<d=SL/> 7. 2. 2013

You can specify custom date and time formats.

Click here to see some examples

<date=USA %A/> Friday

<date=DEU %B, %Y/> February, 2013

<time %Hh %Mm/> 09h 22m

You can specify date and time formats using the <date/> and <time/> tags.

| <date/> parameters | | Example |
|---------------------------------|---|----------------|
| Year | | |
| %y | The year as a number from 01 to 99 (with leading zeros) | 01 |
| %#y | The year as a number from 1 to 99 (no leading zeros) | 1 |
| %Y | The year as a number from 0001 to 9999 (with leading zeros) | 2013 |
| %#Y | The year as a number from 1 to 9999 (no leading zeros) | 2013 |
| Month | | |
| %b | Abbreviated names of the months | Feb |

| | | |
|---------------------------------|---|----------------|
| %B | Full names of the months | February |
| %m | The month as a number from 01 to 12 (with leading zeros) | 02 |
| %#m | The month as a number from 1 to 12 (no leading zeros) | 2 |
| Day of month | | |
| %d | The day as a number from 01 to 31 (with leading zeros) | 07 |
| %#d | The day as a number from 1 to 31 (no leading zeros) | 7 |
| Day of week | | |
| %a | Abbreviated names of the days | Tu |
| %A | Full names of the months | Tuesday |
| <time/> parameters | | Example |
| Hours | | |
| %H | Hours in 24-hour format (from 00 to 23, with leading zeros) | 07 |
| %#H | Hours in 24-hour format (from 0 to 23, no leading zeros) | 7 |
| %I | Hours in 12-hour format (from 01 to 12, with leading zeros) | 05 |
| %#I | Hours in 12-hour format (from 1 to 12, no leading zeros) | 5 |
| %p | A.M./P.M. indication for 12-hour format* | AM |
| Minutes and seconds | | |
| %M | Minutes as a number from 00 to 59 (with leading zeros) | 04 |
| %#M | Minutes as a number from 0 to 59 (no leading zeros) | 4 |
| %S | Seconds as a number from 00 to 59 (with leading zeros) | 04 |
| %#S | Seconds as a number from 0 to 59 (no leading zeros) | 4 |
| Additional parameter | | |
| %% | Percentage symbol | |













Changing your regional settings



















1. Click **Start** > **Control Panel** > **Regional and Language Options**
2. On the **Formats** tab, select a format to be used for date and time, or click **Options** to create your own date and time format.

 In Windows 10, click **Start**  > **PC Settings** > **Time and Language** > **Region and language**.

* Available only for the USA, ENG, HUN, and CZ regions.

Fonts required for the correct display of texts in supported languages

| OCR languages | Font |
|--------------------------------------|--|
| Abkhaz | Arial Unicode MS  ³⁰⁶ |
| Avar | Arial Unicode MS  ³⁰⁶ , Lucida Sans Unicode |
| Agul | Arial Unicode MS  ³⁰⁶ , Lucida Sans Unicode |
| Adyghe | Arial Unicode MS  ³⁰⁶ , Lucida Sans Unicode |
| Altaic | Arial Unicode MS  ³⁰⁶ , Lucida Sans Unicode |
| Arabic | Arial Unicode MS  ³⁰⁶ |
| Armenian (Eastern, Western, Grabar)* | Arial Unicode MS  ³⁰⁶ |
| Bashkir* | Arial Unicode MS  ³⁰⁶ , Palatino Linotype |
| Vietnamese | Arial Unicode MS  ³⁰⁶ |
| Gagauz | Arial Unicode MS  ³⁰⁶ |
| Dargwa | Arial Unicode MS  ³⁰⁶ , Lucida Sans Unicode |
| Zulu | Arial Unicode MS  ³⁰⁶ , Lucida Sans Unicode |
| Hebrew | Arial Unicode MS  ³⁰⁶ , Aharoni, David, Levenim mt, Miriam, Narkisim, Rod |
| Yiddish | Arial Unicode MS  ³⁰⁶ |
| Ingush | Arial Unicode MS  ³⁰⁶ , Lucida Sans Unicode |
| Kabardian | Arial Unicode MS  ³⁰⁶ , Lucida Sans Unicode |

| | |
|---|--|
| Chinese (Simplified), Chinese (Traditional) | <p>Arial Unicode MS , SimSun fonts</p> <p>Example SimSun (Founder Extended), SimSun-18030, NSimSun.</p> <p>Simhei, YouYuan, PMingLiU, MingLiU, Ming(for-ISO10646), STSong</p> |
| Korean, Korean (Hangul) | <p>Arial Unicode MS , SimSun fonts</p> <p>Example SimSun (Founder Extended), SimSun-18030, NSimSun.</p> <p>Simhei, YouYuan, PMingLiU, MingLiU, Ming(for-ISO10646), STSong</p> |
| Koryak | Arial Unicode MS  , Lucida Sans Unicode |
| Lak | Arial Unicode MS  , Lucida Sans Unicode |
| Lezgi | Arial Unicode MS  , Lucida Sans Unicode |
| Mansi | Arial Unicode MS  , Lucida Sans Unicode |
| Mari | Arial Unicode MS  |
| Ossetian | Arial Unicode MS  |
| Russian (old spelling) | Arial Unicode MS  , Palatino Linotype |
| Tabasaran | Arial Unicode MS  , Lucida Sans Unicode |
| Tajik | Arial Unicode MS  , Palatino Linotype |
| Thai | Arial Unicode MS  |
| Udmurt | Arial Unicode MS  |
| Khakass | Arial Unicode MS  |
| Khanty | Arial Unicode MS  |
| Hausa | Arial Unicode MS  , Lucida Sans Unicode |
| Chechen | Arial Unicode MS  , Lucida Sans Unicode |
| Chuvash | Arial Unicode MS  |
| Chukchee | Arial Unicode MS  , Lucida Sans Unicode |

| | |
|----------|--|
| Yakut | Arial Unicode MS ³⁰⁶ * |
| Japanese | Arial Unicode MS ³⁰⁶ *, SimSun fonts Example SimSun (Founder Extended), SimSun-18030, NSimSun. Simhei, YouYuan, PMingLiU, MingLiU, Ming(for-ISO10646), STSong |

Where to find/supplied with

(*) Microsoft Office 2000 or later

Regular expressions

The table below lists the regular expressions that can be used to create a dictionary for a [custom language](#)¹⁹⁸.

| Item name | Conventional regular expression symbol | Usage examples and explanations |
|--------------------------|--|--|
| Any character | . | c.t— denotes "cat," "cot," etc. |
| Character from group | [] | [b-d]ell— denotes "bell," "cell," "dell," etc.; [ty]ell— denotes "tell" and "yell" |
| Character not from group | [^] | [^y]ell— denotes "dell," "cell," "tell," but forbids "yell"; [^n-s]ell— denotes "bell," "cell," but forbids "nell," "oell," "pell," "qell," "rell," and "sell" |
| Or | | c(a u)t— denotes "cat" and "cut" |
| 0 or more matches | * | 10*— denotes numbers 1, 10, 100, 1000, etc. |
| 1 or more matches | + | 10+— allows numbers 10, 100, 1000, etc. |
| Letter or digit | [0-9a-zA-Za-яА-Я] | [0-9a-zA-Za-яА-Я]— allows any single character; [0-9a-zA-Za-яА-Я]+— allows any word |
| Capital Latin letter | [A-Z] | |
| Small Latin letter | [a-z] | |
| Capital Cyrillic letter | [А-Я] | |

| | | |
|-----------------------|-------|-----------|
| Small Cyrillic letter | [а-я] | |
| Digit | [0-9] | |
| | @ | Reserved. |

Note:

1. To use a regular expression symbol as a normal character, precede it with a back slash. For example, [t-v]x+ stands for tx, txx, etc., ux, uxx, etc., and vx, vxx, etc., but \[t-v]x+ stands for [t-v]x, [t-v]xx, [t-v]xxx, etc.
2. To group regular expression elements, use brackets. For example, (a|b)+|c stands for c or any combinations like abbbbaabbb, ababab, etc. (a word of any non-zero length in which there may be any number of a's and b's in any order), while a|b+|c stands for a, c, b, bb, bbb, etc.

Examples

Suppose you are recognizing a table with three columns: birth dates, names, and e-mail addresses. In this case, you can create two new languages, Data and Address, and specify the following regular expressions for them.

Regular expression for dates:

The number denoting a day may consist of one digit (1, 2, etc.) or two digits (02, 12), but it cannot be zero (00 or 0). The regular expression for the day should then look like this: (([0][1-9])|([1][2][0-9]))|(30)|(31).

The regular expression for the month should look like this: (([0][1-9])|(10)|(11)|(12)).

The regular expression for the year should look like this: (([19][0-9][0-9])|([0-9][0-9])).

Now all we need to do is combine all this together and separate the numbers by period. The period is a regular expression symbol, so you must put a back slash (\) before it.

The regular expression for the full date should then look like this:

(([0][1-9])|([1][2][0-9]))|(30)|(31)\. (([0][1-9])|(10)|(11)|(12))\.((19)[0-9][0-9])|([0-9][0-9])

Regular expression for e-mail addresses:

[a-zA-Z0-9_-\.\.]+\@[a-z0-9_-\.\.]+






Installing, activating, and registering ABBYY FineReader PDF 15

Software piracy hurts software manufacturers and end users alike - using an illegal product is never safe. Legal software ensures that a third party cannot introduce detrimental code changes. ABBYY makes every effort to protect its intellectual property rights and the security of its customers.

ABBY software products include special protection technology which prevents unauthorized use by those who have not entered into a license agreement with ABBYY. To be able to run ABBYY FineReader without any limitations, you need to activate it.

Registration is optional and registered users enjoy certain benefits.

Chapter contents

- [System requirements](#)  309
- [Installing and starting ABBYY FineReader](#)  310
- [Activating ABBYY FineReader](#)  311
- [Registering ABBYY FineReader](#)  313
- [Privacy Policy](#)  313

System requirements

1. Operating system:
 - Microsoft Windows 10 / 8.1 / 8 / 7
 - Microsoft Windows Server 2019 / 2016 / 2012 / 2012 R2 / 2008 R2
The operating system must support the language you select for the user interface.
2. 1 GHz or faster 32-bit (x86) or 64-bit (x64) processor with the SSE2 instruction set.
3. 1 GB RAM (4 GB recommended)
An additional 512 MB of RAM is required for each additional processor in a multi-processor system.
4. 1.2 GB of free disk space for installation and an additional 1.2 GB for program operation
5. Video card and monitor supporting a resolution of at least 1024×768
6. An Internet connection for activating your serial number
7. Keyboard and mouse or other pointing device

Terminal server support

ABBYY FineReader PDF 15 has been tested with the following terminal servers:

- Microsoft Windows Server 2019, 2016, 2012 R2, 2008 R2 (Remote Desktop, RemoteApp and Remote Desktop Web Access)
- Citrix Workspace App 1808 (using the *Installed application accessed from a server* scenario), Citrix Virtual Apps and Desktops

Scanners and MFPs

ABBYY FineReader PDF 15 supports TWAIN and WIA-compatible scanners and multi-function printers (MFPs).

 For a list of file formats supported by ABBYY FineReader PDF 15, see [Supported document formats](#) 

Installing and starting ABBYY FineReader

Installing ABBYY FineReader on one computer

1. Double-click the **Setup.exe** file on the installation disk or other distribution media.
2. Follow the on-screen instructions in the Installation Wizard.

Deploying ABBYY FineReader PDF 15 in a LAN

ABBYY FineReader can be installed and used on a local area network*. The automated installation methods give you speed and flexibility when installing ABBYY FineReader on a local area network, as you do not have to install the program manually on each individual workstation.


The installation consists of two stages. First, the program is installed on the server. From the server, the program can be installed on workstations using one of the following four methods:

- Using Active Directory
- Using Microsoft System Center Configuration Manager (SCCM)
- From the command line
- Manually in interactive mode

For more information about installing ABBYY FineReader on workstations, using the License Manager, and working with the program in a local area network, please refer to the [System Administrator's Guide](#).

Starting ABBYY FineReader

To start ABBYY FineReader PDF 15:


- Click the **Start** button in Windows and then click **All Programs > ABBYY FineReader PDF 15** (in Windows 10, click the **Start**  > **All Programs** and then click **ABBYY FineReader PDF 15**).
- Alternatively, right-click a document file in Windows Explorer (it has to be in one of the [supported formats](#)^[284]) and then click **Edit with ABBYY FineReader PDF 15** or **Convert with ABBYY FineReader PDF 15** and select one of the conversion commands.

* This feature is not available in some editions of ABBYY FineReader. **See also:** FineReader page of the ABBYY website (<http://www.ABBYY.com/FineReader/>^[310]) for a list of editions and their features.

Activating ABBYY FineReader

After you install ABBYY FineReader PDF 15, you will need to activate the program to be able to run it in full mode. Unless you activate ABBYY FineReader PDF 15, the program will run in trial mode, which lets you try out the program but limits the number of pages you can save and stops working after a certain period of time.

To activate ABBYY FineReader PDF 15:


1. In the **New Task** window, click **Help > Activate....**
2. Enter your [serial number](#)  or load a license file if you have one.

Select one of the four activation options displayed in the Activation Wizard:

- **Activation over the Internet**

Activation is carried out automatically and takes only seconds to complete. An active Internet connection is required for this method.

- **Activation via the ABBYY website**

1. Click the link in the Activation Wizard to open the activation page.
2. Copy the [Product ID](#)  in the Activation Wizard and paste it to the corresponding field on the page.
3. Copy the serial number in the Activation Wizard and paste it to the corresponding field on the page.
4. Save the license file to your hard disk.
5. Click **Next** in the Activation Wizard and specify the path to the license file.
6. Click **Next**.


ABBYY FineReader PDF 15 will be activated and will run in full mode from now on.

- **Activation by e-mail**

1. The program will generate an e-mail message with all of the information required for activation.
2. Send the e-mail message without changing its body text and subject. You will receive a reply message containing a license file.
3. Save the license file to your hard disk.
4. Specify the path to the license file in the Activation Wizard.

ABBYY FineReader PDF 15 will be activated and will run in full mode from now on.

- **Activation by e-mail from another computer**

1. Select this activation method if you can't activate ABBYY FineReader PDF 15 on the computer on which it is installed (e.g. if it does not have an Internet connection or cannot send e-mail messages).
2. Save the licensing information to a text file.
3. Create a new e-mail message on a computer that can send e-mail messages. Specify *Activation request* in the **Subject** field and FineReader-activation@abbyy.com  in the **To** field.
4. Copy the contents of the text file to the e-mail message. Do not make any changes to ensure that your message will be processed automatically and you will receive a prompt reply.
5. Send the message. You will receive a reply message with a license file.
6. Save the license file to your hard disk.
7. Specify the path to the license file in the Activation Wizard.

ABBYY FineReader PDF 15 will be activated and will run in full mode from now on.

After you activate ABBYY FineReader once, you will be able to install it on the same computer any number of times without having to activate it again. However, if significant changes are made to the computer's hardware configuration, its hard disk is formatted or its operating system is reinstalled, you may need to get a license file and activate ABBYY FineReader again.



Registering ABBYY FineReader

We invite you to register your copy of ABBYY FineReader PDF 15 and receive special benefits available to registered users. Registration is optional.

You can register your copy of ABBYY FineReader:

- By providing your contact information when activating your copy of the product.
 - ✍ If you choose not activate ABBYY FineReader during the activation process, you will be able to register it later at any convenient time.
- By clicking **Help > Register...** and providing your contact information in the registration dialog box
- By completing the registration process on the ABBYY website (<https://www.abbyy.com/>).

Registered users will receive the following benefits:

1. Free [technical support](#) *,
2. [ABBYY Screenshot Reader](#) , an easy-to-use application for capturing screenshots and recognizing on-screen text.
3. A way to recover your serial number if you lose it (e.g. when reinstalling your operating system).

We will also send you notifications about updates and new versions of products if you indicate your consent to receive these notifications during the registration process.

* **See also:** the technical support page of the ABBYY website (<https://www.abbyy.com/en-us/support/>).

Data privacy

We respect your privacy and take great care to protect your information. We will collect, process, and use any data received from you **under the condition of confidentiality and in accordance with this [Privacy Policy](#)**.

We will send you e-mail messages containing product news, pricing information, special offers, and other company and product information **only if you agree to receive such information** from us by selecting the corresponding option in the product registration dialog box. You can [ask us](#) to delete your e-mail address from the mailing list at any time.

Appendix

Chapter contents

- [Glossary](#) 
- [Keyboard shortcuts](#) 

Glossary

A

Abbreviation A shortened form of a word or phrase (e.g. MS-DOS for Microsoft Disk Operating System, UN for United Nations, etc.).

ABBYY FineReader task A set of consecutive steps the program needs to perform in order to process a document. ABBYY FineReader PDF 15 includes a number of built-in tasks for the most common document processing needs. Users can also create their own custom tasks. Built-in tasks can be launched in the New Task window.

ABBYY Hot Folder A scheduling agent that allows users to select a folder with images and specify the time for processing the images in this folder. ABBYY FineReader will automatically process the images from the selected folder.

ABBYY Screenshot Reader An application that enables users to create screenshots and recognize texts on them.

activation The process of obtaining a special code from ABBYY allowing the user to use his/her copy of the product in full mode on a given computer.

active area The currently selected area on an image. An active area can be deleted, moved or modified. To make an area active, click it. The frame enclosing an active area is bold and has sizing handles that can be dragged to change its size.

ADF (Automatic Document Feeder) A device that automatically feeds documents to a scanner. A scanner with an ADF can scan multiple pages without manual intervention. ABBYY FineReader can work with multi-page documents.

ADRT (Adaptive Document Recognition Technology) A technology that increases the quality of conversion of multi-page documents. For example, it can recognize such elements as headings, headers and footers, footnotes, page numbering, and signatures.

area A section of an image enclosed by a frame and containing a certain type of data. Before performing OCR, ABBYY FineReader detects text, picture, table, and barcode areas in order to determine which sections of the image should be recognized and in what order.

area template A template that contains information about the size and locations of the areas in similar-looking documents.


Automated Tasks A task managing component of ABBYY FineReader PDF 15 that allows you to create, set up, and launch ABBYY FineReader tasks.

B

background picture area An image area that contains a picture with text printed over it.

barcode area An image area that contains a barcode.

base form The form of a word to which endings, prefixes or suffixes are added.

brightness An image parameter that reflects the amount of white in an image. Increasing brightness makes the image "whiter". Specifying a suitable brightness value increases recognition quality. **See also:** [Scanning tips](#) 

[Back to top](#)

C

code page A table of correspondences between characters and their codes. Users can select the characters they need from those available in a code page.

color mode A mode that determines whether document colors are to be retained. Black-and-white images produce smaller OCR projects and are faster to process.

compound word A word made up of two or more existing words. In ABBYY FineReader, a **compound word** is a word that the program cannot find in its dictionary but which it can create from two or more dictionary words.

D

document analysis The process of identifying the logical structure of a document and areas that contain various types of data. Document analysis can be carried out automatically or manually.

Document Open password A password that prevents users from opening a PDF document unless they type the password specified by the author.

dpi (dots per inch) A measure of image resolution.

document type A parameter that tells the program how the original text was printed (e.g. on a laser printer, on a typewriter, etc.). For laser-printed texts, select **Auto**, for typewritten texts, select **Typewriter**, for faxes, select **Fax**.

driver A software program that controls a computer peripheral (e.g., a scanner, a monitor, etc.).

F

font effects The appearance of a font (e.g. bold, italic, underlined, strikethrough, subscript, superscript, small caps).

H

headers and footers Images or text in the top or bottom margin of a page. Headers are located at the top of the page and footers are located at the bottom.

I

ignored characters Any non-letter characters found in words (e.g. syllable characters or stress marks). These characters are ignored during the spell check.

inverted image An image with white characters printed against a dark background.

[↗Back to top](#)

K

keyboard shortcuts Keys or combinations of keys that trigger a specific action when pressed. Using keyboard shortcuts can significantly increase your productivity.

L

License Manager A utility used for managing ABBYY FineReader licenses and activating ABBYY FineReader PDF 15.

ligature A combination of two or more characters that are "stuck" together (e.g. fi, fl, ffi). Such characters are difficult for ABBYY FineReader to separate. Treating them as one character improves OCR accuracy.

low-confidence characters Characters that may have been recognized by the program incorrectly.

low-confidence words Words that contain one or more low-confidence characters.

M

monospaced font A font (such as Courier New) in which all characters are equally spaced. For better OCR results on monospaced fonts, on the **OCR** tab of the **Options** dialog box, select **Typewriter** in the **Document type** group of options.

[↩ Back to top](#)

O

OCR (Optical Character Recognition) A technology that enables computers to read text, detect pictures, tables, and other formatting elements.

OCR project A project created by ABBYY FineReader to process a document. It contains the images of the document pages, their recognized text (if any), and the program settings.

OCR project options The set of options that can be selected in the **Options** dialog box (click **Tools>Options...** to open this dialog box). These options also include user languages and patterns. OCR project options can be saved and then used in other OCR projects.

omnifont system A recognition system that recognizes characters set in any font without prior training.

optional hyphen An optional hyphen (¬) indicates exactly where a word or word combination should be split if it occurs at the end of a line (e.g. "autoformat" should be split into "auto" and "format"). ABBYY FineReader replaces all hyphens found in dictionary words with optional hyphens.

P

page layout The arrangement of text, tables, pictures, paragraphs, and columns on a page. The fonts, font sizes, font colors, text background, and text orientation are also part of the page layout.

paradigm All grammatical forms of a word.

pattern A set of associations between averaged character images and their respective names. Patterns are created when you train ABBYY FineReader on a specific text.

PDF (Portable Document Format) A commonly used document format. A PDF file looks the same no matter what computer it is displayed on thanks to the detailed descriptions of text, fonts, and graphics it contains.

PDF security settings Restrictions that prevent a PDF document from being opened, edited, copied or printed. These settings include document open passwords, permissions passwords, and encryption levels.

Permissions password A password that prevents other users from printing and editing a PDF document unless they type the password specified by the author. If some security settings are selected for the document, other users will not be able to change these settings until they type the password.

picture area An image area that contains a picture. This type of area may enclose an actual picture or any other object (e.g. a text fragment) that should be displayed as a picture.

product ID A product identifier that is automatically generated on the basis of the hardware configuration when activating ABBYY FineReader on a given computer. It does not contain any personal information or information about the software or data stored on your computer.

prohibited characters Characters that you think will never occur in a text to be recognized. Specifying prohibited characters increases the speed and quality of OCR.

[↩ Back to top](#)

R

recognition area An image area that ABBYY FineReader should analyze automatically.

resolution A scanning parameter measured in dots per inch (dpi). Resolution of 300 dpi should be used for texts set in 10 pt fonts and larger, 400 to 600 dpi is preferable for texts of smaller font sizes (9 pt and less).

S

scanner A device for inputting images into a computer.

scanning mode A scanning parameter that determines whether an image must be scanned in black and white, grayscale, or color.

separators Symbols that can separate words (e.g. /, \, dash) and that are separated by spaces from the words themselves.

serial number A unique number you receive when you purchase the program. It is used during activation.

shortcut menu The menu that appears when you right-click something, such as an area or another part of a document.


support ID The unique identifier of a serial number that contains information about the license and the computer on which it is used. A Support ID provides additional protection and is checked by the technical support staff before providing technical support.

T

table area An image area that contains data in tabular form. When the program reads this type of area, it draws vertical and horizontal separators inside the area to form a table. This area is then rendered as a table in the output text.

tagged PDF A PDF document that contains information about the document structure, such as its logical parts, pictures, and tables. The structure of a document is encoded in PDF tags. A PDF file with such tags may be reflowed to fit different screen sizes, and will display well on handheld devices.

text area An image area that contains text. Text areas should only contain single-column text.

training The process of establishing a correspondence between a character image and the character itself. **See also:** [If your printed document contains non-standard fonts](#) 





U

Unicode An international text encoding standard developed by the Unicode Consortium (Unicode, Inc.). The Unicode standard provides an easily extendible 16-bit system for encoding symbols from almost all contemporary languages. It specifies how symbols should be encoded and determines which algorithms and character properties should be used during the encoding process.

 [Back to top](#) 

Keyboard shortcuts

ABBYY FineReader offers the following keyboard shortcuts for the most commonly used commands.

- [New Task window](#) 
- [OCR Editor](#) 
- [PDF Editor](#) 
- [ABBYY Compare Documents](#) 

New Task window

- [File](#)  [menu](#) 
- [Edit](#)  [menu](#) 
- [Tools](#)  [menu](#) 
- [Help](#)  [menu](#) 

File menu

| Command | Shortcut |
|------------------------------|--------------|
| New PDF Document | Ctrl+N |
| Open PDF Document... | Ctrl+O |
| Open in OCR Editor... | Ctrl+R |
| Scan to OCR Editor | Ctrl+S |
| New OCR Project | Ctrl+Shift+N |
| Open OCR Project... | Ctrl+Shift+O |
| Exit | Ctrl+Q |

Edit menu

| Command | Shortcut |
|------------------|----------|
| Move Up | Alt+↑ |
| Move Down | Alt+↓ |

| | |
|------------------------------|--------|
| Remove | Del |
| Select All | Ctrl+A |
| Find Recent Documents | Ctrl+F |















Tools menu

| Command | Shortcut |
|-------------------|----------|
| Options... | Ctrl+> |

Help menu

| Command | Shortcut |
|-------------|----------|
| Help | F1 |

OCR Editor

- [File](#)  [menu](#) 
- [Edit](#)  [menu](#) 
- [View](#)  [menu](#) 
- [Recognize](#)  [menu](#) 
- [Area](#)  [menu](#) 
- [Tools](#)  [menu](#) 
- [Help](#)  [menu](#) 
- [General](#)

File menu

| Command | Shortcut |
|----------------------|----------|
| New Task... | Ctrl+N |
| Open Image... | Ctrl+O |
| Scan Pages... | Ctrl+K |

| | |
|-------------------------------|--------------|
| Save Page Images As... | Ctrl+Alt+S |
| Close | Ctrl+W |
| New OCR Project | Ctrl+Shift+N |
| Open OCR Project... | Ctrl+Shift+O |
| Save OCR Project... | Ctrl+Shift+S |
| E-mail document | Ctrl+M |
| E-mail images | Ctrl+Alt+M |
| Print text | Ctrl+P |
| Print image | Ctrl+Alt+P |
| Exit | Ctrl+Q |

Edit menu

| Command | Shortcut |
|--------------------------------|-----------------|
| Undo | Ctrl+Z |
| Redo | Ctrl+Y |
| Cut | Ctrl+X |
| Recognize and Copy Text | Ctrl+C |
| Copy Area as Image | Ctrl+Shift+C |
| Paste | Ctrl+V |
| Delete | Del |
| Select All | Ctrl+A |
| Cancel Selection | Ctrl+Shift+A |
| Delete Pages... | Ctrl+Backspace |
| Delete Areas and Text | Ctrl+Del |
| Delete Text | Ctrl+Shift+Del |
| Rotate Pages Right | Ctrl+Shift+> |

| | |
|----------------------------|---------------|
| Rotate Pages Left | Ctrl+Shift+ < |
| Edit Page Images... | Ctrl+I |
| Find... | Ctrl+F |
| Find Next | F3 |
| Replace... | Ctrl+H |

View menu

| Command | Shortcut |
|-----------------------------|-----------------|
| Show Navigation Pane | F5 |
| Show Zoom Pane | Ctrl+F5 |
| Image Pane Only | F6 |
| Image and Text Panes | F7 |
| Text Pane Only | F8 |
| Next Pane | Ctrl+Tab |
| Previous Pane | Ctrl+Shift+Tab |
| Zoom In | Ctrl++ |
| Zoom Out | Ctrl+- |
| Best Fit | Ctrl+0 |
| Go to Page Number... | Ctrl+G |
| Go to Next Page | Ctrl+↓ |
| Go to Previous Page | Ctrl+↑ |
| Go to First Page | Ctrl+Home |
| Go to Last Page | Ctrl+End |
| Close Page | Ctrl+F4 |

Recognize menu

| Command | Shortcut |
|----------------|-----------------|
|----------------|-----------------|

| | |
|------------------------------|--------------|
| Recognize All Pages | Ctrl+Shift+R |
| Recognize Page | Ctrl+R |
| Analyze All Pages | Ctrl+Shift+E |
| Analyze Page | Ctrl+E |
| Verify Text... | Ctrl+F7 |
| Next Error | Alt+↓ |
| Previous Error | Alt+↑ |
| Mark Text as Verified | Ctrl+T |

Area menu

| Command | Shortcut |
|---|-----------------|
| Recognize Area | Ctrl+Shift+B |
| Change Area Type to Text | Ctrl+2 |
| Change Area Type to Table | Ctrl+3 |
| Change Area Type to Picture | Ctrl+4 |
| Change Area Type to Background Picture | Ctrl+6 |
| Change Area Type to Barcode | Ctrl+5 |
| Change Area Type to Recognition Area | Ctrl+1 |

Tools menu

| Command | Shortcut |
|-----------------------------|-----------------|
| View Dictionaries... | Ctrl+Alt+D |
| Redaction Mode | Ctrl+Shift+H |
| Hot Folder | Ctrl+Shift+F |
| Options... | Ctrl+> |

Help menu

| Command | Shortcut |
|---------|----------|
| Help | F1 |

General

| Command | Shortcut |
|---|------------|
| Make the selected text fragment bold | Ctrl+B |
| Make the selected text fragment <i>italic</i> | Ctrl+I |
| Underline the selected <u>text fragment</u> | Ctrl+U |
| Go to table cell | Arrow keys |
| Switch to Pages pane | Alt+1 |
| Switch to Image pane | Alt+2 |
| Switch to Text pane | Alt+3 |
| Switch to Zoom pane | Alt+4 |

You can also create your own keyboard shortcuts in the [OCR Editor](#) .

To create a shortcut in the OCR Editor:

1. Open the **Customize Toolbars and Shortcuts** dialog box by clicking **View > Toolbars > Customize....**
2. On the **Keyboard Shortcuts** tab, select a category in the **Categories** field.
3. In the **Commands** field, select the command for which you want to specify a keyboard shortcut.
4. Place the cursor in the **Press new shortcut key** field and press the keys to be used for this command.
5. Click **Assign**. The selected key combination will be added into the **Current shortcut** field.
6. Click **OK** to save the changes.
7. To return shortcuts to their default values, click **Reset** (for a selected command category) or **Reset All** (for all shortcut keys).

PDF Editor

- [File menu](#)
- [Edit menu](#)
- [View menu](#)
- [Tools menu](#)
- [Help menu](#)

File menu

| Command | Shortcut |
|--------------------------------|--------------|
| New Task... | Ctrl+N |
| Open... | Ctrl+O |
| Save | Ctrl+S |
| Save as PDF Document... | Ctrl+Shift+S |
| Close Document | Ctrl+W |
| Recognize Document | Ctrl+Shift+R |
| Print... | Ctrl+P |
| Exit | Ctrl+Q |

[***Back to Top](#)

Edit menu

| Command | Shortcut |
|---------------------------|----------|
| Undo | Ctrl+Z |
| Redo | Ctrl+Y |
| Cut | Ctrl+X |
| Copy | Ctrl+C |
| Copy Area as Image | Ctrl+C |

| | |
|----------------------------------|----------------|
| Copy Area as Text | Ctrl+Shift+C |
| Copy Area as Table | Ctrl+Alt+C |
| Paste | Ctrl+V |
| Delete | Del |
| Select All | Ctrl+A |
| Add Pages from File... | Ctrl+Shift+O |
| Add Pages from Scanner... | Ctrl+Shift+A |
| Rotate Pages Right | Ctrl+Shift+> |
| Rotate Pages Left | Ctrl+Shift+< |
| Delete Pages... | Ctrl+Backspace |
| Add Bookmark... | Ctrl+D |
| Find... | Ctrl+F |
| Find Next | F3 |

[***Back to Top](#)

View menu

| Command | Shortcut |
|-----------------------------|-----------------|
| Show Navigation Pane | F5 |
| Search | F9 |
| Digital Signatures | F8 |
| Show PDF Tools | F6 |
| Show Comments Pane | F7 |
| Zoom In | Ctrl++ |
| Zoom Out | Ctrl+- |
| Best Fit | Ctrl+0 |
| Actual Size | Ctrl+8 |

| | |
|-----------------------------|--------|
| Fit to Width | Ctrl+9 |
| Go to Page Number... | Ctrl+G |
| Next Page | Ctrl+↓ |
| Previous Page | Ctrl+↑ |
| First Page | Home |
| Last Page | End |
| Back | Alt+← |
| Forward | Alt+→ |
| One-Page View | Ctrl+1 |
| One-Page Scrolling | Ctrl+2 |
| Two-Page View | Ctrl+3 |
| Two-Page Scrolling | Ctrl+4 |
| Full Screen | F11 |

 [***Back to Top](#)

Tools menu

| Command | Shortcut |
|-------------------------------|-----------------|
| Edit Text and Pictures | Ctrl+E |
| Text Box | Ctrl+T |
| Add Note | Ctrl+M |
| Highlight | Ctrl+H |
| Underline | Ctrl+U |
| Strikethrough | Ctrl+K |
| Insert Text | Ctrl+J |
| Search and Mark Up | F9 |
| Redaction Mode | Ctrl+R |







| | |
|-------------------|--------|
| Options... | Ctrl+> |
|-------------------|--------|

[***Back to Top](#)

Help menu

| Command | Shortcut |
|-------------|----------|
| Help | F1 |

ABBYY Compare Documents

- [File](#)  [menu](#) 
- [Edit](#)  [menu](#) 
- [View](#)  [menu](#) 
- [Compare](#)  [menu](#) 
- [Help](#)  [menu](#) 

File menu

| Command | Shortcut |
|-------------------------|----------|
| New Comparison | Ctrl+N |
| Open Document... | Ctrl+O |
| Close Document | Ctrl+W |
| Save... | Ctrl+S |
| Exit | Ctrl+Q |

[***Back to Top](#)

Edit menu

| Command | Shortcut |
|-------------|----------|
| Undo | Ctrl+Z |
| Redo | Ctrl+Y |

| | |
|-------------------------------|--------|
| Select All Differences | Ctrl+A |
|-------------------------------|--------|

[***Back to Top](#)

View menu

| Command | Shortcut |
|----------------------|-----------------|
| Zoom In | Ctrl++ |
| Zoom Out | Ctrl+- |
| Fit to Width | Ctrl+0 |
| Next Page | Ctrl+↓ |
| Previous Page | Ctrl+↑ |

Compare menu

| Command | Shortcut |
|----------------------------|-----------------|
| Compare Documents | Ctrl+R |
| Next Difference | Ctrl+→ |
| Previous Difference | Ctrl+← |
| Ignore Difference | Del |

Help menu

| Command | Shortcut |
|----------------|-----------------|
| Help | F1 |

[***Back to Top](#) 


Technical support

If you have any questions regarding the use of ABBYY FineReader, which can't be answered using the information provided in the User's Guide and Help, please review the Frequently Asked Questions section in the ABBYY [knowledge base](#).


If you still can't find the answer to your question, please contact the ABBYY technical support service. You can create a new support ticket using an online form at <https://support.abbyy.com>. Describe your problem in the ticket, and our experts will be glad to assist you.

In the case of a technical issue, please attach a system report file to your support ticket. To generate a system report, click **Help** > **About** > **System Info...** > **Save...**

If for some reason you are not able to generate a system report, please provide the following information in your support ticket:

- The serial number of your copy or **Support ID**  (click **Help** > **About** > **License Info** to find out the serial number of your copy of the product);
- The build number of your copy (click **Help** > **About**);
- Your Windows version;
- Any other information that you think is relevant.

Before contacting the ABBYY technical support service, be sure to check for the latest updates available for your version of ABBYY FineReader and install them. To do this, click **Help** > **Check for Updates**.

 Technical support is provided only to registered users subject to the [Product Life Cycle and Technical Support Policy](#). To register your copy of the product, please visit our [website](#) or click **Help** > **Register...** in the product.

Third-party software

Adobe Color Profile, APDFL

© 2000-2012 Datalogics, Inc.

Datalogics®, The DL Logo®, PDF2IMG™ and DLE™ are trademarks of Datalogics, Inc.

© 1984-2012 Adobe Systems Incorporated and its licensors. All rights reserved.

Adobe®, The Adobe Logo®, Adobe® PDF Library™, Powered by Adobe PDF Library logo, Reader® are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.

zlib, zlib-CRC32 constants

zlib.h -- interface of the 'zlib' general purpose compression library

version 1.2.8, April 28th, 2013

Copyright (C) 1995-2013 Jean-loup Gailly and Mark Adler

Part of DjVu - Zlib 1.2.7

/* zlib.h -- interface of the 'zlib' general purpose compression library

version 1.2.11, January 15th, 2017

Copyright (C) 1995-2017 Jean-loup Gailly and Mark Adler

The technologies listed above are distributed subject to conditions of the following license:

This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
3. This notice may not be removed or altered from any source distribution.

Jean-loup Gailly Mark Adler

jloup@gzip.org madler@alumni.caltech.edu 

Adobe Glyph List License

Copyright (c) 1997,1998,2002,2007 Adobe Systems Incorporated

Permission is hereby granted, free of charge, to any person obtaining a copy of this documentation file to use, copy, publish, distribute, sublicense, and/or sell copies of the documentation, and to permit others to do the same, provided that:

- No modification, editing or other alteration of this document is allowed; and
- The above copyright notice and this permission notice shall be included in all copies of the documentation.

Permission is hereby granted, free of charge, to any person obtaining a copy of this documentation file, to create their own derivative works from the content of this document to use, copy, publish, distribute, sublicense, and/or sell the derivative works, and to permit others to do the same, provided that the derived work is not represented as being a copy or version of this document.

Adobe shall not be liable to any party for any loss of revenue or profit or for indirect, incidental, special, consequential, or other similar damages, whether based on tort (including without limitation negligence or strict liability), contract or other legal or equitable grounds even if Adobe has been advised or had reason to know of the possibility of such damages. The Adobe materials are provided on an "AS IS" basis. Adobe specifically disclaims all express, statutory, or implied warranties relating to the Adobe

materials, including but not limited to those concerning merchantability or fitness for a particular purpose or non-infringement of any third party rights regarding the Adobe materials.

MD5 message digest algorithm reference implementation

This software is derived in part from the RSA Data Security, Inc. MD5 Message-Digest Algorithm

Copyright (C) 1991-2, RSA Data Security, Inc. Created 1991. All rights reserved.

License to copy and use this software is granted provided that it is identified as the "RSA Data Security, Inc. MD5 Message-Digest Algorithm" in all material mentioning or referencing this software or this function.

License is also granted to make and use derivative works provided that such works are identified as "derived from the RSA Data Security, Inc. MD5 Message-Digest Algorithm" in all material mentioning or referencing the derived work.

RSA Data Security, Inc. makes no representations concerning either the merchantability of this software or the suitability of this software for any particular purpose. It is provided "as is" without express or implied warranty of any kind.

These notices must be retained in any copies of any part of this documentation and/or software.

little cms

Copyright (c) 1998-2013 Marti Maria Saguer

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Kakadu Software

Portions of this software are copyright © 2017 Kakadu Software Pty Ltd. All rights reserved.

Jasper

JasPer License Version 2.0

Copyright (c) 2001-2006 Michael David Adams

Copyright (c) 1999-2000 Image Power, Inc.

Copyright (c) 1999-2000 The University of British Columbia

All rights reserved.

Permission is hereby granted, free of charge, to any person (the "User") obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

1. The above copyright notices and this permission notice (which includes the disclaimer below) shall be included in all copies or substantial portions of the Software.
2. The name of a copyright holder shall not be used to endorse or promote products derived from the Software without specific prior written permission.

THIS DISCLAIMER OF WARRANTY CONSTITUTES AN ESSENTIAL PART OF THIS LICENSE. NO USE OF THE SOFTWARE IS AUTHORIZED HEREUNDER EXCEPT UNDER THIS DISCLAIMER. THE SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS. IN NO EVENT SHALL THE COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, OR ANY SPECIAL INDIRECT OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE. NO ASSURANCES ARE PROVIDED BY THE COPYRIGHT HOLDERS THAT THE SOFTWARE DOES NOT INFRINGE THE PATENT OR OTHER INTELLECTUAL PROPERTY RIGHTS OF ANY OTHER ENTITY.

EACH COPYRIGHT HOLDER DISCLAIMS ANY LIABILITY TO THE USER FOR CLAIMS BROUGHT BY ANY OTHER ENTITY BASED ON INFRINGEMENT OF INTELLECTUAL PROPERTY RIGHTS OR OTHERWISE. AS A CONDITION TO EXERCISING THE RIGHTS GRANTED HEREUNDER, EACH USER HEREBY ASSUMES SOLE RESPONSIBILITY TO SECURE ANY OTHER INTELLECTUAL PROPERTY RIGHTS NEEDED, IF ANY. THE SOFTWARE IS NOT FAULT-TOLERANT AND IS NOT INTENDED FOR USE IN MISSION-CRITICAL SYSTEMS, SUCH AS THOSE USED IN THE OPERATION OF NUCLEAR FACILITIES, AIRCRAFT NAVIGATION OR COMMUNICATION SYSTEMS, AIR TRAFFIC CONTROL SYSTEMS, DIRECT LIFE SUPPORT MACHINES, OR WEAPONS SYSTEMS, IN WHICH THE FAILURE OF THE SOFTWARE OR SYSTEM COULD LEAD DIRECTLY TO DEATH, PERSONAL INJURY, OR SEVERE PHYSICAL OR ENVIRONMENTAL DAMAGE ("HIGH RISK ACTIVITIES"). THE COPYRIGHT HOLDERS SPECIFICALLY DISCLAIM ANY EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR HIGH RISK ACTIVITIES.

DjVu

Portions of this computer program are copyright © 2008 Celartem, Inc. All rights reserved.

Portions of this computer program are copyright © 2011 Caminova, Inc. All rights reserved.

Portions of this computer program are copyright © 2013 Cuminas, Inc. All rights reserved.

DjVu is protected by U.S. Patent No. 6,058,214. Foreign Patents Pending.

Powered by AT&T Labs Technology.

License.DjVu.txt, which contains the terms of Expat, Release 2.0.1 License and of Jasper License Version 2.0:

Expat, Release 2.0.1 Copyright © 1998, 1999, 2000 Thai Open Source Software Center Ltd and Clark Cooper

Copyright © 2001, 2002, 2003, 2004, 2005, 2006 Expat maintainers. Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions: The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software. THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

JasPer License Version 2.0 Copyright © 2001-2006 Michael David Adams Copyright © 1999-2000 Image Power, Inc. Copyright © 1999-2000 The University of British Columbia All rights reserved. Permission is hereby granted, free of charge, to any person (the "User") obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions: The above copyright notices and this permission notice (which includes the disclaimer below) shall be included in all copies or substantial portions of the Software. The name of a copyright holder shall not be used to endorse or promote products derived from the Software without specific prior written permission. THIS DISCLAIMER OF WARRANTY CONSTITUTES AN ESSENTIAL PART OF THIS LICENSE. NO USE OF THE SOFTWARE IS AUTHORIZED HEREUNDER EXCEPT UNDER THIS DISCLAIMER. THE SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS. IN NO EVENT SHALL THE COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, OR ANY SPECIAL INDIRECT OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE. NO ASSURANCES ARE PROVIDED BY THE COPYRIGHT HOLDERS THAT THE SOFTWARE DOES NOT INFRINGE THE PATENT OR OTHER INTELLECTUAL PROPERTY RIGHTS OF ANY OTHER ENTITY. EACH COPYRIGHT HOLDER DISCLAIMS ANY LIABILITY TO THE USER FOR CLAIMS BROUGHT BY ANY OTHER ENTITY BASED ON INFRINGEMENT OF INTELLECTUAL PROPERTY RIGHTS OR OTHERWISE. AS A CONDITION TO EXERCISING THE RIGHTS GRANTED HEREUNDER, EACH USER HEREBY ASSUMES SOLE RESPONSIBILITY TO SECURE ANY OTHER INTELLECTUAL PROPERTY RIGHTS NEEDED, IF ANY. THE SOFTWARE IS NOT FAULT-TOLERANT AND IS NOT INTENDED FOR USE IN MISSION-CRITICAL SYSTEMS, SUCH AS THOSE USED IN THE OPERATION OF NUCLEAR FACILITIES, AIRCRAFT NAVIGATION OR COMMUNICATION SYSTEMS, AIR TRAFFIC CONTROL SYSTEMS, DIRECT LIFE SUPPORT MACHINES, OR WEAPONS SYSTEMS, IN WHICH THE FAILURE OF THE SOFTWARE OR SYSTEM COULD LEAD DIRECTLY TO DEATH, PERSONAL INJURY, OR SEVERE PHYSICAL OR ENVIRONMENTAL DAMAGE ("HIGH RISK ACTIVITIES"). THE COPYRIGHT HOLDERS

SPECIFICALLY DISCLAIM ANY EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR HIGH RISK ACTIVITIES.

libmv (SURF detector)

Copyright (c) 2007, 2008, 2009 libmv authors.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

FAST detector

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

*Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

*Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

*Neither the name of the University of Cambridge nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

AGAST++

Copyright (c) 2010, Elmar Mair All rights reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution. * Neither the name of the owner nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission. THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

BRISK

BRISK - Binary Robust Invariant Scalable Keypoints Reference implementation of [1] Stefan Leutenegger, Margarita Chli and Roland Siegwart, BRISK: Binary Robust Invariant Scalable Keypoints, in Proceedings of the IEEE International Conference on Computer Vision (ICCV2011).

Copyright (C) 2011 The Autonomous Systems Lab (ASL), ETH Zurich, Stefan Leutenegger, Simon Lynen and Margarita Chli.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution. * Neither the name of the ASL nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE

LibJPEG

1. We don't promise that this software works. (But if you find any bugs, please let us know!)
2. You can use this software for whatever you want. You don't have to pay us.
3. You may not pretend that you wrote this software. If you use it in a program, you must acknowledge somewhere in your documentation that you've used the IJG code.

In legalese:

The authors make NO WARRANTY or representation, either express or implied, with respect to this software, its quality, accuracy, merchantability, or fitness for a particular purpose. This software is provided "AS IS", and you, its user, assume the entire risk as to its quality and accuracy.

This software is copyright (C) 1991-1998, Thomas G. Lane.

All Rights Reserved except as specified below.

Permission is hereby granted to use, copy, modify, and distribute this software (or portions thereof) for any purpose, without fee, subject to these conditions:

- (1) If any part of the source code for this software is distributed, then this README file must be included, with this copyright and no-warranty notice unaltered; and any additions, deletions, or changes to the original files must be clearly indicated in accompanying documentation.
- (2) If only executable code is distributed, then the accompanying documentation must state that "this software is based in part on the work of the Independent JPEG Group".
- (3) Permission for use of this software is granted only if the user accepts full responsibility for any undesirable consequences; the authors accept NO LIABILITY for damages of any kind.

These conditions apply to any software derived from or based on the IJG code, not just to the unmodified library. If you use our work, you ought to acknowledge us.

Permission is NOT granted for the use of any IJG author's name or company name in advertising or publicity relating to this software or products derived from it. This software may be referred to only as "the Independent JPEG Group's software".

We specifically permit and encourage the use of this software as the basis of commercial products, provided that all warranty or liability claims are assumed by the product vendor.

LibPNG

libpng versions 1.2.6, August 15, 2004, through 1.2.29, May 8, 2008, are

Copyright (c) 2004, 2006-2008 Glenn Randers-Pehrson, and are

distributed according to the same disclaimer and license as libpng-1.2.5

with the following individual added to the list of Contributing Authors

Cosmin Truta

libpng versions 1.0.7, July 1, 2000, through 1.2.5 - October 3, 2002, are

Copyright (c) 2000-2002 Glenn Randers-Pehrson, and are

distributed according to the same disclaimer and license as libpng-1.0.6

with the following individuals added to the list of Contributing Authors

Simon-Pierre Cadieux

Eric S. Raymond

Gilles Vollant

and with the following additions to the disclaimer:

There is no warranty against interference with your enjoyment of the library or against infringement. There is no warranty that our efforts or the library will fulfill any of your particular purposes or needs. This library is provided with all faults, and the entire risk of satisfactory quality, performance, accuracy, and effort is with the user.

libpng versions 0.97, January 1998, through 1.0.6, March 20, 2000, are

Copyright (c) 1998, 1999 Glenn Randers-Pehrson, and are

distributed according to the same disclaimer and license as libpng-0.96,

with the following individuals added to the list of Contributing Authors:

Tom Lane

Glenn Randers-Pehrson

Willem van Schaik

libpng versions 0.89, June 1996, through 0.96, May 1997, are

Copyright (c) 1996, 1997 Andreas Dilger

Distributed according to the same disclaimer and license as libpng-0.88,

with the following individuals added to the list of Contributing Authors:

John Bowler

Kevin Bracey

Sam Bushell

Magnus Holmgren

Greg Roelofs

Tom Tanner

libpng versions 0.5, May 1995, through 0.88, January 1996, are

Copyright (c) 1995, 1996 Guy Eric Schalnat, Group 42, Inc.

For the purposes of this copyright and license, "Contributing Authors"

is defined as the following set of individuals:

Andreas Dilger

Dave Martindale

Guy Eric Schalnat

Paul Schmidt

Tim Wegner

The PNG Reference Library is supplied "AS IS". The Contributing Authors and Group 42, Inc. disclaim all warranties, expressed or implied, including, without limitation, the warranties of merchantability and of fitness for any purpose. The Contributing Authors and Group 42, Inc. assume no liability for direct, indirect, incidental, special, exemplary, or consequential damages, which may result from the use of the PNG Reference Library, even if advised of the possibility of such damage. Permission is hereby granted to use, copy, modify, and distribute this source code, or portions hereof, for any purpose, without fee, subject to the following restrictions:

1. The origin of this source code must not be misrepresented.
2. Altered versions must be plainly marked as such and must not be misrepresented as being the original source.
3. This Copyright notice may not be removed or altered from any source or altered source distribution.

The Contributing Authors and Group 42, Inc. specifically permit, without fee, and encourage the use of this source code as a component to supporting the PNG file format in commercial products. If you use this source code in a product, acknowledgment is not required but would be appreciated.

Libpng is OSI Certified Open Source Software. OSI Certified Open Source is a certification mark of the Open Source Initiative.

Glenn Randers-Pehrson

glennrp at users.sourceforge.net

May 8, 2008

pixtran (pixtools)

© Copyright 2007 EMC Corporation. All rights reserved.

EMC's and EMC's licensors' intellectual property rights in the Software are protected under all legal theories applicable to the geography where the Software is used;

ABBYY makes You no representations or warranties on behalf of EMC. All rights not expressly granted herein are reserved by EMC.

Intel Integrated Performance Primitives

Copyright © 2002-2008 Intel Corporation.

Intel® Integrated Performance Primitives (Intel® IPP) 2018

Copyright (c) 2018 Intel Corporation.

The technologies listed above are distributed subject to conditions of the following license:

Use and Redistribution. You may use and redistribute the software (the "Software"), without modification, provided the following conditions are met:

- * Redistributions must reproduce the above copyright notice and the following terms of use in the Software and in the documentation and/or other materials provided with the distribution.
- * Neither the name of Intel nor the names of its suppliers may be used to endorse or promote products derived from this Software without specific prior written permission.
- * No reverse engineering, decompilation, or disassembly of this Software is permitted.

Limited patent license. Intel grants you a world-wide, royalty-free, non-exclusive license under patents it now or hereafter owns or controls to make, have made, use, import, offer to sell and sell ("Utilize") this Software, but solely to the extent that any such patent is necessary to Utilize the Software alone. The patent license shall not apply to any combinations which include this software. No hardware per se is licensed hereunder.

Third party and other Intel programs. "Third Party Programs" are the files listed in the "third-party-programs.txt" text file that is included with the Software and may include Intel programs under separate license terms. Third Party Programs, even if included with the distribution of the Materials, are governed by separate license terms and those license terms solely govern your use of those programs.

DISCLAIMER. THIS SOFTWARE IS PROVIDED "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT ARE DISCLAIMED. THIS SOFTWARE IS NOT INTENDED FOR USE IN SYSTEMS OR APPLICATIONS WHERE FAILURE OF THE SOFTWARE MAY CAUSE PERSONAL INJURY OR DEATH AND YOU AGREE THAT YOU ARE FULLY RESPONSIBLE FOR ANY CLAIMS, COSTS, DAMAGES, EXPENSES, AND ATTORNEYS' FEES ARISING OUT OF ANY SUCH USE, EVEN IF ANY CLAIM ALLEGES THAT INTEL WAS NEGLIGENT REGARDING THE DESIGN OR MANUFACTURE OF THE MATERIALS.

LIMITATION OF LIABILITY. IN NO EVENT WILL INTEL BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT

LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. YOU AGREE TO INDEMNIFY AND HOLD INTEL HARMLESS AGAINST ANY CLAIMS AND EXPENSES RESULTING FROM YOUR USE OR UNAUTHORIZED USE OF THE SOFTWARE.

No support. Intel may make changes to the Software, at any time without notice, and is not obligated to support, update or provide training for the Software.

Termination. Intel may terminate your right to use the Software in the event of your breach of this Agreement and you fail to cure the breach within a reasonable period of time.

Feedback. Should you provide Intel with comments, modifications, corrections, enhancements or other input ("Feedback") related to the Software Intel will be free to use, disclose, reproduce, license or otherwise distribute or exploit the Feedback in its sole discretion without any obligations or restrictions of any kind, including without limitation, intellectual property rights or licensing obligations.

Compliance with laws. You agree to comply with all relevant laws and regulations governing your use, transfer, import or export (or prohibition thereof) of the Software.

Governing law. All disputes will be governed by the laws of the United States of America and the State of Delaware without reference to conflict of law principles and subject to the exclusive jurisdiction of the state or federal courts sitting in the State of Delaware, and each party agrees that it submits to the personal jurisdiction and venue of those courts and waives any objections. The United Nations Convention on Contracts for the International Sale of Goods (1980) is specifically excluded and will not apply to the Software.

*Other names and brands may be claimed as the property of others.

LZMA SDK

LZMA SDK is placed in the public domain.

Anyone is free to copy, modify, publish, use, compile, sell, or distribute the original LZMA SDK code, either in source code form or as a compiled binary, for any purpose, commercial or non-commercial, and by any means.

jsoncpp

Copyright (c) 2007-2010 Baptiste Lepilleur

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE

AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

libyami

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Intel Math Kernel Library 2017 Update 2

Intel Simplified Software License

(version January 2017)

This license applies to the following products:

Intel® Math Kernel Library (intel® MKL)

Intel® Integrated Performance Primitives (Intel® IPP)

Intel® Distribution for Python

Intel® Machine Learning Scaling Library (Intel® MLSL)

Copyright © 2017 Intel Corporation.

Use and Redistribution. You may use and redistribute the software (the "Software"), without modification, provided the following conditions are met:

Redistributions must reproduce the above copyright notice and the following terms of use in the Software and in the documentation and/or other materials provided with the distribution.

Neither the name of Intel nor the names of its suppliers may be used to endorse or promote products derived from this Software without specific prior written permission.

No reverse engineering, decompilation, or disassembly of this Software is permitted.

Limited patent license. Intel grants you a world-wide, royalty-free, non-exclusive license under patents it now or hereafter owns or controls to make, have made, use, import, offer to sell and sell ("Utilize") this Software, but solely to the extent that any such patent is necessary to Utilize the Software alone. The

patent license shall not apply to any combinations which include this software. No hardware per se is licensed hereunder.

Third party and other Intel programs. "Third Party Programs" are the files listed in the "third-party-programs.txt" text file that is included with the Software and may include Intel programs under separate license terms. Third Party Programs, even if included with the distribution of the Materials, are governed by separate license terms and those license terms solely govern your use of those programs.

DISCLAIMER. THIS SOFTWARE IS PROVIDED "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT ARE DISCLAIMED. THIS SOFTWARE IS NOT INTENDED NOR AUTHORIZED FOR USE IN SYSTEMS OR APPLICATIONS WHERE FAILURE OF THE SOFTWARE MAY CAUSE PERSONAL INJURY OR DEATH.

LIMITATION OF LIABILITY. IN NO EVENT WILL INTEL BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. YOU AGREE TO INDEMNIFY AND HOLD INTEL HARMLESS AGAINST ANY CLAIMS AND EXPENSES RESULTING FROM YOUR USE OR UNAUTHORIZED USE OF THE SOFTWARE.

No support. Intel may make changes to the Software, at any time without notice, and is not obligated to support, update or provide training for the Software.

Termination. Intel may terminate your right to use the Software in the event of your breach of this Agreement and you fail to cure the breach within a reasonable period of time.

Feedback. Should you provide Intel with comments, modifications, corrections, enhancements or other input ("Feedback") related to the Software Intel will be free to use, disclose, reproduce, license or otherwise distribute or exploit the Feedback in its sole discretion without any obligations or restrictions of any kind, including without limitation, intellectual property rights or licensing obligations.

Compliance with laws. You agree to comply with all relevant laws and regulations governing your use, transfer, import or export (or prohibition thereof) of the Software.

Governing law. All disputes will be governed by the laws of the United States of America and the State of Delaware without reference to conflict of law principles and subject to the exclusive jurisdiction of the state or federal courts sitting in the State of Delaware, and each party agrees that it submits to the personal jurisdiction and venue of those courts and waives any objections. The United Nations Convention on Contracts for the International Sale of Goods (1980) is specifically excluded and will not apply to the Software.

*Other names and brands may be claimed as the property of others.

TWAIN Header

The TWAIN Toolkit is distributed as is. The developer and distributors of the TWAIN Toolkit expressly disclaim all implied, express or

statutory warranties including, without limitation, the implied warranties of merchantability, noninfringement of

third party rights and fitness for a particular purpose. Neither the developers nor the distributors will be liable

for damages, whether direct, indirect, special, incidental, or consequential, as a result of the reproduction,

modification, distribution or other use of the TWAIN Toolkit.

OpenCV

© Copyright 2018, OpenCV team

For Open Source Computer Vision Library

(3-clause BSD License)

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:


- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- Neither the names of the copyright holders nor the names of the contributors may be used to endorse or promote products derived from this software without specific prior written permission.

This software is provided by the copyright holders and contributors “as is” and any express or implied warranties, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose are disclaimed. In no event shall copyright holders or contributors be liable for any direct, indirect, incidental, special, exemplary, or consequential damages (including, but not limited to, procurement of substitute goods or services; loss of use, data, or profits; or business interruption) however caused and on any theory of liability, whether in contract, strict liability, or tort (including negligence or otherwise) arising in any way out of the use of this software, even if advised of the possibility of such damage.

Eigen

This Source Code Form is subject to the terms of the Mozilla Public License, v. 2.0. If a copy of the MPL was not distributed with this file, You can obtain one at

<https://mozilla.org/MPL/2.0/> 

A copy of Source Code Form of this software may be obtained at <https://github.com/eigenteam/eigen-git-mirror> 

Mozilla Public License

Version 2.0

1. Definitions

1.1. “Contributor”

means each individual or legal entity that creates, contributes to the creation of, or owns Covered Software.

1.2. "Contributor Version"

means the combination of the Contributions of others (if any) used by a Contributor and that particular Contributor's Contribution.

1.3. "Contribution"

means Covered Software of a particular Contributor.

1.4. "Covered Software"

means Source Code Form to which the initial Contributor has attached the notice in Exhibit A, the Executable Form of such Source Code Form, and Modifications of such Source Code Form, in each case including portions thereof.

1.5. "Incompatible With Secondary Licenses"

means

- a. that the initial Contributor has attached the notice described in Exhibit B to the Covered Software; or
- b. that the Covered Software was made available under the terms of version 1.1 or earlier of the License, but not also under the terms of a Secondary License.

1.6. "Executable Form"

means any form of the work other than Source Code Form.

1.7. "Larger Work"

means a work that combines Covered Software with other material, in a separate file or files, that is not Covered Software.

1.8. "License"

means this document.

1.9. "Licensable"

means having the right to grant, to the maximum extent possible, whether at the time of the initial grant or subsequently, any and all of the rights conveyed by this License.

1.10. "Modifications"

means any of the following:

- a. any file in Source Code Form that results from an addition to, deletion from, or modification of the contents of Covered Software; or
- b. any new file in Source Code Form that contains any Covered Software.

1.11. "Patent Claims" of a Contributor

means any patent claim(s), including without limitation, method, process, and apparatus claims, in any patent Licensable by such Contributor that would be infringed, but for the grant of the License, by the making, using, selling, offering for sale, having made, import, or transfer of either its Contributions or its Contributor Version.

1.12. "Secondary License"

means either the GNU General Public License, Version 2.0, the GNU Lesser General Public License, Version 2.1, the GNU Affero General Public License, Version 3.0, or any later versions of those licenses.

1.13. "Source Code Form"

means the form of the work preferred for making modifications.

1.14. "You" (or "Your")

means an individual or a legal entity exercising rights under this License. For legal entities, "You" includes any entity that controls, is controlled by, or is under common control with You. For purposes of this definition, "control" means (a) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (b) ownership of more than fifty percent (50%) of the outstanding shares or beneficial ownership of such entity.

2. License Grants and Conditions

2.1. Grants

Each Contributor hereby grants You a world-wide, royalty-free, non-exclusive license:

a. under intellectual property rights (other than patent or trademark) Licensable by such Contributor to use, reproduce, make available, modify, display, perform, distribute, and otherwise exploit its Contributions, either on an unmodified basis, with Modifications, or as part of a Larger Work; and

b. under Patent Claims of such Contributor to make, use, sell, offer for sale, have made, import, and otherwise transfer either its Contributions or its Contributor Version.

2.2. Effective Date

The licenses granted in Section 2.1 with respect to any Contribution become effective for each Contribution on the date the Contributor first distributes such Contribution.

2.3. Limitations on Grant Scope

The licenses granted in this Section 2 are the only rights granted under this License. No additional rights or licenses will be implied from the distribution or licensing of Covered Software under this License. Notwithstanding Section 2.1(b) above, no patent license is granted by a Contributor:

a. for any code that a Contributor has removed from Covered Software; or

b. for infringements caused by: (i) Your and any other third party's modifications of Covered Software, or (ii) the combination of its Contributions with other software (except as part of its Contributor Version); or

c. under Patent Claims infringed by Covered Software in the absence of its Contributions.

This License does not grant any rights in the trademarks, service marks, or logos of any Contributor (except as may be necessary to comply with the notice requirements in Section 3.4).

2.4. Subsequent Licenses

No Contributor makes additional grants as a result of Your choice to distribute the Covered Software under a subsequent version of this License (see Section 10.2) or under the terms of a Secondary License (if permitted under the terms of Section 3.3).

2.5. Representation

Each Contributor represents that the Contributor believes its Contributions are its original creation(s) or it has sufficient rights to grant the rights to its Contributions conveyed by this License.

2.6. Fair Use

This License is not intended to limit any rights You have under applicable copyright doctrines of fair use, fair dealing, or other equivalents.

2.7. Conditions

Sections 3.1, 3.2, 3.3, and 3.4 are conditions of the licenses granted in Section 2.1.

3. Responsibilities

3.1. Distribution of Source Form

All distribution of Covered Software in Source Code Form, including any Modifications that You create or to which You contribute, must be under the terms of this License. You must inform recipients that the Source Code Form of the Covered Software is governed by the terms of this License, and how they can obtain a copy of this License. You may not attempt to alter or restrict the recipients' rights in the Source Code Form.

3.2. Distribution of Executable Form

If You distribute Covered Software in Executable Form then:

- a. such Covered Software must also be made available in Source Code Form, as described in Section 3.1, and You must inform recipients of the Executable Form how they can obtain a copy of such Source Code Form by reasonable means in a timely manner, at a charge no more than the cost of distribution to the recipient; and
- b. You may distribute such Executable Form under the terms of this License, or sublicense it under different terms, provided that the license for the Executable Form does not attempt to limit or alter the recipients' rights in the Source Code Form under this License.

3.3. Distribution of a Larger Work

You may create and distribute a Larger Work under terms of Your choice, provided that You also comply with the requirements of this License for the Covered Software. If the Larger Work is a combination of Covered Software with a work governed by one or more Secondary Licenses, and the Covered Software is not Incompatible With Secondary Licenses, this License permits You to additionally distribute such Covered Software under the terms of such Secondary License(s), so that the recipient of the Larger Work may, at their option, further distribute the Covered Software under the terms of either this License or such Secondary License(s).

3.4. Notices

You may not remove or alter the substance of any license notices (including copyright notices, patent notices, disclaimers of warranty, or limitations of liability) contained within the Source Code Form of the Covered Software, except that You may alter any license notices to the extent required to remedy known factual inaccuracies.

3.5. Application of Additional Terms

You may choose to offer, and to charge a fee for, warranty, support, indemnity or liability obligations to one or more recipients of Covered Software. However, You may do so only on Your own behalf, and not on behalf of any Contributor. You must make it absolutely clear that any such warranty, support, indemnity, or liability obligation is offered by You alone, and You hereby agree to indemnify every

Contributor for any liability incurred by such Contributor as a result of warranty, support, indemnity or liability terms You offer. You may include additional disclaimers of warranty and limitations of liability specific to any jurisdiction.

4. Inability to Comply Due to Statute or Regulation

If it is impossible for You to comply with any of the terms of this License with respect to some or all of the Covered Software due to statute, judicial order, or regulation then You must: (a) comply with the terms of this License to the maximum extent possible; and (b) describe the limitations and the code they affect. Such description must be placed in a text file included with all distributions of the Covered Software under this License. Except to the extent prohibited by statute or regulation, such description must be sufficiently detailed for a recipient of ordinary skill to be able to understand it.

5. Termination

5.1. The rights granted under this License will terminate automatically if You fail to comply with any of its terms. However, if You become compliant, then the rights granted under this License from a particular Contributor are reinstated (a) provisionally, unless and until such Contributor explicitly and finally terminates Your grants, and (b) on an ongoing basis, if such Contributor fails to notify You of the non-compliance by some reasonable means prior to 60 days after You have come back into compliance. Moreover, Your grants from a particular Contributor are reinstated on an ongoing basis if such Contributor notifies You of the non-compliance by some reasonable means, this is the first time You have received notice of non-compliance with this License from such Contributor, and You become compliant prior to 30 days after Your receipt of the notice.

5.2. If You initiate litigation against any entity by asserting a patent infringement claim (excluding declaratory judgment actions, counter-claims, and cross-claims) alleging that a Contributor Version directly or indirectly infringes any patent, then the rights granted to You by any and all Contributors for the Covered Software under Section 2.1 of this License shall terminate.

5.3. In the event of termination under Sections 5.1 or 5.2 above, all end user license agreements (excluding distributors and resellers) which have been validly granted by You or Your distributors under this License prior to termination shall survive termination.

6. Disclaimer of Warranty

Covered Software is provided under this License on an “as is” basis, without warranty of any kind, either expressed, implied, or statutory, including, without limitation, warranties that the Covered Software is free of defects, merchantable, fit for a particular purpose or non-infringing. The entire risk as to the quality and performance of the Covered Software is with You. Should any Covered Software prove defective in any respect, You (not any Contributor) assume the cost of any necessary servicing, repair, or correction. This disclaimer of warranty constitutes an essential part of this License. No use of any Covered Software is authorized under this License except under this disclaimer.

7. Limitation of Liability

Under no circumstances and under no legal theory, whether tort (including negligence), contract, or otherwise, shall any Contributor, or anyone who distributes Covered Software as permitted above, be liable to You for any direct, indirect, special, incidental, or consequential damages of any character including, without limitation, damages for lost profits, loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses, even if such party shall have been informed of the possibility of such damages. This limitation of liability shall not apply to liability for death or personal injury resulting from such party's negligence to the extent applicable law prohibits such limitation. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so this exclusion and limitation may not apply to You.

8. Litigation

Any litigation relating to this License may be brought only in the courts of a jurisdiction where the defendant maintains its principal place of business and such litigation shall be governed by laws of that jurisdiction, without reference to its conflict-of-law provisions. Nothing in this Section shall prevent a party's ability to bring cross-claims or counter-claims.

9. Miscellaneous

This License represents the complete agreement concerning the subject matter hereof. If any provision of this License is held to be unenforceable, such provision shall be reformed only to the extent necessary to make it enforceable. Any law or regulation which provides that the language of a contract shall be construed against the drafter shall not be used to construe this License against a Contributor.

10. Versions of the License

10.1. New Versions

Mozilla Foundation is the license steward. Except as provided in Section 10.3, no one other than the license steward has the right to modify or publish new versions of this License. Each version will be given a distinguishing version number.

10.2. Effect of New Versions

You may distribute the Covered Software under the terms of the version of the License under which You originally received the Covered Software, or under the terms of any subsequent version published by the license steward.

10.3. Modified Versions

If you create software not governed by this License, and you want to create a new license for such software, you may create and use a modified version of this License if you rename the license and remove any references to the name of the license steward (except to note that such modified license differs from this License).

10.4. Distributing Source Code Form that is Incompatible With Secondary Licenses

If You choose to distribute Source Code Form that is Incompatible With Secondary Licenses under the terms of this version of the License, the notice described in Exhibit B of this License must be attached.

FreeType

FreeType font driver for BDF fonts

Francesco Zappa Nardelli

<francesco.zappa.nardelli@ens.fr

License

Copyright (C) 2001-2002 by Francesco Zappa Nardelli

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including

without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

*** Portions of the driver (that is, bdf.lib.c and bdf.h):

Copyright 2000 Computing Research Labs, New Mexico State University

Copyright 2001-2002 Francesco Zappa Nardelli

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE COMPUTING RESEARCH LAB OR NEW MEXICO STATE UNIVERSITY BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

FreeType font driver for PCF fonts

Francesco Zappa Nardelli

<francesco.zappa.nardelli@ens.fr

License

Copyright (C) 2000 by Francesco Zappa Nardelli

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

The FreeType Project LICENSE

2006-Jan-27

Copyright 1996-2002, 2006 by

David Turner, Robert Wilhelm, and Werner Lemberg

Introduction

=====

The FreeType Project is distributed in several archive packages; some of them may contain, in addition to the FreeType font engine, various tools and contributions which rely on, or relate to, the FreeType Project.

This license applies to all files found in such packages, and which do not fall under their own explicit license. The license affects thus the FreeType font engine, the test programs, documentation and makefiles, at the very least.

This license was inspired by the BSD, Artistic, and IJG (Independent JPEG Group) licenses, which all encourage inclusion and use of free software in commercial and freeware products alike. As a consequence, its main points are that:

- o We don't promise that this software works. However, we will be interested in any kind of bug reports. ('as is' distribution)
- o You can use this software for whatever you want, in parts or full form, without having to pay us. ('royalty-free' usage)
- o You may not pretend that you wrote this software. If you use it, or only parts of it, in a program, you must acknowledge somewhere in your documentation that you have used the FreeType code. ('credits')

We specifically permit and encourage the inclusion of this software, with or without modifications, in commercial products.

We disclaim all warranties covering The FreeType Project and assume no liability related to The FreeType Project.

Finally, many people asked us for a preferred form for a credit/disclaimer to use in compliance with this license. We thus encourage you to use the following text:

""""

Portions of this software are copyright <year> The FreeType Project (www.freetype.org³³¹). All rights reserved.

""""

Please replace <year> with the value from the FreeType version you actually use.

Legal Terms

=====

0. Definitions

Throughout this license, the terms `package', `FreeType Project', and `FreeType archive' refer to the set of files originally distributed by the authors (David Turner, Robert Wilhelm, and Werner Lemberg) as the `FreeType Project', be they named as alpha, beta or final release.

`You' refers to the licensee, or person using the project, where `using' is a generic term including compiling the project's source code as well as linking it to form a `program' or `executable'.

This program is referred to as `a program using the FreeType engine'.

This license applies to all files distributed in the original FreeType Project, including all source code, binaries and documentation, unless otherwise stated in the file in its original, unmodified form as distributed in the original archive.

If you are unsure whether or not a particular file is covered by this license, you must contact us to verify this.

The FreeType Project is copyright (C) 1996-2000 by David Turner, Robert Wilhelm, and Werner Lemberg. All rights reserved except as specified below.

1. No Warranty

THE FREETYPE PROJECT IS PROVIDED `AS IS' WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT WILL ANY OF THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY DAMAGES CAUSED BY THE USE OR THE INABILITY TO USE, OF THE FREETYPE PROJECT.

2. Redistribution

This license grants a worldwide, royalty-free, perpetual and irrevocable right and license to use, execute, perform, compile,

display, copy, create derivative works of, distribute and sublicense the FreeType Project (in both source and object code forms) and derivative works thereof for any purpose; and to authorize others to exercise some or all of the rights granted herein, subject to the following conditions:

- o Redistribution of source code must retain this license file ('FTL.TXT') unaltered; any additions, deletions or changes to the original files must be clearly indicated in accompanying documentation. The copyright notices of the unaltered, original files must be preserved in all copies of source files.
- o Redistribution in binary form must provide a disclaimer that states that the software is based in part of the work of the FreeType Team, in the distribution documentation. We also encourage you to put an URL to the FreeType web page in your documentation, though this isn't mandatory.

These conditions apply to any software derived from or based on the FreeType Project, not just the unmodified files. If you use our work, you must acknowledge us. However, no fee need be paid to us.

3. Advertising

Neither the FreeType authors and contributors nor you shall use the name of the other for commercial, advertising, or promotional purposes without specific prior written permission.

We suggest, but do not require, that you use one or more of the following phrases to refer to this software in your documentation or advertising materials: 'FreeType Project', 'FreeType Engine', 'FreeType library', or 'FreeType Distribution'.

As you have not signed this license, you are not required to accept it. However, as the FreeType Project is copyrighted material, only this license, or another one contracted with the

authors, grants you the right to use, distribute, and modify it.

Therefore, by using, distributing, or modifying the FreeType Project, you indicate that you understand and accept all the terms of this license.

4. Contacts

There are two mailing lists related to FreeType:

o freetype@nongnu.org

Discusses general use and applications of FreeType, as well as future and wanted additions to the library and distribution.

If you are looking for support, start in this list if you haven't found anything to help you in the documentation.

o freetype-devel@nongnu.org

Discusses bugs, as well as engine internals, design issues, specific licenses, porting, etc.

Our home page can be found at

<http://www.freetype.org> 

v8

Copyright 2006-2011, the V8 project authors. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following

disclaimer in the documentation and/or other materials provided with the distribution.

* Neither the name of Google Inc. nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS

INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

v8/Strongtalk

Copyright (c) 1994-2006 Sun Microsystems Inc.

All Rights Reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- Redistribution in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- Neither the name of Sun Microsystems or the names of contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

v8/fdlibm

Copyright (C) 1993-2004 by Sun Microsystems, Inc. All rights reserved.

Developed at SunSoft, a Sun Microsystems, Inc. business.

Permission to use, copy, modify, and distribute this software is freely granted, provided that this notice is preserved.

Rhash

RHash License Copyright (c) 2005-2014 Aleksey Kravchenko <rhash.admin@gmail.com>

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so. The Software is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. Use this program at your own risk!

Pecita (font)

Copyright (c) 2011-05-12—2015-09-22, Pecita (Pecita.net),

with Reserved Font Name <Reserved Font Name>.

This Font Software is licensed under the SIL Open Font License, Version 1.1.

This license is copied below, and is also available with a FAQ at:

<http://scripts.sil.org/OFL> 

Miama Nueva Medium (font)

Copyright (c) 2016-03-13, Linus Romer

This Font Software is licensed under the SIL Open Font License, Version 1.1.

This license is copied below, and is also available with a FAQ at:

<http://scripts.sil.org/OFL> 

Bad Script (font)

Designed by Roman Shchyukin from Gaslight.

This Font Software is licensed under the SIL Open Font License, Version 1.1.

This license is copied below, and is also available with a FAQ at:

<http://scripts.sil.org/OFL> 

SIL OPEN FONT LICENSE Version 1.1 - 26 February 2007

PREAMBLE

The goals of the Open Font License (OFL) are to stimulate worldwide development of collaborative font projects, to support the font creation efforts of academic and linguistic communities, and to provide a free and open framework in which fonts may be shared and improved in partnership with others.

The OFL allows the licensed fonts to be used, studied, modified and redistributed freely as long as they are not sold by themselves. The fonts, including any derivative works, can be bundled, embedded, redistributed and/or sold with any software provided that any reserved names are not used by derivative works. The fonts and derivatives, however, cannot be released under any other type of license. The requirement for fonts to remain under this license does not apply to any document created using the fonts or their derivatives.

DEFINITIONS

"Font Software" refers to the set of files released by the Copyright Holder(s) under this license and clearly marked as such. This may include source files, build scripts and documentation.

"Reserved Font Name" refers to any names specified as such after the copyright statement(s).

"Original Version" refers to the collection of Font Software components as distributed by the Copyright Holder(s).

"Modified Version" refers to any derivative made by adding to, deleting, or substituting -- in part or in whole -- any of the components of the Original Version, by changing formats or by porting the Font Software to a new environment.

"Author" refers to any designer, engineer, programmer, technical writer or other person who contributed to the Font Software.

PERMISSION & CONDITIONS

Permission is hereby granted, free of charge, to any person obtaining a copy of the Font Software, to use, study, copy, merge, embed, modify,

redistribute, and sell modified and unmodified copies of the Font Software, subject to the following conditions:

- 1) Neither the Font Software nor any of its individual components, in Original or Modified Versions, may be sold by itself.
- 2) Original or Modified Versions of the Font Software may be bundled, redistributed and/or sold with any software, provided that each copy contains the above copyright notice and this license. These can be included either as stand-alone text files, human-readable headers or in the appropriate machine-readable metadata fields within text or binary files as long as those fields can be easily viewed by the user.
- 3) No Modified Version of the Font Software may use the Reserved Font Name(s) unless explicit written permission is granted by the corresponding Copyright Holder. This restriction only applies to the primary font name as presented to the users.
- 4) The name(s) of the Copyright Holder(s) or the Author(s) of the Font Software shall not be used to promote, endorse or advertise any Modified Version, except to acknowledge the contribution(s) of the Copyright Holder(s) and the Author(s) or with their explicit written permission.
- 5) The Font Software, modified or unmodified, in part or in whole, must be distributed entirely under this license, and must not be distributed under any other license. The requirement for fonts to remain under this license does not apply to any document created using the Font Software.

TERMINATION

This license becomes null and void if any of the above conditions are not met.

DISCLAIMER

THE FONT SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF COPYRIGHT, PATENT, TRADEMARK, OR OTHER RIGHT. IN NO EVENT SHALL THE

COPYRIGHT HOLDER BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, INCLUDING ANY GENERAL, SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF THE USE OR INABILITY TO USE THE FONT SOFTWARE OR FROM OTHER DEALINGS IN THE FONT SOFTWARE.

PDF-XChange

PDF-XChange Standard (c) 2001-2013 by Tracker Software Products Ltd.

RazorEngine, google-diff-match-patch

Apache License

Version 2.0, January 2004

<http://www.apache.org/licenses/>

Terms and Conditions for use, reproduction, and distribution

1. Definitions

“License” shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

“Licensor” shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

“Legal Entity” shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, “control” means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

“You” (or “Your”) shall mean an individual or Legal Entity exercising permissions granted by this License.

“Source” form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

“Object” form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

“Work” shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

“Derivative Works” shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative

Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

“Contribution” shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, “submitted” means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as “Not a Contribution.”

“Contributor” shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License

Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License

Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution

You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a “NOTICE” text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the

NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions

Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks

This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty

Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability

In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability

While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

haval

Copyright (c) 2003 Calyptix Security Corporation * All rights reserved. * * This code is derived from software contributed to Calyptix Security * Corporation by Yuliang Zheng. * * Redistribution and use in source and binary forms, with or without * modification, are permitted provided that the following

conditions * are met: * 1. Redistributions of source code must retain the above copyright * notice, this list of conditions and the following disclaimer. * 2. Redistributions in binary form must reproduce the above * copyright notice, this list of conditions and the following * disclaimer in the documentation and/or other materials provided * with the distribution. * 3. Neither the name of Calyptix Security Corporation nor the * names of its contributors may be used to endorse or promote * products derived from this software without specific prior * written permission. * * THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS * "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT * LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS * FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE * COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, * INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, * BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; * LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER * CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT * LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN * ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE * POSSIBILITY OF SUCH DAMAGE.

Openssl

Copyright (c) 1998-2011 The OpenSSL Project. All rights reserved.

This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (

<http://www.openssl.org/>³³¹)

Copyright (C) 1995-1998 Eric Young

(eay@cryptsoft.com)

All rights reserved.

This product includes cryptographic software written by Eric Young

(eay@cryptsoft.com)

Eric Young is the author of the parts of the library used.

This product includes software written by Tim Hudson

(tjh@cryptsoft.com)

OpenSSL License * Copyright (c) 1998-2011 The OpenSSL Project. All rights reserved. * * Redistribution and use in source and binary forms, with or without * modification, are permitted provided that the following conditions * are met: * * 1. Redistributions of source code must retain the above copyright * notice, this list of conditions and the following disclaimer. * * 2. Redistributions in binary form must reproduce the above copyright * notice, this list of conditions and the following disclaimer in * the documentation and/or other materials provided with the * distribution. * * 3. All advertising materials mentioning features or use of this * software must display the following acknowledgment: * "This product includes software developed by the OpenSSL Project * for use in the OpenSSL Toolkit. (

<http://www.openssl.org/>³³¹)

)* * 4. The names "OpenSSL Toolkit" and "OpenSSL Project" must not be used to * endorse or promote products derived from this software without * prior written permission. For written permission, please contact *

openssl-core@openssl.org

. * * 5. Products derived from this software may not be called "OpenSSL" * nor may "OpenSSL" appear in their names without prior written * permission of the OpenSSL Project. * * 6. Redistributions of any form whatsoever must retain the following * acknowledgment: * "This product includes software developed by the OpenSSL Project * for use in the OpenSSL Toolkit (

<http://www.openssl.org/>

)" * * THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT ``AS IS" AND ANY * EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE * IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR * PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OpenSSL PROJECT OR * ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, * SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT * NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; * LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) * HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, * STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) * ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED * OF THE POSSIBILITY OF SUCH DAMAGE. *

=====
* * This product includes cryptographic software written by Eric Young *

(eay@cryptsoft.com)

. This product includes software written by Tim * Hudson

(tjh@cryptsoft.com)

. * */

Original SSLeay License -----

/* Copyright (C) 1995-1998 Eric Young

(eay@cryptsoft.com)

* All rights reserved. * * This package is an SSL implementation written * by Eric Young

(eay@cryptsoft.com)

. * The implementation was written so as to conform with Netscapes SSL. * * This library is free for commercial and non-commercial use as long as * the following conditions are aheared to. The following conditions * apply to all code found in this distribution, be it the RC4, RSA, * lhash, DES, etc., code; not just the SSL code. The SSL documentation * included with this distribution is covered by the same copyright terms * except that the holder is Tim Hudson

(tjh@cryptsoft.com)

. * * Copyright remains Eric Young's, and as such any Copyright notices in * the code are not to be removed. * If this package is used in a product, Eric Young should be given attribution * as the author of the parts of the library used. * This can be in the form of a textual message at program startup or * in documentation (online or textual) provided with the package. * * Redistribution and use in source and binary forms, with or without * modification, are permitted provided that the following conditions * are met: * 1. Redistributions of source code must retain the copyright * notice, this list of conditions and the following disclaimer. * 2. Redistributions in binary form must reproduce the above copyright * notice, this list of conditions and the following disclaimer in the * documentation and/or other materials provided with the distribution. * 3. All advertising materials mentioning features or use of this software *

must display the following acknowledgement: * "This product includes cryptographic software written by * Eric Young

(eay@cryptsoft.com)

" * The word 'cryptographic' can be left out if the routines from the library * being used are not cryptographic related :-). * 4. If you include any Windows specific code (or a derivative thereof) from * the apps directory (application code) you must include an acknowledgement: * "This product includes software written by Tim Hudson

(tjh@cryptsoft.com)

" * * THIS SOFTWARE IS PROVIDED BY ERIC YOUNG ``AS IS" AND * ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE * IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE * ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE * FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL * DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS * OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) * HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT * LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY * OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF * SUCH DAMAGE. * * The licence and distribution terms for any publically available version or * derivative of this code cannot be changed. i.e. this code cannot simply be * copied and put under another distribution licence * [including the GNU Public Licence.] */