

Kofax Transformation Modules

6.0.1

Release Notes



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Contents

About This Release	7
Version Information	7
New Features	7
Collapse All Documents on Batch Load	7
Document Rotation with ABBYY FineReader	7
Encrypted Fuzzy Database Support	8
Kofax Capture UniqueID Support	8
Line Item Matching Locator Disambiguation	8
Line Item Matching Locator Unit Price Customization	8
Minimum Search Characters for Fuzzy Database Lookups	8
Mouse Wheel Scroll Behavior in Validation	9
Selecting Multiple Database Lookup Results	9
Thin Client Bitonal Image Configuration	9
Thin Client Log On Autocomplete Behavior	9
Changes in Behavior	9
Additional Statistics for Document Review and Validation	9
Database Connection Confirmation	10
Field Data Lost After Reclassification in Validation	10
User Session Timeouts in the Thin Clients	10
Resolved Issues	11
General	11
Add Word Confidence Values to XDoc	11
Bar Code Locator Fails to Read Unicode Characters and Leads to Irregular Output	11
Batches Remain In Progress	11
Black and White Image Generation	11
Images Deleted on Rotation	11
Inconsistent Document Rotation with ABBYY FineReader	11
Metrics for Unattended Server 2 Module	12
Mixed Print Engine Hangs	12
Moving PDF to Child Batch Fail	12
Page XValues Lost After Document_AfterSeparatePages with TDS	12
Processing Multiple Documents is Slow	12
Reclassification not Saved in Server 2 with TDS	12
Server Memory Error	13
Sticky Notes Sends Batch to Quality Control	13
Support the Kofax Capture UniqueID	13

Synchronization Tool Reaching Limit13

Table Extraction Causes Error13

Trainable Document Separation Extraction Process Memory Error 13

User, Folder, and Registry Permissions13

Project Builder and Project Problems 14

 A2iA Image Error14

 A2iA Memory Leak 14

 Adding Documents for Training Error14

 Advanced Zone Locator Extraction Error 14

 Bar Code Locator Improvements14

 Cannot Train PDF for Classification 14

 Conflict Management - Conflicting Fields in Same Position14

 Conflict Management - Wrong Conflicting Document Displayed 14

 Corrupt Locators in Merged Project 15

 Database Decryption Support 15

 Database Evaluator Breaks Project15

 Database Evaluator without Configuration Causes Error 15

 Database Locator Properties Window Error15

 Database Locator Slower than Previous Version15

 Database Lookup Multiple Selection 15

 Delete Conflicting Fields and Documents16

 Delete Duplicate Document Subset Error 16

 Error When Deleting Fields from Project or Class 16

 Export Locator Error16

 Extraction Training Error16

 Knowledge Base Learning Server Error 16

 Line Item Matching Locator Error for Specific Images and Records 16

 Line Item Matching Locator Extraction Failures16

 Line Item Matching Locator Improvements 17

 Line Item Matching Locator Unit Price Customization 17

 Local Fuzzy Database Files Lost During Publishing17

 Locator Method Access Denied Registry Error17

 Minimum Search Characters for Fuzzy Database Lookups 18

 New Samples Conversion18

 ScriptExecutionInstance Persists After Closing Test Validation18

 Splitting a Batch Causes Error 18

 Unavailable Databases Cause Long Delays in Project Builder 18

Thin Clients 18

 Allow Reclassification Via Script for Thin Clients18

 Batch.CopyDocument Crashes Thin Client Server 19

Thin Client not Releasing User Credentials19

Thin Client not Redirected when Session Times Out 19

Thin Client Batch Error Due to Memory Usage 19

Thin Client Image Folder Path19

Thin Client Log On Autocomplete19

Thin Client Rejection Error20

Thin Client Validation - Batch Routing Error 20

User Modules20

 Additional Statistics for Document Review and Validation 20

 Ability to Set Focus on Specific Field or Tab within Validation20

 Closing Batch Results in Script Error 21

 Correction - Crashes when Alternating Batches with and without Incorrect Fields 21

 Correction - GDI Handle Leak21

 Correction Started from Batch Manager Closes When Batch Suspended 21

 Document Review - Collapse All Documents on Batch Load 21

 Document Review - Custom Menu Issues21

 Document Review - Fails to Open when Viewer Zoom Value is Zero 21

 Document Review - Focus on First Document in Batch 22

 Document Review - Keyboard Shortcuts 22

 Document Review - Merging Documents 22

 Document Review - Open Batch Settings 22

 Document Review - Scroll Position Cached 22

 Document Viewer User Settings 22

 Error Closing Correction Without Any Problems 22

 Moving to Next Invalid Document Time Consuming 22

 Reclassification by Script Results in Empty Fields on Export 22

 Recreate Mouse Wheel Behavior from Previous Version 23

 Split Document Image Missing After Class Assigned 23

 Validation - Editing Batch Causes Corruption 23

 Validation - Extended Logging 23

 Validation - Fails to Load When Zoom Value for Viewer is Zero 23

 Validation - Field Data Lost After Reclassification 23

 Validation - Mouse Wheel Scroll Behavior 23

 Validation - Random Errors with Table Line Items 23

 Validation - Scrollbars Missing 24

 Validation - Slow when Switching Between Documents 24

 Validation - Table Cell Focus Lost when Lassoing 24

 Verification - Crashes when Script Debugging Enabled 24

Known Issues25

 Ignoring a Document for Classification and Separation 25

Locale Name Incorrect 25

Names of Project Elements Not Handled Correctly 25

Oracle Databases Refresh Problem 25

Script Tooltips No Longer Available 25

Thin Client Server Not Supported on Windows Server 2012 25

Uninstalling Leaves Common Files Behind 26

Additional Documentation 27

 Help Updates for Document Review 27

 New: Batch Open Behavior 27

 Help Updates for Project Builder 27

 Changed: Adding a Local Fuzzy Database 27

 Changed: Databases Tab - Project Settings Window 28

 Changed: Local Fuzzy Database Properties Window Reorganized 29

 New: Adding a Local Fuzzy Database Step 29

 New: Database Lookup Button Properties - Relational Databases 30

 New: Enabling Comprehensive Orientation Detection 30

 New: FineReader Page Recognition Profile Option 31

 New: Fuzzy Database Lookup Button Property 31

 New: Fuzzy Database Processing and Optimization 31

 New: General Tab Database Locator Properties Window 32

 New: Image Rotation Type 32

 New: Line Item Matching Locator Disambiguation Tab 32

 New: Mixed Print Page Recognition Profile Option 33

 New: Rotation and Mixed Print Recognition 33

 New: Settings Tab Line Item Matching Locator Properties Window 34

 Help Updates for Scripting 34

 New: Document Data Key 34

 New: Fuzzy Database Search Functions 35

 New: Recognition Word Confidences 37

 New: Validation - Mouse Wheel Scroll Behavior 37

 New: Decimal Separator Detection 38

 Help Updates for the Synchronization Tool 39

 New: Extended Synchronization Window Option 39

Installation Guide Updates 39

 New: User and Folder Permissions 39

Thin Client Server Installation Guide Updates 42

 New: Thin Client Server Configuration Options 42

About This Release

This set of release notes contains important information not included in other Kofax Transformation Modules documentation. Please read these release notes carefully before you install, upgrade, or use this product.

Information about supported operating systems and other requirements is available on the Kofax Support website at www.kofax.com.

Version Information

The Kofax Transformation Modules 6.0.1 release has the following build number, which appears in the About Kofax window:

6.0.1.0.0.1526

New Features

The following new features are available in Kofax Transformation Modules 6.0.1.

Collapse All Documents on Batch Load

Users are now able to choose how documents are initially displayed in Document Review when a batch is opened. The Settings window has a new [option](#) so that users can configure the start of batch behavior.

The default value for this new setting is to collapse all documents when a batch is opened. If this is not the preferred behavior, users can change this option so that only those documents with problems are expanded, leaving all others collapsed.

Document Rotation with ABBYY FineReader

In order to process documents that are not successfully rotated, a new option has been added to the FineReader Page Recognition Profile window. This new option enables you to use [Comprehensive orientation detection](#) to rotate problem documents during processing.

Important This new option should be used only if other rotation detection methods are failing to rotate documents. This is because the time it takes to perform recognition increases when Comprehensive Orientation detection is [enabled](#).

In addition, there is also a new option on the Mixed Print Page Recognition Profile window that enables you to “Remove background” lines to improve recognition results. For existing projects, the Remove background option is selected. For new projects, Remove background is cleared.

If you are using mixed print, clear this new Remove background option if some documents are not orientated as expected.

Encrypted Fuzzy Database Support

Kofax Transformation Modules now supports encrypted remote fuzzy databases running on a Kofax Search and Matching Server.

The database locator, the fuzzy database lookup window, and the fuzzy database search script functionality will decrypt and use the first 20 results returned by the Search and Matching Server.

Important Encrypted fuzzy databases are only provided by Kofax as part of solutions.

Kofax Capture UniqueID Support

The Kofax Capture UniqueID attribute for documents is now available as an [XValue](#) on the XDocInfo level.

In order to use this XValue, a new option has been added to the General tab of the [Extended Synchronization window](#). If the “Expose document UniqueID in script” option is selected, the key named "AC_UNIQUEID" can be used to reference the Kofax Capture UniqueID, the value is read-only.

Important This attribute is not available for newly created documents in the Thin Client modules and when creating documents using batch restructuring.

Line Item Matching Locator Disambiguation

A new tab has been added to the Line Item Matching Locator Properties window. This new tab enables you to refine your line item results by eliminating any line items that are similar but not a correct match for a purchase order. For more information, see the additional documentation for the new [Disambiguation tab](#).

Line Item Matching Locator Unit Price Customization

Two new options are available in the Settings tab of the Line Item Matching Locator properties window. These new [options](#) can be used to specify an Over unit price difference and an Under unit price difference. These options can be used so that small discrepancies between the unit price on a document and the corresponding database record are taken into account.

Minimum Search Characters for Fuzzy Database Lookups

A new Minimum Search Characters [property](#) for fuzzy database lookup buttons has been added. This enables you to customize a validation form by defining the minimum number of characters required before the instant search functionality in Validation is performed.

This Minimum Search Characters value is also used to limit normal searches in both Validation and Thin Client Validation. If this parameter is configured and the user does not type enough characters before pressing the Search button, a message is displayed informing them that they must enter more characters in order to perform a search.

Mouse Wheel Scroll Behavior in Validation

A new [property](#) (`EnabledDropdownScroll`) has been added to the Project object that controls the scrolling behavior of drop down lists on the validation form.

The default value for this property is True, which means that there is no change to the current behavior. When the value for this property is set to False, the scrolling of a mouse wheel moves the validation form up and down instead of scrolling through the drop-down list options.

Selecting Multiple Database Lookup Results

A new [option](#) has been added to the database lookup properties that enables you to configure a relational database lookup to allow multiple selections. During production, a user can select one or more rows and insert them in an associated table field.

Thin Client Bitonal Image Configuration

A new [configuration setting](#) has been added to the Web.config file (`HandleImagesBitonal`). If set to TRUE, this new setting converts color images to black and white. This change optimizes the memory management in the Thin Clients.

Thin Client Log On Autocomplete Behavior

A new [configuration setting](#) has been added to the Web.config file (`EnableLoginAutoComplete`). If set to On, autocomplete provides a selection once the user starts to type. This option can be turned off so users are not given a selection.

In order to use this setting it needs to be added to the Web.config file manually. Add the following content to `Kofax.KTS.Services.Properties.Settings` in the `applicationSettings` section.

```
<setting name="EnableLoginAutoComplete" serializeAs="String">
  <value>On</value>
</setting>
```

Changes in Behavior

The following changes have been made to the behavior of Kofax Transformation Modules 6.0.1.

Additional Statistics for Document Review and Validation

Kofax Analytics 1.0.0 for CaptureKofax Transformation Modules now records the following statistical data for Document Review and Validation:

- Best suggested class
- Classification confidence %
- Classification is confident
- Classification review outcome

The first three of the above statistics are written when Server classifies a document. The Classification review outcome is driven by user actions and can be one of the following values:

Accepted

This value is recorded based on changes made during Document Review only. When a document is not confidently classified, a suggested class is provided. When the suggested class is selected, this Classification review outcome is applied.

Reclassified

This value is recorded based on changes made during either Document Review or Validation whenever a user changes the class. If a document is created and classified manually, this information is also recorded.

(SPR00171862)

Database Connection Confirmation

The database connection settings are now tested when a project is loaded and their connection state is cached. The database connections are not checked again when opening the Project Settings because the cached status is used instead. The database connection is only rechecked when refreshing or editing the database settings.

Because of this, it is possible that a database that was not available when a project was first opened may become available. Even with the restored connection, a locator that uses that database will still display an error until the database has been refreshed via the Project Settings.

Field Data Lost After Reclassification in Validation

If you reclassify a document and then make changes to the field data, that field data is not retained unless you save the document. This means that if you suspend or close a batch and choose not to save a document, all modifications made to that document are lost.

User Session Timeouts in the Thin Clients

When a user session times out, the web page is now redirected to the log on page and a message is displayed with a session timeout message. The user can log on again by pressing OK in the message window and typing in their user credentials.

Resolved Issues

The following problems have been resolved in Kofax Transformation Modules 6.0.1.

General

The following general problems have been resolved.

Add Word Confidence Values to XDoc

Full page text recognition now saves [word confidences](#) when using the FineReader or RecoStar recognition engines. (SPR00125215)

Bar Code Locator Fails to Read Unicode Characters and Leads to Irregular Output

The bar code locator can now read UTF-8 content such as Chinese, Japanese, and other Unicode characters. This is true when the bar code locator is configured to read PDF417 and other bar code types. (SPR00159879, SPR00125063)

Batches Remain In Progress

If the recognition process hangs, a batch no longer remains "In Progress" under Server indefinitely. After a two minute timeout, the batch reverts back to the "Ready" state so it can be processed further. (292932)

Black and White Image Generation

The black and white (bitonal) images are now generated correctly when color images are processed during production or viewed during configuration and production. (SPR00148747, SPR00108580, SPR00111726, SPR00259703)

Images Deleted on Rotation

Specific TIF files are no longer deleted when rotated during production. (310254)

Inconsistent Document Rotation with ABBYY FineReader

A new option has been added to the FineReader Page Recognition Profile [window](#) that enables you to use "Comprehensive orientation detection" to [rotate](#) problem documents during processing.

Important This new option should be used only if other rotation detection methods are failing to rotate documents. This is because the time it takes to perform recognition increases when Comprehensive Orientation detection is [enabled](#).

In addition, there is also a new option on the Mixed Print Page Recognition Profile window that enables you to “Remove background” lines. For existing projects, the Remove background option is selected. For new projects, Remove background is cleared.

If you are using mixed print, clear this new Remove background option if some documents are not orientated as expected. (37746)

Metrics for Unattended Server 2 Module

Four additional performance counters have been added so that the performance of both Server 1 and Server 2 can be counted. The total number of documents processed by each Server instance is recorded as well as the hourly average for both Server instances.

Important The computer needs to be restarted after this service pack is installed to activate these new performance counters.

(SPR00089410)

Mixed Print Engine Hangs

Mixed Print full page recognition now processes images that contain a lot of detail or noise, in a timely manner. (SPR00263254)

Certain images no longer cause the mixed print detection to go into an endless loop, causing Project Builder and Server to hang. (SPR00204565)

Moving PDF to Child Batch Fail

If you have document routing configured and you are using Kofax Capture 9.0, PDF locking errors are no longer generated when a PDF document is routed to a child batch. (SPR00124906)

Page XValues Lost After Document_AfterSeparatePages with TDS

When Page XValues are set via script during separation, these values are no longer lost when separation (scripted or Trainable Document Separation) is performed. (SPR00097102)

Processing Multiple Documents is Slow

If a project is using a Line Item Matching Locator, it no longer takes a long time to process multiple documents. This is because the way database connections are handled has been improved. (SPR00257556, 114524)

Reclassification not Saved in Server 2 with TDS

When Kofax Transformation Modules - Server 2 is executed, it no longer performs separation for those documents that were created by the Batch_Open event.

Instead, Server 2 performs extraction only for the newly created documents. (SPR00076584)

Server Memory Error

If a large batch is processed using document routing to generate child batches, the memory consumption that occurs in Server has been improved. (313071)

Sticky Notes Sends Batch to Quality Control

If you add sticky notes in Document Review to a document that contains a bar code, that document and its batch are no longer routed to Quality Control because of an error. (SPR00147974)

Support the Kofax Capture UniqueID

The Kofax Capture UniqueID attribute for documents is now available as an [XValue](#) on the XDocInfo level.

In order to use this XValue, a new option has been added to the General tab of the [Extended Synchronization window](#). If the “Expose document UniqueID in script” option is selected, the key named “AC_UNIQUEID” can be used to reference the Kofax Capture UniqueID, the value is read-only.

Important This attribute is not available for newly created documents in the Thin Client modules and when creating documents using batch restructuring.

(SPR00177011)

Synchronization Tool Reaching Limit

The Load options of the project have been switched to LoadOptionsBase.

This ensures that only the part of the project that is needed for synchronization is published. (SPR00124709)

Table Extraction Causes Error

It is now possible to perform extraction on a document with a table and then view the extraction results in Project Builder without an error. (120015)

Trainable Document Separation Extraction Process Memory Error

When using Trainable Document Separation, the memory usage by the ExtractionProcess.exe has been improved. The memory used to process image OCR has also been improved. (SPR00148033, 39405)

User, Folder, and Registry Permissions

Please see [Additional Documentation](#) for more information about user, folder, and registry permissions required to successfully use Kofax Transformation Modules.

Project Builder and Project Problems

The following Project Builder errors have been resolved:

A2iA Image Error

When the A2iA recognition engine encounters an image that it is unable to recognize, Server and Project Builder no longer crash as a result. Instead, the recognition engine assigns empty values to the trouble document and continues processing the batch. (37655)

A2iA Memory Leak

The memory leak has been improved and no error messages are displayed in the Windows Event Log relating to an A2iA memory leak. (292709)

Adding Documents for Training Error

When adding a document to the classification or extraction training set of the selected class, an error is no longer displayed, regardless of the language pack installed. (307521)

Advanced Zone Locator Extraction Error

The Advanced Zone Locator now correctly creates empty subfields when applied to documents that have fewer pages than expected. An error is no longer displayed. (122077)

Bar Code Locator Improvements

The bar code locator now reads QR bar codes and Datamatrix bar codes properly. (SPR00176363, SPR00241113)

Cannot Train PDF for Classification

It is now possible to train your project for classification when PDF documents that are part of the classification set are displayed as thumbnails in the Documents window. (38566)

Conflict Management - Conflicting Fields in Same Position

The number of false-positive conflicts has been significantly reduced when the conflicting field appears multiple times on the same document. (SPR00175540)

Conflict Management - Wrong Conflicting Document Displayed

Users are rarely presented with the wrong conflicting document when managing online learning conflicts.

Now, when a conflict is detected, the conflicting field is saved alongside its document. This way, the correct document is displayed, rather than a similar document in the same conflict group. (SPR00175536)

Corrupt Locators in Merged Project

When using the Project Merge Tool, locators in the merged project are no longer corrupted. (SPR00123334)

Database Decryption Support

Kofax Transformation Modules now supports encrypted remote fuzzy databases running on a Kofax Search and Matching Server.

The database locator, the fuzzy database lookup window, and the fuzzy database search script functionality will decrypt and use the first 20 results returned by the Search and Matching Server.

Important Encrypted fuzzy databases are only provided by Kofax as part of solutions.

(RA0429)

Database Evaluator Breaks Project

If an index in a Database Evaluator is incorrect, the selected locator is cancelled. An error is no longer displayed and the project can be used as normal. (116695)

Database Evaluator without Configuration Causes Error

It is no longer possible to test a Database Evaluator without configuring it first. (116696)

Database Locator Properties Window Error

It is now possible to open the Database Locator Properties window without an error. (120057)

Database Locator Slower than Previous Version

A new [option](#) is available when adding a database that enables users to optimize how a database search is processed.

The Advanced option uses in-depth search functionality to provide better results with more accurate confidences, but can be time consuming for larger databases. The Basic option replicates the search behavior from Kofax Transformation Modules 5.0 that enables users to focus on speed instead of accuracy. (SPR00175726)

When the new Basic value for the Database processing option is selected, the Optimization option is not available when this fuzzy database is used by a database locator. The Optimization option is available only when the Advanced value for the Database processing option is selected. (242614)

Database Lookup Multiple Selection

A new [option](#) called "Table Mapping" has been added to the database lookup properties that enables you to configure a relational database lookup to allow multiple selections. During

production, a user can select one or more rows and insert them in the associated table field. (307588)

Delete Conflicting Fields and Documents

It is now possible to delete both fields and documents that cause extraction conflicts.

A set of additional buttons are now available so that the project administrator can delete one or both conflicting fields or documents as required. (SPR00123474)

Delete Duplicate Document Subset Error

It is now possible to delete a duplicated document subset without an error. (119073)

Error When Deleting Fields from Project or Class

It is now possible to delete several fields from a project or class without causing an error or crashing Project Builder. (292324)

Export Locator Error

If the export directory no longer exists, a default value of c:\ is used. (120112)

Extraction Training Error

When trained documents in the Extraction Training Set are re-extracted, training the project for extraction no longer fails with error 417 because of missing training data. (116698)

Knowledge Base Learning Server Error

Batch Repair is now enabled for the Knowledge Base Learning Server.

In addition, the log file contains a warning about documents with a modified structure cannot be used for online learning. Since these documents cannot be used for online learning, the learning files for all modified documents are deleted. (SPR00226560)

Line Item Matching Locator Error for Specific Images and Records

An error is no longer generated by the Line Item Matching Locator for specific images and records.

When the Line Item Matching Locator is run, any invalid fields are now skipped and excluded from the extraction results. (SPR00148035)

Line Item Matching Locator Extraction Failures

It is now possible to set the decimal separator for a document and database in [script](#). There is no need to set the database separator per document. (313455)

Line Item Matching Locator Improvements

Purchase orders that were listed as line items in an invoice were not always correctly identified. The Line Item Matching Locator has been improved to reduce false potential matches. If a purchase order number is found on a line item, all other potential matches for a purchase order are eliminated.

A Disambiguation tab has been added to the Line Item Matching Locator Properties window. On this tab, you can use database columns for disambiguation and select the order in which they are evaluated. The following columns can be used if they are mapped on the Database tab:

- Description
- Article Code (New column. Also referred to as part number.)
- Supplier Article Code (New column. Also referred to as supplier or vendor part number.)
- Purchase Order Item Number

Disambiguation is enabled by default for all new and existing projects. (SPR00097727, SPR00097775, 306861)

The purchase order number recognition has improved and the disambiguation logic has been added to improve matching. In addition a check was added so that empty database entries (e.g. for Article Code) are not used for disambiguation. (SPR00099343, 115957, SPR00099345, 115958)

The Match method has been improved so invalid field values that are extracted from the database cannot be used for disambiguation. (SPR00099363, 116309)

An error no longer occurs when a match is not found. (SPR00176733, 116342)

Line Item Matching Locator Unit Price Customization

It is now possible to specify both an Over unit price difference and an Under unit price difference. These new [options](#) can be used so that small discrepancies between the unit price on a document and the corresponding database record are taken into account. (310811)

Local Fuzzy Database Files Lost During Publishing

An imported local fuzzy database file is now copied when a project is published during synchronization.

The file extension was changed in Kofax Transformation Modules 5.5 to *.crp2 for imported database files. These files are now also copied during publishing. (SPR00125749)

Locator Method Access Denied Registry Error

If a locator method or one of its dependencies is unavailable because a user does not have the necessary user credentials, a descriptive message is displayed when opening the locator properties window. (65786)

Minimum Search Characters for Fuzzy Database Lookups

A new Minimum Search Characters [property](#) for fuzzy database lookup buttons has been added. This enables you to customize a validation form by defining the minimum number of characters required before the instant search functionality in Validation is performed.

This Minimum Search Characters value is also used to limit normal searches in both Validation and Thin Client Validation. If this parameter is configured and the user does not type enough characters before pressing the Search button, a message is displayed informing them that they must enter more characters in order to perform a search. (SPR00176709/116340)

New Samples Conversion

An error is no longer generated when you open a test set if your project contains unconverted New Samples. (110218)

ScriptExecutionInstance Persists After Closing Test Validation

When testing multiple steps in Test Validation the ScriptExecutionInstance event no longer retains the last tested step. Subsequent tests no longer cause problems. (45709, 324206)

Splitting a Batch Causes Error

When a batch contains PDF documents, an error is no longer displayed stating a process is being used by another process when a batch is split. (316371)

Unavailable Databases Cause Long Delays in Project Builder

The database connection settings are now tested when a project is loaded and their connection state is cached. The database connections are not checked again when opening the Project Settings because the cached status is used instead. The database connection is only rechecked when refreshing or editing the database settings.

Because of this, it is possible that a database that was not available when a project was first opened may become available. Even with the restored connection, a locator that uses that database will still display an error until the database has been refreshed via the Project Settings. (SPR00107826/2720283)

Thin Clients

The following Thin Clients issues have been resolved.

Allow Reclassification Via Script for Thin Clients

Reclassification via script is now possible when using the Thin Clients. (SPR00114829)

Batch.CopyDocument Crashes Thin Client Server

The Thin Clients no longer time out when the `Batch.CopyDocument` method is executed in the `Batch_Open` or the `Batch_Close` events.

This problem was introduced in Kofax Transformation Modules 5.5.2.5 when a license was not correctly activated when loading an image for the `KCThinClientModule` process. The correct licensing call is now performed and the image library is available without timing out. (SPR00148007)

Thin Client not Releasing User Credentials

When using the Thin Client Modules, log on sessions are now cleared when a user logs off. This means that new users are able to log on without incorrectly using the session of a previously logged on user. A new session is created instead. (307842, 307989, 307990)

Thin Client not Redirected when Session Times Out

When a user session times out, the web page is now redirected automatically to the log on page. An error message is also displayed so that the user knows that their session has timed out. They can log on again by pressing OK and typing in their user credentials. (284886)

Thin Client Batch Error Due to Memory Usage

A new [configuration setting](#) has is available to be added to the `Web.config` file (`HandleImagesBitonal`). If set to `TRUE`, this new setting converts color images to black and white. This change optimizes the memory management in the Thin Clients. (119809)

In order to use this setting it needs to be added to the `Web.config` file manually. Add the following content to `Kofax.KTS.Services.Properties.Settings` in the `applicationSettings` section.

```
<setting name="HandleImagesBitonal" serializeAs="String">
  <value>False</value>
</setting>
```

Thin Client Image Folder Path

It is now possible to add an image folder path that ends with a trailing backslash. This character is ignored when the image path is processed later and an error is no longer displayed. (65790)

Thin Client Log On Autocomplete

A new [configuration setting](#) is available to be added to the `Web.config` file (`EnableLoginAutoComplete`). If set to `On`, autocomplete provides a selection once the user starts to type. This option can be turned off so users are not given a selection. (284707)

In order to use this setting it needs to be added to the `Web.config` file manually. Add the following content to `Kofax.KTS.Services.Properties.Settings` in the `applicationSettings` section.

```
<setting name="EnableLoginAutoComplete" serializeAs="String">  
  <value>On</value>  
</setting>
```

Thin Client Rejection Error

An error is no longer displayed when a user rejects a document, and then closes or suspends a batch, even if that document has no problems or errors. Documents are now successfully rejected in any of the Thin Client modules. (292736)

Thin Client Validation - Batch Routing Error

When a batch is split using scripted batch routing, one or more child batches are no longer sent to Quality Control. Now, all images are assigned to the correct batch and the child batches can be processed as normal. (293680)

User Modules

The following Document Review, Correction, Validation, Verification and problems have been resolved.

Additional Statistics for Document Review and Validation

Document CSS values are now added for Kofax Analytics 1.0.0 for Capture and Kofax Transformation Modules now records the following statistical data for Document Review and Validation:

- Best suggested class
- Classification confidence %
- Classification is confident
- Classification review outcome

The first three of the above statistics are written when Server classifies a document. The "Classification review outcome" is driven by user actions and can be one of the following values:

Accepted

This value is recorded based on changes made during Document Review only. When a document is not confidently classified, a suggested class is provided. When the suggested class is selected, this Classification review outcome is applied.

Reclassified

This value is recorded based on changes made during either Document Review or Validation whenever a user changes the class. If a document is created and classified manually, this information is also recorded. (SPR00171862)

(SPR00171862)

Ability to Set Focus on Specific Field or Tab within Validation

When a user navigates to a document that has no invalid fields, the focus is automatically given to the first editable field on the document.

If there are multiple tabs on the validation form, the first tab with an editable field is displayed. (SPR00148039)

Closing Batch Results in Script Error

When a batch is suspended or rejected in Validation or Verification, a message is now displayed to the user if a script error occurs. This enables users to close the batch so it is not corrupted. (293389, 293393)

Correction - Crashes when Alternating Batches with and without Incorrect Fields

It is now possible to open a batch with incorrect fields and then a batch without incorrect fields without causing the Correction module to crash. (309657)

Correction - GDI Handle Leak

The Correction user module no longer generates extraneous GDI handles when in whole field mode or character mode. (SPR00176660)

The font size is no longer reset when using Whole Field Correction mode. (285617)

Correction Started from Batch Manager Closes When Batch Suspended

If a batch is suspended, the Correction module now closes as expected. (120048)

Document Review - Collapse All Documents on Batch Load

A new [option](#) has been added to the Settings window in Document Review so that users can configure the start of batch behavior.

The default value for this new setting is to collapse all documents when a batch is opened. If this is not the preferred behavior, users can change this option so that only those documents with problems are expanded, leaving all others collapsed. (SPR00147987)

Document Review - Custom Menu Issues

Document Review It is now possible to successfully reset a custom menu so that the Document Review module no longer displays out-of-sync errors. The "Reset" option can also be used to fix projects that have an out-of-sync problem and to re-define any custom commands. Any corresponding script events should be reviewed in case there are any name changes. (SPR00106249, 284008)

Document Review - Fails to Open when Viewer Zoom Value is Zero

When viewing documents in Document Review, it is now possible to zoom to the minimum or maximum magnification setting without causing problems the next time Document Review is opened.

Viewer settings are successfully retained for each user between sessions because they are now correctly recorded in the registry. (SPR00112200)

Document Review - Focus on First Document in Batch

In Document Review, the focus is now on the first document of the batch when it loads. (SPR00147990, SPR00259735)

Document Review - Keyboard Shortcuts

It is now possible to use the key combinations of Alt + Home and Alt + End when configuring keyboard shortcuts in the Document Review module. (308564)

Document Review - Merging Documents

When you merge a document to its previous document, the resulted merged document is expanded automatically, even if the previous document was collapsed before the merge. (SPR00116759, 40555)

Document Review - Open Batch Settings

It is now possible to open the Settings window, the About window, or the help, and the next batch now opens if it is configured to open automatically. (116359)

Document Review - Scroll Position Cached

Document Review now scrolls to the first invalid document when opening a new batch, independent of the scroll bar position from the previous batch. (SPR00114607, 45101)

Document Viewer User Settings

The user settings for the Document Viewer are now stored for each user module (Document Review, Correction, Validation, Verification). This means that any changes made to the Document Viewer settings for a module are retained and restored the next time that module is opened. (100638)

Error Closing Correction Without Any Problems

An error is no longer generated when a batch that has no correction problems is closed automatically. (307391)

Moving to Next Invalid Document Time Consuming

In Document Review, if you have Kofax Capture 10.0.2.1.FIX2509 installed, moving to the next invalid document no longer takes a long time.

Because of new bulk-update functionality for fields, the time it takes to save a document has been improved and the next invalid document loads in less time as a result. (SPR00123566)

Reclassification by Script Results in Empty Fields on Export

Index fields are no longer empty after reclassification in Validation. (285005, SPR00119195)

Recreate Mouse Wheel Behavior from Previous Version

In Document Review and Validation, users can now change the magnification of the image in the Viewer window by scrolling the mouse wheel, even if the window does not have focus. (SPR00148038, SPR00147989)

Split Document Image Missing After Class Assigned

Images are now successfully displayed when a new document that was created from a split is assigned a class. (41722)

Validation - Editing Batch Causes Corruption

It is now possible to copy or add a page or document in Validation without corrupting a batch. If a license is unavailable, the batch editing operation is cancelled and an error message is displayed to the user. Once a license is available, the user can continue to process the batch as required. (313438)

Validation - Extended Logging

The extended logging for the Validation user module now works as expected. (321143)

Validation - Fails to Load When Zoom Value for Viewer is Zero

Validation no longer fails to load when the zoom value is zero because this is no longer possible. A minimum of 0.5 is the smallest zoom value possible.

Viewer settings are successfully retained for each user between sessions and are correctly recorded in the registry. (SPR00112209)

Validation - Field Data Lost After Reclassification

If you reclassify a document and then make changes to the field data, that field data is not retained unless you save the document. (293052)

Validation - Mouse Wheel Scroll Behavior

A new [property](#) (`EnabledDropdownScroll`) has been added to the Project object that controls the scrolling behavior of drop down lists on the validation form.

The default value for this property is True, which means that there is no change to the current behavior. When the value for this property is set to False, the scrolling of a mouse wheel moves the validation form up and down instead of scrolling through the drop-down list options. (SPR00176179)

Validation - Random Errors with Table Line Items

An error is no longer generated when a user presses Enter when validating a table in the Validation module. (SPR00113498)

Validation - Scrollbars Missing

The scrollbars on the validation form are now always visible when needed. (293638)

Validation - Slow when Switching Between Documents

The loading of the document has been optimized. (292827)

Validation - Table Cell Focus Lost when Lassoing

It is now possible to lasso text from the image into a table cell and then use the Tab key to navigate to the next cell in the table. The table no longer loses focus after each lasso action is finished. (284246)

Verification - Crashes when Script Debugging Enabled

The Verification module no longer crashes after enabling script debugging and then suspending a batch. The correct docking information is saved before the batch is closed, eliminating the crash. (308665)

Known Issues

The following sections describe known problems, and if available, useful workarounds for Kofax Transformation Modules 6.0.1.

Ignoring a Document for Classification and Separation

If a document in the Classification Set is marked “Ignore for Classification and Separation”, there is no indication that the document, Classification Set, or the project has unsaved changes. If you close the project without saving these changes, they are lost and you are not notified. (SPR00124766)

Locale Name Incorrect

When German is selected for the application language, the `Kofax.SDK.CaptureInfo.CaptureInfo.LocaleName` function returns “de-DE”. This behavior differs from the documented behavior which states that “de” should be returned. (SPR00094565)

Names of Project Elements Not Handled Correctly

If you type a very long name for a project element such as a class name or a document subset, the name runs off the screen, it is not truncated, and there are no tooltips to show the full name. (SPR00110654)

Workaround: Use shorter names or expand the windows so that the entire name is visible.

Oracle Databases Refresh Problem

It can take 2-3 attempts to successfully refresh an Oracle database using the Refresh button on the Databases Tab in the Project Settings. (SPR00107826/2720283)

Script Tooltips No Longer Available

When using the Script window debug mode, tooltips are no longer displayed when hovering over variables. (SPR00119969)

Thin Client Server Not Supported on Windows Server 2012

Windows Server 2012 cannot run the Thin Client Server. (SPR00124698)

Workaround: Install the Thin Client Server on a Server that runs a Windows Server 2003 or 2008 operating system.

Uninstalling Leaves Common Files Behind

After uninstalling Kofax Transformation Modules, several common files are left behind. This is known to happen on Windows Server 2008, but it may occur on other operating systems as well.

Workaround: Manually delete %Program Files%\Common Files\Kofax\A2iA343 and its subfolders.

Additional Documentation

The following sections provide additional documentation for new features available in Kofax Transformation Modules 6.0.1, that is not available in existing documentation.

Help Updates for Document Review

The following changes will be made to the Document Review Help in the next Kofax Transformation Modules full release.

New: Batch Open Behavior

The Batch Settings window has the following new group.

The **Batch Open Behavior** group has the following options:

The Disambiguation tab has a table with the following columns:

Document display behavior

Select an option to configure how this module behaves when a new batch is opened. Select one of the following:

- Expand documents with problems.
When this option is selected, all documents without problems remain collapsed and all documents with problems are expanded.
- All documents collapsed.
When this option is selected, all documents are collapsed, regardless of their problems. This is the default value for this option.

Help Updates for Project Builder

The following changes will be made to the Project Builder Help in the next Kofax Transformation Modules full release.

Changed: Adding a Local Fuzzy Database

Step 7 will change to:

- On the Remote Fuzzy Database Properties window, set the following properties in any order:
 - a** For the Reference import text or csv file, click **Browse**.
 - b** Navigate to the required .TXT or .CSV file, select the file and click **Open**.
A copy of the source database file is imported into the file system hierarchy for the project.

- c** Optionally, if case does not matter, select the **Ignore case** option in the Import Options group.
All strings are automatically converted to lower case when a search is performed and case is ignored when this option is selected.
- d** Optionally, if the first record entry in the Local Fuzzy Database contains the column header names, select the **First line contains caption** option in the Import Options group.
- e** Type the field delimiter character that separates entry fields into the **Field delimiter** option in the Import Options group.
- f** Type the characters that separate compound words in an entry field into the **Word separation characters** option in the Import Options group.
- g** Type a list of characters to be ignored and excluded when a database entry or field value is returned into the **Characters to ignore** option in the Import Options group.
- h** Optionally, add, delete, modify, or import string substitutions in the **String Substitution** group.
- i** Optionally, to update the imported copy of the database automatically when the source database is modified, select the **Automatic update from import file** option.
- j** Optionally, if you want to store the Local Fuzzy Database in memory, select the **Load database in memory** option.
- k** Optionally, select the **Database processing** level to optimize your database searches.
- l** If any of the fields are not present on a document, right-click a database field header in the Field Names group, and select **Not present on document**.

Changed: Databases Tab - Project Settings Window

The following button description will change to:

Refresh

Click Refresh to update the selected database. For remote fuzzy databases, the connection is tested as are the field mappings. For relational databases, the connection alone is tested. Alternatively, press **F5** to refresh the selected database.

Tip It may be necessary to press Refresh for an Oracle database 2-3 times before the connection state is successfully refreshed.

Important Changes to a database and its settings may affect your current project settings. For example, the settings for a Database Locator or database lookup button may be affected. If needed, apply the changes and save your project.

If you cancel the update and a database has changed, an error may occur during processing and the batch is sent to Kofax Capture Quality Control.

Caution If a database is temporarily unavailable, **do not** edit any dependent locators or fields because database mappings may be lost. For example, any changes made to a database lookup when one of its databases is unavailable may cause the mappings to be cleared.

Changed: Local Fuzzy Database Properties Window Reorganized

On the Local Fuzzy Database Properties window, you will notice a new Optimization group:

- The “Automatic update from import file” and the “Load database in memory” options were moved to this group from the top of the window.
- The “Database processing” option is new.

The **Optimization** group has the following options:

Automatic update from import file

Select this option to update the Local Fuzzy Database automatically when the source file is updated. This option is cleared by default.

Load database in memory

Select this option to load the database into memory. This option is selected by default.

Database processing

Select one of the options to determine the level of processing required for your database searches. Choose from:

- Basic.

Select this option if the computer where Kofax Capture and Kofax Transformation Modules is installed does not have a lot of memory or processing power. Selecting this value means that the accuracy of your results can be lower than expected, but the time it takes to generate these results may be significantly faster than if you selected the “Advanced” value for this option.

This option replicates the search behavior from Kofax Transformation Modules 5.0 that enables users to focus on speed instead of accuracy.

- Advanced. This is the default value for this option.

Select this option if you want the most accurate search results. Selecting this option means that the accuracy of your results are better than the “Basic” value for this option. However, the time it takes to generate these results depends on the size and complexity of your database, the available memory, and the number of processing cores available on your server. If you do not have a lot of memory and multiple processing cores, or your database is very large and complex, the “Basic” value may be more suitable.

If you select this value, you can further optimize a database locator that uses this database for speed or accuracy.

Tip If you are unsure which value is best for your project, the best practice is to finish configuring the database locator that uses this fuzzy database and then run several extraction benchmarks to compare the results between the two Database processing values.

New: Adding a Local Fuzzy Database Step

A new step has been added to this procedure after the tenth step. All subsequent steps have been incremented by one.

- Optionally, type a **Minimum Search Characters** value to restrict when a search can be performed.

If Instant Search is enabled, it is not performed until this value is reached. If the user tries a manual search by pressing the Search button, they are informed if they have not met the minimum number of characters required for a search.

New: Database Lookup Button Properties - Relational Databases

A new property has been added to the Database Lookup Button Properties window for relational databases as follows:

Table Mapping

If set to true, this option enables users to select multiple rows in the relational database lookup results window during production. The multiple rows are copied to the table field, inserting new rows as needed. The value for this option is set to False by default.

Tip If you set this option to True, add instructions to the Dialog Caption string so that your users know that this feature is possible.

New: Enabling Comprehensive Orientation Detection

If you are using automatic rotation and several documents are still not rotated correctly after processing, you can use Comprehensive orientation detection.

Important This more thorough method of orientation detection can take a long time so the best practice is to use it only when other rotation options are not sufficient. This is because the Comprehensive orientation detection option is project specific. All classes and documents will be processed using this option and this increases recognition times.

The most common use for this option is for projects with the following configuration:

- Classes with incorrectly rotated documents are using content classification or a combination of layout and content classification.
- Your default page profile is using the FineReader method.

Note In this configuration, rotation is only performed at the time of classification so if a class is configured to use a different recognition engine, it is not taken into account for rotation.

You can configure your project to perform more thorough orientation detection by following these steps:

- 1 On the Project tab, in the Configuration group, select **Project Settings**.
- 2 Select the **Recognition** tab to view the Recognition settings.
- 3 Open your default FineReader page recognition profile.

Note If you are using mixed print recognition with a FineReader page profile for machine print, you must clear the "Remove background" [option](#) on the Mixed Print Page Recognition Profile window. If Remove background is not selected, no documents are rotated.

- 4 On the recognition profile window, in the General Settings group, select **Comprehensive orientation detection**.

- 5 Click **OK** to save your recognition profile settings.
- 6 Optionally, test your classification settings against some documents that do not rotate correctly to see if there is improvement.

The best practice is to perform several classification benchmarks with and without this setting enabled. These benchmarks help you to determine if more documents are successfully rotated and whether or not the reduction in performance is acceptable.

Tip If a project is configured with **no classification**, rotation is performed only if OCR on demand is required. This means that you can do one of the following:

- Enable the Comprehensive orientation detection option in the default page recognition profile so that all documents are rotated when OCR on demand is performed.
- Create a new page recognition profile, enable Comprehensive orientation detection, and assign it to problem classes only.

When OCR on demand is performed, rotation is applied using Comprehensive orientation detection for any relevant documents.

New: FineReader Page Recognition Profile Option

A new option will be added to the FineReader Page Recognition Profile Settings window in the next Kofax Transformation Modules release as follows:

Comprehensive orientation detection

Select this option to perform thorough checks to evaluate whether a page needs to be rotated or not before or during classification. This option is cleared by default.

Note Selecting this option can increase the time it takes to perform recognition. As a result, the best practice is to use this option only when processing documents whose orientation is not adequately corrected with Rotation during runtime.

New: Fuzzy Database Lookup Button Property

A new property has been added to the database lookup button for fuzzy databases.

Minimum Search Characters

This value determines the minimum number of characters required before a search can be performed.

If Instant Search is enabled, it is not performed until the user enters this value of characters. If the user tries a manual search by pressing the Search button, they are informed if they have not met the minimum number of characters required for a search. The value for this option is set to 1 by default.

New: Fuzzy Database Processing and Optimization

A new topic will be added to the Help at Welcome > Use Project Builder > Manage Databases > Fuzzy Databases as follows:

You can optimize a search that uses your local fuzzy database by configuring how it is processed during production.

If your database is large with many columns and repetitious entries, the extraction results using Advanced database processing are more accurate than Basic database processing. This is because the Advanced value ensures a more in-depth search functionality to provide better results with more accurate confidences. An Advanced search also has the advantage of supporting parallel searches that can decrease the time it takes to get results.

The amount of physical memory and the number of processing cores available on a computer limits how fast the search results are performed. As a result, the speed of the Advanced processing decreases with fewer resources, but the speed of Basic processing is not as affected. However, the accuracy of Advanced processing is significantly better than Basic processing, so it is a matter of choosing which is more important for your needs.

New: General Tab Database Locator Properties Window

A new note will be added to the Optimization group on the General Tab of the Database Locator Properties window as follows:

Note This option is not available if you are using a local fuzzy database that is configured for basic database processing.

New: Image Rotation Type

A new image rotation type has been added to the Image Rotation topic in the next Kofax Transformation Modules release as follows:

- [Enable](#) Comprehensive orientation detection for a FineReader page recognition profile.

New: Line Item Matching Locator Disambiguation Tab

Because purchase order that were listed as line items in an invoice were not all ways correctly identified, the Line Item Matching Locator has been improved to reduce false potential matches. If a purchase order number is found on a line, all other potential matches for a purchase order are eliminated.

A new Disambiguation tab has been added to the Line Item Matching Locator Properties window. On this new tab, you can use additional database columns for disambiguation and select the order in which they are evaluated.

The Disambiguation tab has a table with the following columns:

Meaning

The description or name of the purchase order field.

Use for Disambiguation

Selected fields are used for disambiguation to help improve the results of the Line Item Matching Locator.

The **Up** and **Down** buttons can be used to organize the preference of the purchase order fields.

New: Mixed Print Page Recognition Profile Option

A new option will be added to the Mixed Print Page Recognition Profile Settings window in the next Kofax Transformation Modules release as follows:

Remove background

Select this option to remove any lines from a document. This option is cleared by default.

Note If you are using the FineReader page profile for machine print recognition [profile](#) and you want to use the [Comprehensive orientation detection](#) option, this option must be selected.

New: Rotation and Mixed Print Recognition

When using Mixed Print recognition, there are a few interdependent options that may be required in order to successfully and consistently rotate documents during production. Since the correct orientation of a document is essential for classification and therefore, extraction, getting this right is very important.

There are three distinct and separate scenarios that can occur when using Mixed Print Recognition for rotation.

A FineReader Machine Print Page Profile Rotates a Page

In this scenario, the Machine print page profile is configured to use a page recognition profile. When documents are processed using this profile, it attempts to recognize each page. If a page is unknown, it may be rotated so it is recognized and classified correctly.

A FineReader Machine Print Page Profile Rotates a Page Using Comprehensive Orientation Detection

In this scenario, the Machine print page profile is configured to use the “Comprehensive orientation detection” [option](#) on the FineReader page recognition profile. When selected, this option thoroughly checks every page to ensure that it is rotated correctly. As a result, the time it takes to perform recognition is increased significantly.

If after processing with the above option selected on the FineReader page recognition profile, you may find that several documents are not orientated correctly. If this occurs, ensure that the “Remove background” [option](#) on the Mixed Print Recognition profile is cleared and try again.

To ensure that you are getting the best results for rotation as well as performance, perform several classification benchmarks with and without Comprehensive orientation detection selected. In addition, test the benchmark results with and without the Remove background option to determine if the loss of performance when using “Comprehensive orientation detection” is justified by improved rotation and classification results.

The Hand Print Page Profile Rotates a Page

If you have a page profile selected to detect hand print, it is possible that this profile will rotate an incorrectly orientated page.

This rotation behavior occurs in the following circumstance only:

- 1 A page profile is selected for hand print recognition instead of an zone profile.
- 2 The Segmentation result handling option has the “Read full page with single profile” value selected.
- 3 The detected hand print area is above the Minimum hand printed area for hand print recognition threshold. When this occurs, the page is processed using the hand print profile.

Perform a classification benchmark to ensure that the rotation and subsequent classification results are as expected.

New: Settings Tab Line Item Matching Locator Properties Window

A new group with several options will be added to the Settings Tab of the Line Item Matching Locator Properties window as follows:

The **Amount Settings** group has the following options:

Over unit price difference

Enter a percent value to set a tolerance for the unit price so a higher value on a document is found when it does not match a record in the database.

The value for this option is set to 1% by default. If the unit price for an item in the database is 10.50 and a document for that same item has a value of 10.60, the item on this document should be returned using the default value for this option. For the best results, do not use a value greater than 3% for this option. Higher values may return unwanted results.

Under unit price difference

Enter a percent value to set a tolerance for the unit price so a lower value on a document is found when it does not match a record in the database.

The value for this option is set to 1% by default. If the unit price for an item in the database is 10.50 and a document for that same item has a value of 10.40, the item on this document should be returned using the default value for this option. For the best results, do not use a value greater than 3% for this option. Higher values may return unwanted results.

Help Updates for Scripting

The following changes will be made to the Kofax Transformation Modules Scripting Help in the next Kofax Transformation Modules full release.

New: Document Data Key

A new key is available as an XValue in the XDocInfo as follows:

Unique ID

The Kofax Capture Unique ID name is read-only and can be accessed using the following key:

```
XDocInfo.XValues.ItemByName("AC_UNIQUEID")
```

Important This key is not available for newly created documents in the Thin Client modules and when creating documents using batch restructuring.

New: Fuzzy Database Search Functions

When you set up a database lookup, you can search for different numbers of words. To do this, you need to create one field for one word.

For example, if you want to search for “John Smith” in “Canal Street,” create four fields using either `Dim Fields() As String` or `ReDim Fields(4)`.

Now that you have set up your fields, you can then assign each word to a field:

```
Fields(0) = "John"
Fields(1) = "Smith"
Fields(2) = "Canal"
Fields(3) = "Street"
```

Or

```
Fields = Split("John Smith Canal Street", " ")
```

FieldIDs can be used to define which column is searched in the database. If the FieldID is set to “0” then all columns in the database are searched.

Note Indexes are applied only to the subset of columns that were included when the database was imported. If you selected only 5 of 8 possible columns, you can index only one to five fields.

The following example shows the code needed to search in three columns:

```
Dim Fields() As String
Dim FieldIDs() As Long
ReDim Fields(2)
ReDim FieldIDs(2)
Dim DB As CscDatabase
Dim DBResItems As CscDatabaseResItems
Dim arr() As String

Fields(0) = pXDoc.Fields(0).Text
Fields(1) = pXDoc.Fields(1).Text
Fields(2) = pXDoc.Fields(2).Text

FieldIDs(0) = 1
FieldIDs(1) = 0
FieldIDs(2) = 0

Set DB = Project.Databases.ItemByName("German")
Set DBResItems = DB.Search(Fields, FieldIDs, CscEvalMatchQuery, 5)

If DBResItems.Count > 0 Then
    arr = DB.GetRecordData(DBResItems(0).RecID)
    If MsgBox("Confidence: " + CStr(DBResItems(0).Score) + " Zip: " + arr(0) + " &
City: " + arr(1) + _
"Street: " + arr(2) + vbCrLf + "Insert values?", vbYesNo, "Database lookup") =
vbYes Then
        pXDoc.Fields(0).Text = arr(0)
        pXDoc.Fields(1).Text = arr(1)
        pXDoc.Fields(2).Text = arr(2)
    End If
End If
```

Note When you import a fuzzy database into your project, you can define a few preprocessing settings such as Additional Delimiter Characters, Ignore Characters, and Substitution pairs. When you use this database in a Database Locator, the preprocessing functions are applied to the document before searching its content in the database.

When you use this database directly in script, the preprocessing is not applied to the document beforehand. As a result, you can use the following examples in place of the preprocessing.

Code for additional delimiters:

```
' Additional Delimiter chars are used to split the text into smaller fields. You need
to split your search string
' by using the same characters:
Dim i As Long
Dim s as String

s = QueryString
' Replace all delimiters by blank
For i = 0 To Len(DB.AdditionalDelimiterChars) - 1
    s = Replace(s, Mid(DB.AdditionalDelimiterChars, i + 1, 1), " ")
Next

Fields = Split(s, " ")
```

Code for ignore characters:

```
' Characters that are ignored during DB import need to be removed from the query
Dim i As Long
Dim s as String

s = QueryString
' Replace all ignore characters by blank
For i = 0 To Len(DB.RemoveChars) - 1
    s = Replace(s, Mid(DB.RemoveChars, i + 1, 1), " ")
```

Code for substitution pairs:

```
' Substitution pairs define which texts to be replaced by what. Apply that to your
query string
Dim i As Long
Dim s as String

s = QueryString

For i = 0 To DB.SubstitutionPairCount - 1
    Dim value As String
    Dim substitute As String
    DB.GetSubstitutionPair(i, value, substitute)
    s = Replace(s, value, substitute)
Next
```

Caution When searching a fuzzy database that is on the Kofax Search and Matching Server, the search is always performed in all columns. The column ID makes no difference and any search looks at all fields in a record.

Example. FieldIDs and Column Searches

A database has the following five columns.

- ID
- Street
- Name
- City
- ZIP

When you import this database, you only select the “Street” and the “Name” columns.

You want to search the database for the following:

- “John Smith” in the “Name” column.

You know that the “Name” column is the third column in the database but it is the second imported column.

- “Canal Street” in the “Street” column.

You know that the “Street” column is the second column in the database but it is the first imported column.

Because of the column number differences between the original database and the imported database, the FieldIDs that indicate where to search should be as follows:

```
Dim FieldIDs() As Long
ReDim FieldIDs(2)
FieldIDs(0) = 2 ` John in Name
FieldIDs(1) = 2 ` Smith in Name
FieldIDs(2) = 1 ` Canal in Street
FieldIDs(3) = 1 ` Street in Street
```

New: Recognition Word Confidences

If you are using the FineReader or RecoStar recognition engines for full-page text recognition, word confidences are also recorded for each word found on a document.

Even though both of these recognition engines record individual word confidences, it is not possible to compare the confidences between the two recognition engines. This is because recognition confidences are defined by the recognition engines, each using different criteria. For example, a word read by FineReader that has a 50% recognition confidence may be more or less confident than the same word read by RecoStar recognition engine also with 50% confidence.

The `CscXDocWord` object has a confidence property called `Confidence` and it is of type `double`.

A value of 0.0 means that a word has a 0% recognition confidence. A value of 1.0 means that a word has a 100% recognition confidence.

Note For all recognitions other than FineReader and RecoStar, the default word value will always be 0.0. Also, the word confidence value is also 0.0 for any XDocuments that were processed before the 5.5.2.17 Fix Pack or this Service Pack.

The following example shows how to use this new property in a script:

```
` Example code. Access is possible at any time after recognition is performed

Private Sub Document_AfterProcess(ByVal pXDoc As CASCADELib.CscXDocument)
    Dim word As CscXDocWord
    Set word = pXDoc.Representations(0).Pages(0).Words(0)
    MsgBox word.Text & " Confidence: " & word.Confidence
End Sub
```

New: Validation - Mouse Wheel Scroll Behavior

A new property (`EnableDropdownScroll`) has been added to the `Project` object that controls the scrolling behavior of drop down lists on the validation form. This property can be accessed via script and can be used in the `Application_InitializeBatch` event and the `Application_InitializeScript` event.

The default value for this property is `True`, which means that there is no change to the current behavior. When the value for this property is set to `False`, the scrolling of a mouse wheel no longer controls a simple field drop-down list, even if a list is selected. Instead, if the mouse is

over the validation form, scrolling the mouse wheel moves the validation form up and down if it spans more than one page on the screen. If the mouse is over the image in the Viewer, scrolling the mouse wheel zooms in and out on the image.

The following code examples shows this property used in script:

```
Private Sub Application_InitializeBatch(ByVal pXRootFolder As CASCADELib.CscXFolder)
    Project.EnableDropdownScroll = False
End Sub

Private Sub Application_InitializeScript()
    Project.EnableDropdownScroll = False
End Sub
```

New: Decimal Separator Detection

The Line Item Matching Locator automatically detects the decimal separator from the document data. It also detects the decimal separator for the order positions from the database to enhance the locating and the matching of quantity and prices by the Line Item Matching Locator, especially for documents with ambiguous amounts or quantities like 1,000 or 1.000. Due to a mixture of decimal separators caused by poor recognition, the decimal separator can also be controlled and checked by script. It can be set per document for the document data and the order positions can be retrieved from the database.

If the automatic detection fails for specific vendors, a Script Locator can be used to set the decimal separator for that vendor per document. To check which decimal separator has been used on a document, check the `LastDocumentDecimalSeparator` (`LastDatabaseDecimalSeparator`) of the locator in a debugging session. For example, in the `Document_AfterExtract` event. This will tell you which decimal separator was used for the document when you are in detect mode.

Since there is no need to set the decimal separator for the database per document, you may want to use the `Application_InitializeScript` event to set the decimal separator for the whole application session if required.

Note If the detection of a decimal separator fails because there appear to be a mix of decimal separators, this might be caused by poor recognition.

The following sample code shows how to set the decimal separator for a document:

```
' Add a reference to "Kofax Cascade Line Item Matching Locator" library to your script
Private Sub SetDecimalSeparator(sClassName As String, sLocatorName As String,
    sDecimalSeparator As String)
    Dim pClass As CASCADELib.CscClass
    Dim pLocatorDef As CASCADELib.CscLocatorDef

    ' get the locator definition
    Set pClass = Project.ClassByName(sClassName)
    Set pLocatorDef = pClass.Locators.ItemByName(sLocatorName)

    ' convert it to the LineItemMatchingLocator interface
    Dim oIExtMethod As CASCADELib.ICscExtractionMethod
    Set oIExtMethod = pLocatorDef.LocatorMethod
    Dim oILIMLoc As CscLineItemMatchingLocLib.CscLineItemMatchingLocator
    Set oILIMLoc = oIExtMethod

    Select Case sDecimalSeparator
        Case "."
            oILIMLoc.DocumentDecimalSeparatorMode = CscDot
        Case ","
            oILIMLoc.DocumentDecimalSeparatorMode = CscComma
        Case Else
            oILIMLoc.DocumentDecimalSeparatorMode = CscDetect
    End Select
```

End Sub

Help Updates for the Synchronization Tool

The following changes will be made to the Synchronization Tool Help in the next Kofax Transformation Modules full release.

New: Extended Synchronization Window Option

A new option has been added to the General tab of the Extended Synchronization window as follows:

Expose document UniqueID in script

Select this option to make the Kofax Capture UniqueID attribute for documents is available as an XValue on the XDocInfo level. The key is read-only and is named "AC_UNIQUEID". This option is cleared by default.

Important Selecting this option may result in some performance issues. Please ensure that you enable this option only if it is required.

Installation Guide Updates

The following changes will be made to the *Kofax Transformation Modules Installation Guide* in the next Kofax Transformation Modules full release.

New: User and Folder Permissions

In order to use Kofax Transformation Modules, various folders and registry keys require specific user permissions. This is true for the machine where Kofax Transformation Modules Is installed, as well as several client machines where the User Modules are installed. The following section explains each module, client, or server specific permissions.

Note Access to runtime data depends on Kofax Capture user permissions. For more information about Kofax Capture user permissions, please see the *Kofax Capture Installation Guide* and the *Kofax Capture Administrator's Guide*.

All modules and tools require access to the CaptureSV shared folder in Kofax Capture.

Kofax Capture Module Permissions

Kofax Capture modules include all user modules (Correction, Document Review, Validation, and Verification) as well as Server, the Knowledge Base Learning Server, and Kofax Search and Matching Server Administration. The following permissions are required for the module user on the machine where the Kofax Capture module is installed:

Kofax Capture Module Permission Requirements

Path/Registry Key	Permission
<LocalAppData>\Kofax	Read/Write

Path/Registry Key	Permission
<WindowsFolder>\ktmdef.ini	Read
<CommonAppData>\Kofax\KTT	Read
Published project location	Read
HKEY_CURRENT_USER\Software\Kofax\Transformation\4.0	Full Control
HKEY_LOCAL_MACHINE\Software\Kofax	Read
HKEY_LOCAL_MACHINE\Software\Kofax\Transformation	Read

Project Builder Permissions

The following permissions are required for the user configuring a project using Project Builder and using all other configuration tools, such as the Synchronization Tool:

Path/Registry Key	Permission
Windows TEMP directory	Full Control
Installation folder	Read/Execute
<WindowsFolder>\ktmdef.ini	Read
<ProgramData>\Kofax	Read/Write
<CommonAppData>\Kofax\KTT	Read
<CommonProgramFiles(x86)>\Kofax	Read/Execute
Project source directory	Full Control
Document source files and directories	Full Control
HKEY_CURRENT_USER\Software\Kofax\Transformation\4.0	Full Control
HKEY_LOCAL_MACHINE\Software\Kofax Image Products	Read
HKEY_LOCAL_MACHINE\Software\Kofax	Read
HKEY_LOCAL_MACHINE\Software\Kofax\Transformation	Read

Kofax Search and Matching Server Permissions

The Kofax Search and Matching Server service user needs to have access permissions to all database servers used as data sources. The Service user also needs to have permissions to read and write to the configured database directory. For more information about the Kofax Search and Matching Server service, please see the *Kofax Search and Matching Server Installation Guide*.

In addition, the Service user requires read access to the following Registry location and its sub-keys:

- HKEY_LOCAL_MACHINE\SOFTWARE\Kofax\SearchMatchingServer
- SOFTWARE\Kofax\SearchMatchingServer\5.5\RecentServersNode
- SOFTWARE\Kofax\SearchMatchingServer\5.5\RecentServers

The Search and Matching Server Load Balancer requires full network access and the Load Balancer Service user needs to be a member of the KSMSAdmin group. The Search and Matching Server Administration user also needs to be a member of the KSMSAdmin group.

The Search and Matching Server Server Browser Service requires full network access.

For more information about the Kofax Search and Matching Server Service, please see the *Kofax Search and Matching Server Installation Guide*.

Kofax Transformation Modules Server Permissions

Both the Server and the Server Scheduler require the same permissions. The originating process of the user needs the same permissions as the Server Scheduler as well as the same permissions needed to start the Server Scheduler

All spawned processes started by either the Server module or the Server Scheduler inherit the permissions from the Server Scheduler user. As a result, this service user must have administrative permissions. In addition, the Server Scheduler user must also have access to the Kofax Capture Server.

The path and registry permissions required for the Server module and the Server Scheduler are the same as all other [Kofax Capture modules](#).

In order to write logs, the Server module and the Server Scheduler user must have Write permissions to write logging entries on the local Kofax Capture client (Capture/Local/Logs).

Lastly, the Server module and the Server Scheduler needs Read access for the configured Online Learning directory that was configured on the General tab of the Project Settings.

Kofax Transformation Modules Statistics Release Permissions

The Kofax Transformation Modules Statistics Release user needs to have full control over the statistics database directory.

Kofax Transformation Modules Statistics Release also requires the same permissions as the other [Kofax Capture modules](#).

Knowledge Base Learning Server and Knowledge Base Learning Service Permissions

Both the Knowledge Base Learning Server and the Knowledge Base Learning Service require the same permissions

The Knowledge Base Learning Server also requires the same permissions as the other [Kofax Capture modules](#).

In addition, both the Knowledge Base Learning Server and the Knowledge Base Learning Service must have Full Control over the configured online learning directory. This path is configured on the General tab of the Project Settings.

Thin Client Server Permissions

In order for logging to successfully record errors for the Thin Client Server, the log file location (C:\logs\MyLog.txt by default) requires that the configured IIS user (IIS_USR by default) has Full Control over the log file directory.

Additionally, the user account running the Application Pool in IIS needs the same permissions as any user account running a Kofax Capture module.

Kofax Transformation - Synchronization Tool Permissions

All actions performed by the Synchronization Tool require the same permissions as Kofax Capture Administration. If the user has the necessary permissions to access Administration, then they can access the Synchronization Tool.

Thin Client Server Installation Guide Updates

The following changes will be made to the *Kofax Transformation Modules Thin Client Server Installation Guide* in the next Kofax Transformation Modules full release.

New: Thin Client Server Configuration Options

The following new Web.config configuration options are now available for the Thin Client Server.

HandleImagesBitonal

If this option is set to TRUE, color images are converted to black and white. This decreases the amount of memory used to load a batch because color images require more memory than black and white images.

EnableLoginAutoComplete

When the value for this option is set to On, autocomplete for the User ID field on the log on page is available. This means that if a user types one or two letters, suggestions are provided so that the user can select their cached User ID rather than type it again. Change the value for this option to Off so that users are not presented with a list of suggestions.

Note Once the value for this option is set to Off, each user needs to clear their browser cache to remove any saved User IDs.

These configuration options are available for use but they are not in the Web.config file automatically for Kofax Transformation Modules 6.0.1. In order to use these options, they must be added to the Web.config file manually. Add the following content to `Kofax.KTS.Services.Properties.Settings` in the `applicationSettings` section.

```
<setting name="HandleImagesBitonal" serializeAs="String">
  <value>False</value>
</setting>
<setting name="EnableLoginAutoComplete" serializeAs="String">
  <value>On</value>
</setting>
```