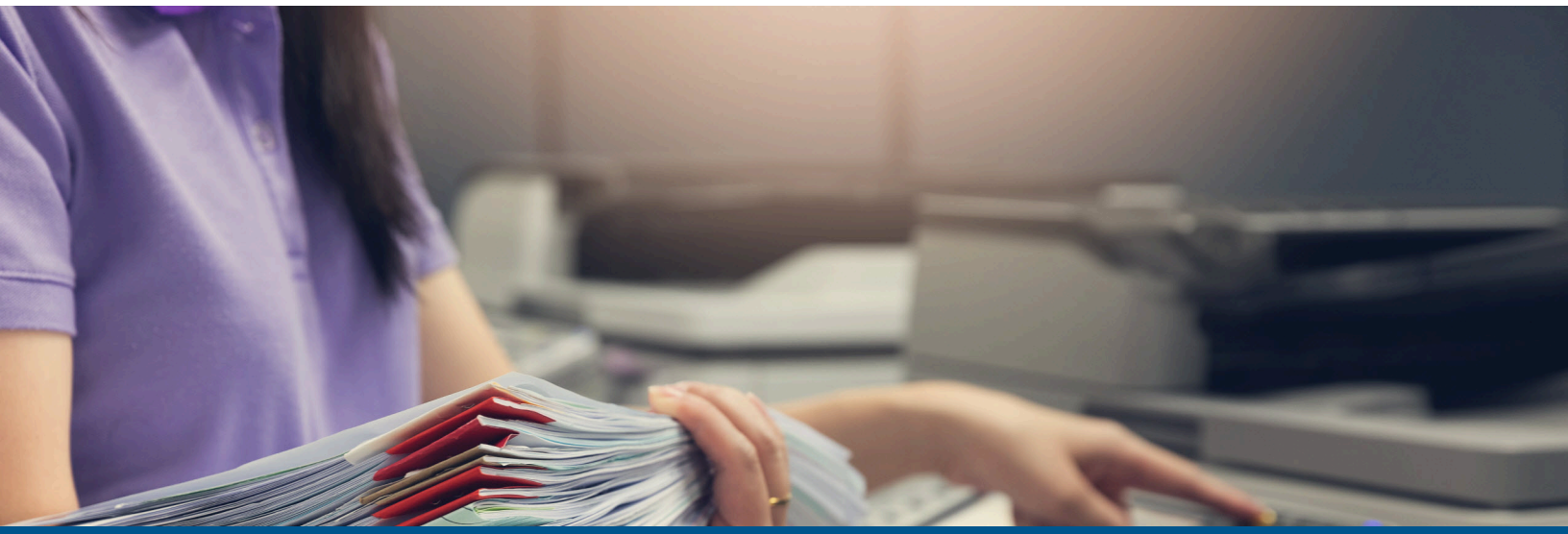

Ephesoft Transact
Getting Started Guide

Version: 2023.1.00

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EPHESOFT
a KOFAX company

Table of Contents

Preface

Ephesoft Transact uses context-driven productivity and open-source technologies to scan and extract data from documents that arrive in formats such as paper, fax, and email attachments. Transact automates the end-to-end document processing workflow with minimal operator interaction.

Transact is a web-based application that can be installed on-premises or hosted in the cloud in a single or multi-tenant architecture. Transact features and functionalities are designed for three types of user roles:

- Super administrators complete system-level operations, installations, and system configuration.
- Administrators perform high-level configurations used to classify documents and extract the desired data from those documents. They also define Transact integration with client databases and other systems or tools.
- Operators review and validate the scanned/imported documents.

This document provides a brief overview of Transact. To learn more, see the Ephesoft Transact documentation site:

https://docshield.kofax.com/Portal/Products/Transact/2023.1.00-oismpn77w5/Transact.htm

Chapter 1

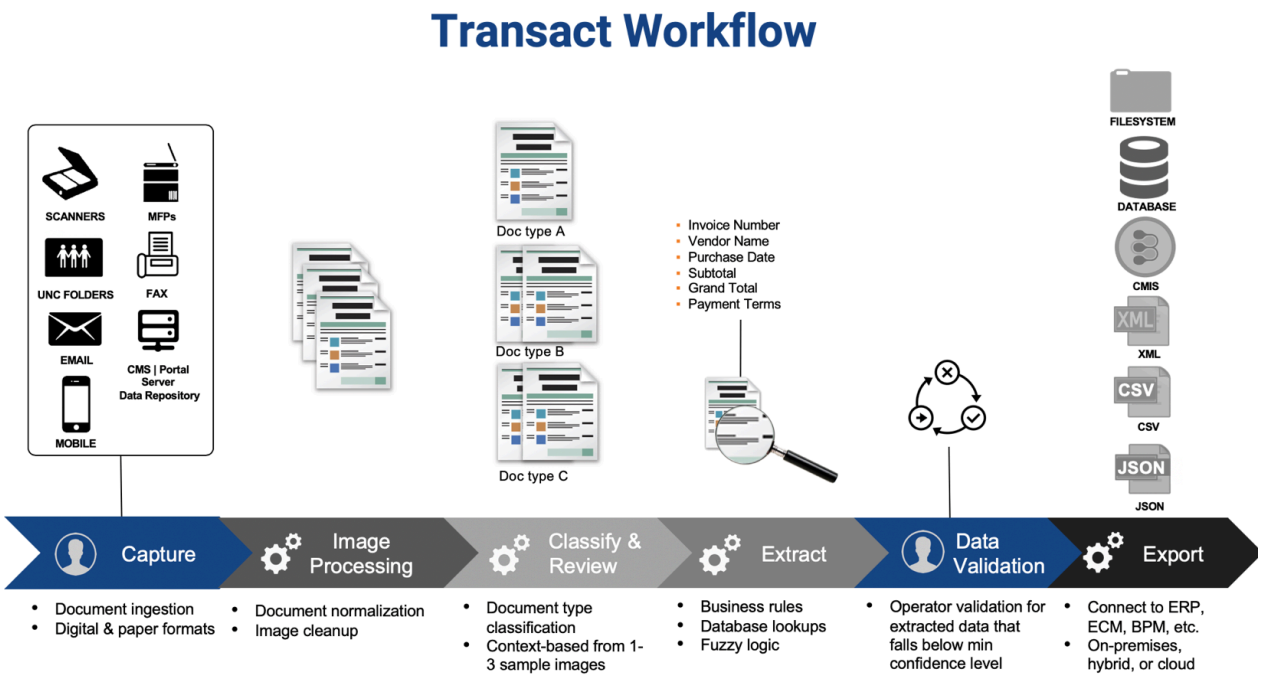
Ephesoft Transact workflow

Each step in the Transact workflow is built upon the following key functionalities:

- Plugins are each independently responsible for a specific document capture operation.
- Modules group specific collections of plugins based on their collective document capture operation.

For example, the Extraction module includes plugins that extract metadata using the following methods: free form, zonal OCR/ICR, and table/line item.

The following diagram demonstrates the basic stages of the Transact workflow.



The workflow follows these steps.

1. Documents are imported by the Import module plugins.
2. Each page is analyzed by the plugins during page processing.
3. Document boundaries are defined by the plugins in the Document Assembler module. Operators can review the document classification results in the Document Review.
4. Plugins in the Extraction module extract targeted data.

5. Operators can validate the extracted values during data validation.
6. The Export module exports documents and metadata to their respective destinations.

The workflow uses a combination of automatic and manual modules.

Automatic workflow stages:

- Document Capture
- Image Processing
- Data Extraction
- Data and Document Export

Manual workflow stages:

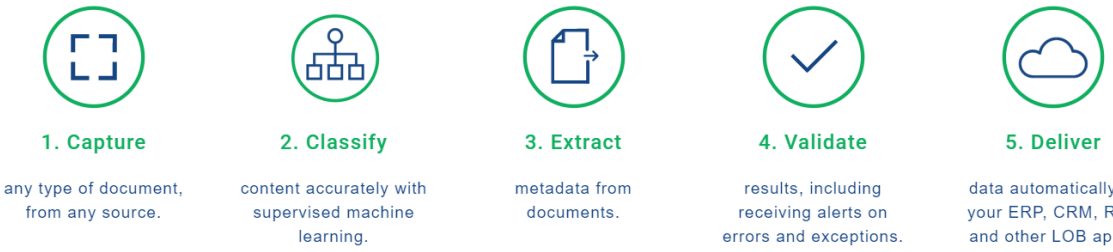
- Document Classification Review
- Data Validation

Chapter 2

Quick reference

This quick reference chapter provides a brief overview of Ephesoft Transact features and terminology, user roles, and main operating interfaces.

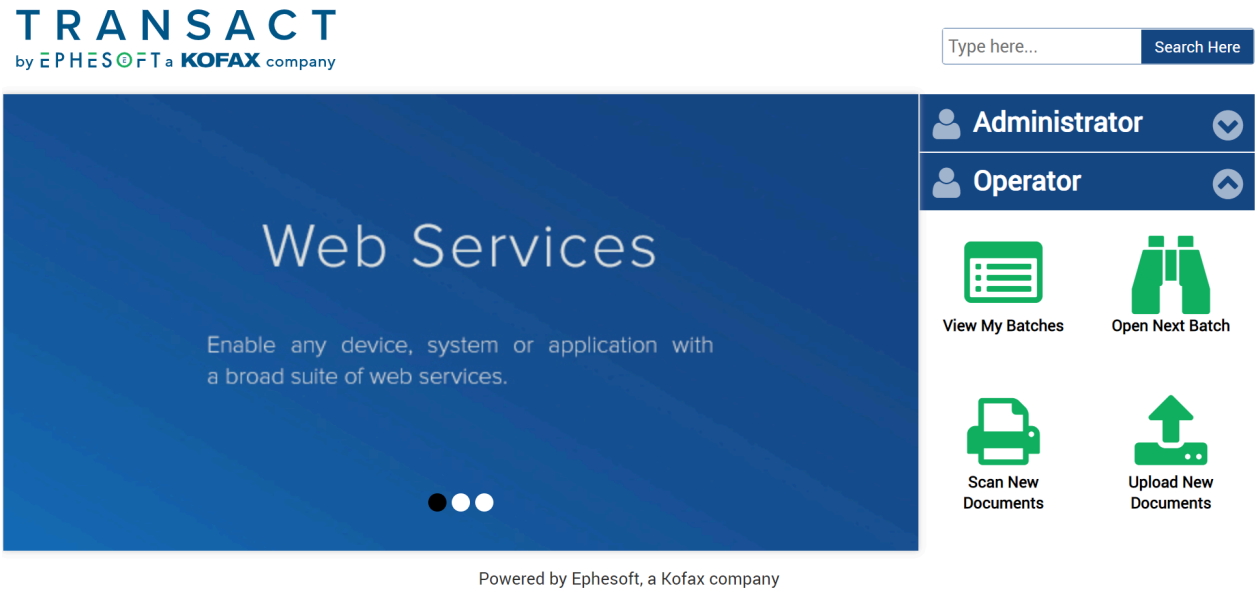
Transact captures document data using context-driven productivity and open source technologies, and can operate both on-premises and in the cloud. Transact processes incoming documents and extracts data in the following workflow:



For a list of workflow terms and definitions, refer to Key terms and definitions.

Transact home page

Upon navigating to the Transact host URL, the home page appears.



The home page includes resources and navigation menus to access Transact as an administrator or operator. Additional resources are listed at the bottom section of the home page.

User roles and login screens

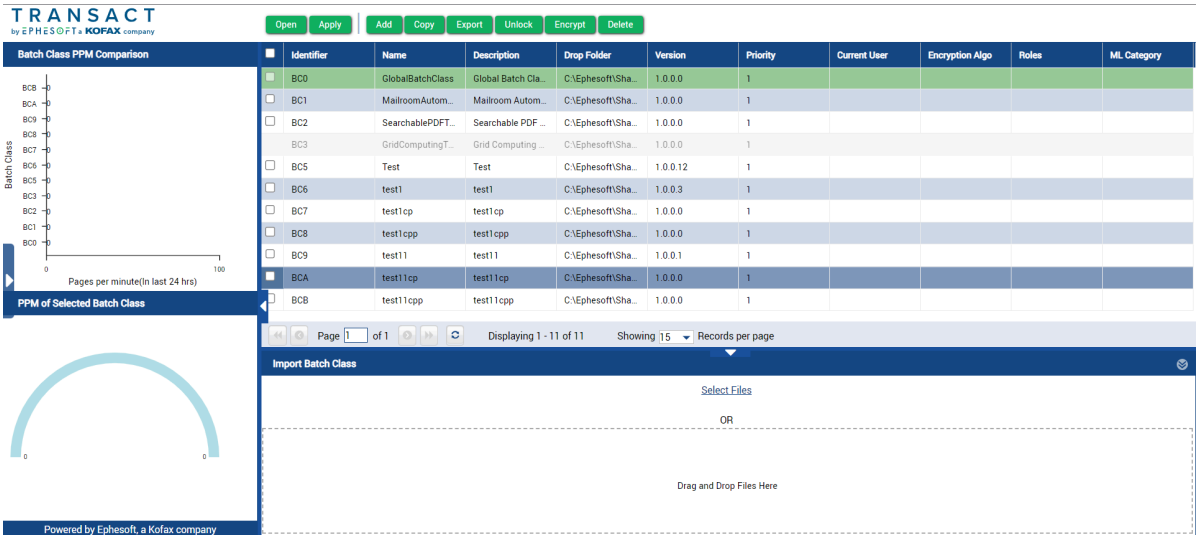
The following table outlines the three supported user roles and their responsibilities.

User role	Responsibilities
Super administrator	Manages initial deployment, cloud configuration, security configuration, and tasks associated with back-end operations and setup.
Administrator	Performs ongoing administrative functions with batch class management and batch instance management.
Operator	Uploads batches for processing, reviews document type classification results in the Review interface, and reviews data extraction results in the Validation interface.

1. On the right side of the home screen, select an operation icon under either the **Administrator** or **Operator** menu to access the login page.

   The icon selected determines the page that displays after login.
2. Enter your login credentials.

   Your selected page displays upon login. As an example, the **Administrator** > **Batch Class Management** screen is shown below.



3. To navigate to other screens, hover over the lefthand tab to display the navigation menu.

Administrator functions

Administrators are responsible for creating, configuring and maintaining batch classes, and managing batch instance processing.

Access to System Configuration is restricted to Transact users with super administrator permissions.

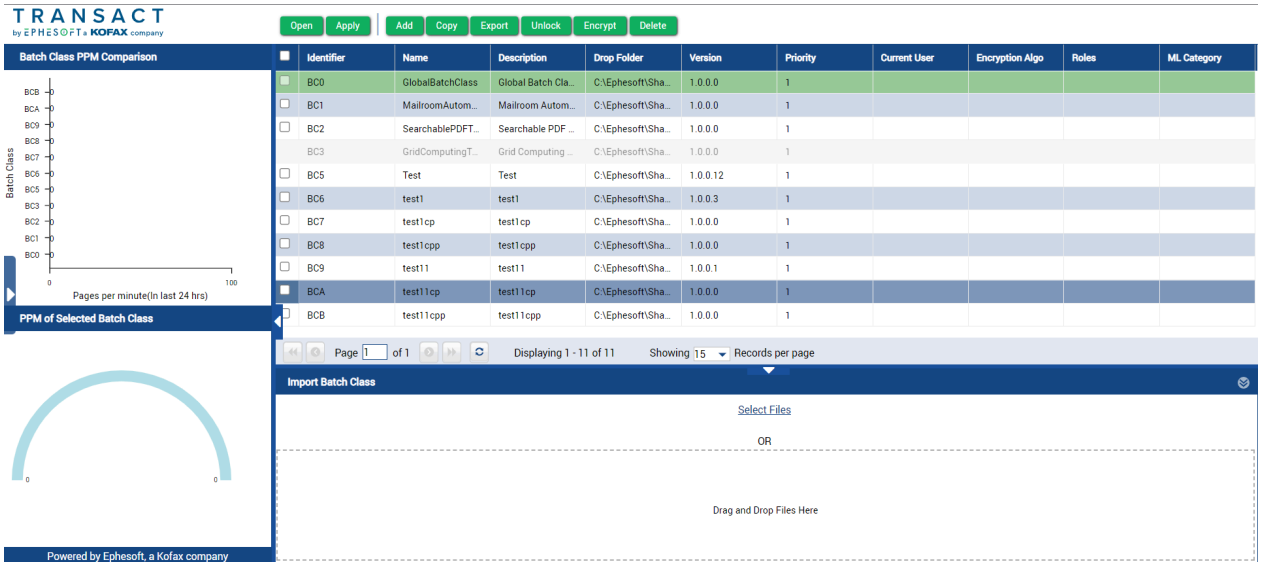
The following table provides a brief overview of each administrator interface and related functions.

Feature	Overview
Batch Class Management	Primary configuration area where workflows, classification rules, and extraction rules are configured and managed.
Batch Instance Management	Dashboard that displays all batches being processed, as well as a real-time status per batch in the overall workflow. Administrators can also view which batches are currently locked for use by other users.
Folder Management	Web browser access to specific areas of the Transact server, to allow uploads and downloads of files without logging in to the server. Stores document images used as part of training the system.
System Configuration (Super Administrator only)	Administrators can use the System Configuration interface to manage user security, database connections, licensing, security tokens and keys, and the regular expression pool.

Feature	Overview
Reports	Reporting dashboard that provides access to standard and advanced reports.

Batch class management

The Batch Class Management screen displays all existing batch classes and enables administrators to add, remove, and configure batch classes. The configuration options include creating document types, index fields, and extraction rules.



Batch class configuration

Batch classes provide the global settings and configurations from which all additional operations in the Transact workflow are derived.

To configure batch classes, navigate to the Batch Class Management screen.

- Click **Add** to create a new batch class and view the configuration screen.
- To view and edit any existing batch class configurations, double-click the batch class name or select the check box for the batch class and click **Open**.

The following screen illustrates the general layout of the batch class configuration screen.

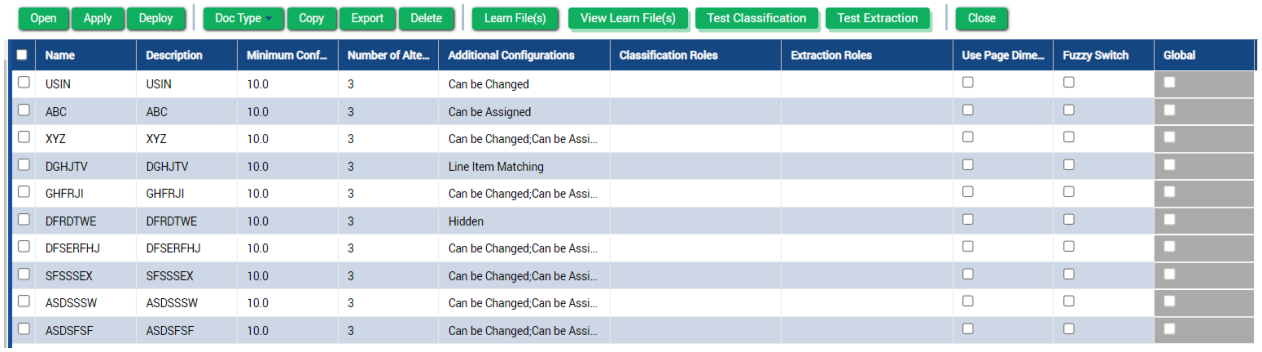
For more details on batch class configuration options, see Key terms and definitions.

Document types

The Document Types screen displays all document types created within a selected batch class.

To access Document Types from a batch class, locate the batch class name in the left navigation tree and expand the **Document Types** node.

The following screen appears.



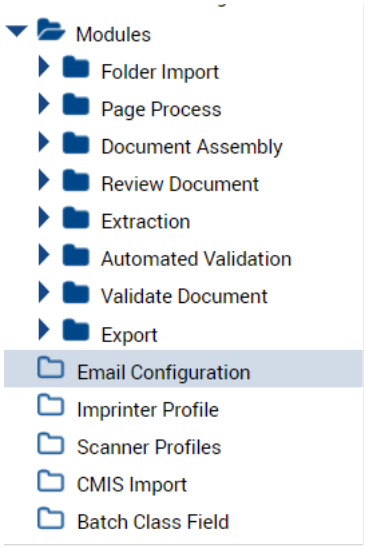
Within the Document Types node, the following configuration options are available.

Document Type Setting	Definition
Index Fields	Individual pieces of metadata to be extracted from documents of a specific document type.
Tables	Use to define extraction rules for various types of tables found inside each document type.

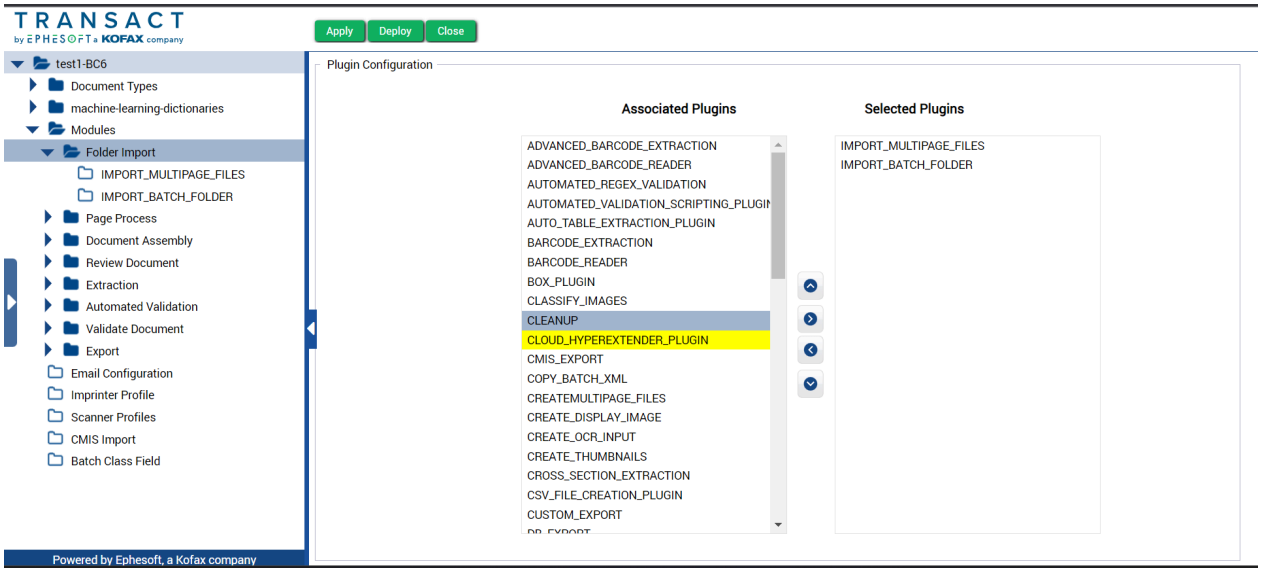
Document Type Setting	Definition
Function Key Mapping	Use to configure a custom script run when a function key is pressed.
DB Export Configuration	Use to map document type index fields to columns in a database table. During export, Transact inserts the index field metadata into the database table. This functionality only supports index field extraction, and not Transact table extraction.
Fixed Form Extraction	When a document type requires fixed-form extraction such as handprint, check boxes, or signature detection, this setting maps the external fixed-form project to the individual pages of that document type.
Fuzzy DB Extraction Configuration	Transact supports two fuzzy database lookup options.
Document Fuzzy	Use either all document OCR content, or individual extracted values to perform a lookup to an external database. You can assign the data returned to specific index fields.
Field Fuzzy	Use to extract index fields from a document, then use those values for a database lookup, and return the values into the same (or other) index fields.
REST API Lookup	Use to look up external data using index field data extracted from a document. Index field data is passed to the external API, and pieces of data returned from the API can be mapped to other index fields.

Modules and plugins

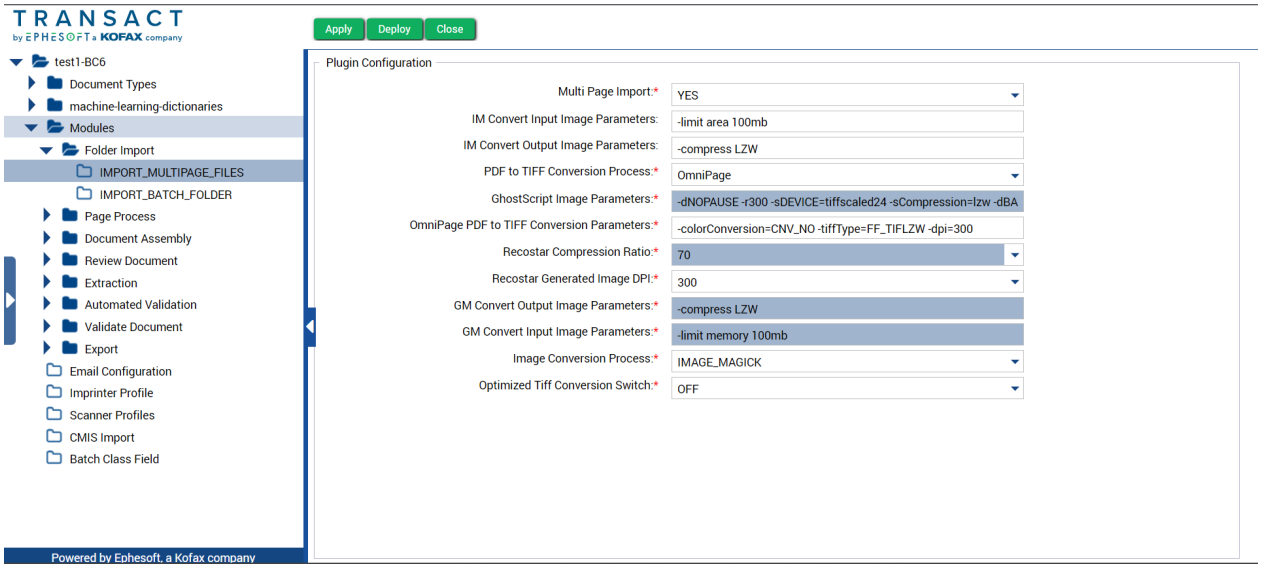
Modules represent specific stages of the batch class workflow. To access the modules used in any batch class, open a batch class and expand the **Modules** node.



Each module includes a set of plugins. Add, arrange, and edit plugins within a module to configure a workflow that will meet a customer's requirements. From the expanded **Modules** node, select any module folder to view the plugins used in that module.



Within a module, select a specific plugin to view the configuration settings.



For details on module configuration options, see Key terms and definitions.

Email configuration

The Email Configuration screen enables administrators to configure document ingestion from an email account.

The Email Import plugin is used to import documents from an email account. Administrators can specify the types of documents to be ingested, including determining if the body of the email should be ingested.

Scanner profiles

Administrators use the Scanner Profiles section to add and configure multiple scanner profiles to support different scanning needs. These profiles are used by the Transact Web Scanner, a client application that integrates Transact directly with local scanners.

CMIS import

Use the CMIS Import feature to download files from a CMIS-compliant repository (such as Alfresco, Nuxeo, or Documentum) and process them as batches. Once processed, the completed documents and index field metadata can be exported using any of the supported export mechanisms for Transact.

Batch class field

Administrators use this feature to add fields at the batch class level. If a custom field exists, the operator is prompted to complete field details during the initial steps of batch processing. Fields can be used to include various types of information not found in all documents, such as customer business process information or commonly audited details.

Batch instance management

A batch instance contains all files and pages to be processed in a particular work session (a "job" or "instance"). Whenever documents are ingested on the server, a new batch instance is created.

Administrators can use the Batch Instance Management section to configure, add, or remove batch instances. Tasks for batch instance management include the following:

- View and prioritize all existing batch instances.
- Select any batch instance to display batch execution details and current status in the workflow.
- Open, restart, unlock, or delete batch instances.
- Troubleshoot batch instances.
- View batch instance performance metrics.

For details on batch class configuration options, see Key terms and definitions.

View batch instance status and details

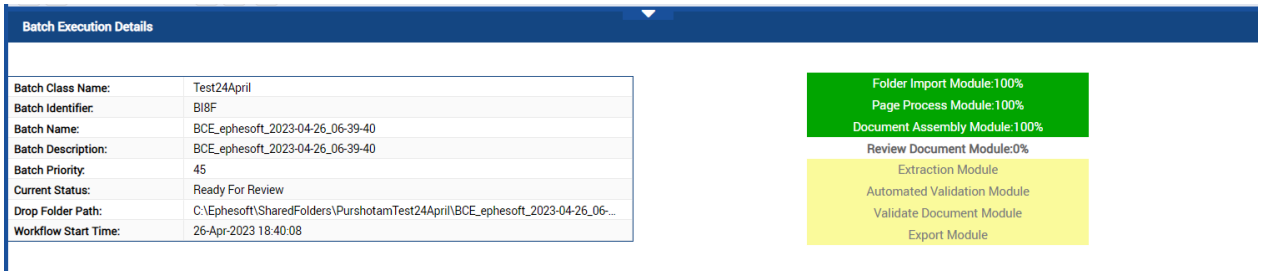
On the left side of the Batch Instance Management screen, a pie chart displays the number of batch instances per processing status type.

The stacked chart below the pie chart shows the number of batch instances backlogged in either Review or Validation status, organized by the following four time periods:

- 0-1 hour
- 1-4 hours
- 4 hours - 1 day
- 1 day or longer

Administrators can use this feature to check batch instance status. When a batch instance is selected from the grid, the applicable details are displayed in the bottom panel.

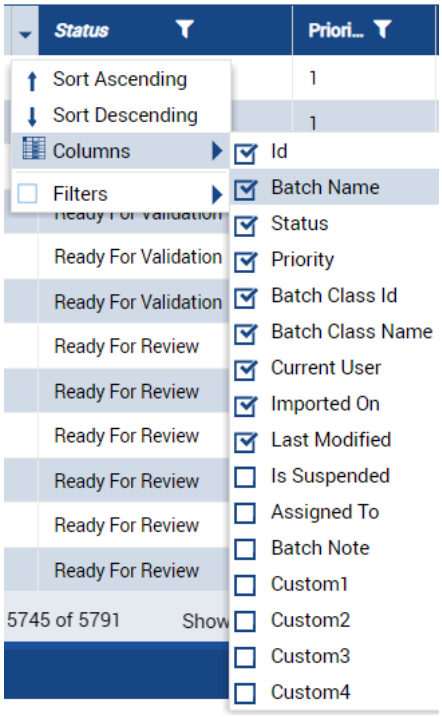
To view configuration details for a particular batch class such as name, processing priority, or current processing status, navigate to the Batch Execution Details screen at the bottom of the Batch Instance Management page. If the selected batch class is running, the colored bars represent the stage progression and real-time status of the batch instance within the overall workflow.



Add, sort and filter batch instance columns

For enhanced visibility, sorting and filtering is available in the Batch Instance screen inside the Batch Instance grid.

To add additional columns to the grid, select the drop-down icon on any existing column, navigate to Columns, and select the desired column types.



Set batch instance priority

Batch instance priority defines the order in which batches are executed. The priority of the batch instance is a numerical value from 1 to 100, with 1 as the highest priority and 100 as lowest. When multiple batches are running simultaneously, they are executed in order of highest to lowest priority.

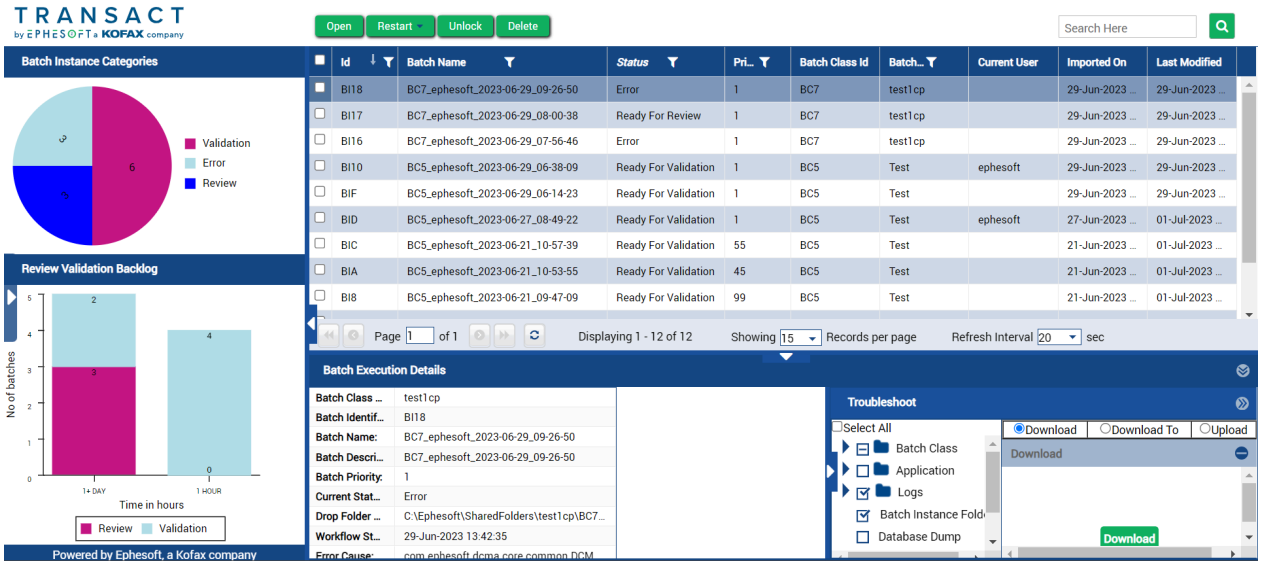
Set batch instance auto-refresh

Administrators and operators can modify the auto-refresh interval in the Batch Instance Management and Batch List screens. To modify the auto-refresh interval, navigate to the Refresh Interval drop-down menu in the taskbar at the bottom of the screen and select the preferred option.

Troubleshoot batch instances

The Troubleshoot window is located in the bottom right section of the Batch Instance Management screen and provides the option to download multiple types of logs, batch instance files, and batch class files.

If hidden, click the arrow (◂) to view and expand.

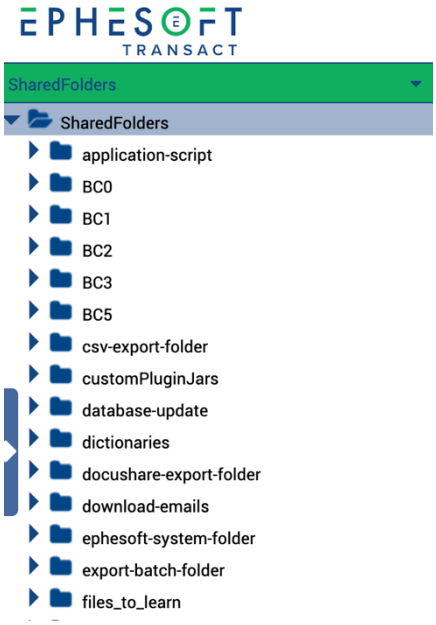


Folder management

The Folder Management screen provides a browser-based folder navigation tool for administrators to browse, view, and modify files, folders, and batch class configurations. This feature is useful when users do not have direct access to the Transact server at the operating system level.

Super administrators have additional functionality to view batch XML files for each batch instance, as well as the final output PDF or TIFF files generated by the Transact workflow.

The following image displays sample sub-folders in a typical Transact environment.



Reports

Administrators can produce Dashboard and Throughput reports.

Dashboard reports

Dashboard reporting options include the following:

- System Health: Displays server status for the specified date.
- System Reporting: Displays overall batch processing metrics.
- Batch Processing: Displays page processing metrics.

Throughput reports

Throughput reports summarize metrics per workflow variable including hourly throughput, user throughput, and batch size throughput.

The Throughput Reports tab includes:

- Batch Class Throughput
- Batch Size Throughput
- Week Days Throughput
- Hourly Throughput
- Time-Based Throughput
- Monthly Throughput
- Module Throughput
- User Throughput

System configuration

The System Configuration screen is enabled only for Super Administrators. For details on configuration options, see Key terms and definitions.

Operator functions

The following section describes the Operator role and responsibilities. Operators can perform tasks related to batch instances, such as uploading batches, reviewing document classification and separation, and reviewing index field extraction.

The following table summarizes the Operator menu options.

Page	Features
Batch List	Displays all batch instances waiting for review or validation, and their priority as set by the administrator.
Review Validate	Used by operators to review document type classification and verify data that has been extracted from documents.
Web Scanner	Browser-based scanning interface used by local TWAIN-based scanners to scan documents directly to the Transact server.
Upload Batch	Provides an interactive environment for the user to upload electronic documents into Transact for processing.

Batch list

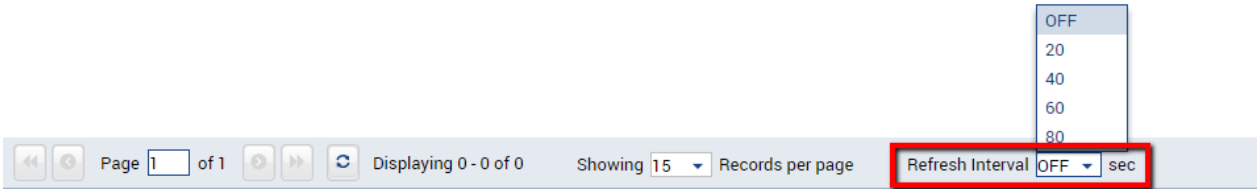
The Batch List screen, which shows the list of batch instances in either Review (document type classification) or Validation (data extraction verification) status, is divided into three parts:

- Batch List charts
- Batch List options panel
- Batch List grid

By default, batches that are in the Ready for Review status are shown first. Clicking Validation displays all batches in the Ready for Validation status.

Set Batch instance auto-refresh

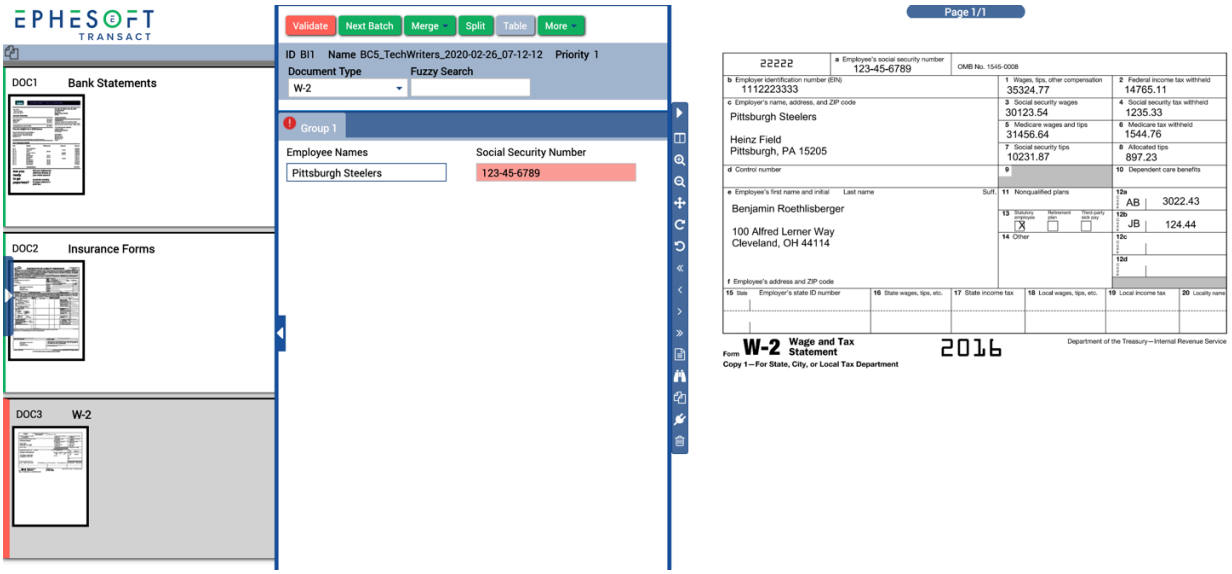
Administrators and operators can modify the auto-refresh interval in the Batch Instance Management and Batch List screens. To modify the auto-refresh interval, navigate to the Refresh Interval setting at the bottom of the screen and select the preferred option.



Review and Validate

Operators use the Review and Validate screens to review and verify data extracted from the ingested documents through batch instance processing. If extracted data falls below the batch class confidence threshold, Transact alerts the operator of a potential wrong value and directs them to the Review and Validation screens to verify the extracted data values and make necessary corrections. Operators can also perform various modifications such as classifying the document type, splitting documents, merging pages to form a document, and deleting unnecessary pages from a document.

The following image is an example of the Validation screen.



Web Scanner

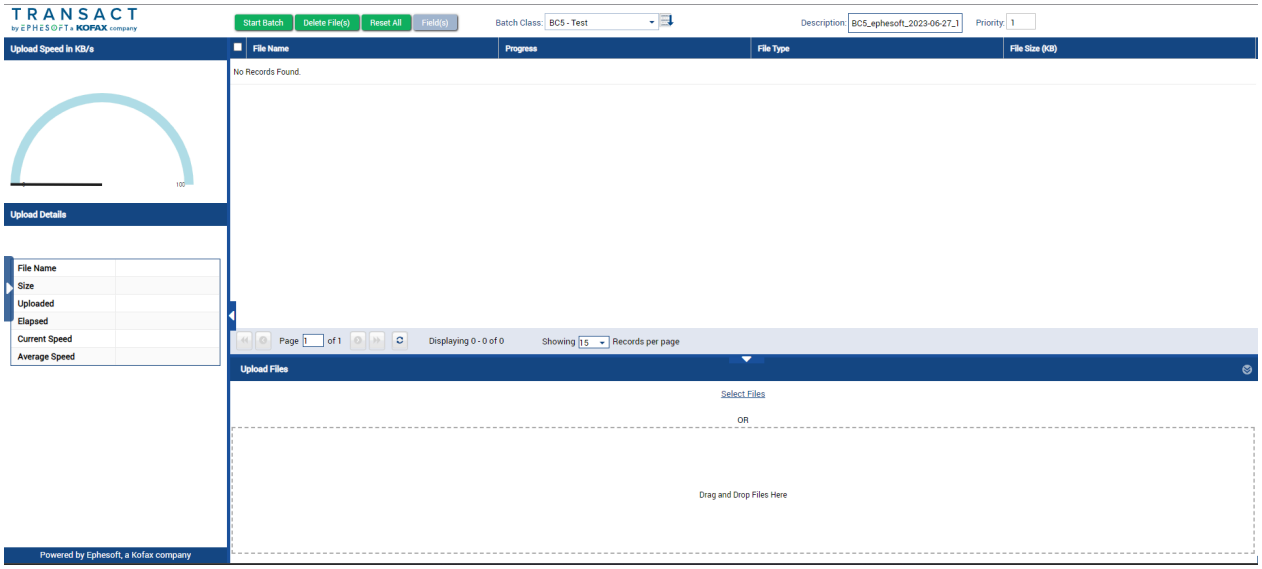
With Web Scanner, users can scan documents directly into the Transact server using a web application interface to preview, rotate, and re-scan necessary images as part of the overall batch to submit to Transact.

For more information about Web Scanner features and operations, see the Web Scanner topic in the Transact help.

Upload batch

Operators can use the Upload Batch screen to upload files directly from their computer. The uploaded files are processed as a single batch instance.

The following image illustrates the Upload Batch screen.



To upload a set of files for batch instance processing, drag the files from your workstation into the lower panel. This creates a single batch instance. Once the upload is complete, select the batch instance and click Start Batch at the top of the screen to begin processing.

Key terms and definitions

If you are new to Transact, the following key terms and definitions may be useful.

Transact workflow

Term	Definition
Document Capture	There are multiple ways to capture data: scanners, multi-function peripherals (MFPs), UNC folders (network folders), fax, email, mobile devices or through an outsourced business process organization (BPO).
Image Processing	Documents and images are normalized and rotated in preparation for classification. The system can apply filters to improve image quality and more easily identify documents for data extraction.

Term	Definition
Document Classification and Review	Transact uses patented AI and ML algorithms that can "learn" document types and their extractable content. This workflow stage separates and classifies individual pages into separate documents. If the system does not meet minimum confidence levels for pages it attempts to classify, the process is routed to the operator for review.
Data Extraction	Transact uses Optical Character Recognition (OCR), Intelligent Character Recognition (ICR), and Optical Mark Recognition (OMR) as well as AI and ML algorithms to extract data from ingested documents.
Data Validation	If any extracted data falls below pre-set confidence scores, the system prompts for an operator review. Validation may be needed when there are smudges, spills, blurry characters, or missing fields. The system alerts the operator of these documents and data values for manual verification and correction as necessary.
Data and Document Export	Once all documents are validated, the exported documents and extracted data are moved to a repository or other business system. The exported documents and data can be stored on a local server or cloud-based storage, such as Alfresco, Box, or SAP.

Module functions

Module	Function
Folder Import	Contains plugins that govern how documents, data or images are ingested or imported into Transact at the start of the workflow. Also, defines additional compression, image optimization and image resolution attributes.
Page Process	Defines how Transact performs OCR. For example, plugins are available to create display and thumbnail images, or enable multi-dimensional classification.
Document Assembly	Refers to the process of separating and classifying single pages into documents produced in the Page Process module above. This module emphasizes two definitive plugins: • `DOCUMENT_ASSEMBLER` • `DOCUMENT_ASSEMBLER_SCRIPTING_PLUGIN`
Review Document	Determines if batch instance contains documents with low confidence needing operator review and suspends workflow processing for this activity. The `REVIEW_DOCUMENT` plugin is the key component of this module.

Module	Function
Extraction	Locates and extracts defined data values from documents based on the OCR results produced in the Page Process module above. Extraction can entail key-value extraction, table extraction, fixed-form extraction, text extraction, and more.
Automated Validation	Automatically performs data type checks. This module contains all the extracted values for index fields, and checks index fields for matches in data type and appropriate values. It marks exceptions when they are present.
Validate Document	Determines if batch instance contains extracted values marked for exception and suspends workflow processing for operator validation.
Export	Defines how documents and the extracted data are distributed to external storehouses or other forms of output after all document processing and workflow operations are complete.

Batch class management functions

A batch class is a collection of document types. Each batch class has its own custom workflow. This table defines the buttons associated with the Batch Class Management screen.

Button	Function
Open	Opens the batch class and displays the configuration screen.
Apply	Saves all changes made to the selected batch class or classes.
Add	Adds a new batch class.
Copy	Copies a batch class.
Export	Exports a batch class and creates a .zip file with the configurations and images used in document training.
Unlock	Batch classes can only be configured by one user at a time. If any administrator idles on a configuration screen, other administrators can use the unlock button to unlock the batch class.
Encrypt	Secures data from unauthorized access. Only super administrators have permissions to encrypt a batch class.
Delete	Removes the batch class and any associated training documents from the Transact server.

Batch instance management functions

The batch instance processes ingested documents using an assigned batch class and its configurations. This table defines the buttons associated with the Batch Instance Management screen.

Button	Function
Open	Opens the selected batch instance that is in the processing queue.
Restart	Provides a precise way to execute specific workflow modules in batch instance processing.
Unlock	To prevent multiple operators from reviewing the same documents, active batch instances are locked. An administrator can manually unlock batch instances.
Delete	Deletes a selected batch instance from the processing queue.
Troubleshoot Batch Instance	Troubleshoots errors or failures that occur during batch instance processing.

Batch execution details

Field	Function
Batch Class Name	The name of the batch class to which the batch instance belongs.
Batch Identifier	The identifier of the batch instance.
Batch Name	The name of the batch instance.
Batch Description	The description for the batch instance.
Batch Priority	The priority of the batch instance. If the priority is edited, the batch must be restarted to reflect the new priority.
Current Status	The status of the batch instance. Example: RUNNING, ERROR, NEW, LOCKED, READY_FOR_REVIEW, READY_FOR_VALIDATION, DELETED, etc.
Drop Folder Path	The final export folder path for the batch class to which the batch instance belongs.
Workflow Start Time	Timestamp indicating when batch processing began.
Error Cause	This field is only available in the grid if the batch instance is in the ERROR state. It shows the details of the cause for the batch instance's ERROR state.

System configuration functions

Button	Function
Regex Group	All available regex groups in the database are displayed in a grid and can be edited directly from the grid.
Regex Pattern	Accessed by expanding the Regex Group node to display each regex folder and its patterns.
Generate Key	Used to generate an application-level key for image encryption. A key can only be generated once.
Regex Builder	Defines regular expressions used to process each document type.
Workflow Management	Displays plugins and their dependencies on other plugins in the workflow.
Ephesoft Cloud	Provides registration accessibility and configuration settings for the Transact Cloud HyperExtender.
Connection Manager	Displays all connections to supported external databases.
License Details	Displays license details for the Transact host environment.
Access Manager	Super administrators can restrict each user's visibility into the administrative and operational screens (such as Batch Instance Management, Reports, or other).
Currency Configuration	Super administrators can configure for currencies found in the documents they process.

Chapter 3

Tutorial

This tutorial is designed to familiarize you with essential operations in the Transact workflow. Use this tutorial to learn how to create batch classes, document types, index fields, and key-value extraction rules, all of which are used to classify documents and extract data. You will also learn how to export the data from the documents you have uploaded.

Prerequisites

To complete this tutorial, download the Tutorial Helper, which includes the following files:

- Tutorial images
- Three files for batch instance processing:
  - `W-2.pdf`
  - `Insurance Form.tif`
  - `Bank Statement.pdf`

Essential operations in Transact

The procedures in this section walk you through the basic processes to set up a workflow in Transact.

Create a batch class

In Transact, a batch class is a collection of document types, index fields, extraction rules and workflow processes used to capture data from uploaded documents. To create a batch class:

1. Enter the following URL to navigate to the Transact home screen:
   `http://<Server-Name>:8080/dcma`
2. Select **Administrator** > **Batch Class Management**.
3. Log in with your user credentials.
4. Click **Add**.
   The following fields appear on the **Add Batch Class** screen.

Field	Description
Name	Title of your batch class. If multiple words are needed, ensure no spaces are used. Each batch class name must be unique.

Field	Description
Description	Create a description for the batch class. Spaces are allowed.
Priority	Set the priority level for this batch class. When multiple batch classes exist, the priority level determines the order in which each batch class is processed.
Drop Folder	Desired folder path (local or network) for all files associated with this batch class.

5. For this tutorial, fill in the fields as shown below.

Field	Value
Name	FinancialDocumentTutorial
Description	Financial Document Tutorial
Priority	1
Drop Folder	`C:\Ephesoft\SharedFolders\WATCH \Financial Document Tutorial`

6. Click **OK** to create the batch class.

Create and train document types

Once a batch class is created, the next step in the workflow is creating the document types. Each document type uses an algorithm to classify and organize files into pre-configured categories, based on commonalities between those documents.

Create a document type

To create a document type:

1. Navigate to the **Batch Class Management** screen.
2. Double-click the **FinancialDocumentTutorial** batch class to open it.
   Alternatively, highlight the batch class name and click **Open**.
3. Click the **Document Types** folder.
4. In the top toolbar, click **Doc Type** > **Create New**.
   A new document type row is added. Enter a name and description. For this example, use the following:
   - Name: W-2
   - Description: W-2

   As a best practice, assign document type names that do not include spaces.
5. Click **Apply** to save the document type.
6. Repeat steps 2–4 to create two more document types for Insurance Forms and Bank Statements.

Train the document type

Once the document type is created, train it to recognize similar documents with a representative set of files.

1. Select the W-2 document type created in Create a document type.
2. Drag the W-2 sample file into the **Upload Learn File(s)** section.
   This action trains the document type to distinguish W-2 files from other documents.
3. Repeat steps 1–2 for the `Insurance Form.pdf` and `Bank Statement.pdf` files for their respective document types.

Test classification

The Test Classification feature ensures each document type is properly trained to classify and separate multiple pages or multiple documents within a single uploaded file. To test Document Types:

1. Drag all three sets of files into the **Upload Test Classification File(s)** section.
2. Click **Test Classification**.
   The classification results appear.
3. Click the **Classify** button.
4. Review the results to verify that each document type has been separated correctly.
5. Click **Close** to exit the classification testing interface.
   Continue to Create index fields to create Index Fields for document data capture.

Create index fields

Once the document types are successfully trained, the next step is to create index fields to extract data from uploaded documents. For simplicity, the following steps focus on the W-2 document type.

1. Navigate to **Batch Class Management** and select the **FinancialDocumentTutorial** batch class.
2. Expand the **Document Types** tree to display all three categories.
3. Expand the **W-2** document type and select **Index Fields**.
4. Click **Add** to insert a new index field row, and complete the following fields:
   - **Name**: EmployeeNames
   - **Description**: Employee Names
5. Under the **Additional Configurations** column, expand the menu for your selected index field and select **Force Validation** to ensure the data is reviewed in the validation screen.

   Force Validation is recommended here for demo purposes. In production, this check box is typically not selected unless there is a field that an operator must review on every document.

6. Click **Apply** to save the index field row.
7. Click **Add** to insert a second row, and complete the following fields:
   - **Name**: SSN
   - **Description**: Social Security Number

8. Click **Apply** to save the index field row.
9. Repeat steps 2–8 to create the same index fields for the Insurance Form and Bank Statement. The index field is now ready for key-value extraction rules.

Key-Value extraction rules

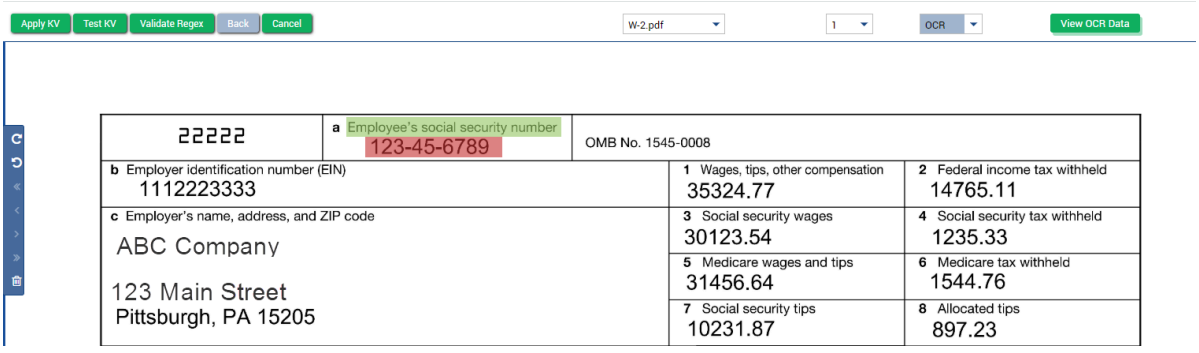
Once index fields are generated, the next step is to create an extraction rule to populate those fields defined within Transact with the data extracted from each page within a document. The key-value (KV) extraction rule is the most common way to build out extraction logic, but other extraction rule types can also be created.

Create and define a KV extraction rule

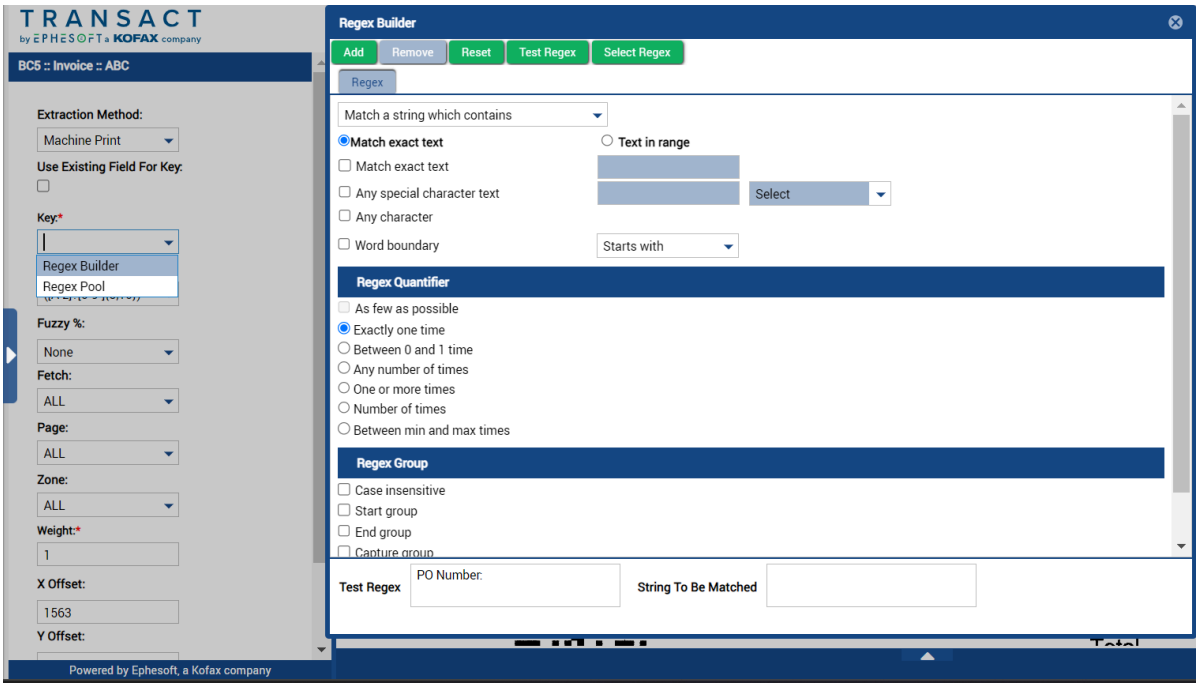
To create a KV extraction rule and define the data to be extracted:

1. Navigate to **Batch Class Management** and select the **FinancialDocumentTutorial** batch class.
2. On the lefthand menu, expand **Document Types** to display all three document type categories.
3. Expand the **W-2** document type.
4. Expand **Index Fields**, click **SSN**, and select **KV Extraction Rule**.
5. On the top menu bar, click **Add** to create a new KV extraction rule.
6. Locate the `W-2.pdf` file included in the `TutorialImages.zip` file.

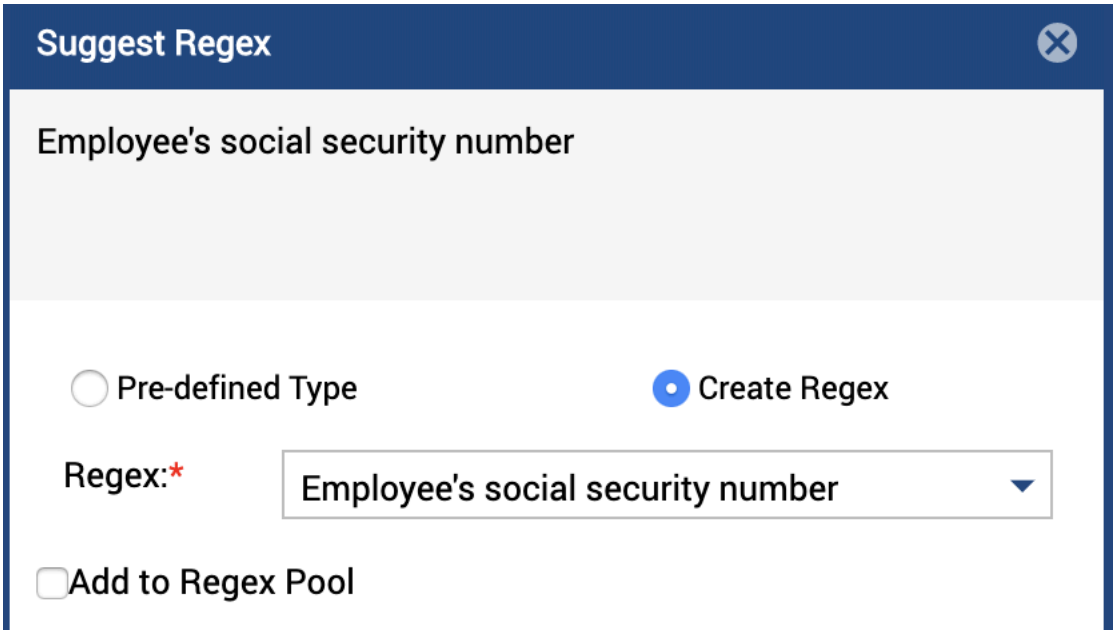
   Under **Advance KV Test** at the bottom of the page, drag and drop the PDF file or click **Select Files** to upload `W-2.pdf`.
7. Move and resize the **Key** ("Employee's social security number," highlighted in green) and **Value** (corresponding numeric value to be recognized by the regex, highlighted in red) zones as shown below to build a relationship between the key and the value.



Steps 8–12 define the KV extraction rule using automatic data recognition in Transact. This is the simplest method. To manually define a KV extraction rule, select **Regex Builder** and complete the fields in the screen shown below.



8. Click in the **Key** zone.
   A menu displays to define regular expressions (regex). In this case, Transact automatically reads the data in the Key zone.
9. Click **OK**.



10. Click in the **Value** zone. The **Value** field requires a visual pattern to identify for the key.

In this case, Transact automatically recognizes that the pattern for this field follows a Social Security Number: XXX-XX-XXXX.

11. Click **OK**.
12. Click **Test KV** to test the extraction rule and ensure data is extracting correctly.
    A new panel displays below the document with the extracted values.
13. Click **Apply KV** to save the extraction rule.
14. Click **Apply** to commit the extraction rule to the **SSN** index field.
    The index field now has a KV extraction rule to reference when processing a batch class.
    Proceed to set up the **Export** module.

Export setup

Transact processes batches of documents simultaneously in the form of batch instances. You can configure batch classes to export the documents and extracted data to a specified destination.

To set up the Export module:

1. Navigate to **Batch Class Management** and select the **FinancialDocumentTutorial** batch class.
2. On the lefthand menu, expand **Modules**.
3. Expand the **Export** folder and select the **COPY_BATCH_XML** plugin.
   This plugin is used to export structured XML files and PDF images to a specified network or local path folder.
4. In the **Export Document File Name** field, enter the following to add the document type to the PDF file export:
   $DOCUMENT_TYPE & _ & $BATCH_IDENTIFIER & _ & $DOCUMENT_ID
5. Select **Apply** > **Deploy**.
6. Click **Close** to exit the **Plugin Configuration** screen.
   The **FinancialDocumentTutorial** batch class is now configured and ready to process documents.

Run and validate a batch instance

Numerous methods are available to run documents through batch class configurations for data capture. The following procedure describes one of the simplest methods, which uses the Upload Batch screen.

Run a batch

1. Hover over the lefthand navigation panel. On the **Operator** menu, select **Upload Batch**.
2. From the **Batch Class** menu, select the **Financial Document Tutorial** batch class for processing.
3. Click **Select Files** or drag and drop the following files into the **Upload Files** section:
   - `Bank Statement.pdf`
   - `Insurance Form.tif`
   - `W-2.pdf`
4. Click **Start Batch**.

Validate a batch

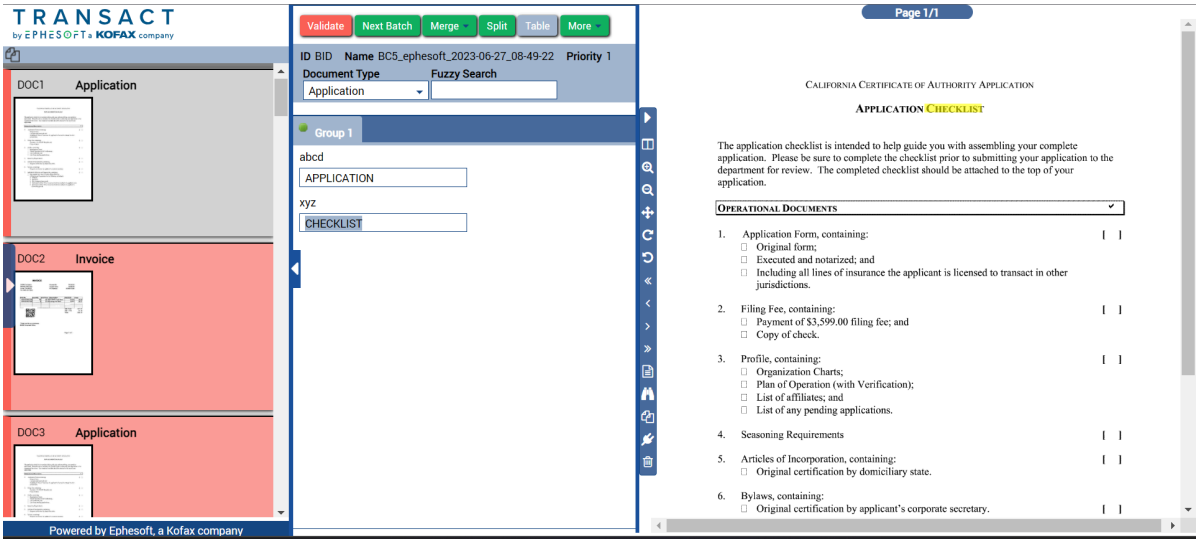
1. Navigate to the **Batch Instance Management** screen and locate the **FinancialDocumentTutorial** batch class.

   As the batch instance is processing through the various stages of the workflow, the status displays as **Ready for Review**.
2. Select the **FinancialDocumentTutorial** batch class.
3. Click **Open** > **OK** to view the results in the **Review Validate** screen.

   Operators use the **Validation** screen as needed to verify that extracted content is accurate. If an extracted field does not meet the preset minimum confidence level, that field is highlighted in red to indicate that an operator review is required.

4. Fill in any fields that return blank.

   In the example below, **Employee Names** returned blank and has been manually entered.



5. Double-click **Validate** in the top menu.

   The **Validation Done** dialog box appears.
6. Click **OK**.
7. Once validated, Transact exports the three files in PDF format to the system in the final drop folder specified for the FinancialDocumentTutorial batch class.

   The `batch.xml` file containing the extracted data also resides in that folder.

This completes the Transact tutorial. You are now ready to create your own batch classes, define document types and index fields, set up export options, and run batches of documents for data capture.

Chapter 4

Supported languages

The following languages are supported by Transact and optical character recognition (OCR) engines.

UI supported languages

The Transact user interface can be displayed in the following languages:

- Dutch
- English
- French
- German
- Italian
- Spanish

OCR engines

Transact leverages the following OCR engines. These OCR engines support additional languages that may work with Transact.

- Kofax OmniPage
- Tesseract
- OpenText Capture Recognition Engine
- Google Cloud Vision (premium add-on)
- Microsoft Azure Computer Vision (premium add-on)

Chapter 5

Use Transact with Automation Anywhere

This chapter describes how to use Transact with Automation Anywhere. Allow for at least 30 minutes to complete this procedure.

Prerequisites

Before proceeding, ensure that the following prerequisites are met:

- Transact is installed and licensed.
- Automation Anywhere or Automation Anywhere Community Edition is installed and licensed.
- You have a basic understanding of Transact batch class administration.
- The RPA Invoice Demo Package zip file is downloaded and available.

Import the batch class into Transact

Import the sample batch class to complete the prerequisites for this procedure. Perform the following steps:

1. Open the `RPA Invoice Demo Package` .zip file.
2. In the `RPA Invoice Demo Package` folder, locate the `RPA_Invoice_BC.zip` file.
   This is your sample batch class.
3. Log in to Transact as an Administrator.
4. Use the **Batch Class Management** screen to import the batch class from step 2.

User instructions

After you have completed the prerequisites and imported the batch class, you are ready to follow the user instructions below.

Use Automated Tasks with Automation Anywhere

This section provides examples on how to use Transact with automated tasks and an Automation Anywhere (AA) Bot.

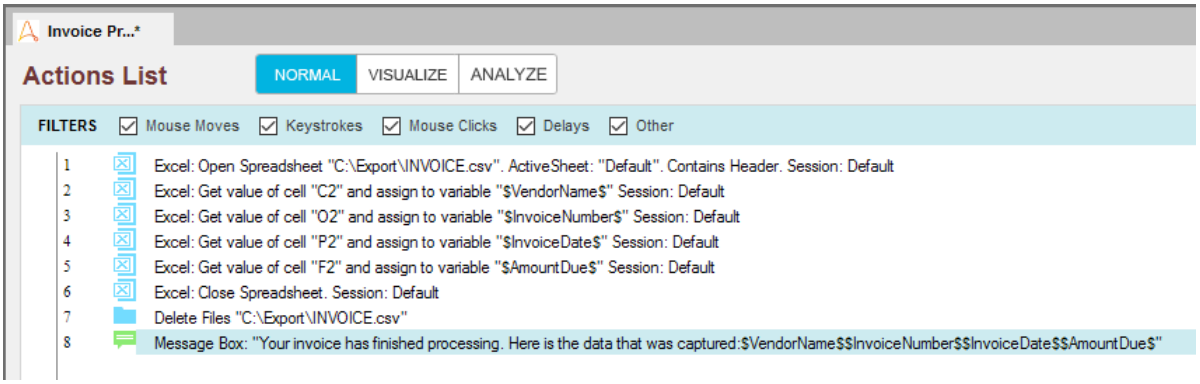
The primary method of using Transact with Automation Anywhere is to have an AA Bot send images from a folder (that is not monitored by Kofax) to a Transact watch folder. The images in the folder are then processed through Transact and exported to a CSV file and sent back to the AA Bot. If documents are being ingested directly to the Transact drop folder monitored by Kofax, then you do not need the AA Bot to start the batch processing.

An AA Task monitors a folder path for the CSV file, opens that file, pulls data elements from some of the cells, and assigns these data elements to variables. The Robotic Process Automation (RPA) bot then uses the data however it wishes.

Perform the following steps to open and run an AA Task and use the AA Bot:

1. Open the Automation Anywhere application.
2. Click **New**.
3. When the **Automate** screen appears, select **Workbench**.
   A new Automation Anywhere Task is ready to be configured.
4. Click **Variables Manager** in the lower right, then click **Add**.

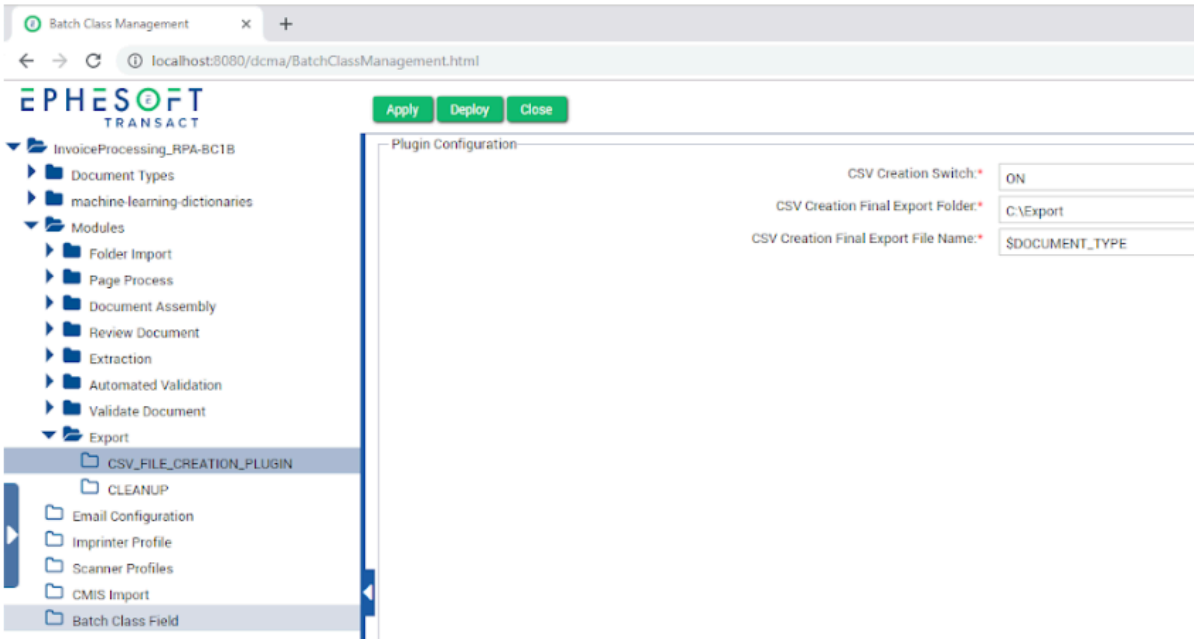
   The **Add Variable** screen appears.
5. Keep the **Value** field blank when adding each of the following variables:
   - VendorName
   - InvoiceNumber
   - InvoiceDate
   - AmountDue
6. Click **Save** after each variable above is added.
7. Add the following commands to your task.



8. Save your task.
9. Run a batch through Transact.

   If the batch becomes **Ready for Review** or **Ready for Validation**, open Transact, and finish the review and validation process.
10. Once the batch is validated in the **Review** screens, Transact exports the batch as a CSV file.

    The following figure illustrates the Export plugin that was used in this sample batch class.



The Automation Anywhere bot continues to monitor the Transact export location.

11. Run your task.

    A message displays data extracted from the invoice, such as vendor date, invoice number, invoice date, and amount due.

Chapter 6

Use Transact with UiPath

This chapter walks you through a tutorial that explains how to use Transact with UiPath. To complete the tasks in this chapter, ensure that you have the following prerequisites in place:

- Transact is installed and licensed.
- Transact Web service/API license is active.
- UiPath Studio Enterprise or Community is installed and licensed.
- You have a basic understanding of Transact batch class administration.
- 30 minutes is available to complete the tutorial.
- Access to the Transact Getting Started tutorial resources:
  - Download the Getting Started Demo, which includes the following components:
    - Transact example batch class (`Batch Class RPA Invoice Example.zip`)
    - UiPath Project (`EphesoftGettingStartedDemo project.json`)

Import the batch class into Transact for UiPath

You must import the example batch class to help complete the setup for this tutorial. Note the following details about this batch class:

- The download package contains a sample Transact batch class.
- Log in to Transact as an Administrator.
- Use the Batch Class Management screen to import the Transact batch class that you downloaded.

UiPath activities overview

This section provides the following examples of how to use Transact together with UiPath:

- Batching method
- Open and run the batch processing action
- Execute non-batch-processing action

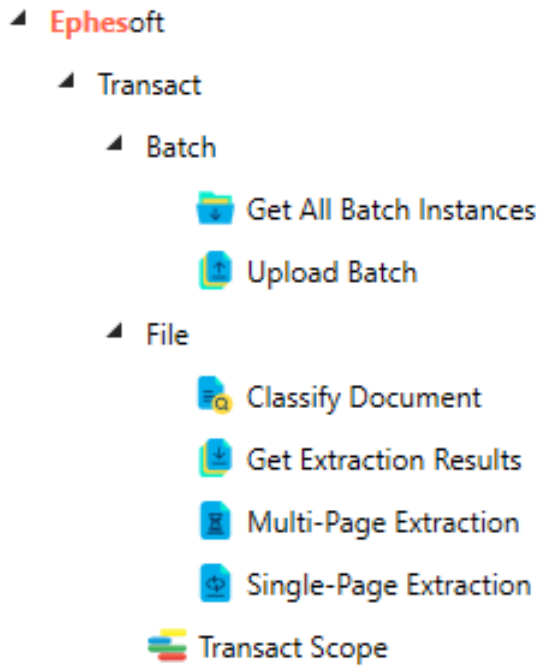
Batching method

The most common method of using Transact with UiPath is the batching method.

- Place images into a Transact batch.
- Process the batch through the complete Transact workflow.

- Export the batch using a CSV export within the batch class export plugin.

The following illustrates the Transact-UiPath actions that are available for download on the UI Path Marketplace: Transact.



In this sample setup, all the UiPath actions use the Transact REST API as an integration point. The UiPath actions supported in Transact in this sample setup are as follows:

1. **Transact Scope**: Use this authentication scope, which is required for all Transact actions.
2. **Get All Batch Instances**: Use to get all the batches of a particular batch status.
3. **Classify Document**: Use to classify a single file document type.

   This action supports one file to be processed (a single- or multi-page TIFF file, or a .zip file containing one or more TIFF or PDF files).
4. **Multi-Page Extraction**: Use to process multiple pages. If you are familiar with the Transact Rest API, this action uses the InitiateClassifyExtract API, which returns a callback token.

   This activity supports one file to be processed (a single- or multi-page TIFF file, or a .zip file containing one or more TIFF or PDF files).
5. **Get Extraction Results**: Use in conjunction with the multi-page extraction call.
6. **Single-Page Extraction**: Use to process a single-page document and return document-level fields. This action uses Transact REST API `v2/OcrClassifyExtract` API.

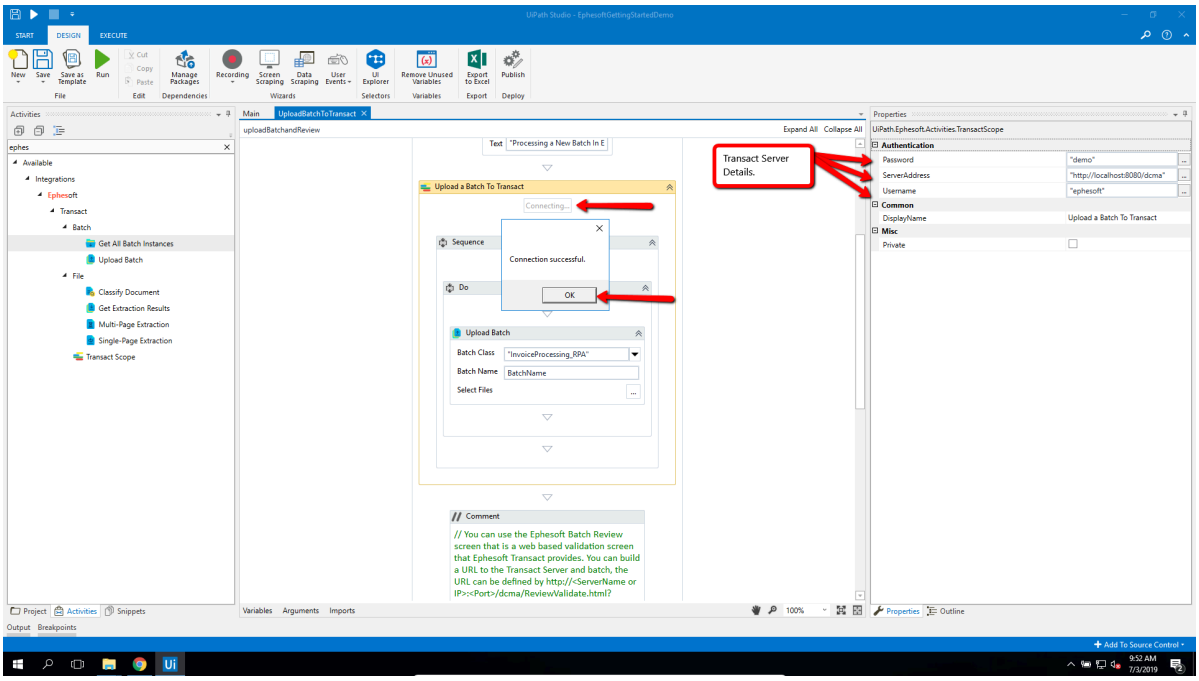
   This action supports one input file of a valid file format or a .zip file containing multiple files of valid file formats.

Open and run the batch processing action

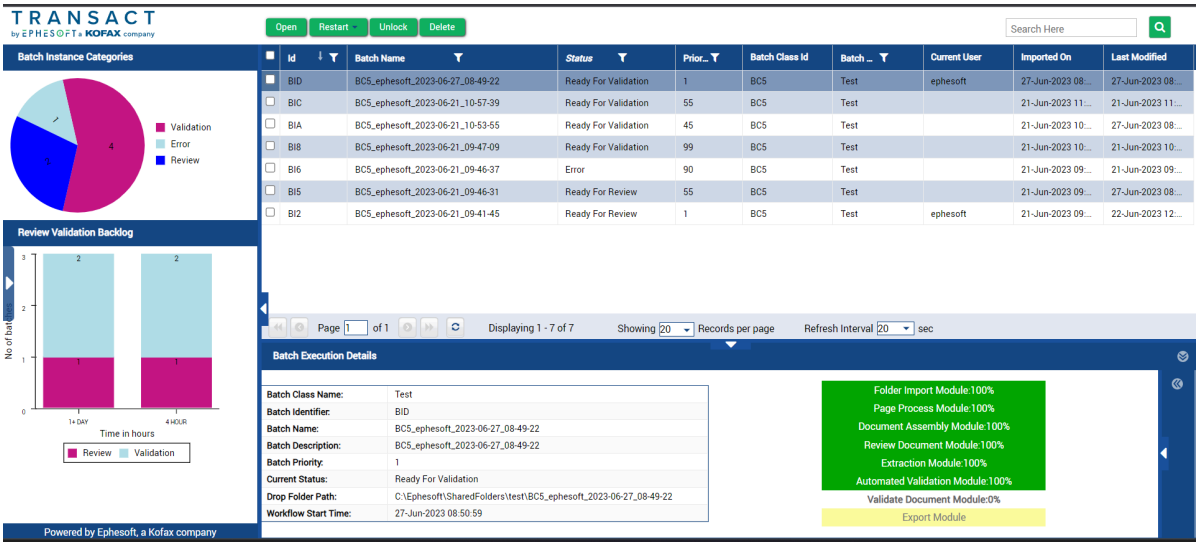
Another method of using Transact with UiPath is to perform one or more batch processing actions. To use this method, you must sign up for UiPath Studio and download the UiPath Studio app from UiPath.com.

To open and run a batch processing action:

1. Open the UiPath project by opening the `project.json` file.
2. Update the Transact scope.



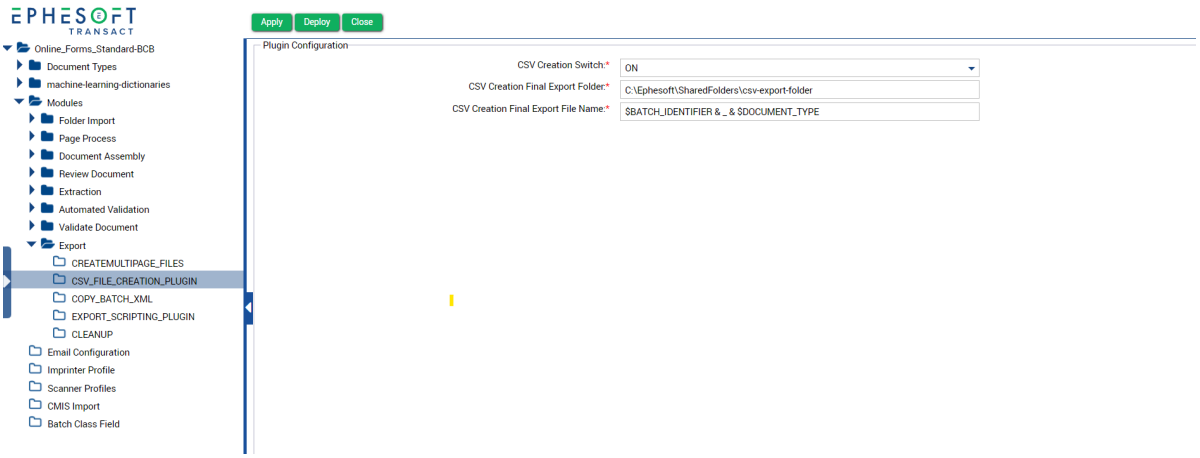
3. When the sequence is running, you are able to view the batch queue up in the **Batch Instance Management** screen, as shown.



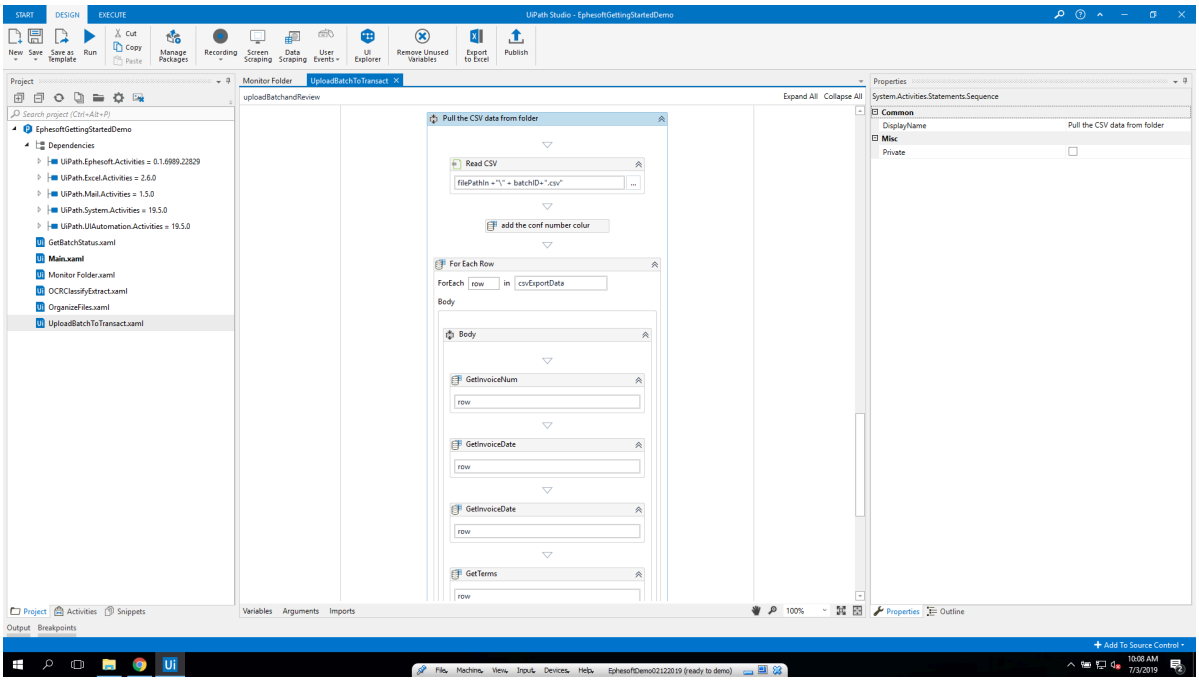
4. If the batch becomes **Ready for Review** or **Ready for Validation**, Transact prompts you in a dialog that contains a hypertext link to the **Validation** page.
5. Open the URL in the message to be directed to the Transact web-based **Validation** screen.

   Once the batch is validated in the **Validation** screen, Transact exports the batch as a CSV file.

   The following illustrates the Export plugin that is used in this sample batch class.



This example includes a UiPath workflow that monitors a folder path for the CSV data to drop out, and for the Uipath robot to pick it up and continue to a process.



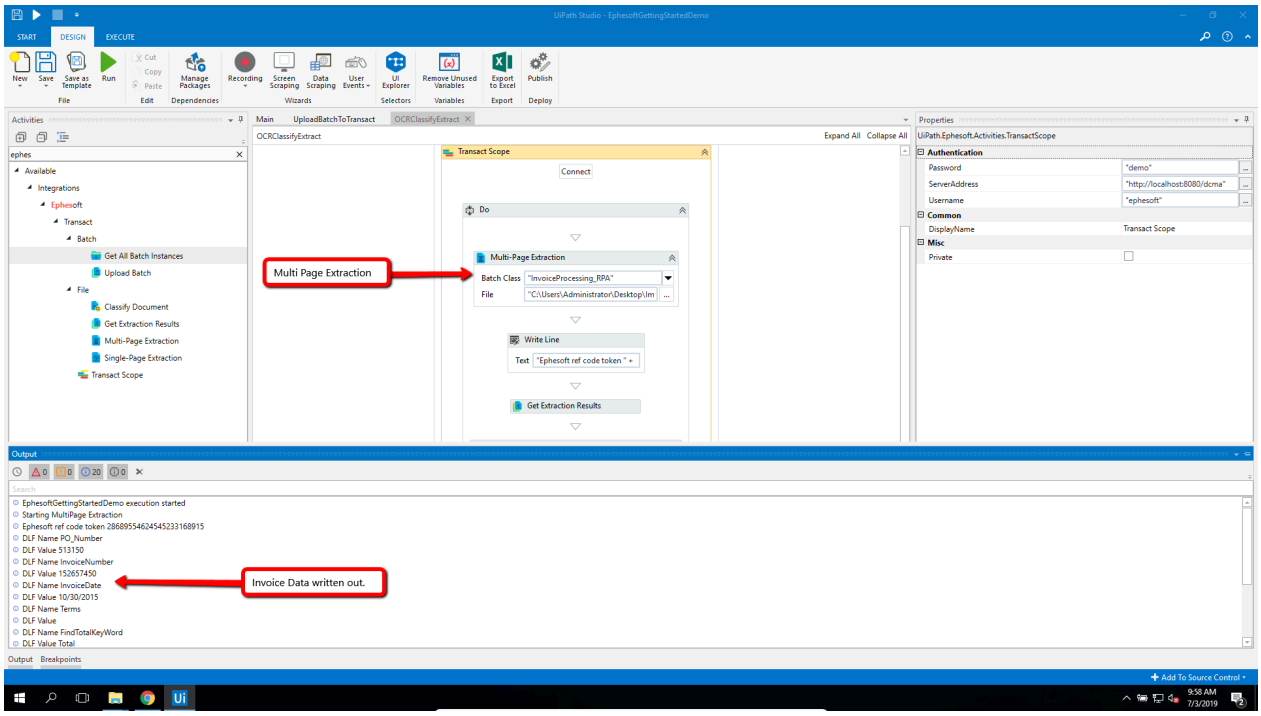
You can load data back in using the CSV actions contained in UiPath.

Execute non-batch-processing action

The alternate method of calling Transact from UiPath is an in-process type of data capture.

This method does not put the image into a Transact batch. Instead, it returns the data as shown in the example below.

The workflow that shows this method is the Multi-Page Extraction example.



Be sure to update Transact as needed.