

Brainware for Invoices

Installation and Setup Guide

Version: 3.4.x

Written by: Documentation Team, R&D

Date: Wednesday, July 27, 2022

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 Brainware for Invoices	5
<i>Supported Accounts Payable documents</i>	5
Installation Process	5
<i>Automatic Installation</i>	5
About Brainware for Invoices Installer	6
Software Prerequisites	6
Brainware Intelligent Capture	6
Microsoft .NET Framework 4.6	6
SAP .NET Connector Components	6
SQL Server	7
Oracle Client Components	7
Installation and Setup Procedure	7
Run the Installation Wizard	7
Define an Installation Directory	8
Create a Database	8
Define Database Connections	8
ICAL Registration	9
Runtime Servers	9
Complete the Installation	10
Uninstall Brainware for Invoices	10
<i>Manual Installation</i>	11
Prepare for the installation	11
Configure the local settings for decimal separators	11
Download the installation file	12
Create the Brainware for Invoices folder structure	12
Create the Pool directory	12
Install the ICAL DLLs	12
Install the SQL Server / Oracle Database	13
Run the Database Creation Script (SQL Server)	13

Run the Database Creation Script (Oracle)	14
Configure the <project>.ini file	14
Solution Configuration Manager - Tasks To Do	14
<i>Configure the project general settings</i>	14
<i>Configure the project database connection strings</i>	15
Configure Asian language recognition	16
Registry and Web Verifier Message Settings	17
<i>Configure registry settings</i>	17
<i>Configure Web Verifier message settings</i>	18

About Brainware for Invoices

Brainware for Invoices is a multi-tenanted, out-of-the-box Accounts Payable solution that automates data entry for invoices and credit notes.

The solution is able to capture invoice information such as the invoice number, purchase order number and dates, identify the invoice vendor and line items automatically, and then make this data available to use with your business information and document management systems. Brainware for Invoices also includes processes for line pairing, VAT compliance checking, the automatic assignment of ERP system tax codes to invoice line items, miscellaneous charge handling, and solution reporting.

Brainware for Invoices can be integrated with almost any environment and includes the following components.

- Visibility for auditing and reporting purposes.
- Thick and thin Verifier clients for document quality-assurance purposes.
- Perceptive Content (optional).

Supported Accounts Payable documents

Brainware for Invoices supports the following document types.

- Vendor invoices
- Vendor credit memos
- Subsequent debits and credits
- Third party freight invoices

Additional document types, such as statements or travel and expense forms, need to be configured within the solution as new document base classes.

Installation Process

You can install Brainware for Invoices automatically or manually.

Automatic Installation

You can use the BFI installer to install Brainware for Invoices, automatically.

For automatic installation, you need to use the BFI Installer. The following steps are a high-level overview of the procedures that you need to perform to install Brainware for Invoices using the installer.

- Run the Brainware_Invoice_Solution.exe as administrator.
- Read and acknowledge the warning message prior to installation.
- Read and accept the End User License Agreement.
- Select an installation directory and project file name.
- Select a database creation option.

- Define the configuration database connection string.
- Define the reporting database connection string.
- Define the Intelligent Capture Application Library (ICAL) installation path.
- Define the Runtime Service instance configurations.
- Complete the installation.

About Brainware for Invoices Installer

The Brainware for Invoices installer installs Brainware for Invoices (BFI) 3.4.x on a server with Brainware Intelligent Capture EP1 or higher running on it. The installer automates the following tasks:

- Creation of project directory structure and copying of Brainware for Invoices related files.
- Creation of Intelligent Capture Application Library (ICAL) directory and DLL registration.
- Creation of BFI configuration database.
- Creation of BFI reporting database.
- Creation of BFI specific registry values.
- Creation of Run Time Server instances.

Note:

The installer is available for new installations only and does not support upgrading from a previous version of BFI at this time.

Software Prerequisites

Brainware Intelligent Capture

The Brainware for Invoices installer requires Brainware Intelligent Capture EP1 or higher and must be executed on a server with Intelligent Capture Runtime Server.

Microsoft .NET Framework 4.6

Brainware for Invoices needs .NET Framework 4.6 to run. Prior to executing the installer, it must be ensured that the server has .NET Framework 4.6 installed.

SAP .NET Connector Components

If SAP support is required, download the **SAP .NET Connector 3.0 for .NET 4.0 on x86** and install it on all machines running the solution.

You can download this connector from the SAP Service Marketplace. The download is in the form of a ZIP file called **sapnco30dotnet40P_21-20007347.zip**.

1. Extract the ZIP file into the directory of your choice.
2. Double-click the file called **NCo3021_Net40_x86.msi** to launch the installer.

3. Follow the instructions provided by the installer and complete the installation. You do not need to install the assemblies to the GAC. Make a note of the directory where the connector was installed. This is usually **C:\Program Files (x86)\SAP\SAP_DotNetConnector3_Net40_x86**.

SQL Server

For creating the BFI configuration and reporting databases, the BFI Installer uses the MSOLEDBSQL provider (Microsoft OLE DB Driver for SQL Server) if it is installed on the machine.

If this provider is not available, the system uses the SQLOLEDB provider. For updates to the core Brainware Intelligent Capture (BIC) database, the system uses the provider supplied in the BIC database connection string taken from the DstHost.exe.config file, unless TLS 1.2 is activated on the machine, in which case the MSOLEDBSQL provider is used.

If you require TLS 1.2 protocol support, the MSOLEDBSQL provider is mandatory and must be installed on the machine executing the BFI Installer. The system throws an SSL security error if this provider is not available.

Oracle Client Components

If Oracle database access is required, Oracle Client must be installed and Oracle Data Access Components (ODAC) must be installed and registered in the GAC. Specifically, you need to download the ODAC 32 bit components for the version of Oracle client installed, and then register the components into the GAC following the instructions provided by Oracle. For more information on installing the Oracle components, refer to the Oracle Product Installation Guide.

Installation and Setup Procedure

The following section explains how the installer can be used to install Brainware for Invoices.

Run the Installation Wizard

The Brainware for Invoices Installer is currently usable for new installations only and does not support an upgrade or uninstallation.

The Brainware for Invoices installer must be run as an administrator. When you run the installer, it checks for an existing installation of BFI. If it finds any existence of BFI, it throws a warning message. You must acknowledge the warning message, abort the installation and manually uninstall BFI before continuing with the installer.

If you use the installer for upgrading an existing application, it may cause the files to get deleted or corrupted. You can use the Add/Remove Programs available in the Windows Control Panel to uninstall an existing version of BFI.

To run the installer, complete the following steps.

1. Run the Brainware_Invoice_Solution.exe as administrator.

Note:

The BFI installer displays a warning message that you need to acknowledge before you can continue.

2. Read carefully and select the **I understand and want to continue the installation** check box to acknowledge the warning and click **Next**.
3. Read and accept the End User License Agreement.

Define an Installation Directory

The Install Directory screen allows you to define the installation directory for the Brainware for Invoices project. This path can be local to the server or a UNC path; however, the user running the installer must have access rights to this directory.

The installer validates that the target installation directory entered by the user is empty. If any file(s) is found, a warning message is displayed, enabling the user to either:

- Change the directory entered or selected
- Remove the file(s) present in the directory
- Abort the installation

Additionally, you can define the Brainware for Invoices project file's name. During installation, the following three directories are created within the defined installation directory.

- Import - The Runtime Server Instance for Import is configured to poll this directory for incoming documents.
- Global - The project, INI, sample CSVs, and Train directory are copied to this location. The project and INI files are then renamed to the defined Project file name.
- Export - The Runtime Server Instance for Export is configured to export documents to this directory.

Create a Database

On the Database Creation screen, you can choose to have the installer create the configuration and reporting databases automatically or manually. If you choose manual installation of the databases, the location of the required database scripts is displayed on the screen.

Define Database Connections

On the Database Connection screens, you must define the database connection string to the Brainware for Invoices configuration database and then the Brainware for Invoices Reporting database. If you chose to have the installer create the database, you must also define the database name. BFI Installer supports TLS 1.2 so that the current standard protocols can be used to secure the environment.

Note:

The BFI Installer cannot be used to overwrite an existing database.

To define database connections, complete the following steps.

1. Click the **Change** button within the **Database Connection** screens. A dialog appears and allows you to create the connection by selecting the database type (either Oracle or SQL Server), server name, and authentication method. You can also test the connection from this dialog.

Note:

If database tables already exist, a warning message is displayed. You must manually remove the existing database tables, select a new database to continue, or abort the installation. The installer cannot be used to overwrite existing database tables.

2. Click **OK** to acknowledge the warning and then do any of the following:
 - Click **Cancel** to go back to change your connection string.
 - Manually remove the existing database tables.
 - Select a new database.
 - Abort the installation process.

The installer cannot be used to overwrite existing database tables.

Note:

The OLE DB provider referenced during installation is only used to determine whether the database is SQL Server or Oracle. The actual provider used is System.Data.SqlClient for SQL Server and Oracle.Data.Access for Oracle databases.

ICAL Registration

The ICAL Registration screen allows you to define the installation directory for the Intelligent Capture Application Library DLLs. This path must be local to the server, and the user running the installer must have access rights to this directory.

Additionally, you must select the appropriate options if your implementation includes the following.

- Oracle database access for the configuration database, reporting database, database validations, or database export. The installer confirms whether the Oracle Client is installed prior to continuing the installation, if Oracle is selected.
- SAP integration. If SAP is selected, you must define the path to the SAP .NET Connector installation directory.

Runtime Servers

During installation, the installer creates one RTS instance for Import and one RTS instance for Export. On the Runtime Servers screen, you can specify:

- Number of OCR, Classification, and Extraction (OCE) RTS Instances. The default number (# of RTS instances = # of cores - 1) is used for processing documents as quickly as possible, however this number can be lowered.
- Limit Batch Size - This option allows you to limit the number of documents imported into a Brainware Intelligent Capture batch. The Import RTS instance is configured to poll for sub-directories and any sub-directory with more than this number of files is split into multiple batches based on the number defined. The default setting is 10 documents.
- Clean Up Batch Time Limit (hours) - The Export instance is automatically configured by the installer to perform clean-up of old batches. You can define the amount of time which must pass after successful export of the batch before clean-up of the batch is executed and the batch is deleted. The default setting is 240 hours.
- Job Name - You can define the Database Job name where the RTS instances are performing their work. This value defaults to the Project file name defined on the Installation Directory screen.
- Auto System Update Time - The Import instance is automatically configured by the installer to perform updates to the Associative Search Engine pools every 24 hours. You can define the time when this update should occur. The default is 12:00 AM local server time.

During the installation, the Runtime Manager service is restarted.

Complete the Installation

You can review your options prior to executing the installation and then complete your installation.

To view the installation summary and finish installation, complete the following steps.

1. Review a summary of the installation options you have selected on the **Summary** screen.
2. Use the **Previous** button to make changes to any of your selections.
3. Click **Install** once you have reviewed and are satisfied with your configuration.
4. A progress bar displays the progress of the installation. Upon completion, the **Completed the Brainware for Invoices Setup Wizard** screen is displayed.
5. Click **Finish** to exit.

Uninstall Brainware for Invoices

You can uninstall Brainware for Invoices via **Add/Remove Programs** in Windows Control Panel only.

If Brainware for Invoices already exists, the installer displays a message, prompting the user to uninstall Brainware for Invoices via the **Add/Remove Programs** in Windows Control Panel. Once uninstallation is done, click **Finish** to exit the wizard. Click **Exit** to cancel the installation.

Note:

The uninstallation process will remove all BFI related project files and project settings (.sdp file) from the system. However, any database installed with Brainware for Invoices is not removed via the uninstall process.

Manual Installation

This section describes how you can install Brainware for Invoices, manually.

The following steps are a high-level overview of the procedures that you need to perform to manually install and configure Brainware for Invoices.

- Create the Brainware for Invoices folder structure.
- Install Brainware for Invoices project file.
- Create the pool directory.
- Install the ICAL DLLs.
- Run the database creation script.
- Configure the INI file.
- Install the Solution Configuration Manager.
- Configure registry settings.
- Set up and add clients.
- Set up and add processing profiles.
- Activate and configure the fields for extraction.
- Configure and activate the Dynamic Verifier Form.
- Set up users.
- Set up processing instructions.
- Set up review states.
- Create a connection to Visibility.
- Configure the vendor field.

Prepare for the installation

Prerequisite

Before you install Brainware for Invoices, verify that you have completed the following prerequisites:

- You have installed Brainware Intelligent Capture EP1 or higher.
- You have obtained and installed a Brainware Intelligent Capture license file. This file must be located in the <InstallDir>\Components\Cairo directory.
- You have obtained the Brainware for Invoices installation files.

Configure the local settings for decimal separators

Brainware for Invoices functions on any machine with a language setting that uses the western alphabet, though English or English (US) is recommended for the server configuration. It also runs independent of whether the machine and system localization uses a period or a comma as the decimal separator, even if the server is set to one option, yet one or more Verifier stations use different separators.

Amount fields are outputted using a period as the decimal separator in all instances. If database output is required, you need to configure the language and decimal separator preferences against that database accordingly.

For locations that use a space as the thousand separator, such as the French location, this must be changed to a comma or period, whichever is appropriate.

Dates are handled internally in a manner that is entirely independent of the system locale. The Verifier display and output formats are configurable.

Download the installation file

To obtain the Brainware for Invoices installation files, contact the Hyland Software Technical Support group. For a list of Technical Support contact numbers, go to hyland.com/pswtscontact.

Create the Brainware for Invoices folder structure

The first step in installing Brainware for Invoices is to create the underlying folder structure within Windows Explorer. To create the folder structure, complete the following steps.

1. Create a folder directory on the hard drive, for example C:\BrainwareProjects\BFI.
2. Within this directory, create three folders and name them as:
 1. Import
 2. Global
 3. Export

Create the Pool directory

The pool directory stores the internal representation of the vendor master data, which is accessed by the system at runtime when determining the document vendor. To create the pool directory in the Global directory, complete the following step.

- In the Global directory, create a new directory and name it Pool.

Install the ICAL DLLs

The ICAL DLLs are required on all machines where Brainware for Invoices is used. This includes the main Brainware server, all Verifier stations and the Web Verifier server if the thin client is being used.

Note:

If you have ICALs already installed, you cannot run the ICAL installer. If you try to uninstall the existing ICALs via the **Add/Remove Programs** option, it will result in the removal of the project file (.sdp file) and other BFI related project files within the folder. It is recommended that you take a back-up of the project file before uninstalling.

To install the ICAL DLLs, complete the following steps.

1. Run **ICAL Install.exe** as an administrator.
2. Accept the end user licence agreement and click **Next**.

3. Enter the path where you want to install the ICAL DLLs.
4. Select the **Oracle** check box if you are using Oracle.
5. Select the **SAP** check box if you are using SAP. A further option then appears. Enter the path to the directory where you have installed the SAP .Net Connector.
6. Click **Next**.
7. Click **Install**.
8. Click **Finish** to exit the installer. The installation is now complete.

Install the SQL Server / Oracle Database

Brainware for Invoices runs in conjunction with either an SQL or Oracle database server. This database server needs to be in place prior to installation.

If the database server used is Oracle, a full Oracle 32 bit client needs to be installed using the Oracle Client Installer. You must select **Administrator** as the installation type. Following installation of the Oracle client, you need to download and install the ODAC 32 bit components for the version of Oracle client installed. If you use Oracle version 19c, you must use either the ODAC 11g or 12c version. You cannot use the 19c ODAC components. Once complete, then follow the instructions provided by Oracle to install the ODP.NET40 (Oracle Data Provider for .NET 4) components. For more information on installing the Oracle client, refer to the Oracle Client Installation Guide.

Before loading scripts with the SQL Developer, configure the SQL Developer for UTF-16 encoding with the relevant character set. Otherwise, the script either does not convert all characters (Chinese characters and special characters: €, £, ¥, ♂) or, displays extra characters at the beginning of the script in the SQL Developer, which causes the script to fail.

Separate database server scripts are used depending on whether the database type is SQL server or Oracle.

Run the Database Creation Script (SQL Server)

The SQL Server creation script has two parameters in the SQL file available to configure.

- **DB_Name** - The name of the SQL database you want to create. This is set to **BFI_Config** by default.
- **Do_Create** - This controls whether you want the SQL scripts to create the database. The value should be set to 0 for no, and 1 for yes.

To configure the database creation script for SQL Server, complete the following steps.

1. Open the 'MasterSQL - SQL Server.sql' file.
2. Navigate to the SET parameters in the **Configuration** section of the file.
3. Configure the name of the database you want to create using the **@DB_Name** parameter.
4. If you want to abort the script execution if either the database does not exist or the database already has BFI content, set the **@Do_Create** parameter to '0'.
5. If you want the system to create the database if it does not already exist, or overwrite content in an existing database, set the **@Do_Create** parameter to '1'.
6. Execute the script.

Run the Database Creation Script (Oracle)

The database creation script for Oracle has one parameter in the SQL file. The `overwriteTables` parameter controls whether you want the SQL script to overwrite existing database tables.

To configure the database creation script for Oracle, complete the following steps.

1. Open the 'MasterSQL - Oracle.sql' file.
2. Navigate to the declaration line **`overwriteTables char(1) = '1'`**.
3. If you want the script to abort if the database already contains any BFI data, set the value of the **`overwriteTables`** to '0'.
4. If you want the script to overwrite any BFI data that already exists in the database, set the value of **`overwriteTables`** to '1'.
5. Execute the script.

Configure the <project>.ini file

To configure the <project>.ini file, complete the following steps. The INI file helps to point the system to the BFI database created in the previous step.

1. Navigate to the Global directory you created.
2. Open the <project>.ini file.
3. Configure the connection string to the BFI database.
4. Enter an encrypted password, if required. For more information, refer to the [Brainware for Invoices Password Encryption](#) section in the User Guide.
5. Save the changes and close the file.

Solution Configuration Manager - Tasks To Do

The Brainware for Invoices solution configuration is managed via the Solution Configuration Manager (SCM). SCM is a web-based tool that provides an interface for an administrator to configure and maintain the solution configuration. You can also use it for change management control as changes are migrated between development, test and production environments.

SCM requires the installation of the corresponding BFI SCM package. You must ensure that the correct SCM package for BFI (in this case, version 3.4) is installed. You need to ensure this, regardless of whether you are installing SCM for the first time or if you are upgrading BFI. For instructions on how to install a new BFI SCM package, refer to the [SCM documentation](#).

Once the software is installed, you need to organize and configure the project. For information on how to configure your project, refer to the [Brainware for Invoices User Guide](#).

Configure the project general settings

To configure the project general settings, complete the following steps.

1. Select the project from the drop-down.
2. In the **Settings** drop-down, select **Global Settings**.

3. From the **Global Settings** hierarchy tree, select **General Settings**. The following items are available to configure.
 - **Project Name:** This is the Brainware for Invoices solution name, which is typically set to the name of the customer. The value configured here is stored in the Visibility reporting database.
 - **(Optional) Version:** This is the version number of the project. We recommend setting this to 1, but it can be left blank or changed to assign document records to different testing cycles. The value entered is recorded in the Visibility reporting database.
 - **(Optional) Client Name:** Set this to the default client name that is recorded in the Visibility reporting database for each processed document. This is superseded by the client name in Client Settings and is therefore optional.
 - **Read Settings From DB:** Select this to control whether the project reads configuration settings from the database. This should always be selected.
 - **SQL Connection Group:** This must be set to 1. It is the reference to the SQL connection group in Database Settings that contains the connection string to the Brainware for Invoices database.
 - **Batch In Database:** Select this to specify whether the Brainware Intelligent Capture document batches are to be held in the Brainware for Invoices database or held as a batch root in the file system. It is recommended to use a database as many solution features, such as setting a priority based upon the client, are not supported if the batch root is used.
 - **Batch SQL Connection Group:** Set this to 2. This is the reference to the SQL connection group in Database Settings that contains the connection string to the main Brainware platform database where document batches are stored.
4. Now save the changes.

Configure the project database connection strings

Within the BFI configuration database, a global table is provided where you can maintain the database connection strings used by the solution. These database connection strings include the connection to the core Brainware Intelligent Capture database, and can also include connections to the Visibility database and other databases used for data lookups.

The solution supports database connections to either SQL Server or an Oracle database.

The core BFI solution uses a hard-coded provider to connect to the destination database. This provider is set to **System.Data.SqlClient** for SQL Server databases and **Oracle.DataAccess** for Oracle databases. The provider in the connection string is only used by the system to determine which type of database you want to connect to. For an Oracle database, the provider must contain the string pattern **ORAOLEDB** for the connection to be successful. If this string pattern is not present, the system assumes that it is connecting to an SQL server type database.

For database connections that are invoked in Winwrap script, for example in a user exit or for the Verifier processing instructions dialog, the provider specified in the connection string is used. Hence, you must ensure that this provider is available on the machine executing the call.

To configure the project database connection strings, complete the following steps.

1. Select **Database Settings** from the **Global Settings** tree structure.
This will present you with a screen where you can set the connection strings to databases to be used by the invoices solution. By default, three database connection screens are added during installation.
2. For the first line, with Index ID 1, change the connection string to match the connection to the BFI solution database. This is the same connection string that you entered into the project INI file. The system knows that this string represents the BFI configuration database as the Index ID matches the ID entered against the SQL Connection Group parameter in General Settings.
3. For the second line, with Index ID 2, change the existing string to represent the connection to the Brainware core platform database. Index ID 2 corresponds to the entry against the Batch SQL Connection Group parameter in General Settings. This step is optional depending upon whether batches are stored in the Brainware core platform database.
4. For the third line, with Index ID 3, change the existing string to represent the connection to the Brainware Visibility database. This step is optional depending upon whether the solution is required to write data into the Visibility reporting tables.
5. For each connection string, an encrypted password may be used as opposed to specifying the database user password within the connection string itself. For more information, refer to the Brainware For Invoices Password Encryption section in the [Brainware for Invoices User Guide](#).
6. Save the changes.

Configure Asian language recognition

If your system processes documents using a supported Asian language (Simplified Chinese, Japanese, Korean or Thai), you need to complete the steps below to configure the recognition. Some of these steps involve making changes to the registry. The location of the correct registry hive where you need to make your changes depends on the version of the core product that is installed. You can find the correct hive name to use by checking the value of the CID key from the Cedar node within the software registry. On a 32-bit machine the path to the Cedar node is as follows:

```
HKEY_LOCAL_MACHINE > SOFTWARE > Cedar
```

On a 64-bit machine the path to the Cedar node is:

```
HKEY_LOCAL_MACHINE > SOFTWARE > Wow6432Node > Cedar
```

In the steps below, the hive name is represented as <HiveName>. If you used the BFI or ICAL installer, the registry settings are created automatically so you do not need to add them manually.

Prerequisite: It is recommended that projects involving documents with Chinese, Japanese, Korean or Thai (CJKT) characters are processed using a separate instance of the <project>.sdp file, one instance per CJKT language. This recommendation is because the Abbyy Finereader 10 engine has been noted to exhibit slower performance when CJKT languages are added to the system, as well as a lower character recognition rate for documents that do not contain CJKT characters.

1. Using Brainware Intelligent Capture Designer, open the <project>.sdp file.
2. Navigate to **Project settings**.
3. On the **Definition Mode** tab, select the **Use multi-byte encoding** check box.
4. Save the <project>.sdp file.
5. In Brainware Intelligent Capture Designer definition mode, at the project level node, open the OCR Settings.
6. To activate Japanese, on the **Recognition** tab, select **Japanese+English** and add it to the **Used** list. If a standalone entry already exists for English then this can be removed.
7. To activate simplified Chinese, on the **Recognition** tab, select **ChinesePRC+English** and add it to the **Used** list. If a standalone entry already exists for English then this can be removed.
8. To activate Korean, on the **Recognition** tab, in the **Installed** list, select **Korean** and add it to the **Used** list.
9. To activate Thai, on the **Recognition** tab, in the **Installed** list, select **Thai** and add it to the **Used** list.
10. Open Windows registry editor.
11. For a 32-bit machine, in the left pane, expand `HKEY_LOCAL_MACHINE > SOFTWARE > <HiveName>`. For a 64-bit machine, in the left pane, expand `HKEY_LOCAL_MACHINE > SOFTWARE > Wow6432Node > <HiveName>`.
12. Under the <HiveName> node, create a new key and name it `CJKT Support`.
13. In the new **CJKT Support** folder, create a DWORD value and name it `CJKT_MinimalSymbolSequenceLengthForWordsSplit`.
14. Assign the new registry key a value of 1.

Registry and Web Verifier Message Settings

The following sections contain the recommended registry and thin client (Web Verifier) configuration settings. If you used the BFI or ICAL installer, the registry settings are created automatically so you do not need to add them manually.

Configure registry settings

To configure the registry settings, complete the following steps.

1. Open the Windows registry editor.
2. For a 32-bit machine, in the left pane, expand `HKEY_LOCAL_MACHINE > SOFTWARE > <HiveName>`. For a 64-bit machine, in the left pane, expand `HKEY_LOCAL_MACHINE > SOFTWARE > Wow6432Node > <HiveName>`.
3. Under the <HiveName> node, create a new key and name it `Cedar`.

4. In the new Cedar folder, create two DWORD values and name them `AnalyzeLinesOptionally` and `ASEnginePoolAllowedCharDifference`.
5. Assign the new registry key `AnalyzeLinesOptionally` a value of 1 using a hexadecimal base.
6. Assign the new registry key `ASEnginePoolAllowedCharDifference` a value of 0 using a hexadecimal base.

Configure Web Verifier message settings

If you deploy the thin client (Web Verifier), then you need to update the `web.config` file so that the dialog box information and optional messages are activated within the Verifier interface. This is not required for the thick client Verifier application. To configure the Verifier message display setting, complete the following steps.

1. Navigate to **Program Files > Hyland > Brainware Intelligent Capture Web Server** and open the `web.config` file.
2. In the `web.config` file, set the `mouseClicked enabled` and `tabPressed enabled` properties to `TRUE`
3. Save and close the file.