

XBOUND ReadSoft Capture Framework

Release Notes

Version: 3.9

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Table of Contents

| | |
|--|----------|
| Overview | 4 |
| Licensing..... | 4 |
| Installation..... | 4 |
| Updating an existing installation | 4 |
| Third-party components..... | 5 |
| ReadSoft Capture Framework (RCF) 3.9, October 2015..... | 5 |
| New or enhanced features | 5 |
| Fixed defects | 7 |
| Additional changes | 8 |
| Security-related changes and bug fixes | 9 |
| Known problems | 9 |
| ABBYY FlexiCapture error message..... | 9 |
| RecoStar reinstallation | 9 |
| Multiple document types in an ABBYY project file | 9 |
| Keyboard shortcuts in Verification..... | 10 |
| Error message in business logic design..... | 10 |

Overview

ReadSoft Capture Framework (RCF) was formerly known as Open Capture Framework (OCF).

These release notes contain information that is not included in earlier documentation and also give an overview of the enhancements and corrections in this release.

Licensing

Licensing of RCF is integrated with XBOUND licensing. You receive a license file in accordance with the agreements concluded with Lexmark. You must load this license file before XBOUND can be used in production. Please also note that the XBOUND license server must be installed on a server. For more information, see *XBOUND Installation Guide*.

If you use ABBYY components for extraction, you previously needed separate licenses. Beginning with XBOUND 3.6 R2, ABBYY licensing is integrated into the XBOUND licensing model (ABBYY FlexiStudio).

Use the XBOUND License Information plug-in to check the status of your licenses.

Installation

- RCF is an extension of XBOUND and it is not executable without an XBOUND installation.
- For the integration of RCF into XBOUND it is essential to run `xboundOcfMigration.exe`.
- Not all RCF opponents can run as native 64-bit operating system components.
- ❗ Beginning with version 3.8.2, XBOUND and RCF require Microsoft .NET Framework 4.5.

Please refer to *XBOUND Installation Guide* for more information about the above points, as well as detailed installation instructions. Silent installation is also covered in that document.

Updating an existing installation

Please follow the detailed instructions found in *XBOUND Installation Guide*.

If the RecoStar parameter set or runtime are not working, see page 9.

If you upgrade an ABBYY installation in connection with an update from XBOUND 3.6.0.1 to XBOUND 3.9, please follow the instructions found in *XBOUND Installation Guide*. (Those steps are not needed if you upgrade from 3.6 R2 or 3.7 to 3.9.)

Third-party components

RCF uses the following software that is copyrighted by its respective owners.

| Component | Used in | Version |
|----------------------------------|------------------------------|------------|
| ABBYY FullPage Extraction | ABBYY FineReader | 10.0.2.222 |
| ABBYY FlexiCapture Extraction* | ABBYY FlexiCapture | 10.0.2.222 |
| RecoStar FullPage Extraction | Open Text Full Page Reader | 6.0.4.906 |
| RecoStar Professional Extraction | Open Text Recognition Engine | 6.0.4 |

* Does not include ABBYY Form Designer.


ReadSoft Capture Framework (RCF) 3.9, October 2015

New or enhanced features

Validation Designer

- The Business Logic Designer, Master Data Designer and Form Designer have been combined into a single plug-in: the Validation Designer. A major advantage is that you no longer need to switch back and forth between the different designers, checking the objects in and out each time. Most of the functionality is very similar, so you will recognize it. If you have any questions, please press **F1** to open Help.
- The XBOUND Security Manager contains a predefined privilege for starting the Validation Designer. The privileges for starting the Business Logic Designer, Master Data Designer and Form Designer are still present but are now obsolete.
- When defining conditional business logic, the NOT operator is now available.
- When designing input forms for Verification, the new button is available. It can be directly connected with a custom action, if desired.
- Master data connections and queries are now possible with IBM DB2 databases.
- Text boxes can now be set as read only in the Validation Designer. Compared with deactivated text boxes, read-only text boxes are easier to read.
- Custom actions:
 - It is now possible to define custom actions with parameters (similar to business rules with parameters).
 - Custom actions can be used as business rules, and vice versa.

Verification

- It is now substantially easier to restructure documents. In particular, the **Documents and images** view () has been enhanced.
- All restructuring commands can be done using keyboard shortcuts.
- Single-page PDFs can now be displayed in Verification. However, image manipulation (saving a rotated or rescanned medium) is not possible and should therefore be disabled if possible.
- Page rotation is saved for future image display. Even if image manipulation is not allowed, the display can be rotated by the user. The rotation angle is then saved as a page property, so that the image can be displayed properly in XBOUND. Exception: If image manipulation is allowed, information about rotation of PDF documents in Verification is lost. Details:
 - If image manipulation is allowed, a PDF cannot be saved in its rotated aspect, as other formats can, and the rotation is lost.
 - If image manipulation is not allowed, the rotation angle is saved as a page property, as it is for other formats, and can be used for subsequent display.
- It is now possible to allow/disallow document cancellation per process step.
- The rescan flag can now be set on media.
- An entire root document (batch) can now be “confirmed”. To do this, select **Document > Deactivate root document validation**. Both **Deactivate root document validation** and **Deactivate document validation** can be disabled in the configuration of the Verification process step.
- There is a keyboard combination that allows users to hide the display of captured values on the field areas of the image. This setting remains in effect for the rest of the Verification session.
- The colored highlighting of the field areas on the image can be adjusted in the Verification step settings. Also the color and thickness of the frame can be defined, as well as whether the field area should have a background color. The color of the field value displayed in the image can also be specified.
- You can define keyboard shortcuts for scrolling in the image viewer.
- If only a detailed view is defined for the input form, the keyboard shortcuts for image manipulation are used for it.
- The new **Block user input during validation** option in the Verification step settings means that all input by Verification users is ignored while validation is in progress. Select this option when validation is slow due to low network capacity or other problems. Some users become impatient and press **Enter** repeatedly. By doing so, they unintentionally confirm subsequent fields. You can avoid that problem by selecting this option.
- The new **AutoTab** option for text fields triggers validation when the maximum length (**MaxLength**) is reached. Focus moves automatically to the next invalid field.
- If root documents are not re-validated when Verification starts, only the media of the invalid documents are cached.
- The performance of Verification can be improved by updating forms asynchronously. This feature can be activated using the command-line parameter `-refreshAsync`.
- For analysis of performance problems, additional logging can be activated using the command-line parameter `-log <filename>`.

Web Verification (Beta, under sales control)

- Web Verification allows using a browser to verify and correct the content of documents. No local software installation is required. The functional range is optimized for simple scenarios. Ergonomics were prioritized – for example, all functions are accessible via keyboard shortcuts.

Export to PROCESS DIRECTOR Accounts Payable

- Additional media for the invoice image can now be transferred.
- Throughput times of selected XBOUND process steps can now be transferred to Performance Analytics via PROCESS DIRECTOR Accounts Payable. In addition, field value changes are provided for optimization purposes.

RecoStar

- RecoStar version 7.2 is now integrated. The available features are the same as those available with the previous version, RecoStar 6.0.

Licensing

- The pages in the documents processed in Verification are no longer counted.
- All pages in documents that are processed in Business Logic are now counted.

API

XBOUND has an open interface that allows you to alter XBOUND behavior or to develop your own components for the XBOUND platform.

- It is now possible to manipulate forms using business rules. A proxy object is available for this in the Validation context.

Additional enhancements

- The Document Manager supports quick access values (match codes).
- The new Adapter for PROCESS DIRECTOR allows you to transfer documents, including image and field data, to PROCESS DIRECTOR. For further information, please refer to *Capture Framework Help*.

The adapter is registered in XBOUND and added to the **Export Documents** group in the Process Designer when you execute `xboundOcfMigration.exe`

Fixed defects

Verification

- If focus fell on the Inplace Editor when accessing the document, the **Ctrl+Enter** shortcut did not work. This is now fixed.
- A memory leak in the Document Manager was fixed.
- Verification now uses additionally configured application servers, for example if the first one fails.

- If a filter has excluded a document that is needed for the structure because it contains sub-documents, the fields for those sub-documents are no longer recreated if accessed.
- It is now possible to switch to the primary image format when the secondary image format is selected but no image in that secondary format is available.
- The colored background of the zones in the images is now correctly recalculated and displayed when switching between primary and secondary images with different DPIs.
- When field values are added using the rubberbanding function, focus now remains in the field.
- The scrollbar in the drop-down list in combo boxes no longer disappears when you close and then re-access the list.
- Documents that are smaller than the print area are now printed in their actual size.
- **Force fields complete** now works even with the focus is in an Inplace Editor.
- Performance: When a form uses multiple viewers, now the image is loaded only once and made accessible to all the viewers.
- Searching: When the list of hits is presented, focus is placed in the list.
- PDFs that load additional fonts (for example Asian fonts) can now be displayed in Verification.

Business logic

- `IsInDateRangeFromNow` now works for `pCount=0`, which checks whether a date is not in the future.
- If you delete a DLL containing business rules from the list of the business rule libraries, the program now checks whether the business rules are used by any custom actions. If so, an error message is displayed.
- Licensing: Use of business logic per page is now counted correctly.

Additional fixed defects

- Table selection during master data design now works for IBM DB2 views.
- An error message when accessing master data in IBM DB2 was eliminated.
- TIFFs with incorrect DPI information no longer lead to zone positioning “NaN”, which led to an inability to highlight the read result in the images.

Additional changes

DocCat

- DocCat is no longer supported.

File version

- The file version of all XBOUND runtimes is set to 3.9.x. The assembly version is still 3.0.0.0. In most cases there is no need to recompile custom components that were compiled for XBOUND 3.x.

Security-related changes and bug fixes

In this section all security-related changes and bug fixes for the current version are listed and categorized as having 'High', 'Medium' or 'Low' security relevance.

High security relevance

This version contains no security-related changes or bug fixes in this category.

Medium security relevance

This version contains no security-related changes or bug fixes in this category.

Low security relevance

This version contains no security-related changes or bug fixes in this category.

Known problems

ABBYY FlexiCapture error message

Error 6733: Sometimes after installing ABBYY FlexiCapture Engine on a 64-bit system, the `Path` variable does not match the installation. This results in an error message ("Could not load FCEngine.dll") when you start OCR mapping. Edit the `Path` variable (**Advanced System Settings > Environment variables**), for example to this::

```
';C:\Program Files (x86)\ABBYY SDK\10\FineReader Engine\Engine 10.0\Bin'
```

RecoStar reinstallation

If RecoStar is reinstalled, sometimes the path to `RecoStar.dll` is not correct for Management Center and Worker (Activities). This can result in DLL access errors. Look in the XBOUND directory, in `xboundManagementCenter.exe.config` and `xboundWorker.exe.config`.

In the below example, the path to RecoStar, specified in the `<runtime>` section, needs to be corrected. For example just delete "`\Bin`" from the path.

```
<runtime>
  <assemblyBinding xmlns="urn:schemas-microsoft-com:asm.v1">
    <dependentAssembly>
      <assemblyIdentity name="RecoStar" publicKeyToken="7ca08498c01dc4d5" culture="neutral" />
      <codeBase version="5.0.1.176" href="C:\Program Files (x86)\open Text\RecoStar Professional 6.0\Bin\Bin\RecoStar.dll" />
    </dependentAssembly>
  </assemblyBinding>
</runtime>
```

Multiple document types in an ABBYY project file

In OCR mapping, currently only the first document type in an ABBYY project is displayed and mapped to XBOUND fields. If you need to have multiple document types in an ABBYY project file, and if you see only one of them in OCR mapping, please contact Lexmark to obtain the available hotfix.

Keyboard shortcuts in Verification

In Verification, the predefined shortcut displayed in the menu for **Image > Zoom > Width** is sometimes wrong. However, at runtime the shortcut works as defined in the **Shortcuts** tab of the Verification settings.

The first time you start Verification, the shortcuts for **Image > First Page** and **Image > Last page** cannot be used and are also not displayed in the tool tip. To get around this problem, change the display language (**Options > Settings**) to a different language, restart Verification, then change the language back and restart again. This need only be done once. Alternatively, set your own keyboard shortcuts for these two commands as described in *Capture Framework Help*.

Error message in business logic design

The error message “Tried access an invalid XcfMethod object” can be displayed when you assign a business rule to a field, if you previously opened the **Business rule libraries** dialog and closed it by clicking **Cancel**. As a workaround, please check out the process again.