



Release Notes

Ephesoft Enterprise Version 4.0.6.0

July' 2016

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Ephesoft, Inc., 23041 Avenida De La Carlota, #100, Laguna Hills, CA 92653

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1. Introduction

The Enterprise 4.0.6.0 Release Notes describe the enhancements and new features introduced in the package, as well as workarounds for possible issues. Use these release notes for reference as you become more familiar with the product, and for future reference.

2. Document Overview

To help you understand what's new and what is fixed relative to the current release, the 4.0.6.0 release notes have been structured so that you read only the sections relevant to you.

The enhancements have been categorized based on various parameters so that the functionality of the current release is compared to the version you are upgrading from.

3. Release Charter

#	Release Type	Category	Description
1	New Features	System	<ul style="list-style-type: none"> Language Support Database Support Web Services Clustered Configuration
		Security	<ul style="list-style-type: none"> Encryption in Linux Platform
		Capture	<ul style="list-style-type: none"> Advanced Web Scanner Service Pull in Header Information
		Classification	<ul style="list-style-type: none"> Advanced Barcode Reader
		Extraction	<ul style="list-style-type: none"> Advanced Barcode Extraction Auto-suggestion for Regex Fuzzy DB Revamp
		Review/Validation	<ul style="list-style-type: none"> Line Item Matching
		Export	<ul style="list-style-type: none"> Export documents to SharePoint 365
		Reporting	<ul style="list-style-type: none"> Reporting Revamp
		UI	<ul style="list-style-type: none"> Batch Class Instance UI
2	Improvements	System	<ul style="list-style-type: none"> Licensing Issue during upgrade from 4.0.2.0
		Security	<ul style="list-style-type: none"> Support for FIPs compliant cryptographic algorithm
		Capture	<ul style="list-style-type: none"> Editable Default Profile Parse Filenames in multiple Languages Test CMIS Support PDF Import
		Classification	<ul style="list-style-type: none"> Dropdowns in Document Assembler Plugin Separation Algorithm of DA Workflow based Test Classification
		Extraction	<ul style="list-style-type: none"> Alternate values in learned file names Advanced Fixed Form Extraction configuration Workflow based Test Extraction
		Export	<ul style="list-style-type: none"> Append parameters for DB Export
		User Interface	<ul style="list-style-type: none"> LIM UI
3	Bug Fixes		

4. Appendix A - NEW FEATURES

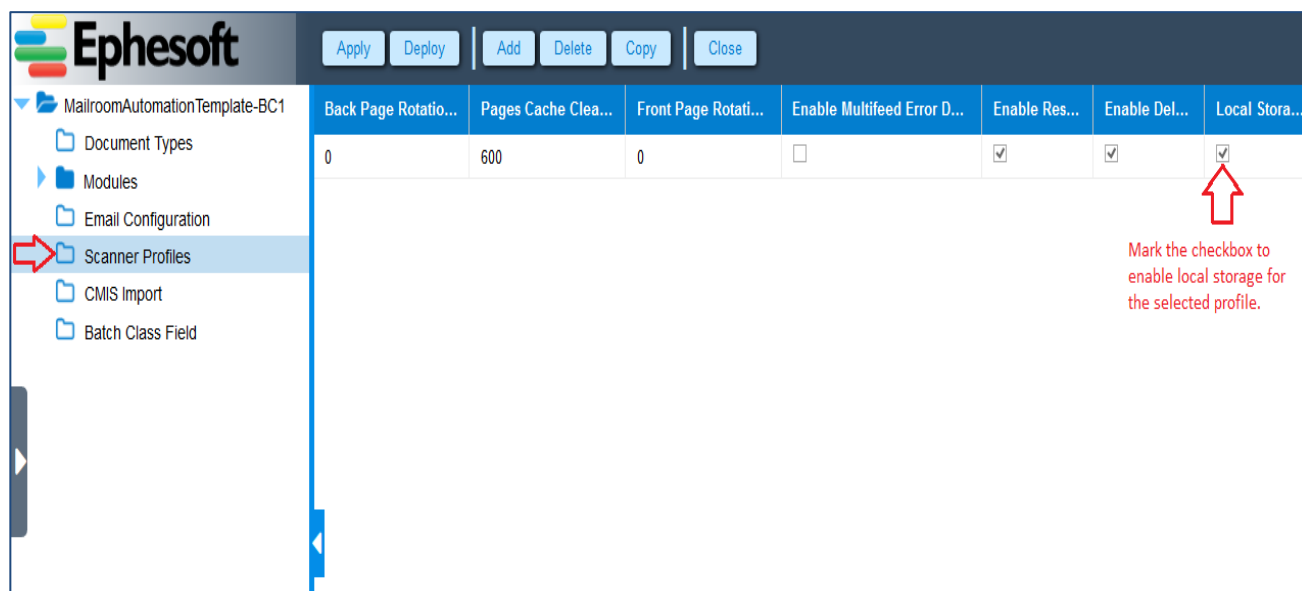
System
<ul style="list-style-type: none">• Language Support Multilingual support is provided. Ephesoft Enterprise now supports English, German, Dutch, French, Spanish and Turkish locales.
<ul style="list-style-type: none">• Database Support SQL Server 2014 is supported.
<ul style="list-style-type: none">• Web Services New web services are introduced, one for Advance Barcode Engine and four web services for Fuzzy DB.
<ul style="list-style-type: none">• Clustered Config: Set server.instance.pick.capacity dynamically via database User can select auto mode for Pickup and Max Process Capacity (number of batches to be processed at a time.) Once the auto mode is selected, the Max Process Capacity will be set automatically for optimum throughout based on the number of cores on the machine, while Pickup Capacity will be the sum of all active servers' execution capacity.
Security
<ul style="list-style-type: none">• Encryption in Linux Platform Existing Functionality - Encryption is supported only for Windows platform. New Functionality - Along with Windows, the application will also support encryption for Linux platform.

Capture

• Advanced Web Scanner Service

Existing Functionality - Applet based support.

New Functionality - The application is integrated with an Advanced Web Scanner Service. A user can download the Service and configure the switches to store the scanned images on the local system or server (TIFF files will always be stored on the server as they are used for OCR processing). Another switch can be configured for backward compatibility i.e. Applet based support.



• Pull in Email Header Information

Existing Functionality - No way to access Email Header information during mail import.

New Functionality - The user can now access the Email Headers for the batches executed via Mail-Import functionality. This information would be available in the batch.xml of the batch. Also, each page of the batch would hold a reference in the batch.xml to the Email of which it is a part.

Configurations required - User needs to set properties in the mail-import.properties to fetch the header information.

1. **dcma.mail.header_switch** - The value of this property decides whether to pull in header information or not. By default, the value is set as ON i.e. the header information is pulled by default.
2. **dcma.mail.required_headers** - The value of this property holds the list of headers that needs to be fetched separated by semicolon.
For example, dcma.mail.required_headers=Subject;To;From.
If you want to fetch all the headers from the mail,
then set the value of this property to ALL (dcma.mail.required_headers=ALL).

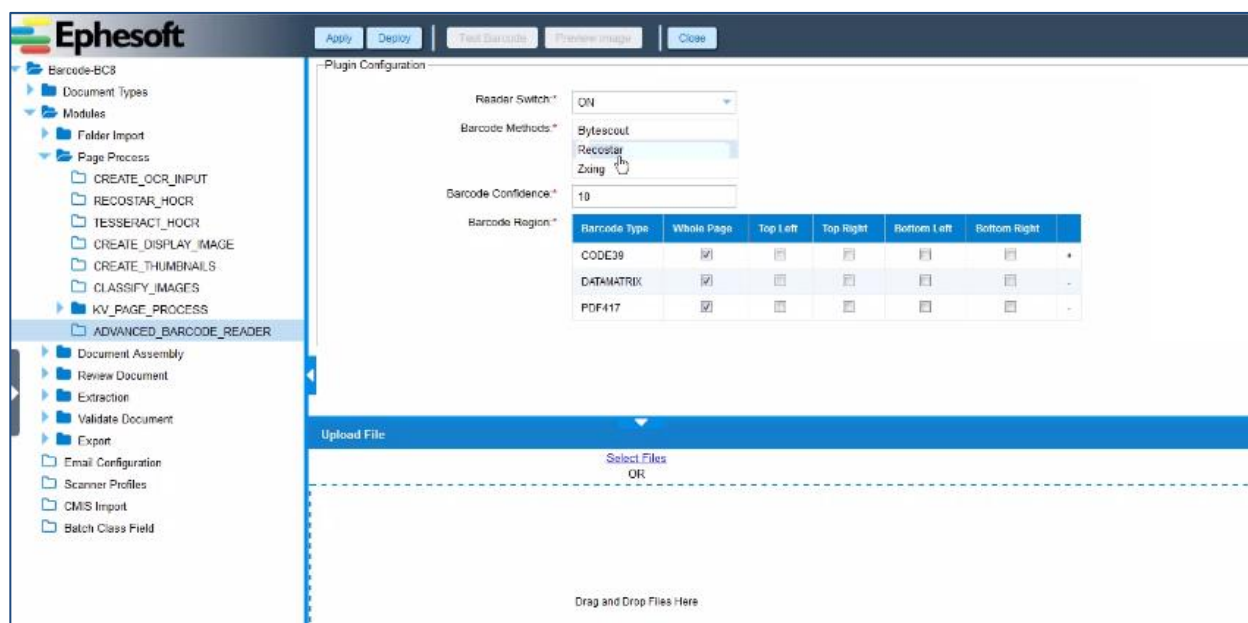
Classification

- **Advanced Barcode Reader**

The Advanced Barcode Reader Plugin is introduced for improved classification results. User can configure the advance plugins for Barcode Reader and remove the existing plugin. The user can specify the barcode Methods, Types and Region. Users can add/delete or reorder the Barcode Methods and Type by right-clicking on the list; users can also test the configuration on a single page Image.

The following Barcode Engines are available for different operating systems in default order which can also be configured:

- **Windows:** Zxing, Bytescout (JNI API), and Recostar.
- **Linux:** Zxing, Bytescout (JAVA), and Nuance.



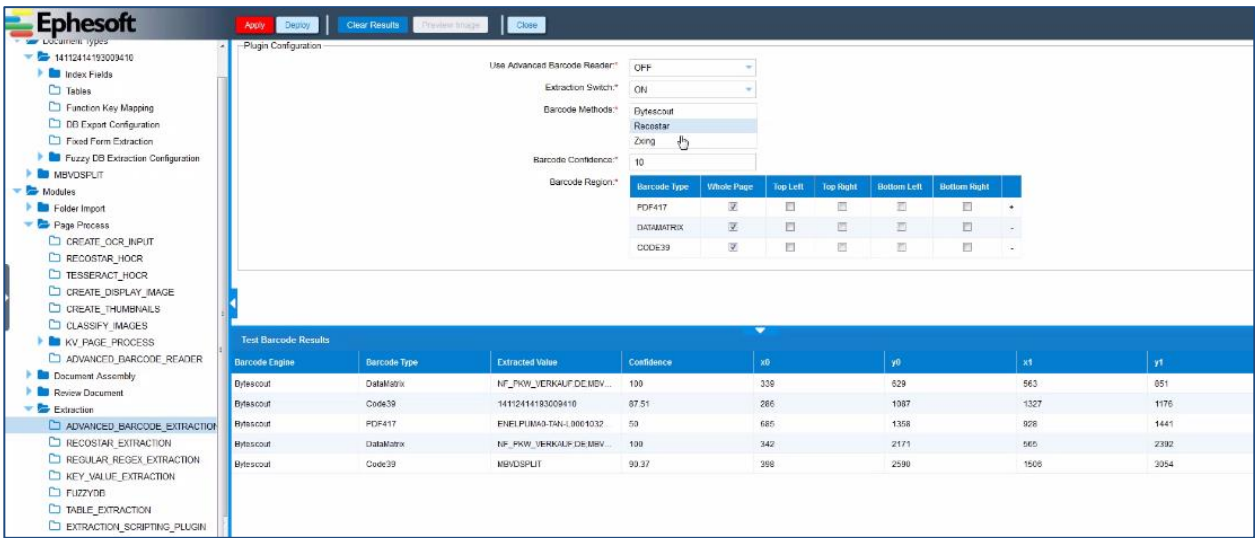
Extraction

Advanced Barcode Extraction

The Advanced Barcode Extraction Plugin is introduced for improved extraction results. The user can configure the advance plugins for Barcode Extraction and remove the existing plugin. He can import the same configurations of Barcode Reader in the defined preference, can also change it if required and can specify the Barcode Methods, Types and Region. Users can add/delete or reorder the Barcode Methods and Type by right-clicking on the list.

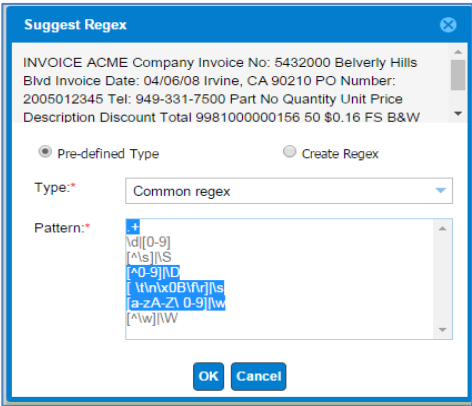
At the index level you can define Barcode Extraction Rules, in case there exist multiple barcodes of same type in a document and also test the configuration on a single page Image. The following Barcode Engines are available for different operating systems in default order which can also be configured:

- **Windows:** Zxing, Bytescout (JNI API), and Recostar.
- **Linux:** Zxing, Bytescout (JAVA), and Nuance.



Auto suggestion for Regex

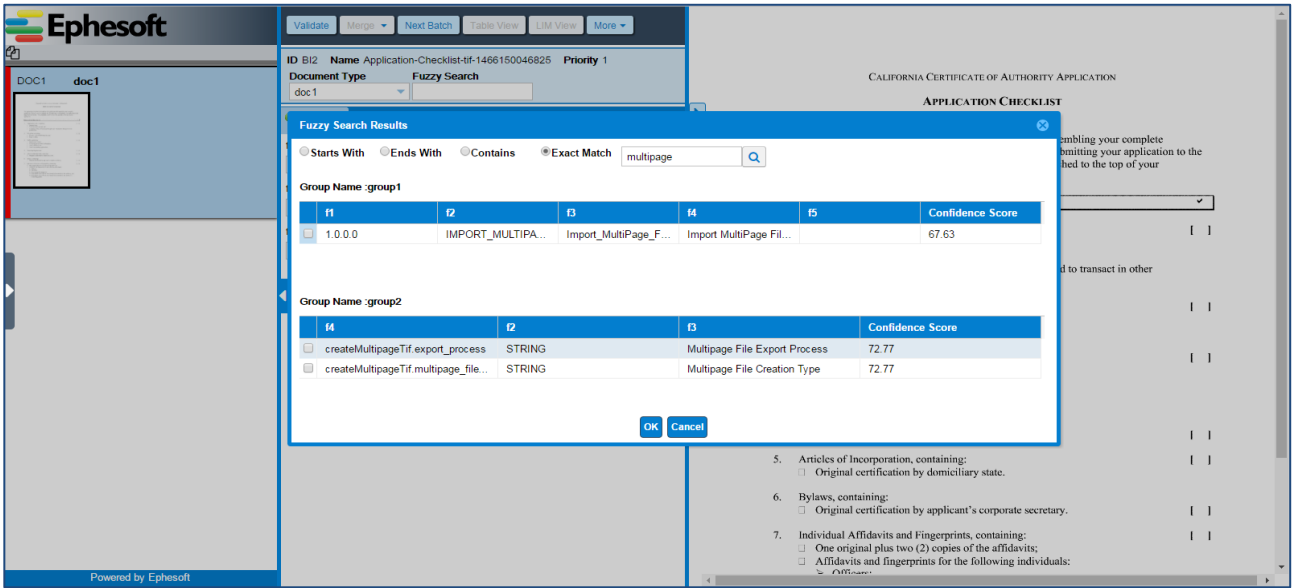
On the Advanced KV Screen, the application will suggest regular expression (regex) for the key-value pattern based on the type of data selected. If the suggested regex pattern is not the best fit, user can create custom regex (define own regex) which gets added to the regex pool.



Fuzzy DB Design Revamp

- In the existing system, all the configurations are done at the document level, but the mappings are stored in a database at plugin level which resulted in many issues:
- Mappings were not copied when a document type is copied.
 - Mappings were not imported/exported when a batch class or document type is imported/exported.
 - On removing fuzzy DB plugin from the workflow, all mappings were removed.
 - During upgrade from Batch class level to Document level, the properties were not migrating properly.

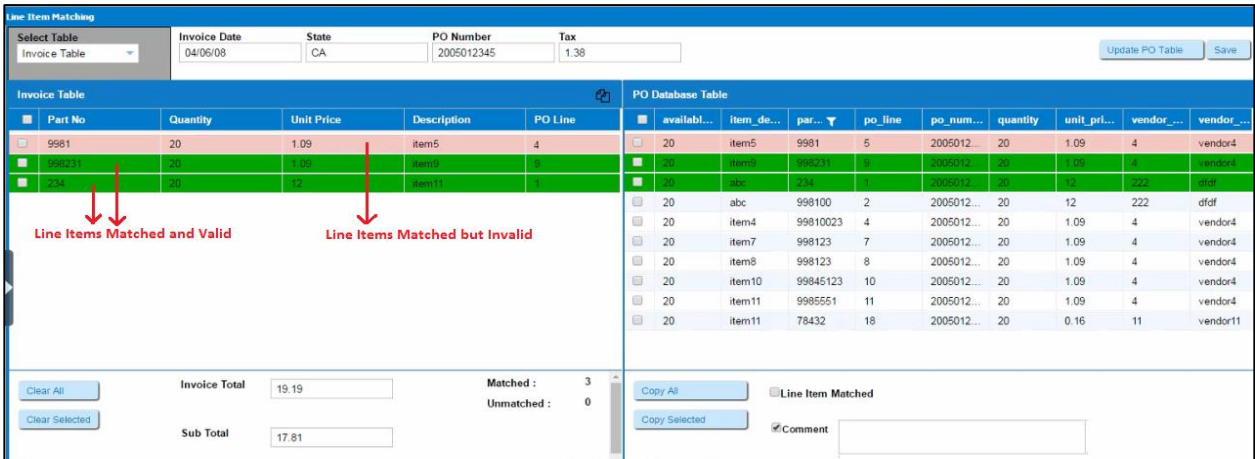
All the Fuzzy DB configurations are now moved from Plugin level to Document level.
Along with document level, field level search and extraction is also supported.



Review/Validate

Line Item Matching

Inbuilt functionality for Line Item Matching (LIM) on Validation Screen to verify Invoice against the Purchase Order. Based on validation the document will be marked as valid or invalid on the Validation Screen as Red/Green. The user can view both Invoice and PO data in the LIM Screen and can manually validate the data. Along with the UI option, user can also use the keyboard shortcut (new) to navigate to the LIM Screen. The keyboard shortcut to access the LIM Screen is **Ctrl + Shift + Y**.



Export

- **Admin – Export documents to SharePoint 365**

A new plugin "SHAREPOINT_365_EXPORT" is introduced for exporting documents to an online SharePoint repository. Users can configure the export for each Document Type and can change connection settings from the application interface. The SharePoint connection can be setup both online as well in offline mode. The documents (PDF, TIFF or Both) can be exported to the online SharePoint repository along with the configured meta-data. Also, the failed export (in ERROR state) can be restarted to resume the export. Resuming the export will override the already exported data to avoid duplicity.

Share Point Configurations

Document and Connection Type

Document Types:* Invoice

Connection Type:* ☐ Existing ☒ New

Connection Details

Connection Name:* SpConnectionTest

Share Point URL:* https://nagg.sharepoint.com

Username:* *****

Password:* ***** Connect

Export Settings

Sub Web / Library:* /SharePointTesting

Relative Folder Path:* Shared Documents/SpTesting/

Artefacts for Export:* PDF Fetch Metadata

Mapping Metadata Configurations

Index Field: Date

Share Point Metadata: test2

Add Mapping Remove Mapping

Mappings

Date <<<<<<>>>> test2 ✓

Reporting

- **Reporting**
Performance is improved:
 - New Purging mechanism
 - Clean-up w.r.t to Advanced Reporting
 - Destination of Activity tables can now be changed during database cleanup
 - Version Upgrade
 - Transactional behavior for Maria DB/MySQL
 - Merge of Linux & Windows
 - UI enhancements

User Interface

- **Batch Instance UI enhancements**
On Batch Instance Screen, the Batch Execution Details are made selectable. User can now select and copy the details if required.
On Review Validate Screen, the visibility of the Batch Name text (in the buttons) is auto-adjusted as per the screen resolution.

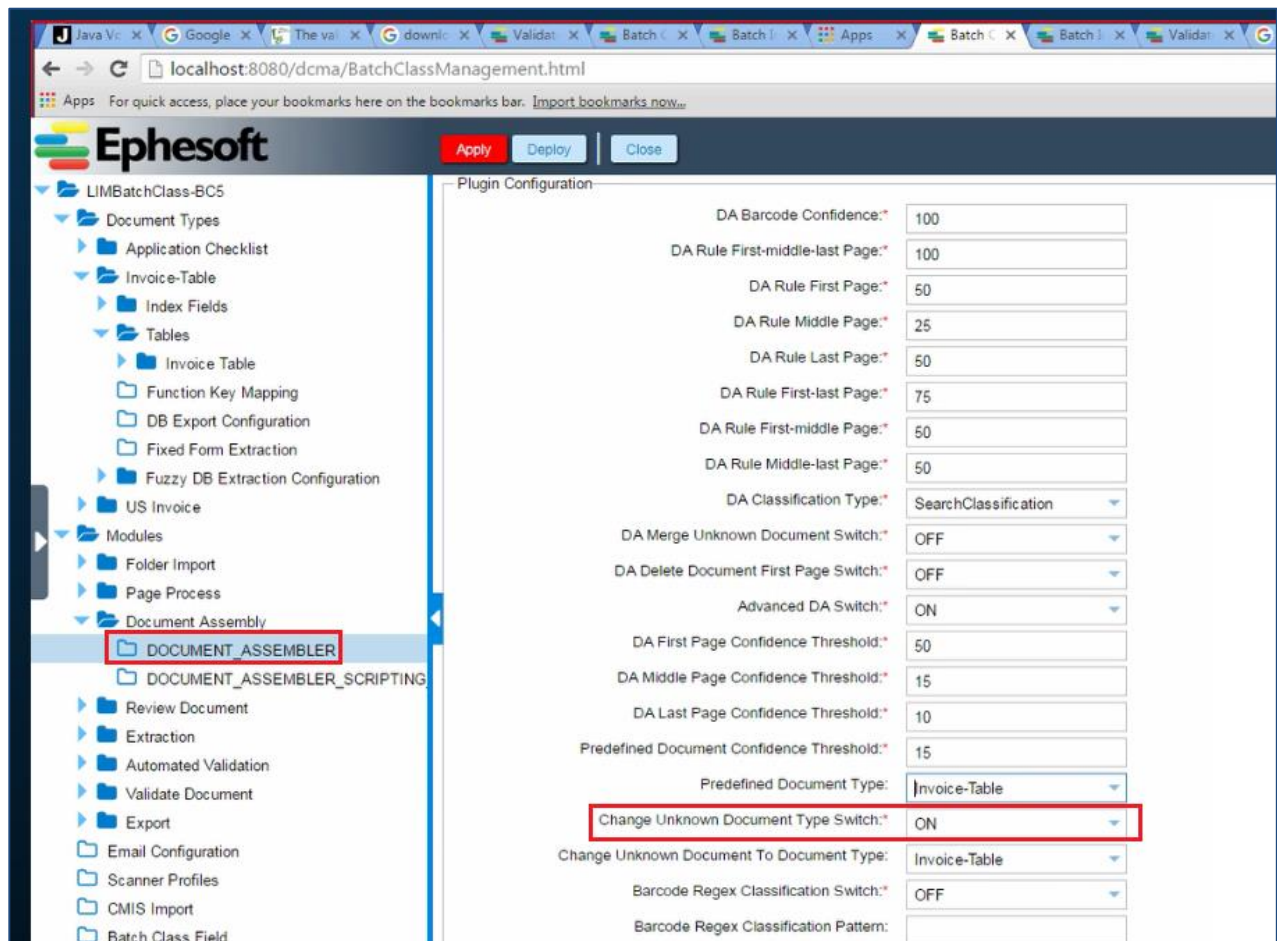
5. Appendix B - IMPROVEMENTS

System
<ul style="list-style-type: none"> Licensing Issue during upgrade from 4.0.2.0 During Upgrade from 4.0.2.0, the data in the license file (.lic file under license-util folder) was lost and did not contain complete information which was causing issues upon installation.
Security
<ul style="list-style-type: none"> Support for FIPs compliant cryptographic algorithms in Recostar FIPs compliant algorithms for encryption and decryption are introduced in RecostarPlugin.exe.
Capture
<ul style="list-style-type: none"> Batch Class Management – Editable Default Profile Users can edit the Default Profile, but the name of the Default Profile will remain un-editable. The selected Scanner Profile for a Batch Class will be stored in the cookies and whenever a Batch Class is changed from the dropdown list, the last selected profile for the corresponding Batch Class will get auto-select. The values are reset on clearing the cookies.
<ul style="list-style-type: none"> Parse filenames in multiple languages The application will also support non-English files names. In order to use this functionality, the user has to modify the database tables once before running the batches.
<ul style="list-style-type: none"> Batch Class Management – Test CMIS Import Users can now test the CMIS Import configuration to verify the connection settings before executing the batches.
<ul style="list-style-type: none"> PDF Import During PDF Import, the application was not working properly if the user drops a PDF file of large filename into the Import folder. The PDF files were going into Error state.

Classification

- **Document Assembly**

In DOCUMENT_ASSEMBLER Plugin configuration, drop-down lists are introduced instead of a text-box. Previously, users had to manually enter the Document Type in the text-box which may not be correct. Now, a drop-down list of the pre-configured Document Types appears for the fields 'Change Unknown Document to Document Type' and 'Predefined Document Type'.



- **Separation Algorithm of DA**

Existing Functionality - The separation results were not proper in some cases; pages were merged even if the document type was different. And after merging, the final documents were not correctly assigned to the corresponding Document Type.

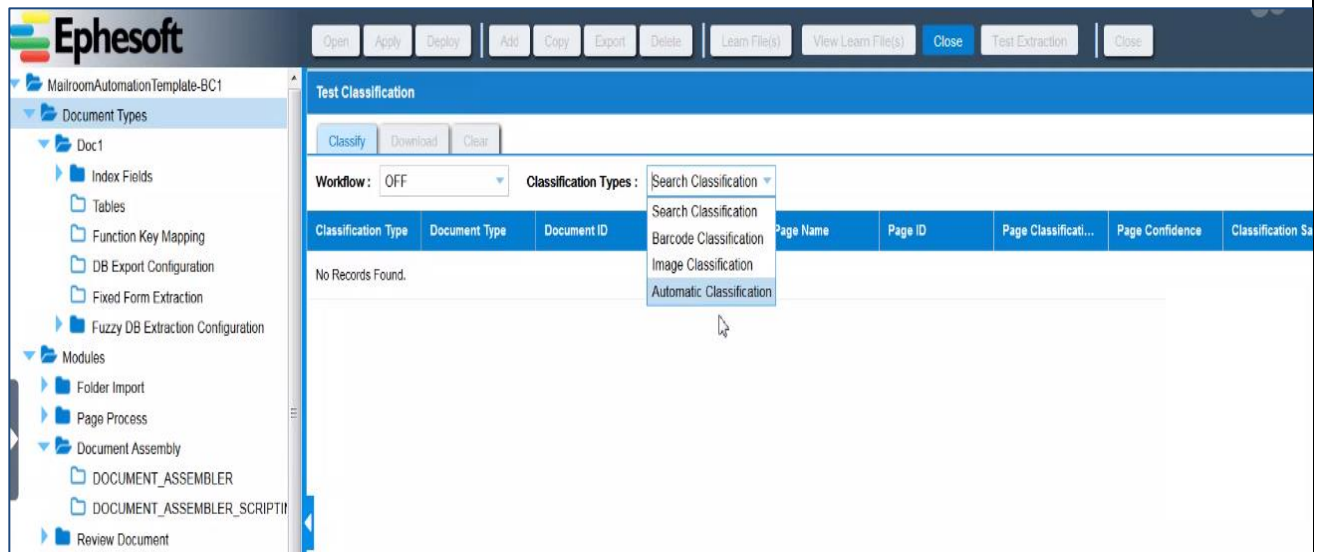
New Functionality - The Separation Algorithm of Document Assembly (DA) is improved. The documents are now properly merged and classified.

- **Workflow based Test Classification**

A Workflow Switch is provided to test the Classification results for an input document before executing the batches.

If the workflow switch is set to ON, then 'Classification Types' list box will be disabled and the results will be generated as per the batch class configurations.

If the switch is set to OFF, then the results will be generated based on the manual configurations done in the 'Classification Types' list box on the UI.



Extraction

- **Alternate Values in Learned File Names**

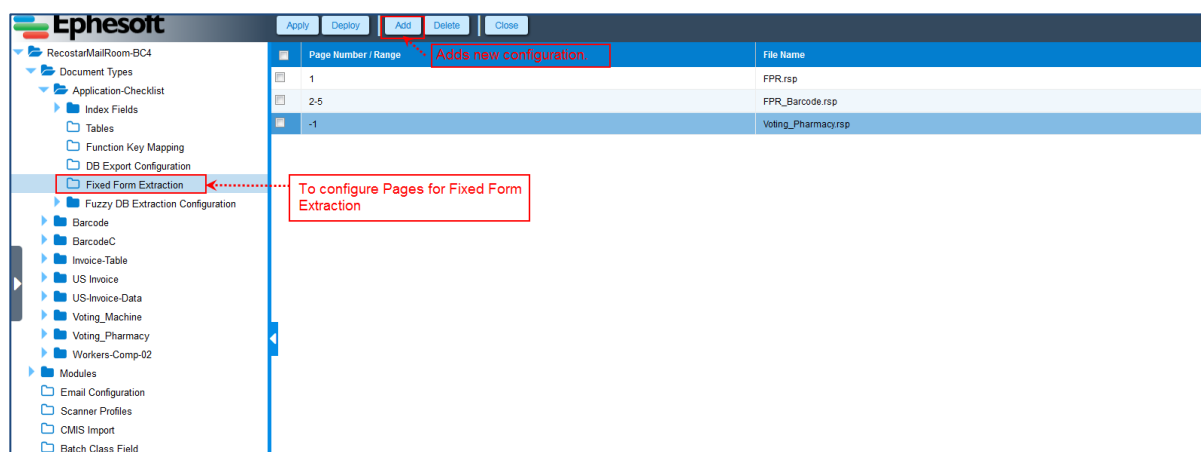
The Learned File Names are now available in the Alternate values of PageLevelFields in the batch.xml file.

• Advanced Fixed Form configurations

Existing Functionality - In the case of Recostar extraction, the RSP file can be specified for a maximum of four pages. And the configuration is done at the Document Type grid while adding a new Document or editing an existing Document.

New Functionality - The RSP file can now be specified for more than four pages. Users can configure the RSP file for a specific Page (single page), Range of Pages (multiple pages) and Last Page. The rules for configuring the Page Number are:

- Specific Page: 2 | abc.rsp
- Range of Pages: 4-10 | xyz.rsp
- Last Page: -1 | abc.rsp (The last page is always configured using -1)

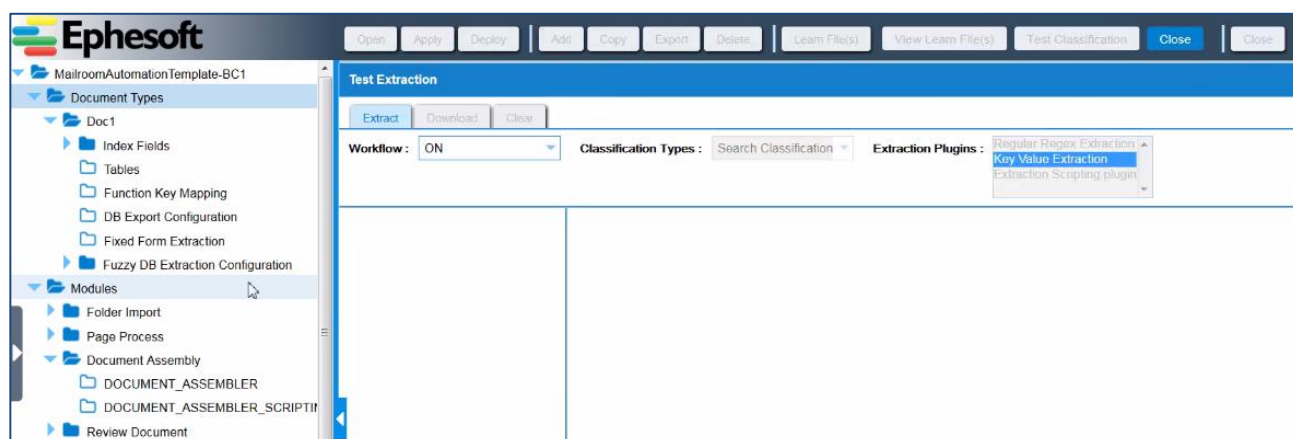


• Workflow based Test Extraction

A Workflow Switch is provided to test the Classification results for an input document before executing the batches.

If the workflow switch is set to ON, then 'Classification Types' list box and 'Extraction Plugins' multi-select list-box will be disabled and the results will be generated as per the batch class configuration. The classification type will be picked as configured in Document Assembler plugin.

If the workflow switch is set to OFF, then the results will be generated based on the manual selection for 'Classification Types' and 'Extraction Plugins'. The required plugin properties for extraction will be picked as per the configurations in the batch class. Please note that the extraction plugin multi-select list box will contain only those plugins that are being configured in the batch class i.e. active plugins for the selected batch class.



Export

- **Append parameters for DB Export**

User can now append optional parameters to be exported in a single table column during DB Export.

User Interface

- **LIM Screen**

- Clicking on an icon in the tool bar pops out the image.
- Data Source is configurable.
- New Button for Line Item Matching on Validation screen.
- Scroll bars appear on resizing the screen.
- Other filters are also supported now.

The screenshot displays the Ephesoft LIM (Line Item Matching) interface. On the left, there's a sidebar with document thumbnails labeled 'DOC1 Invoice-Table' and 'DOC3 Invoice-Table'. The main area is titled 'Ephesoft' and contains a 'Validate' button, a 'Merge' dropdown, a 'Next Batch' button, a 'Table View' button, and a 'LIM View' button (highlighted with a red arrow and the text 'Click to open LIM view'). Below this, there's a 'Document Type' dropdown set to 'Invoice-Table' and a 'Fuzzy Search' input field. The central form is for 'Group 1' and includes fields for 'Invoice Date' (04/06/08), 'Invoice Total' (19.19), 'State' (CA), 'City' (Irvine), 'PO number' (2005012345), 'Sub Total' (17.81), 'Tax' (1.38), and 'Shipping'. A 'Comment' field and a 'Fee' field are also present. On the right, an 'INVOICE' summary is shown, including 'ACME Company' details, 'Invoice No: 5432000', 'Invoice Date: 04/06/08', and 'PO Number: 2005012345'. Below this is a table with columns: Part No, Quantity, Unit Price, Description, Discount, and Total. The table contains one row: 9981000000156, 50, \$0.16, FS B&W Card Stock, 0.00%, \$8.00. A QR code is displayed below the table. At the bottom right, a 'Thank you for your business. MAIN Corporate Office' message is shown.

Part No	Quantity	Unit Price	Description	Discount	Total
9981000000156	50	\$0.16	FS B&W Card Stock	0.00%	\$8.00

Sub Total:	\$17.81
Tax 7.75%	\$1.38
Total	\$19.19

6. Appendix C - BUG FIXES

JIRA ID	Bug Description
EEN-3114	During Table Extraction, if there is partial match of data using 'Regex Extraction', in such cases, the partial matched data was get extracted rather than whole word.
EEN-3032	The web service 'ocrClassifyExtract' returns exception when FuzzyDB related fields are used. The Code has been improved for fetching the HOCR Switch.
EEN-3017	There was an issue while fetching the Column Names for Fuzzy DB Extraction when the user configures Database connection with windows authentication.
EEN-3001	<p>Issue: Even if the application property of Zip switch is set as True, there exists an unzipped copy of the batch.xml file in the ephesoft-system-folder\BI#.</p> <p>Resolution: Problem was identified in the script method writeToXML() which was not govern by zip_switch switch. Same has been corrected in default batch classes BC1 & BC2.</p>
EEN-2992	Handling the barcodes extracted which contains non-XML complaint letters in Ephesoft.
EEN-2954	Default Document type name for Unknown Docs was not working when document type name does not exist.
EEN-2930	The application was extracting partial data in case of using AND operator in Extraction Type.
EEN-2929	Corrupted Searchable PDF's were generated due to the presence of Vertical Orientation of text in PDF file.
EEN-2927	In Table Extraction, the data with given word gap was not getting extracted properly for any given column header.
EEN-2926	The application will now give priority to TiffToPdf converter thread over the Recostar Converter thread.
EEN-2924	Existing key functionality in KV was not working properly.