

ABBYY FineReader Engine 11 Windows

What's New

ABBYY FineReader Engine 11 offers a variety of new built-in features and improvements make it the ideal text recognition and document conversion SDK for your systems and applications. A highlight of the key new features includes:

Classification	Image and text-based document type detection
Business Card Recognition	Single and multi-card processing, vCard export
Extended PDF Capabilities	PDF/A2 & PDF/A-3 support, enhanced PDF processing
New and Improved OCR Technology	New OCR and ICR languages, new barcode types, improved image pre-processing
Development Improvements	64-bit support, asynchronous scanning, new Java Native Interface (JNI) support


Automatic Document Classification

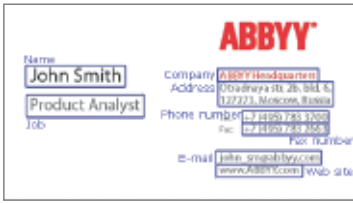
ABBYY FineReader Engine 11 provides new functionality for document classification technology. Based on a combination of image and content-based classifiers, the technologies support a wide range of document types. The API also allows training of different document types and provides confidence levels after classification is run.

Feature	Description	Benefit
Automatic Document Classification	<p>Various Documents → Your Application (Classification from ABBYY) → Business Cards, Invoices, Receipts</p> <p>FineReader 11 classification applies a combination of image criteria, OCR, and linguistic and statistical technologies to deliver high levels of accuracy and support a wide range of documents.</p>	<p>With new classification capabilities, your application "knows" what document type is being processed, e.g. a business card, a receipt, invoice or complaint. This information enables workflow automation and reduces costs associated with manual pre-processing.</p> <p>Users can easily train new document types via a custom designed interface. The pre-compiled code sample is a perfect starting point. Separate template creation is not required.</p>
Classification Profiles	<p>FineReader Engine 11 classification can be executed in 2 modes:</p> <ul style="list-style-type: none"> Maximum Speed – this mode is based on image pattern (black pixels location template) and quick OCR text analysis of title texts. It works up to 10x faster than full-page OCR*. Maximum Accuracy – this mode is based on the full OCRed text. It analyses the full-text of the document including the title texts as well as the key words that were detected during the training. 	
Difference between FlexiCapture Engine Classification	<p>ABBYY also offers classification via FlexiCapture Engine, which performs classification using intelligent document definitions called FlexiLayouts. With ABBYY FlexiCapture Engine, document separation, classification and further processing steps are designed for data extraction scenarios. Classification in FineReader Engine 11 is designed for full-text OCR and document conversion scenarios.</p>	

Business Card Recognition

Despite the prevalence of email, internet and social networks, business cards are still very common when business people meet in real life at events and tradeshows. Very often the cards will pile up on desktops and never make their way into a CRM system. With the new business card reading capabilities of FineReader Engine 11, developers can now easily extend their applications and offer a solution for this problem.

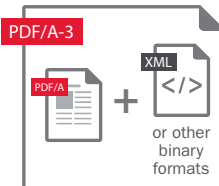
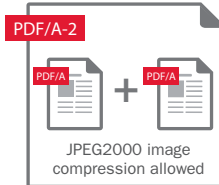
Feature	Description	Benefit
Business Card Recognition	<p>Business card recognition technology is accessible via a new API in FineReader Engine 11. It offers special pre-processing features and access to the extracted data.</p> <p>Business card recognition supports 27 recognition languages.</p>	<p>Enabling your applications to process business cards is now an easy task. All users of your application/system will benefit immediately when business card contacts are converted to an active digital asset, no matter if the images come from a scanner or a mobile device.</p>
Multiple Business Card Detection	<p>Multiple business cards scanned on one page can be automatically detected and separated before processing.</p>	
vCard Export	<p>Recognised business card data can be exported to the vCard format, a standard exchange format to manage contact information.</p>	



Enhanced PDF Capabilities

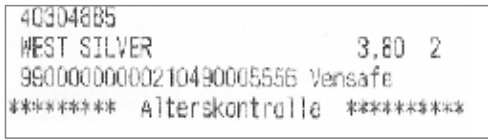
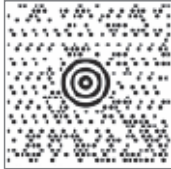

After 20 years on the market, PDFs have become one of the most often used file formats for exchanging and archiving digital documents. Scanning, OCR and PDF are a perfect fit. The new ISO standards for PDF/A-2 & A-3 will expand usage even further, because they make PDF/A a reliable container format. FineReader Engine 11 addresses these new formats and offers extended PDF processing capabilities.

Feature	Description	Benefit
PDF/A-2 Export Support	<p>In addition to the common PDF and PDF/A-1 formats, FineReader Engine 11 now exports to PDF/A-2. The new options of the ISO standard format are:</p> <ul style="list-style-type: none"> JPEG2000 compression Ability to merge multiple PDF/A-1 formats into a PDF/A-2 file Engine 11 export options: <ul style="list-style-type: none"> - Tagged PDF/A-2a - PDF/A-2u: not tagged, but text in unicode 	<p>PDF/A-2 enables creation of smaller PDF files using JPEG2000 compression. For long-term archiving, this can help reduce used storage space and an enable faster access when working on low bandwidth networks.</p>
PDF/A-3 Export Support	<p>PDF/A-3 is an extension of the A-2 standard which allows inclusion of PDF/A files or files in a variety of other binary formats such as XML or Office formats.</p> <p>Long-term archiving and readability of the PDF/A part is still guaranteed, and the binary attachments can deliver additional benefits.</p>	<p>The PDF/A-3 extended container capabilities will make this format attractive in new areas, for example when a graphical representation of a document should be combined with some source data. The new e-invoice format defined by the Forum for Electronic Invoices Germany (FeRD) is based on PDF/A-3 and XML.</p>
Improved Highly Compressed MRC PDF Export	<p>Version 11 PDF MRC compression improvements allow higher background image compression and to keep contrast elements stay in foreground.</p>	<p>Higher background image compression can reduce the size of output PDF MRC files up to 50% (compared to version 10 implementation).*</p>
Enhanced Processing	<ul style="list-style-type: none"> Opening PDF files from memory Ability to specify resolution for rastering before the PDF is opened Keeping existing bookmarks in PDF Detection of an existing text layer in PDFs, ability to skip OCR and leave the document as is Up to 12% faster export speed, compared to previous technology* 	<p>Multiple new API options give developers more control over PDF processing so that they can fine-tune their own applications and services.</p>



Extended and Improved OCR Features

ABBYY is continuously extending the capabilities of its core OCR technologies to deliver a robust SDK for international business applications. FineReader Engine 11 adds new OCR and ICR languages, new barcodes and extends image pre-processing capabilities to deliver better results – faster.

Feature	Description	Benefit
Arabic OCR	New ABBYY Arabic OCR technology. Compared to the technical preview in Version 10 the number of incorrectly recognised words for Arabic OCR has been halved, whilst at the same time recognition speed is up to 3 times faster.*	The new Arabic OCR can be combined with all other ABBYY recognition languages and is therefore perfectly suited for international enterprises.
Improved Chinese, Japanese and Korean OCR	Processing speed in fast mode has been increased, while maintaining accuracy level. Japanese up to 2.5 times faster, Chinese (Simplified) up to 2.5 times faster, Chinese (Traditional up to 4.0 times faster, Korean up to 2.5 times faster.*	
New Languages for OCR and ICR	<ul style="list-style-type: none"> • New OCR languages: Turkmen (Latin) and Old Slavonic • New ICR languages: Danish, Norwegian (Bokmal & Nynorsk), Old English, Serbian (Cyrillic), Tajik • Full dictionary support for: Azerbaijani (Latin), Russian (old spelling), Latin. • Additionally it is now possible to create User dictionaries for all languages. 	With 202 languages for OCR and 126 for ICR, ABBYY technology continues to be a leader in recognition languages.
New Text Type Receipts	<p>Engine 11 now adds a new text type for recognising receipts</p> 	The new, optimised text type ensures better OCR results for receipts. This is important for solutions in which travel expense processing should be automated.
New Barcodes: MaxiCode, USPS 4CB	<ul style="list-style-type: none"> • MaxiCode is a two-dimensional barcode which can encode about 100 characters of data in an area of one square inch, e.g. used by United Parcel Service (UPS).  <ul style="list-style-type: none"> • USPS 4CB, or IMB, is a barcode used by USA post office. 	Extended support of barcodes that are used in international post and logistics.
Improved Image Pre-processing	<ul style="list-style-type: none"> • Extended geometrical distortions correction. • Auto-cropping. • Auto-splitting of double-pages. • Background lightening. • Better ISO noise removal. • New pre-processing for documents with stamps and written notes, the image is split into two layers: color and black-and-white. 	Input image quality is a key factor in achieving good OCR results. At the end recognition works faster delivers higher accuracy. Better image quality also enables higher compression rates for MRC PDFs.
Further Enhancements	<ul style="list-style-type: none"> • Extended ABBYY XML export with the ability to save information of paragraph styles and roles in XML file. • Improved font management API and extended access to the fonts used during document synthesis (predefined font filters). • New colour settings for embedded pictures when exporting to RTF, DOCX, PPTX, HTML, EPUB, and FB2 formats. • Export to XPS (XML Paper Specification). 	The extended export features can directly be implemented in your applications.

Development Improvements

ABBYY FineReader Engine 11 offers native 64-bit support, improved scanning and a simpler Java integration.

Feature	Description	Benefit
Native 64-bit Support	FineReader Engine 11 provides C++ DLLs that can be linked in x64 applications directly without using a COM proxy. The neutral .NET interops allow .Net projects for 32-bit or 64-bit machines without re-compilation.	The new 64-bit support makes it easier to integrate and to roll out ABBYY OCR technology in applications that need more than 4 GB of RAM.
Simplified Java Integration	FineReader Engine 11 can be used from Java on 64-bit systems either by loading into the current process (InprocLoader), or by loading into a separate process (OutprocLoader). The new ready-to-use Java classes for the Engine library cover the full API.	
Extended Scanning Capabilities	<ul style="list-style-type: none">Asynchronous Scanning enables recognition of scanned pages before scanning of all pages is finished.Extended access to scan settings, including access to scan source capabilities.Ability to specify compression type of scanned images.	The new code sample makes it easy to implement better and faster scanning to your application.
Further Enhancements	<ul style="list-style-type: none">FineReader Engine 11 supports the export of recognised documents not only on disk, but also into a file stream to RAM.FineReader Engine collections can be iterated using the "foreach" statement in .NET	

New Licensing Options

FineReader Engine 11 offers new and updated pricing and licensing schemes designed to match your business requirements. The previously offered add-ons "Document analysis for invoices" and "OMR" (Checkmark recognition) are now included in a FineReader Engine 11 Runtime Professional. There are two new licensing add-ons for "Classification" and "Arabic OCR". Developer Licences still provide access to all available features.

Additional Information

- * Based on internal ABBYY testing. Your results may vary based on scan quality, document complexity, hardware and the the implementation of the feature in different applications.
- The update for FineReader Engine 11 is free if you have Software Maintenance for your Development Kit and Runtime Licences.
- Software Maintenance and Support are available for an annual fee of 20% of the list price.
- If you have licensed an older version of ABBYY FineReader Engine, please contact ABBYY Europe to upgrade your existing development tools and deployed installation.
- ABBYY Europe can also provide Professional Services and Consulting to extend your development resources. Take advantage of our industry expertise to help you deliver your project successfully and on time.
- Further details and the latest news around ABBYY SDKs can be found on the ABBYY Technology Portal: www.abbyy.com/technology



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