Brainware Intelligent Capture

Licensing Guide

Version: Foundation EP1

Written by: Documentation Team, R&D

Date: July 2020

Hyland™

Copyright

Information in this document is subject to change without notice. The software described in this document is furnished only under a separate license agreement and may be used or copied only according to the terms of such agreement. It is against the law to copy the software except as specifically allowed in the license agreement. This document or accompanying materials contains certain information which is confidential information of Hyland Software, Inc. and its affiliates, and which is subject to the confidentiality provisions agreed to by you.

All data, names, and formats used in this document's examples are fictitious unless noted otherwise. Complying with all applicable copyright laws is the responsibility of the user. Without limiting the rights under copyright law, no part of this document may be reproduced, stored in or introduced into a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise), or for any purpose, without the express written permission of Hyland Software, Inc. or one of its affiliates.

Hyland® and Hyland Software®, as well as Hyland product names, are registered and/or unregistered trademarks of Hyland Software, Inc. and its affiliates in the United States and other countries. All other trademarks, service marks, trade names and products of other companies are the property of their respective owners.

© 2020 Hyland Software, Inc. and its affiliates. All rights reserved.

Table of Contents

About Licensing ... 4
Request a License ... *4*
Copy the License File to Local License Directories ... *4*
Verify a License File ... *5*
About Demonstration and Test Licenses ... *5*
What is the Master License Server? ... *5*
Hardware Binding ... *5*
Check the Master Licensing Status ... *6*
About the License File Validity ... *6*
DSTCore Service Log File Licensing Messages ... *6*
About Licensing Notifications ... *7*
License-Protected Components and Engines ... 7
Classification Engines ... *8*
Analysis Engines ... *8*
Evaluation Engines ... *8*
Recognition Engines ... *8*
Supervised Learning ... *9*
Email Import in Runtime Server ... *9*
Electronic, Non-Image Documents in Runtime Server ... *9*
Digit Booster Engine ... *9*
Kadmos 5 Server ... *9*
Brainware Toolkit ... *10*
About License Counters ... 10
About Overall Counters ... *10*
About Period Counters ... *11*
About Engine Level Counters ... *11*
About Incrementing Counters for Repeated Processing ... *12*
Increment a Counter when Reprocessing ... 12
Check a License Counter or Parameter ... *12*

About Licensing

To use your Brainware Intelligent Capture (BIC) system, you need a valid license file based on the required applications and features.

This license file must be present in the local license directory of each BIC server and BIC workstation.

The default location is *[Installation directory]\Components\Cairo*.

BIC applications automatically search in the local license directory for a valid license file on startup.

In addition, the **DSTCoreSvc** service must run on each server and workstation.

Request a License

To request a license, on the designated BIC master license server, complete the following steps.

Note: Licenses are tied to hardware. BIC installations on virtual machines require you to assign the resources statically.

1. Ensure that you are logged in with an account which has administrator rights.
2. To create a **Dump.log** file, launch **Check Hardware ID**.
3. Send an email to support and provide the following information.
   - The MAC address and HDD serial number information provided in the Dump.log file. The tool selects the HDD serial number of the fixed drive on which Windows is installed.
   - The number of Runtime Server, Verifier, and Web Verifier workstations.
   - The required components and engines. For more information, see License-Protected Components and Engines.

Copy the License File to Local License Directories

Each standalone BIC installation must include a copy of the license file in its local license directory. When you receive your permanent license file, complete the following steps.

1. On all systems running BIC applications or services, close all BIC applications and stop all BIC services, including DSTCoreSvc.
2. On all systems running BIC applications or services, complete the following substeps.
   1. Navigate to *[Installation directory]\Components\Cairo*.
   2. Remove the **zCroDemo.lic** demo license file and any other existing LIC files.
   3. Copy the permanent license file to *[Installation directory]\Components\Cairo*.
   4. For **Web Verifier**, on the web server, open a **Command Prompt** window and run **iisreset** as an administrator.
3. On each machine, start **DSTCoreSvc**.
4. Start all other BIC applications and services.

Verify a License File

To verify that the new license file is in use, complete the following steps.

1. Launch **Component Version Info**.
2. On the **View** menu, click **Components Licensing Info**.
3. In the **License Files** column, verify that the correct license file is in use.

About Demonstration and Test Licenses

The installation provides one demonstration license for each organization.

You can order additional demonstration licenses as needed. Demonstration licenses without hardware binding to a specific server are available for temporary use and are valid for three months.

What is the Master License Server?

A valid license file must include hardware binding to one or more servers. The server to which a license binds is a master license server.

The **DSTCoreSvc** service running on a master license server has the ability to create a runtime license file and update the timestamp within an existing runtime license file.

You can grant master rights to a server when one or more of the following conditions apply.

- The local hard disk ID matches the corresponding ID specified in the master license file.
- The local MAC address ID matches the corresponding ID specified in the master license file.
- The master license file contains the `Hardware Binding = Off` parameter that allows BIC to work without hardware binding.

Hardware Binding

BIC licensing supports different options for binding server hardware to the license file.

The following table lists the master license entries that determine the hardware binding type. If a section is not present, the corresponding hardware binding option is switched off.

Hardware Binding Type	License Section and Parameter Name
MAC address	Section: `[License for Document Processing]` Parameter: `Secondary MAC Address`
Hard disk ID	Section: `[License for Document Processing]` Parameter: `Secondary HD Serial Number`
Master license file parameter that allows the system to work without hardware binding	Section: `[License for Document Processing]` Parameter: `Hardware Binding`

Check the Master Licensing Status

Runtime Server machines that have a licensing server status can generate runtime licenses.

For more information, see “System Monitoring” in the *Brainware Intelligent Capture Runtime Server Help*.

To check the licensing status of a workstation, complete one of the following steps.

- In the MMC administration console, locate the required Runtime Server machine node.

  Nodes marked with a golden key have master status.
- Check the Core service log file monitored through the system monitoring service.

About the License File Validity

The `[CheckPeriod]` section in the license file defines the runtime license file’s validity period.

The `Value` parameter specifies the timestamp validity in minutes. To increase this value in the license file, contact support.

Example

```
[CheckPeriod]
Value = 360
Check = -871790541
```

The validity is based on the master server license.

By default, the validity period is 30 minutes, which means that the timestamp must be less than 30 minutes old for that runtime license to be valid.

The timestamp is stored in the database on the master server being running and updated once per minute.

The license file is valid if the following conditions apply.

1. The local license file matches the master license file.
2. The **DSTCoreSvc** is running on the master license server.
3. The usage has not exceeded the license counter limits.

DSTCore Service Log File Licensing Messages

The system monitoring service logs the following messages.

Message	Description
Security check passed. Master access rights granted.	Licensing server status granted through license file parameter, `Hardware Binding = Off`, that allows the system to work without any hardware binding.
Security check for MAC address	Licensing server status granted through MAC address.

Message	Description
"NNNN" passed. Master access rights granted.	
Security check for HDD serial number "NNNN" passed. Master access rights granted.	Licensing server status granted through hard disk ID.
Security check for primary hardware key "NNNN" passed. Master access rights granted.	Licensing server status granted through primary hardware key.
Security check for secondary hardware key "NNNN" passed. Master access rights granted.	Licensing server status granted through secondary hardware key.
No message	Licensing server status has not been granted.

About Licensing Notifications

BIC logs all critical licensing notifications and forwards them to the system monitoring service. The BIC system monitoring can enable email notification to the system administrator list.

For more information, see “System Monitoring” in the *Brainware Intelligent Capture Runtime Server Help*.

License-Protected Components and Engines

To use the following BIC Cairo and Cedar components and engines, you need a license file that contains the corresponding license entries.

- Classification Engines
- Analysis Engines
- Evaluation Engines
- Recognition Engines
- Supervised Learning
- Email Import in Runtime Server
- Electronic, Non-Image Documents in Runtime Server
- Digit Booster Engine
- Kadmos 5 Server
- Brainware Toolkit

Classification Engines

BIC provides several classification engines to categorize your documents.

The available classification engines include the following.

- Brainware Classify Engine
- Layout Classify Engine
- ASSA Classify Engine
- Brainware Layout Classification
- Forms Classify Engine
- Phrase Classify Engine
- Language Classify Engine
- Image Size Classification

Analysis Engines

BIC provides several analysis engines to configure the extraction of values from header fields and tables.

The available analysis engines include the following.

- Associative Search Engine
- Brainware Table Extraction
- Check Analysis Engine
- Format Analysis Engine
- Table Analysis Engine
- Zone Analysis Engine

Evaluation Engines

Specific analysis engines, such as the Format Analysis Engine and the Zone Analysis Engine, may use an evaluation engine to determine the best candidate.

The available evaluation engines include the following.

- Brainware Extraction Engine
- Brainware Field Extraction Engine

Recognition Engines

BIC provides several engines for the recognition of characters, marks and bar codes.

The available recognition engines include the following.

- ABBYY FineReader 11
- ABBYY FineReader 10
- Kadmos 5 with or without Kadmos 5 Server enabled
- CloudOCR

Supervised Learning

The Supervised Learning and the Learnset Manager require licenses for the following classification and analysis engines.

- A classification engine for the classification of the base document class.
- Brainware Layout Engine for the classification of a derived document class.
- Associative Search Engine for both the classification of a derived document class and as an analysis engine to extract the respective vendor supplier information.
- Format Analysis Engine and Brainware Extraction Engine for the evaluation of header fields.
- Brainware Table Extraction engine for the extraction of values from tables.

Email Import in Runtime Server

This feature is included in the demonstration license.

For more information, see “Download emails from Exchange server” in the *Brainware Intelligent Capture Runtime Server Help*.

Electronic, Non-Image Documents in Runtime Server

BIC provides the ability to process electronic, non-image documents.

This feature requires the `[Cairo CIDoc]` license entry.

For more information, see "Configure import settings" in the *Brainware Intelligent Capture Runtime Server Help*.

Note: This feature is included in the demonstration license.

Digit Booster Engine

The Digit Booster engine enhances OCR quality on low quality documents.

The engine requires the `[Field Digit Booster]` license entry.

Kadmos 5 Server

The Kadmos 5 engine recognizes handwritten document forms and material containing handwritten zones. It offers support and optimization for different languages.

BIC uses Kadmos 5 Client Edition. This standard version is for one user and one processor at a time.

A Server Edition is available, which is capable of processing documents with multiple users and multiple processors. The Server Edition requires a separate installation Add-on and a separate license.

Contact support for more information.

Brainware Toolkit

The Brainware Toolkit provides external programs access to core BIC functions and Associative Search Engine (ASE) classification and search capabilities. The Brainware Toolkit requires additional licensing.

A second licensing option is available specifically for Brainware Toolkit. You can license Brainware Toolkit with a dedicated secondary license file in the *[drive:]\[installation directory]\Components\Bwe* directory.

This secondary license file must be a valid license file and is used solely for the activation of the Brainware Toolkit to external programs.

Note: This feature is not included in the demonstration license.

About License Counters

BIC maintains license counters to track the number of times specific licensed actions execute. The counters are updated once per minute.

The `[License for DocumentProcessing]` section of the license file includes all active counters.

BIC programs and OEM tools store immediate backups of currently processed documents. If the program terminates or does not respond any more, the counters restore at the next program start.

Each counter is available as overall or period counter.

If an active counter exceeds the indicated value, the system blocks the corresponding licensed action.

BIC maintains inactive counters, but does not consider them when checking the corresponding licensed action's validity.

BIC counts the following nine actions.

- Processed Pages, such as pages that were either imported or processed with optical character recognition (OCR).
- Processed Documents, such as documents that were either OCRed, classified, extracted, or exported.
- Imported pages
- OCRed pages
- OCRed documents
- Classified documents
- Extracted documents
- Exported documents
- Documents validated in Verifier

About Overall Counters

For overall counters, the system allows exactly the specified number of licensed actions without a time limitation. The Overall prefix defines an overall counter.

Example

The master license file contains the following entry.

```
Overall Classified Documents = 100000
```

This entry allows classification attempts on 100,000 different documents. By default, reprocessing of an already processed document does not increment the counter.

Note: A licensing warning displays if the license usage reaches 90 percent. A licensing error occurs when license usage exceeds 100 percent.

About Period Counters

For period counter types, the system allows processing of the specified number of licensed actions multiplied by the `Licensing Period in Days` value in the same `[License for Document Processing]` section of the master license file.

BIC then processes this number of documents within “Licensing Period in Days”. As soon as the “Licensing Period in Days” period elapses, a new period of the same duration starts and BIC resets the previous period counters.

Period counters allow a licensed action to perform a specified number of times within a specified period. The `Licensing Period in Days` value in the `[License for Document Processing]` section of the license file defines the period. The first licensing period starts with the license file installation. During the initial licensing period, the total number of licensed actions allowed is the counter value multiplied by the number of days in the licensing period. As soon as the licensing period elapses, a new period of the same duration starts with reset counters. The per Day suffix defines a period counter.

If your BIC system uses a period counter, the license does not transfer the unused pages or documents from one licensing period to the next. A licensing warning displays if the license usage reaches 90 percent. A licensing error occurs when license usage exceeds 120 percent.

Example

The master license file contains the following entries.

```
Licensing Period in Days = 90
OCRed Pages per Day = 3000
```

These entries allow BIC to OCR 270,000 pages (90 x 3000) within each 90 days licensing period.

About Engine Level Counters

Engine level counters are only available if the corresponding engine header and counters are active in the license file.

- The Check Analysis Engine provides extended counters at the engine level. Each engine-level counter is available as overall or period counter per document.
- The CloudOCR engine counter is available as overall or period counter per page.

About Incrementing Counters for Repeated Processing

Each BIC workdoc document retains information about the licensed actions applied to the document.

When the licensing subsystem verifies a licensed action, such as classification, the system first checks whether this action was previously applied to the document or page. If so, the system allows the action without any further license verification or incrementing of the corresponding counter.

This feature is also active when you upgrade the license file.

Note: The CloudOCR engine counter increments for every request sent to the remote service. For more information, see the "CloudOCR Engine" in the *Brainware Intelligent Capture Licensing Guide*.

Increment a Counter when Reprocessing

To increment a counter every time the system processes or reprocesses a document, complete the following step.

- Verify that the `License Counting by Reprocessing` parameter exists in the `[License for Document Processing]` section of the master license file and the parameter value is set to 1.

  Note: To request a license file that includes this feature, contact support.

Check a License Counter or Parameter

To check a license file counter or parameter, complete one of the following steps.

For more information, see “SCBCdrLicenseInfoAccess” and “ReportLicensingStatus” in the *Brainware Intelligent Capture Scripting Help*.

- Use one of the following methods, provided by the `SCBCdrLicenseInfoAccess` object, in a BIC custom script.
  - `GetLicenseCounterByID`
  - `GetLicenseCounterByName`
  - `GetLicenseValueById`
  - `GetLicenseValueByName`

  Note: The methods “GetLicenseCounterByID” and “GetLicenseValueById” are not available for engine-level counters.

- Use the `ReportLicensingStatus` method, provided by the `SCBCdrPROJLib` object, in a BIC custom script.

  Note: The system increments both active and inactive license counters for evaluation purposes. The system does not increment inactive counters on engine level.