



VERSION: 1.9.1.X

Document history

Version	Date	Comments/Amendments
1.1.0.10	2023-09-03	For version 1.1.0.10
1.1.0.26	2023-11-03	For version 1.1.0.26
1.2.0.x	2023-12-05	For version 1.2.0.x
1.2.1.x	2023-12-27	For version 1.2.1.x
1.3.1.x	2024-01-26	For version 1.3.1.x
1.4.0.x	2024-02-25	For version 1.4.0.x
1.5.0.x	2024-04-16	For version 1.5.0.x
1.6.0.x	2024-05-16	For version 1.6.0.x
1.6.1.x	2024-06-16	For version 1.6.1.x
1.6.2.x	2024-07-09	For version 1.6.2.x
1.7.0.x	2024-08-09	For version 1.7.0.x
1.8.0.x	2024-09-02	For version 1.8.0.x
1.9.0.x	2024-12-10	For version 1.9.0.x
1.9.1.x	2025-01-29	For version 1.9.1.x

Release notes

Version: 1.1.0.10

1. Real-time synchronization of vendor master data from F&O to invoice capture.
2. Enhanced search functionality in the "Classify invoice" form, enabling users to search for legal entities and vendor accounts by their names or addresses.
3. Support template "Microsoft Outlook Shared Mailbox" within the channel.
4. Legal entity assignment in the channel definition, which is used to determine the legal entity right after the invoice is captured within the channel,
5. Cleanup the voided and transferred invoices with system parameter control. The job will be triggered daily and delete the ones which are longer than 180 days.
6. Support extracting the charges on the invoice document header and transferring them into F&O with assigned charges codes.
7. Support batch transfer for touchless invoice transfer.

Version: 1.1.0.26

1. Support "Remove all" option for deleting all invoice lines in SBS viewer.
2. Provide the parameter to control the purchase order formatting logic.
3. Derive the currency code from vendor master data for cost invoices.
4. Check the UoM consistency between invoice line and linked purchase order line.
5. Correct the field mapping using KVPs (key-value pairs) in SBS viewer.
6. Support multiple sales tax on document header.
7. Apply the validation on invoice total amount and invoice total sales tax amount.

Version: 1.2.0.x

1. Support custom fields within Invoice capture.
2. Support financial dimensions within Invoice capture.
3. Add parameter to control the confidence score check.
4. Add parameter to control journal name for creating "Invoice journal" in Dynamics 365 Finance (10.0.39).

5. Add parameter to control document type for persisting the invoice attachment in Dynamics 365 Finance (10.0.39).
6. Default the item description for procurement category item by the value from original document (10.0.39).

Version: 1.2.1.x

1. Support the download of original invoice file in SBS viewer.
2. Display the cancelled reason in received file list viewer.

Version: 1.3.0.x

1. Support custom invoice model.
2. Add the default financial dimension to the line level for cost invoices.

Version: 1.4.0.x

1. Support multiple purchase orders for head-only invoices.
2. New user interface for linking the purchase line with invoice line.

Version: 1.5.0.x

1. Support Charges / Tax amount fields when using custom invoice model.
2. Support the automatic conversion of the amount and qty fields for credit note.

Version: 1.6.1.x

1. Support the lookup list on custom fields.
2. Support the migration tool to migrate the continuous learning knowledge.
3. Navigate the users to the specific invoice forms on the Dynamics 365 Finance side based on the invoice status to help check the status.

Version: 1.6.2.x

1. Enhance the expense type mapping rule by adding an additional "vendor account" column.

Version: 1.7.0.1

1. Enhance the form "Link invoice line to purchase line", which can display the purchase line candidates when item number or expense type is not defined.
2. Introduce a group access level above the legal entity in Channel definition to support cases where a single AP clerk is responsible for multiple legal entities.

Version: 1.8.x.x

1. Remove the irrelevant invoice lines (with zero/empty amount, quantity and unit price).
2. Exclude invoice lines with the type "Cost Invoice" when it is designated to transfer cost invoices to the invoice journal.
3. Leverage the continuous learning to format the date based on the historical data.

Version: 1.9.0.x

1. Automatically remove the field value when it is not found in the lookup list.
2. Sync vendor based on filter conditions.
3. Deactivate the legal entities & vendor accounts when they are removed in the Dynamics 365 Finance side.
4. Leverage the continuous learning to apply the correct decimal format on the amount fields based on the historical data.

Version: 1.9.1.x

1. Support currency code as an attribute during OCR recognition process.

1. Introduction of Invoice capture

1.1 Overview

The Accounts payable (AP) department manages and processes invoices for goods and services received. The AP accountant verifies data on vendor invoices for the following reasons:

- To avoid extra effort if adjustments or corrections are required during the period close.
- Paying vendor invoices in a timely manner to prevent financial loss because of error or fraud.

Optical character recognition (OCR) has become widely used by different industries in past years. It is now common for printed texts to be digitized, so that they can be electronically edited, searched, stored more compactly, and displayed online. The digital text can be used in machine processes such as cognitive computing, machine translation, text-to-speech, key data, and text mining.

The evolution of artificial intelligence (AI) technology has enabled modern OCR solutions to read different invoice formats from different vendors without requiring much human intervention. More companies are recognizing that they can save effort and improve accuracy by processing invoices via automation instead of doing manual processing.

1.2 System landscape

The major components and steps contained in the Invoice capture solution are captured in the following diagram:



1.3 Roles

You may need to have different roles to set up and use the Invoice capture solution in the Power Apps environment and Dynamics 365 Finance environment:

- **Accounts Payable Admin**

Task: Perform setup and configuration in both Invoice Capture and Dynamics 365 Finance.

Roles: **Accounts Payable Admin** role in Power Platform and Dynamics 365 Finance, with the additional **InvoiceCaptureOperator** role assigned in Dynamics 365 Finance.

- **b) Accounts Payable Clerk**

Task: Review and correct captured invoices in Invoice Capture.

Roles: **Accounts Payable Clerk** role in both Power Platform and Dynamics 365 Finance, with the additional **InvoiceCaptureOperator** role assigned in Dynamics 365 Finance.

- **c) System Administrator**

Task: Set up environments in Microsoft Power Platform and deploy solutions within the platform.

Roles: Admin role in both Dynamics 365 Finance and Power Platform.

- **d) Environment Maker**

Task: Create custom AI models and workflows in Power Automate.

Roles: Environment Maker.

- **e) Finance and Operations Basic User**

Task: The Finance and Operations Basic user security role allows the user to access and update virtual entities (VE) and Business events. User will be blocked from navigating to Dynamics 365 Finance to check the transferred invoices if the role is missing.

The **InvoiceCaptureOperator** role in Dynamics 365 Finance is specifically designed to allow users to execute derivation and validation logic in Invoice Capture, as well as transfer invoices to Dynamics 365 Finance. For touchless processing scenarios, this role must be assigned to the corresponding Flow user within Dynamics 365 Finance.

1.4 License

To use Invoice capture solution, the following licenses need to be considered for Dynamics 365 Finance customers:

- Invoice processing fee based on number of invoices

Dynamics 365 Finance customers will be entitled to 100 invoice capture transactions per tenant/month. If customers need additional transactions, they need to purchase Electronic Invoicing SKU which costs 300 USD for 1K transactions/tenant/month. The transaction capacity is use-it-or-lose-it monthly, and customers will need to purchase for peak capacity.

- Power Apps license (per user)

If users want to access the Invoice capture, they have to grant the access to Power Apps first.

- Azure Data Lake Storage subscription

Normally, Dynamics 365 Finance customers do not need to subscribe to additional Azure Data Lake storage if the entitled 20G Dataverse file license is sufficient to persist the original invoice documents. However, different apps will share this Dataverse file storage. Therefore, they might need to make additional subscription if the entitled Dataverse file capacity is not sufficient. The same applies for Dataverse database storage (Default 10GB) to persist with the captured invoice data.

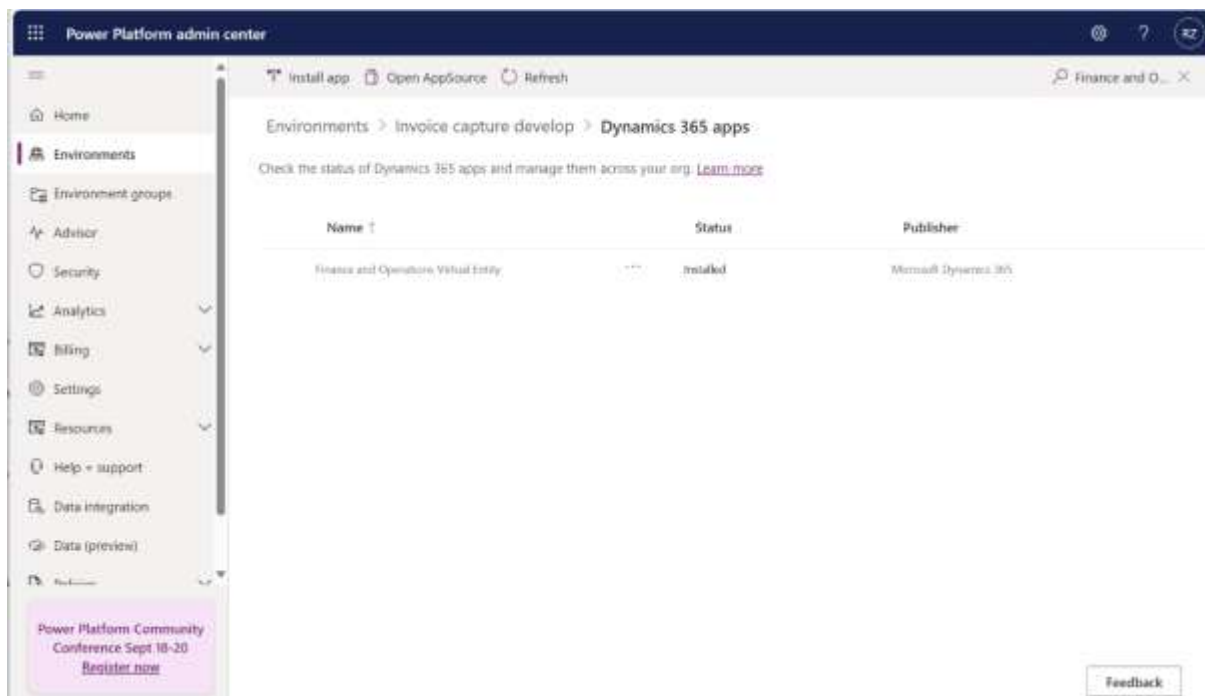
2. Installation

2.1 Preparation

Invoice capture officially **ONLY** supports Integrated Power Platform environments.

For an *integrated Power Platform environment*, the finance and operations virtual entity is already installed. To confirm that it is installed in the environment, follow these steps.

1. In the Power Platform admin center, go to **Environment**, and open the **Environment details** page.
2. Select **Resources >> Dynamic 365 apps**.
3. Confirm that **Finance and Operations Virtual Entity** appears in the list, and that it has a status of **Installed**.



As of March 1, 2024, the integrated Dataverse environment was enabled by default for Dynamics 365 Finance environments. <https://learn.microsoft.com/en-us/power-platform/admin/settings-features#finance-and-operations-in-dataverse>

One known limitation when using the Cloud-Hosted Development Environment is that navigating from Dynamics 365 Finance to Invoice capture does not work when clicking the Invoice capture tile within Dynamics 365 Finance.

2.2 Feature enablement in Dynamics 365 Finance

When the feature **Invoice capture for Dynamics 365 Finance** is enabled, the menu under **Accounts Payable >> Set up >> Invoice capture** will be visible.

Before the installation of invoice capture, you need to complete the set up in Invoice capture setting:

1. Decide the onboarding legal entities in the parameter "Synced legal entities".
2. Decide whether the attachment will be transferred together with invoice from Invoice capture.

When the parameter is enabled, the column "Document type" in table "Synced legal entities" will be enabled and the value on field "File" under Organization administration >> Document management >> Default document types will be assigned. Admin can choose another value from the list to decide which document type is used for persisting the original document from Invoice capture.

3. Maintain the mapping relationship between invoice type in Invoice capture and the invoice framework to create the invoice in Dynamics 365 Finance.

In the current version, it supports the following options:

Invoice type	Invoice framework in Dynamics 365 Finance
PO invoice	Vendor invoice
Header-only invoice	Vendor invoice
Cost invoice	Vendor invoice or Invoice journal

When the invoice journal is chosen, the column "Invoice journal name" in table "Synced legal entities" will be enabled and the default journal name will be assigned. Admin can choose another journal name from the list to decide which journal name is used for creating the cost invoices in Dynamics 365 Finance.

Known limitations:

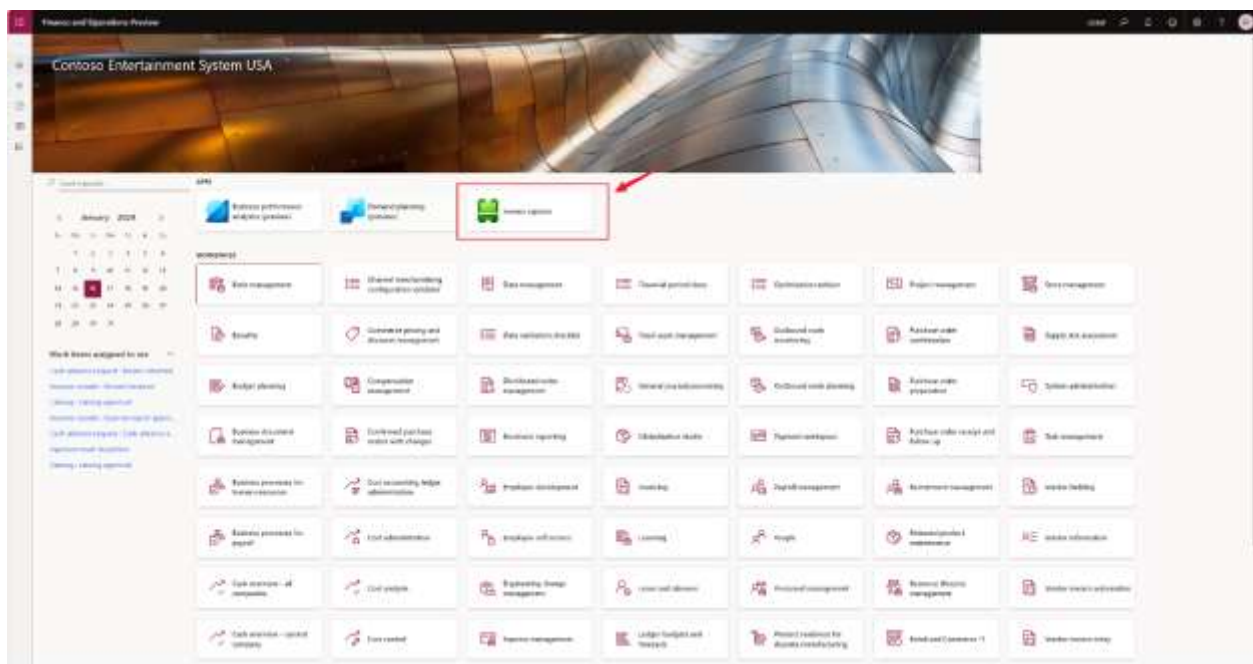
When the Invoice journal is selected for creating a cost invoice in Dynamics 365 Finance:

- Only the total amount from the invoice header will be transferred. Line-item details will NOT be included.

- The total sales tax cannot be transferred. Instead, the system relies on the sales tax settings to calculate the correct sales tax amount. The "Amount included sales tax" parameter must be enabled in the journal name settings.
- Attachments can only be transferred to the invoice journal header level and not to the line level.

2.3 Invoice capture in Dynamics 365 Finance

The tile "Invoice capture" has been introduced on the home page. The feature "Invoice capture for Dynamics 365 Finance and Operations" decides whether to display the tile or not. It will navigate to the home page of Invoice capture when the invoice capture solution is installed.

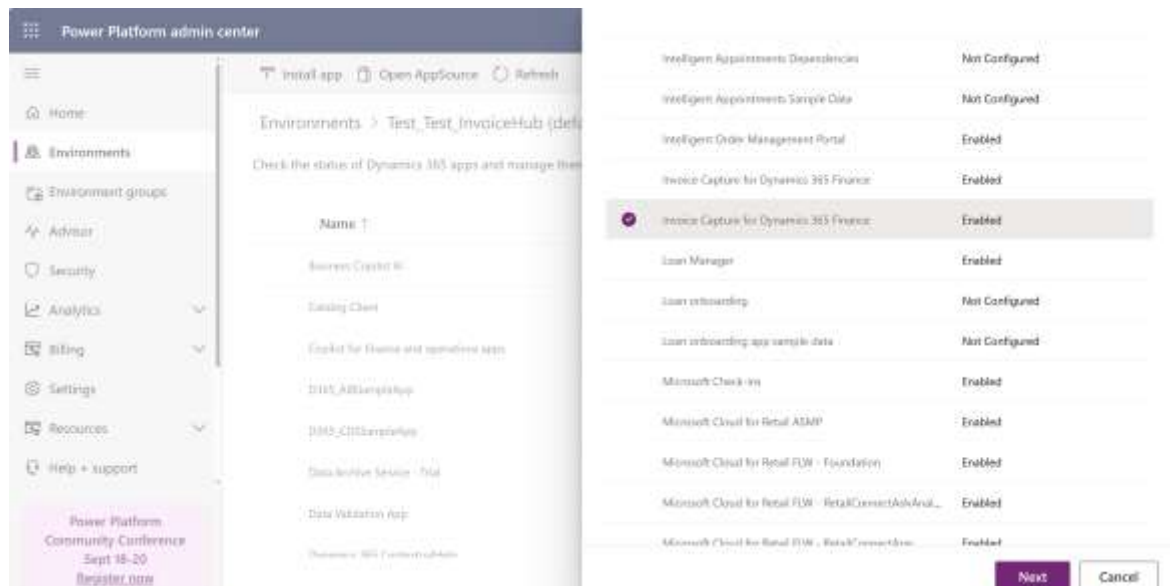


When the invoice capture is not installed in the integrated Power Platform environment, it will navigate to the installation page of Dynamics 365 Finance.

2.4 Installation

To install the Invoice capture solution, follow the steps:

1. In the Power Platform admin portal, go to **Environments** and select the environment.
2. Select **Resources >> Dynamics 365 apps**.
3. Click "Install app" and choose "**Invoice Capture for Dynamics 365 Finance**"
4. Follow the instructions to complete the installation



2.5 Upgrade

When a new version is available, it will remind the user of the availability of the new updates and the admin can follow the steps below to complete the upgrade:

1. In the Power Platform admin center, go to **Environment**, and open the **Environment details** page.
2. Select **Resource >> Dynamic 365 apps**.
3. If **Invoice Capture for Dynamics 365 Finance** has a status of **Upgrade available**, the new update can be applied by clicking the status, accepting the terms of service and selecting **Update**.

2.6 Uninstallation

If a customer wants to delete the invoice capture solution, it can be achieved by the following steps:

1. In the Power Platform, select the right environment and select **Solution**.
2. If the customer wants to delete the solution completely, the following solutions have to be deleted in order:
 - Dynamics 365 Invoice Capture - FNO Integration
 - Dynamics 365 Invoice Capture - Application
 - Dynamics 365 Invoice Capture Solution Anchor
 - Dynamics 365 Invoice Capture - Controls
 - Dynamics 365 Invoice Capture - Backend
 - Dynamics 365 Invoice Capture Base

If the customer wants to delete the solution only and keep the historical data, please do not delete the solution **Dynamics 365 Invoice Capture Base**.

If you have already installed the solution in private preview, you will need to uninstall the old solution completely before you continue.

2.7 Migration

2.7.1 Import and export the knowledge of continuous learning records

Continuous learning is a feature of Invoice capture that allows the system to automatically derive codes such as legal entity, vendor account, item number, and expense type from past invoices that have been transferred.

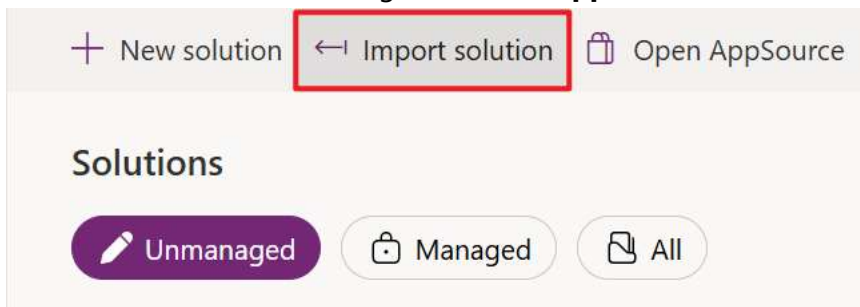
When your system has accumulated sufficient knowledge, this guide enables you to migrate the knowledge between environments, eliminating the need to retrain the system from scratch.

Prerequisites

- Upgraded to version 1.6.0.x or higher on both source and target environments.
- You need to have the "Invoice capture continuous learning migration tool" solution with you.

Export and import steps:

- a) In the **source environment**, go to **Power App Maker >> Solutions >> Import solution**



- b) On the "Import a solution" page, select "Browse" and select the "invoice capture continuous learning migration tool" solution. The solution can be downloaded via the [link](#). Click "Next".
- c) Follow the guide to complete the solution import. Note: If the connection is not ready, please complete the connection setup first.
- d) Wait until the solution is completely imported.
- e) Go to **Power App Maker >> Solutions >> All >> Invoice capture - continuous learning migration tool >> Invoice capture - continuous learning migration flow** and click "Turn on" first and then click "Run >> Run flow". Go to **Power App Maker >> Solutions >> All >> Invoice capture - continuous learning migration tool >> Invoice capture - continuous learning migration flow** and click "Turn on" first and then click "Run >> Run flow".



- f) Wait for the flow to be completed. This can be checked under "Run history".

28-day run history ⓘ			Edit columns	All runs
Start	Duration	Status		
May 8, 03:24 PM (12 sec ago)	00:00:12	Succeeded		

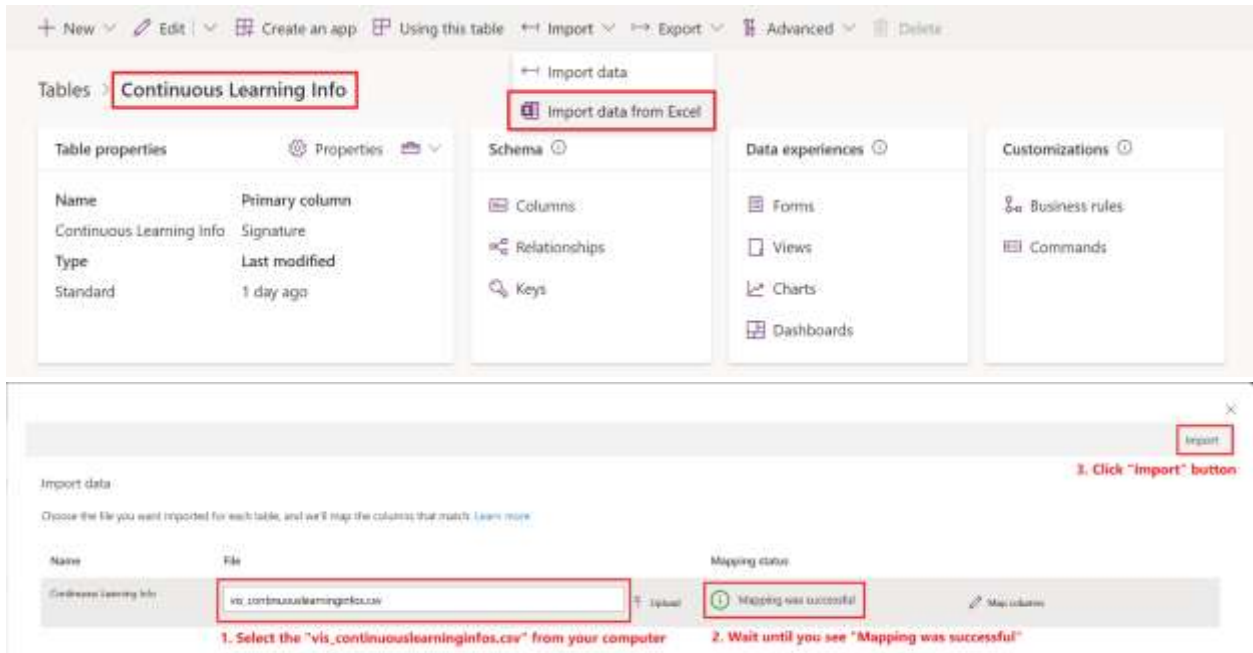
- g) In the Power App Maker, go to Tables >> All >> Continuous learning info and click **Export** >> **Export data** to download exported data A zip file will be downloaded.

2. Click the "Export data" button

1. Select to highlight the table

3. Click the "Download exported data" text

- h) Extract the zip file, it will give you a file with name "vis_continuouslearninginfos.csv". Save this file for later use.
- i) Now switch to the **target environment**.
- j) Go to **Power App Maker >> Tables >> Import >> Import data >> Import data from Excel >> "Continuous learning info"** and select "**vis_continuouslearninginfo.csv**" to upload.



k) Wait until you see "Mapping was successful" in column "Mapping status" shows.

3. Channel

3.1 Definition

Customers receive supplier invoices normally from different external sources. Channels are introduced in Invoice capture to collect these invoices in one location. Admins can define channels based on different triggers in various connectors in Microsoft Power Automate. Invoices that are captured via channels will appear on the **Received files** page.

3.2 Document received API

"Document receive API" (**vis_ExternalDocumentReceive**) is a Dataverse unbound custom API, which is used to receive the invoice documents. Admin must follow the API standards and provide the correct input parameters to ensure API is correctly called.

Input parameters:

Parameter name	Type	Required	Description
vis_ExternalDocumentReceiver_FileSetId_In	string	No	An optional parameter.
vis_ExternalDocumentReceiver_FileName_In	string	Yes	A file name with extension.
vis_ExternalDocumentReceiver_FileContent_In	string	Yes	A Base64-encoded file.

Parameter name	Type	Required	Description
vis_ExternalDocumentReceiver_ChannelType_In	string	Yes	The channel type can be Direct , Email , API , or FileSystem .
vis_ExternalDocumentReceiver_ChannelInfo_In	string	Yes	A stringified object. For more information, see the Channel information section.

A valid channel ID has to be given here. If the document receive API is called without a valid channel ID, the system will ignore the request, and the invoice document will not be captured and pop in the **Received files** list page.

Channel information

Parameter name	Type	Required	Description
ChannelId	string	Yes	The identifier of the channel that must be bound.
SendFrom	string	No	Additional information to track the sender.

Here is an example of a payload.

```
{ "ChannelId": "xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx",
  "SendFrom": "xxxx.xxx@contoso.com" }
```

Output parameters:

Parameter name	Type	Description
vis_ExternalDocumentReceiver_Data_Out	string	The file ID of a successful file on the Received files page (vis_externaldocumentinfo).

3.3 Generate the channel with the flow

Admin can decide how the company wants to integrate the document receive API. On the **Channel** page, you can decide the enablement of the parameter **Use managed flow**.

When the parameter **Use managed flow** is set to **Yes**, the flow setting is enabled. The user can then select a flow template, which assists in building the flow by providing the necessary parameters. The following templates are available out-of-the-box:

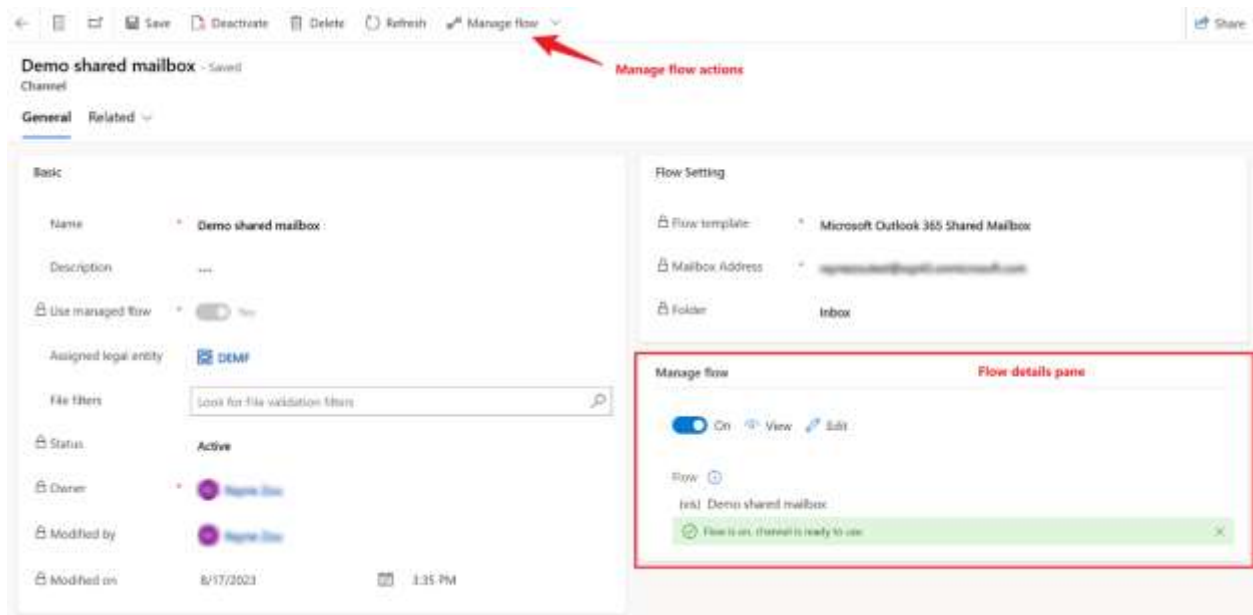
- Outlook.com
- Microsoft Outlook 365
- Microsoft Outlook 365 shared mailbox
- SharePoint
- OneDrive
- OneDrive for business

By default, the flow template is set to **Microsoft Outlook 365**.

The following table describes the properties that are required to generate flows.

Flow template	Property	Description
Outlook.com or Microsoft Outlook 365	Folder	The email folder under the root directory. The default folder is Inbox . (Subfolders are not supported.)
Microsoft Outlook 365 shared mailbox	Mailbox address and folder	The mailbox address is the shared mailbox address, and the default folder is Inbox . (Subfolders are not supported.)
SharePoint	Site address	The address of the SharePoint site, such as https://contoso.sharepoint.com/sites/sitename.
	Library	The name of the SharePoint library.
	Folder	Select a folder or leave the property blank to use the whole library.
OneDrive or OneDrive for business	Folder	The directory name.

When the channel is saved and the parameter “**Use managed flow**” is set as **Yes**, the flow will be automatically generated when the connection reference has been already existing, and pane “Manage flow” will pop. It provides the following quick action menus:



- Turn the flow on or off.
- Edit the flow or customize the flow with some advanced conditions.
- View the running details of the flow and other flow-related information.

The action “Manage flow” helps you to manage the flow lifecycle management:

- If no flow is associated with the current channel:
 - **Generate** – This option is available if the first attempt to generate the channel failed.

- If a flow is associated with the current channel:
 - **Sync** – Sync the parameters when users update the flow.
 - **Unlink** – Unlink the associated flow and keep it in the environment.
 - **Delete** – Delete the associated flow.

The flow is generated based on the selected template and preset required parameters. Microsoft recommends that only users with advanced knowledge of Power Automate Flow update some advanced rules within the flow.

3.4 Generate the channel without the flow

When the parameter “**Use managed flow**” is set **No**, it means that the admin wants to call the document receive API without using the flow template. This option is suggested to be used only by professional users. After the channel is saved, the channel ID can be found in the URL.

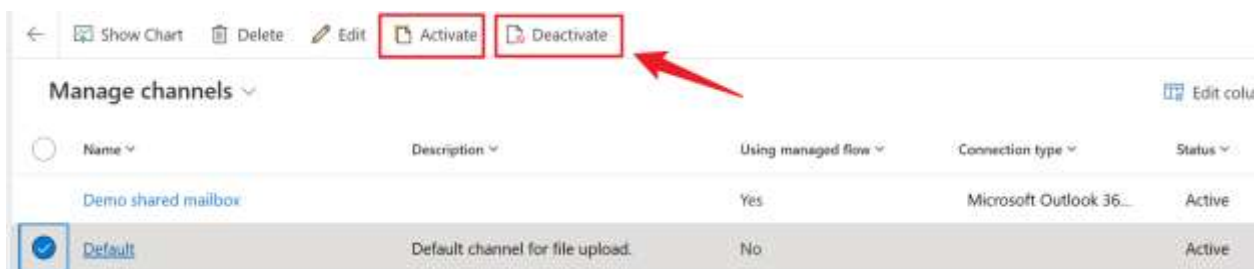
3.5 Create a new channel

Admin can create a new channel by following the steps:

- In the navigation pane, select **Manage channels**.
- On the Action Pane, select **New**.
- Enter a name and description, set the **Use managed flow** option to **Yes**, and select a flow template.
- Select **Save**. The new channel page will then appear in the list. Creation of the flow behind will take some time.

3.6 Deactivate/Activate

Admin can use the button Activate/Deactivate in the ribbon to decide whether the invoice document should be received from the channel.



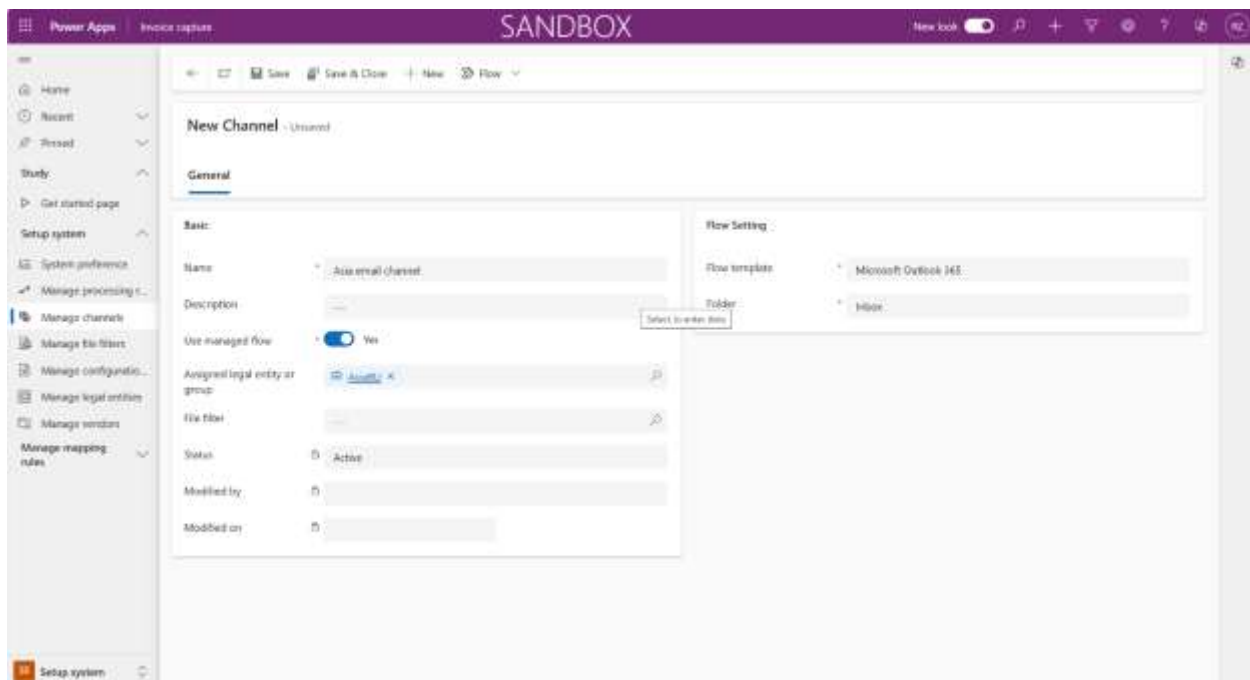
3.7 Legal entity or group assignment

Admin can create distinct channels for various levels within the company organization. In the Power Platform admin portal, navigate to Environment and select the desired environment. Then go to Business Units to create new business units and assign existing ones as child nodes. These business units can act as group levels for multiple legal entities, with security roles to manage data access.

The details of creating business unit can be found under [Create or edit business units \(preview\) - Power Platform | Microsoft Learn](#).

When invoices are received from the channel, only users with the appropriate privileges can access the received invoice files. To grant the access, the corresponding Teams shall be assigned to the AP clerk roles. The definition of Teams can be found under [Teams in Dataverse - Power Platform | Microsoft Learn](#). In case the derived business unit is not valid, the invoice file will be set as Cancelled with reason "Legal entity or group is invalid".

When a legal entity is assigned to a channel, the corresponding business unit will automatically be set as the access level when an invoice file is received through that channel. During the invoice capture process, the legal entity is automatically assigned, removing the need for additional derivation logic.



3.8 Steps for creating a channel without using managed flow

A shared mailbox can be used by a group of people, like a support team, to receive and send email from the same email address. Select a shared mailbox to add or remove members, set up automatic replies, manage aliases, and more. In invoice capture, customer could follow the steps to create a channel which uses the shared mailbox to receive the invoice email from the supplier:

- Create a channel by clicking the "+ New" button.
- Give the channel name and set "Use Manage channel" to No.
- Save and record the channel id from the browser url.
- Login Power Apps and choose "Flow" from the left navigation.
- Click button "+ New flow" and choose "Automated cloud flow" from the dropdown list.

- f) Give the flow name and select trigger "When a new email arrives in a shared mailbox".
- g) Click "Create" button to create the power automated flow.
- h) Provide the shared mailbox address in the field "Original Mailbox Address" and set "Only with Attachments" and "Include Attachments" to Yes.
- i) Adding the other criteria to meet your own business requirement.
- j) Clicking the "+" to insert a new step, choose "Add an action", select "Microsoft Dataverse" and choose "Perform an unbound action" in the action.
- k) Rename the step name by clicking "..." and select "Rename".
- l) Choose vis_ExternalDocumentReceiver for the action name.
- m) Fill the record channel id to "ChannelId".
- n) Select "Attachments Name" for "FileName".
- o) Select "Attachment content" for "FileContent", and select "..." > > "Peek code", copy the value for "item/FileContent" which looks like "@items('xxx')['contentBytes']" and wrap with string function like "string(items('xxx')['contentBytes'])" and paste the final value to field "Attachment content".
- p) Fill "AdditionalInfo" with

```
additionalInfo:{
    "SendFrom": @{triggerOutputs()?['body/from']}
}
```

Note:

If you have Invoice capture solution version 1.1.0.10 or higher, you could directly choose the "Microsoft Outlook 365 Shared Mailbox" as the "Flow template".

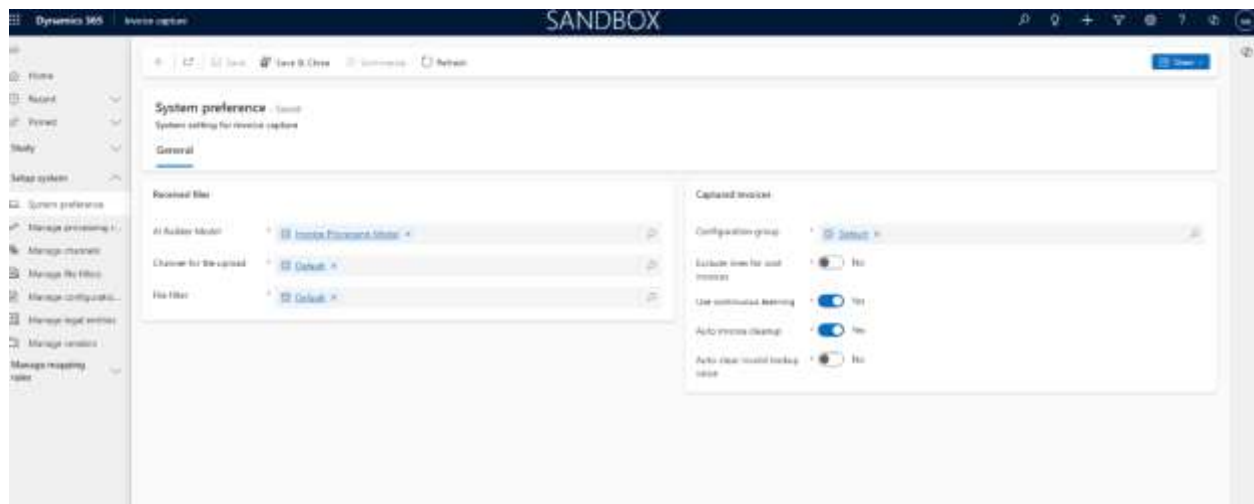
3.9 Security

Accounts Payable Admin with assigned Environment maker is allowed to create the channels with managed flow. Meanwhile, the role "InvoiceCaptureOperator" in Dynamics 365 Finance has to be assigned to the flow owner to make sure the Invoice capture operation can be working properly.

4. Configuration

4.1 System preferences

After the Invoice capture solution is installed, default configurations for using it are provided. In the Setup system section, configurations on the system level can be found in **System preference**. If these default configurations do not fully meet your business requirements, please create new settings and replace the default ones. The configurations are including:



- **AI Builder model**

The default model is set to **Invoice processing model**. This is a prebuilt model that can handle the most common invoices in various languages.

You can create your own model by uploading additional sample invoices, tagging the fields and training the model. Additionally, you can define some new fields to accommodate your business. The fields can be automatically extracted within Invoice capture and transferred to Dynamics365 finance.

- **Channel for file upload**

The channel "Default" is provided for directly uploading the invoice files. You can create a new channel and replace the default channel. In the list form of **Manage invoices >> Received files**, AP clerk can upload the invoice directly by the steps:

- a) Click the button "Upload files" to call out the side pane.
- b) Select the file by clicking the "+" or directly drag and drop the file into the frame. It can only accept a maximum of 20 files at one time.
- c) Click the "Upload"
- d) The selected files will be submitted into **Document received API** and the list will be refreshed.

If customer wants to block the uploaded invoices, simply deactivate the corresponding channel”.

- **File filter**

Select the file filter to apply additional filtering to incoming files at the application level.

- **Configuration group**

The configuration group that is used if a configuration group isn't set at the legal entity or vendor account level during invoice processing.

- **Exclude lines for cost invoices**

Enabling this parameter and setting the cost invoice for transfer to the invoice journal will result in the invoice lines being automatically hidden in the side-by-side viewer, bypassing all line-level validations.

- **Use continuous learning**

Select this option to turn on the continuous learning feature.

- **Auto-clear invalid lookup value**

Turning on this parameter will automatically clear the value which is invalid in the lookup list. Currently, it will only support the limited field (payment terms, business unit, cost center and department) in the initial release.

- **Auto invoice cleanup**

Select this option to automatically clean up the transferred and voided invoices, together with the invoice files from the Dataverse older than 180 days every day. The already transferred invoice records and the attachment in Dynamics 365 Finance will NOT be removed.

4.2 Manage processing rules

In invoice capture processing, different derivation rules and validation rules are applied to assure the completeness and correctness of the invoices. Considering some are not applicable to all the customers, it will use additional parameters to control the logic.

a) **Remove irrelevant invoice lines**

When this parameter is enabled, invoice lines will be removed if the captured values for amount, quantity, and unit price are ALL zero or left blank.

b) **Format purchase order**

When the parameter is enabled, it will check the number sequence settings in the Dynamics 365 Finance side and format the purchase order number accordingly. This can

increase the touchless rate when the purchase order number doesn't follow the same format as the one set in the number sequence settings.

Here are the supported format examples:

- Purchase order number: "125", Format: "#####", Formatted purchase order number: "00000125"
- Purchase order number: "00125", Format: "#####", Formatted purchase order number: "00000125"
- Purchase order number: "125", Format: "USMF-#####", Formatted purchase order number: "USMF-00000125"
- Purchase order number: "PO00125", Format: "#####", Formatted purchase order number: "00000125"
- Purchase order number: "P.O.125", Format: "USMF-#####", Formatted purchase order number: "USMF-00000125"
- Purchase order number: "125", Format: "PO-#####", Formatted purchase order number: "PO-00000125"

c) Derive currency code for cost invoice

When the parameter is enabled, it will automatically derive the currency code from the invoice master data on Dynamics 365 Finance side. The logic is only applied for cost invoices as the currency code has to be identical to the currency code on the purchase order.

d) Validate total sales tax amount

It will validate the consistency between the sum of the sales tax amount in sales tax card and the total sales tax amount. When there is no sales tax line, the validation logic will be skipped.

e) Validate total amount

This rule ensures alignment between the calculated total invoice amount and the captured total amount. First, we need to ensure the line amount on each line and the total sales tax amount before applying the equation:

- If line amount has zero or null value, it will set the line net amount = unit price x qty
 - If total sale tax has zero or null value, it will sum the sales tax lines as total sales tax.
- Total amount == Sum (line amount) + Sum (charge lines) - ABS(Discount) + Total sales tax*

In case there are no invoice lines, or the sum of line amount is zero, the total amount validation will be skipped.

4.3 File filters

"Manage file filters" is to define additional filters for incoming invoice files. Files that don't meet the filter criteria will be received and appear in the **Received files (Pending)** list with status of **Cancelled**. Clerks can review them and decide whether to void and obsolete the file. This behavior is different from the one defined in the Flow

behind the channel. In the Flow, files that don't meet the criteria are not going to pop in the **Received files** list.

After the Invoice capture solution is installed, a default file filter is provided. This file filter cannot be edited and removed. If admin wants to apply a filter with different conditions, s/he has to create a new filter and replace the default setting.

The file filter is quite flexible and can be applied on different channel levels. When the invoice document is received, it will first check the file filter on the channel level. If no file filter is assigned to the channel level, it will use the file filter on the system level.

There are three settings need to be configured in the file filter:

a) Accepted file size

Admin has to define the minimal accepted file size and maximum file size for the invoice document. The maximum file size cannot exceed 20 MB.

b) Supported file types

Admin can select one or more file types which are currently supported for AI Builder recognition service. (pdf, png, jpg, jpeg, tif, tiff)

c) Supported file names

AP admin can filter out files that are not invoice-relevant by using file name rules. S/he can apply different rules on file names to accept files only when the name contains predefined strings or exclude files that contain the defined strings.

4.4 Sync master data

Invoice capture processing requires two basic master data: legal entities and vendors.

a) Legal entities

Organizations that are registered with legal authorities and defined in Microsoft Dynamics 365 Finance. Business activities are performed and recorded separately for each legal entity. In Microsoft Power Platform, business units, security roles, and users are linked to conform to the role-based security model. This link controls data access through business units and security roles and allows Accounts payable clerks to view only the invoices that are assigned to their users.

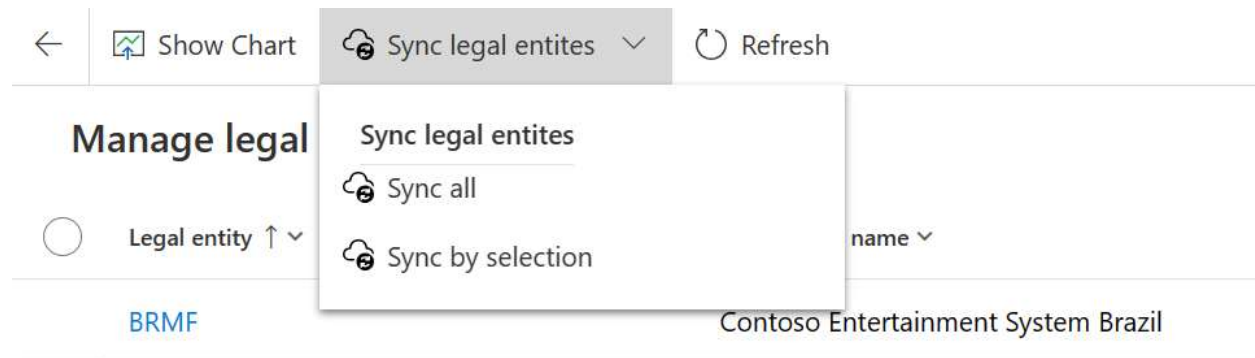
b) Vendors

Individuals or organizations that supply goods or services to a business. In Dynamics 365 Finance, if a vendor provides services or product to multiple legal entities, a vendor account has to be created for each legal entity and business activity can be recorded. In Invoice capture, the vendor master data is used to automatically derive the vendor account and helps increase the touchless rate in invoice processing.

Within Invoice capture, it provides the option to view and manage the synchronized legal entities and vendor account which need to be used for classification and derivation during invoice processing.

▪ **Manage legal entities**

In the **Manage legal entities** process, users can't manually create legal entities. Instead, you must sync the legal entities by following the steps.



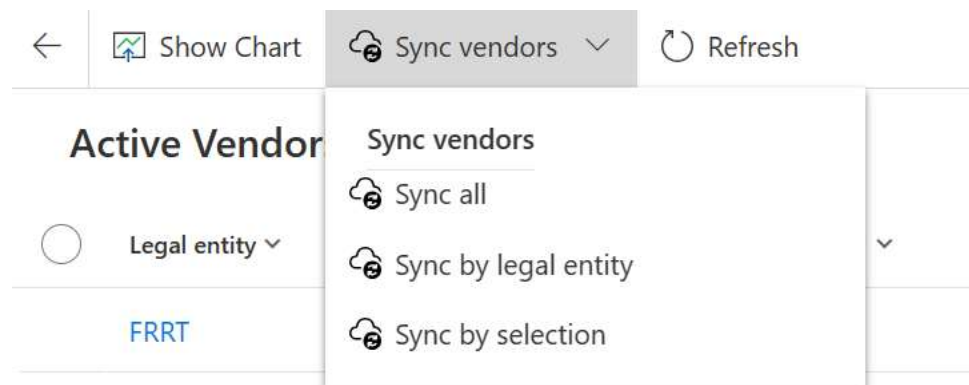
- Go to **Setup >> System setup >> Manage legal entities**.
- Select **Sync legal entities >> Sync all**.
- In the confirmation message box, select **OK**.

After synchronization is completed, a message shows the number of new legal entities that have been synced. The list view is automatically refreshed to show the newly created legal entities.

Please ensure the feature "Invoice capture for Dynamics 365 Finance" has been enabled in integrated Dynamics 365 Finance and the onboarded legal entities have been selected.

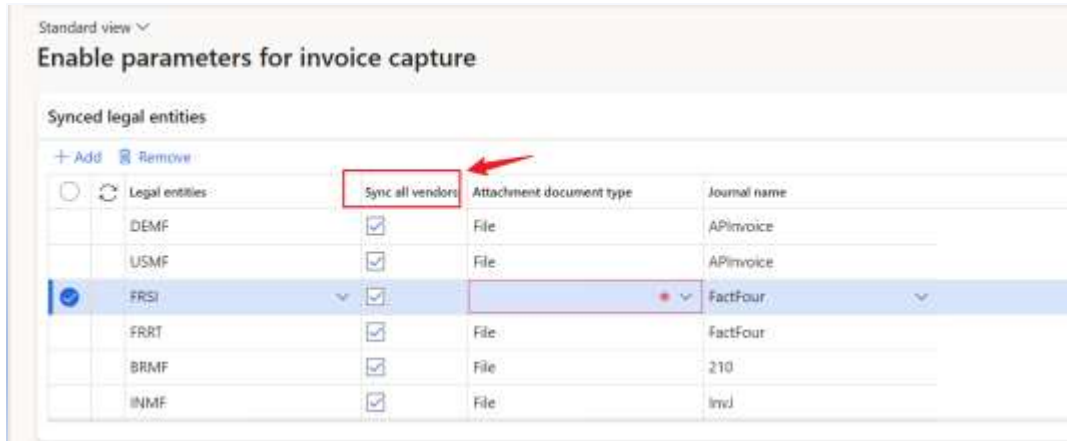
▪ **Manage vendors**

In **Manage vendors**, there are three options to sync the vendor accounts:



- Sync all** - all vendor accounts are synced. This will potentially cause a performance issue.
- Sync by legal entity** – Admin can select one or multiple legal entities and sync the vendors in the selected legal entities.
- Sync by selection** - Admin can search and select one or multiple vendors and sync the selected vendor.

When in the Dynamics 365 finance, the “Sync all vendors” is enabled under onboarded legal entities. The master data for new vendors and changed vendors will be automatically synchronized from Dynamics 365 Finance to Invoice capture.



Standard view ▾

Enable parameters for invoice capture

Synced legal entities

+ Add Remove

Legal entities	Sync all vendors	Attachment document type	Journal name
DEMF	<input checked="" type="checkbox"/>	File	APInvoice
USMF	<input checked="" type="checkbox"/>	File	APInvoice
FRSI	<input checked="" type="checkbox"/>	FactFour	FactFour
FRRT	<input checked="" type="checkbox"/>	File	FactFour
BRMF	<input checked="" type="checkbox"/>	File	210
INMF	<input checked="" type="checkbox"/>	File	InvJ

Sync vendor based on filter conditions

To fulfill some customers’ specific business, customers may not want to synchronize all vendors in Invoice capture. To address this, administrators can set up conditions to sync only the required vendors by following these steps:

- Navigate to the **Manage Vendors** list form and click the **Sync** button. Select one of the available options: **Sync All**, **Sync by Legal Entity**, or **Sync by Selection**.
- Click the **Filter** icon to open the filter condition form.
- Configure the filter condition as needed and save it.

Once the parameter **Sync all vendors** is enabled on Dynamics 365 Finance side, only the vendors that meet the specified filter conditions will be synchronized.

Deactivate the legal entities & vendor accounts

If the synchronized legal entities or vendor accounts are removed on the Dynamics 365 Finance side, the corresponding entities will be set as inactive in Invoice Capture. This will have the following implications during the invoice capture process:

- If the inactive legal entity is assigned to the channel, the incoming document will be set as cancelled.
- The inactive legal entities or vendor accounts will not be considered during the derivation logic.
- If the invoice has been completely reviewed with the inactive legal entity or vendor account assigned, the error will prevent the invoice from being successfully transferred.

4.5 Security

Only AP admin is allowed to access the settings **System preferences**, **Manage legal entities** and **Manage vendors**.

5. Configuration group

5.1 Definition

Invoices received from various suppliers can vary in style and resolution. The configuration group in Invoice Capture includes all the necessary settings for the review process, which can be adjusted across different legal entities and vendors to meet different business needs.

5.2 Default configuration group

After deployment, a default configuration group is created, which cannot be modified or deleted. This default group serves as a template for creating new configuration groups.

Admin can assign different configuration groups to various levels, such as vendor accounts, legal entities, and system-wise settings.

During the captured invoice processing, after legal entity and vendor account are determined, the system checks first if a configuration group has been assigned to the vendor. If no group is found, it checks at the legal entity level. If no configuration group is assigned at either the vendor or legal entity level, the configuration group specified in **System Preferences** will be applied.

5.3 Create a new configuration group

To create a new configuration group, select a configuration group and click **Copy**. The system will then create a new configuration group by duplicating an existing group. The new configuration group will pop in the **Configuration group** list view, which has the same values as the original configuration group for all the settings except **Group name** and **Group description**.

5.4 Configuration group details

The following settings can be adjusted based on vendor invoices which are received in customer's real business.

- **Confidence score**

Admin can define the quality standard for the invoice data recognized by AI Builder. When the recognition is completed, structured invoice data and the corresponding confidence score for each field on the invoice are sent from AI Builder. The confidence score on each recognized field indicates confidence about the accuracy for the returned result. The value range of confidence score in Invoice capture is interpreted from 0 to 100. A higher score means AI Builder has more confidence in the recognized result. Admin can configure the threshold of confidence scores to indicate different severity of messages. The low confidence error/warning message will pop in the side-by-side viewer. User has to ignore the confidence errors/warnings manually by clicking the "ignore" button in the message details before completing the review.

Note:

The confidence score cannot be improved because the prebuilt model cannot be trained with customer data without explicit permission. As a result, the recognition accuracy of the prebuilt model does not improve with continued use. In most cases, the captured text is accurate, and a low confidence score is typically due to the absence of similar sample invoices during the prebuilt model's training phase.

To manage the application of the confidence score, Admins can use the **Use confidence score** parameter under **Setup System >> Manage Process Rules >> Manual Review Condition**.

- **Manual review condition**

Admins can define review conditions based on the severity of issues. By default, manual review is only required when error occurs. This means that if no errors are detected during the Invoice capture process, the invoice will be automatically transferred to Dynamics 365 Finance. This parameter directly influences the touchless processing rate.

- **Invoice types**

There are different invoice types to classify the invoices. The invoice type determines several details:

- It determines the validation logic that's used to ensure the completeness and correctness of invoices in Invoice capture.
- It determines the invoice fields (on the header or lines) that are shown in the side-by-side viewer.
- Together with the setting in Dynamics 365 Finance and Operations, it determines whether to use invoice journal or vendor invoice after transfer.

There are three invoice types in Invoice capture:

- **PO invoice**

Invoices of this type are associated with purchase orders. The purchase order details must be determined on each invoice line. Both the header and the lines must be reviewed in Invoice capture.

- **Header-only**

Invoices of this type are associated with purchase orders. The purchase order field on the invoice header is a mandatory field. If the **Automatically create invoice lines** feature is enabled, the invoice lines are automatically created from the purchase order in Finance, and users don't have to review the line details in Invoice capture. In addition, the line details aren't shown in the side-by-side viewer.

- **Cost invoice**

Stock items and purchase order is not allowed in this type of invoices.

- **Fields control**

For each invoice type, different fields can be selected to appear in the side-by-side view by adding them from the form "Manage visible fields", and the displayed fields can be set as mandatory.

To remove the fields, please click the delete icon in the "Action" column in the configuration group detailed form.

- **Default invoice fields:**

As out-of-box, the default fields will be defined for each invoice type on both header and lines.

Default fields on the invoice header:

Field name	PO invoice		Header-only		Cost invoice	
	Available	Visible	Available	Visible	Available	Visible
Legal entity	x	x	x	x	x	x
Buyer name	x	x	x	x	x	x
Buyer address						
Bill-to name	x	x	x	x	x	x
Bill-to address	x	x	x	x	x	x
Vendor account	x	x	x	x	x	x
Vendor name	x	x	x	x	x	x
Vendor address	x	x	x	x	x	x
Invoice number	x	x	x	x	x	x
Invoice date	x	x	x	x	x	x
Due date	x	x	x	x	x	x
Purchase order	x	x	x	x		
Currency code	x	x	x	x	x	x
Subtotal	x	x	x	x	x	x
Total amount	x	x	x	x	x	x
Total tax	x	x	x	x	x	x
Payment terms					x	
Business unit					x	
Cost center					x	
Department					x	

Default fields on the invoice line:

Field name	PO invoice		Cost invoice	
	Available	Visible	Available	Visible
Item number	x	x	x	x
Expense type	x		x	x
Item description	x	x	x	x
Item external number	x	x	x	x
Purchase order	x	x		
Purch line no.	x	x		

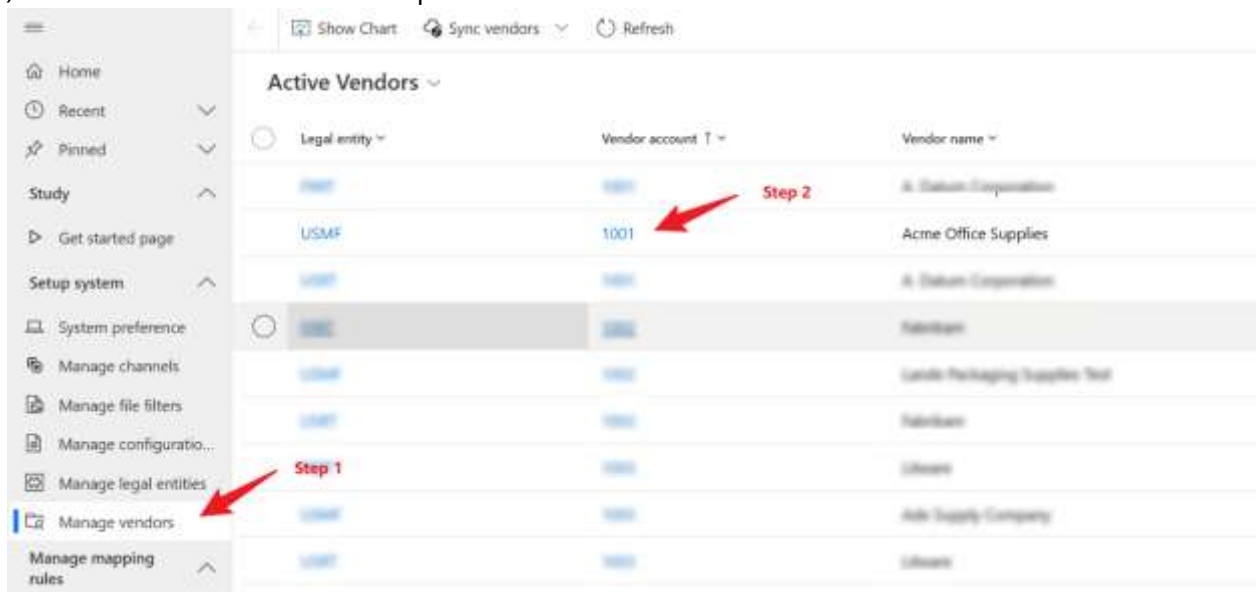
Quantity	x	x	x	x
Unit of measure	x	x	x	x
Unit price	x	x	x	x
Payment terms			x	
Business unit			x	
Cost center			x	
Department			x	

5.5 Configuration group assignment

Customers might receive invoices of different types, layout, and context from different suppliers. To handle the invoices more efficiently within Invoice capture, it provides the assignment of configuration on either vendor account level or legal entity level. During the time of invoice capture processing, it will determine the configuration group for each captured invoice by following the priority Vendor account >> Legal entity >> System level.

Here is the step how to assign a configuration group under a selected vendor:

- Go to Setup system >> Manage vendors.
- Click the vendor account to open the detailed form.



- Select the assigned configuration from the list.

1001 - Saved
Vendor

General

Vendor account	1001
Vendor name	Acme Office Supplies
Vendor address	711 LouisianaHouston, TX 77020USA
Tax number	---
Legal entity	<input checked="" type="checkbox"/> USMF
Configuration group	<div><input type="text" value="Look for Configuration group"/> Recent Configuration Groups <div><div><input checked="" type="checkbox"/> Assign vendor</div><div><input checked="" type="checkbox"/> Default</div></div><div>+ New Configuration Group</div></div>

When the configuration is assigned, you can also see which vendors or legal entities have been assigned under the **Related** options in the configuration detailed form.

Default - Saved
Configuration Group

General Related ▾

Related - Common

☒ Legal entities

☒ Vendors

5.6 Security

Only AP admin is allowed to access the Manage configuration groups.

6. Mapping rules (Optional)

6.1 Definition

"Manage mapping rules" assists in deriving basic data from predefined rules to facilitate the invoice capture process, including details such as legal entity, vendor account, item number, and expense type.

As Invoice capture now supports more advanced derivation, maintaining these mapping rules is not mandatory unless there are specific requirements in your business process.

6.2 Manage mapping rules (Optional)

The **Mapping rule setup** tab provides four options:

- Legal entity
- Vendor account
- Item mapping
- Expense type

For example, you select the **Legal entity mapping rules** option. The legal entity code will be identified by using the company name, address, and tax registration number. For a rule that is named **LE-USPM**, if the company name contains the text "Contoso Robotics USA," the legal entity code will be **USPM**.

The page shows all the active mapping rules. If you want to view the inactive mapping rules, select **Active mapping legal entity rules**, and then select **Inactive mapping legal entity rules**.

The following actions are available for mapping rules.

6.2.1 Create a mapping rule

You can use two methods to create a mapping rule:

- Select **New** to create a new mapping rule. Then enter the information for the mapping rule. The **Rule Name** value should be unique for each type of mapping rule.
- If you select an existing mapping rule, button **Copy** becomes available. Select it, and then select **OK** in the dialog box that appears. A mapping rule is created by duplicating the selected rule.

6.2.2 Edit a mapping rule

To edit a mapping rule, select a field, and change the value. If two mapping rules have the same **Legal Entity** and **Vendor Account** values, but different **Item Name** values, a conflict will be detected, and the mapping rule won't be created or updated.

6.2.3 Activate/deactivate mapping rule

To deactivate one or more mapping rules, select them on the **Active mapping rules** page, and then select **Deactivate**. The rules are moved from the **Active mapping rules** page to the **Inactive mapping rules** page.

Likewise, to activate mapping rules, select them on the **Inactive mapping rules** page, and then select **Activate**.

6.2.4 Remove mapping rule

To remove mapping rules, select them, and then select **Delete**.

6.3 Manage mapping rule of expense type

To ensure a seamless and automated process within Dynamics 365 Finance, it is advisable to utilize the vendor invoice framework for creating cost invoices. This approach allows for the transferred invoices from Invoice capture to be automatically submitted into the workflow for approval.

To realize this end-to-end touchless process, it is essential to automatically derive the expense type for each invoice item. In Invoice capture, you could define a default expense type for each vendor in manage mapping rule. This default expense type acts as the procurement category within Dynamics 365 Finance, which is to determine the appropriate expense account for bookkeeping purposes.

It is important to note that the default expense type setting is effective only for vendors from whom you exclusively receive cost invoices. If a vendor supplies both purchase order invoices and cost invoices, the mapping rule may incorrectly apply the default expense type to purchase order invoices.

7. Dashboard

In Invoice capture, the dashboard includes charts that provide an overview of invoices that have been imported. These charts can help the Accounts Payable (AP) manager analyze the performance of the invoice generation process. The AP manager can view the status of the invoice generation process and, by applying different filters, can also view details.

The following charts are available on the dashboard:



a) All captured invoice by status

This chart shows the following statuses for a captured invoice. By selecting a status, users can filter the captured invoices in the detailed list.

- Captured
- Complete
- In review
- Obsoleted

b) Total captured invoice volume

This chart shows the number of captured invoices by period. Users can change the period by using the drop-down list.

c) Captured invoices from top vendors

This chart shows the total number of invoices per vendor. The vendors that have the most invoices appear at the top.

d) Days to complete per invoice with exceptions

This chart shows the average number of days that are required to capture one invoice. This information can help the AP manager analyze the time to process an invoice when manual intervention is required. If there is an upward trend, users can review the process details and adjust settings to help reduce the number of days that are required.

e) Incomplete invoices by pending time

This chart shows the number of days that a captured invoice hasn't been generated in the enterprise resource planning (ERP) system. The larger the number of days pending, the longer the invoice generation process. The AP manager can drill down into the detailed captured invoices and generate invoices in the ERP system.

8. Received files

8.1 Overview

In Invoice capture, the **Manage invoices >> Received files** page is a central place where invoice files are received from different sources.

In most cases, the **Received files** process is automatically processed and doesn't require any manual intervention. However, if there are exceptions or errors, the user must ensure that all invoice files have been correctly accounted, to help prevent omissions.

Setup system >> Manage file filters can be used to apply different filter settings on the invoice files received. Invoice files that violate the filter rules won't be processed and stop as "Cancelled" in the default list view. Users can decide whether invoices can be included again when they're valid or void these invoices if they are not valid after double confirmation.

8.2 List views

Received file (pending)

The default view which shows incoming files that violate filter rules.

- If an invoice isn't valid, the user can mark it as **Voided** by selecting **Void**.
- If an invoice is valid, the user can include it in the invoice process by selecting it and then selecting **Retry**.

Received file (voided)

The view shows all files that are marked as **Voided**. If you select an invoice and then select **Delete**, it's permanently deleted from Microsoft Dataverse and can't be recovered.

Received file (captured)

The view shows all files that have been successfully recognized and are in Dataverse.

- Select an invoice, and then select **View captured invoice** to view invoices in a side-by-side viewer, where users can review the invoice status and make corrections.
- Select **Download** to download the original invoice file.

8.3 States

States	Description	Action
Waiting	The invoice has been captured by Power Automate flow and is awaiting file validation.	No action
Processing	File filter rules are being applied to validate the invoice, or the invoice has passed filter validation and is being recognized.	Retry
Cancelled	An exception occurred during file validation, or the call to the recognitive service failed.	Retry or Void

States	Description	Action
Captured	The form recognizer result has been moved to captured invoice staging.	View captured invoice
Voided	If the invoice isn't needed, select Voided. If an invoice has a status of Voided, you can permanently delete it from Dataverse by selecting Obsoleted.	Delete
Time out	When the environment is experiencing a heavy workload from other applications, scheduled jobs may not be executed on time. This can also happen when the environment is in ADMIN mode, which disables all background jobs	Retry

Note:

In the default list view, when the incoming file is "Cancelled" status, the system will display the specific cancelled reason. This feature aims to facilitate efficient actions by Accounts Payable (AP) clerks, eliminating the need to navigate to the history log for detailed information.

8.4 Upload invoice files

To upload invoice images, follow these steps.

- a) Go to **Manage Invoices >> Received file**.
- b) Select **Upload file**.
- c) Select files by selecting the plus sign (+) frame.
- d) Drag and drop the files. The selected files appear in the list.
- e) Select **Upload**. The files immediately start to be uploaded.
- f) When the upload is completed, a success message is shown, and the uploaded files are removed from the list.
- g) Close the pane. The **Received file** list is automatically refreshed.

8.5 View history

Users can select an invoice and then select **View history** to view the processing details. Details include a description, the message type, and the processing time.

8.6 Security

Both AP admin and AP clerk are allowed to access Received files.

9. Captured invoices

9.1 Overview

In Invoice capture, when an invoice is successfully recognized by AI Builder and mapped to invoice fields, the system will automatically enrich the context and validate the correctness of the invoice information according to rules before it's converted to a vendor invoice in Microsoft Dynamics 365 Finance. If the invoice isn't complete, or if the confidence score of the invoice recognition isn't high enough, manual intervention is required to review and correct the invoice. All the invoices persisted in **Manage invoices > > Captured invoices**.

9.2 What is a Side-by-side viewer?

The side-by-side viewer provides an intuitive interface for viewing raw documents and invoice forms side by side. It uses Microsoft form recognition technology to automatically extract information from the raw document and fill in the corresponding fields on the invoice page. The viewer also establishes a connection between the page fields and the original document, so that users can navigate through the document in a single tap or click. This assists the user to review the invoice more efficiently.

When the invoice fields have connection with the fields returned from AI Builder, the eyeball will be displayed on the left side of fields. By clicking the eyeball, it will automatically position and highlight the corresponding field value on the original document.

Here are the key features of the side-by-side viewer:

- Fields on the invoice page are automatically filled with information that's extracted from raw documents by using Microsoft form recognition technology.
- A connection is established between page fields and raw documents, for effortless navigation and proofreading.
- Messages are shown to help users correct errors on the invoice page, for improved accuracy and efficiency. A message is always linked to a specific invoice field except in the case where the invoice is not fully classified. The error/warning icon will pop on the right of the field. By clicking the icon, the message details will be shown.
- The interface can be resized to accommodate different invoice formats.
- Lookup lists are fetched from Dynamics 365 Finance at runtime, to ensure that information is up to date and accurate.
- The interface is flexible and adapts to different invoice types, for a customizable experience.

#200

Invoice

Expanded header

Document header

Classified

Legal entity

USD, US, 2000000

PO Invoice

Document preview pane

Fabrikam Electronics

INVOICE

711 Louisiana

Houston, TX 77002

USA

DATE: 3/15/2020

INVOICE NO. 4500

PO NO. 00000076

Due date: 3/15/2020

BILL TO

Contract Entertainment System USA

123 Coffee Street Suite 300

Redmond, WA 98002

+1 206 1234

SHIP TO

Contract Entertainment System USA

123 Coffee Street Suite 300

Redmond, WA 98002

+1 206 1234

ITEM NO.	DESCRIPTION	QTY	UNIT PRICE	TOTAL
1	Wallpaper Swatch	2	50.71	101.42
2	Cabinet	9	16.64	149.76
3	Standard Function	2	166.64	333.28

Subtotal

581.46

Tax rate

7.00%

Tax

40.70

TOTAL TAX

40.70

TOTAL AMOUNT

622.16

Messages

Message pane

Severity

Message

Invoice line 100 Purchase order not line no. 2 is missing.

Invoice line 100 Purchase order not line no. 1 is missing.

Invoice line 100 Purchase order not line no. 2 is missing.

Item 10000 cannot be found in current legal entity.

Invoice header

Invoice header pane

General

Invoice number *

4500

Vendor name

Fabrikam Electronics

Invoice address

711 Louisiana Houston, TX 77002 USA

Purchase order *

00000076

Buyer name

Contract Entertainment System USA

Buyer address

123 Coffee Street Suite 300 Redmond, WA 98002

Bill to name

Contract Entertainment System USA

Bill to address

123 Coffee Street Suite 300 Redmond, WA 98002

Invoice date

3/15/2020

Due date

3/15/2020

Total tax

40.70

Total amount **

622.16

Currency code

USD

Invoice lines

Invoice line pane

Line description	Item number **	Unit price	Quantity	Unit of measure
Wallpaper Swatch	00000	50.71	2	EA
Cabinet	00000	16.64	9	EA
Standard Function	00000	166.64	2	EA

The document header consists of four fields: **Status**, **Legal entity**, **Vendor account**, and **Invoice type**. Users can update legal entity, vendor account and invoice type by selecting **Classify invoice**.

On the left side pane of the interface, the document viewer shows the original document. The controls in the upper-right corner let users adjust the page view by changing pages, zooming in or out, fitting the document to the page, or rotating it. Meanwhile, Accounts Payable (AP) clerks can download the original invoice document by clicking the download icon to. The complete pane can be resized by dragging the resize line between the original document pane and invoice form pane.

The invoice form pane contains different cards to display invoice context.

The **message card** shows all errors, warnings, and informational messages. It's an expandable/collapsible section in the central part of the interface. To expand it, users select the message symbol. Users can select which types of messages are shown.

The **invoice header** card shows the header fields which are set as visible through configuration groups and depend on the selected invoice type.

The **invoice lines** card shows the table for invoice lines. The line fields are also customized through configuration groups. The card will be hidden if the invoice type is **Header-only**. A maximum of five invoice lines are shown per page. Users can navigate through the pages by using the left and right arrow buttons in the lower-right corner of the interface.

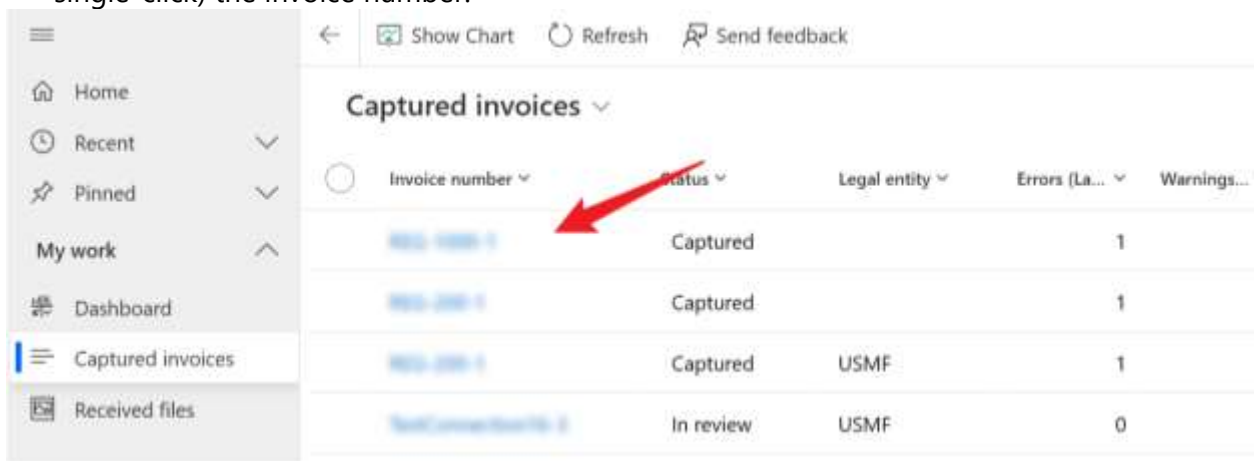
The **Charges** card and **Sales tax** show the table for charges and sales tax on the document header. In case there are no charges and sales tax line, both cards will not be visible, and user can click the **"Show more"** to show them up. User can manually add the charges and sales tax by clicking the "Add" button.

- The charges code must be assigned before transferring the invoice to Dynamics 365 Finance. Then the charges lines will be imported together with invoice header and lines by leveraging the data entity "header vendor invoice charges".
- When the value of "total sales tax" is null or zero and multiples sales tax lines are defined, the sum of the sales tax amount will be automatically calculated and assigned to the field "total sales tax" of the invoice header. When the parameter Validate total sales tax amount is enabled, it will validate the consistency between the sum of sales tax amount and the total sales tax amount. If no sales tax line is defined, the validation will be skipped.

How to navigate to the side-by-side viewer?

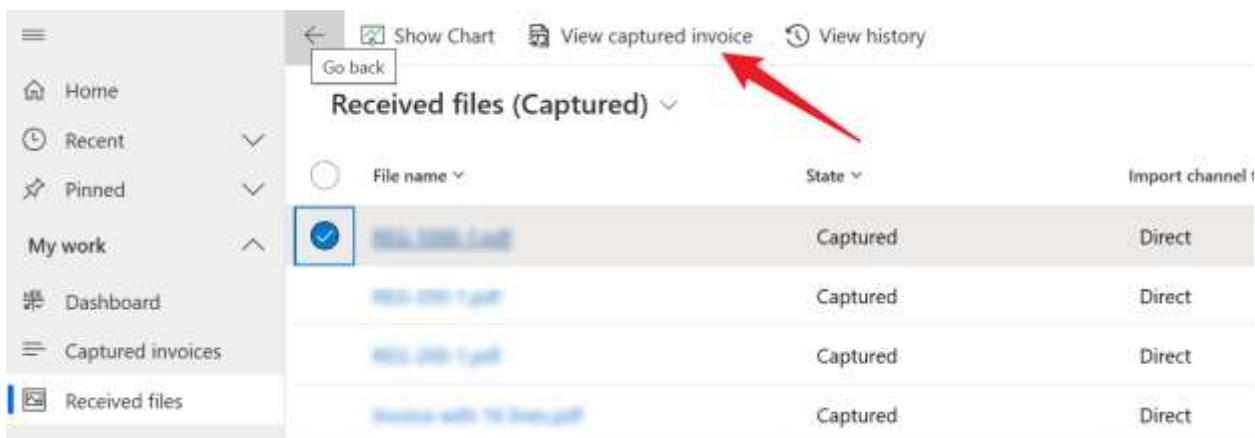
In Dynamics 365 Finance Invoice capture, you can open the side-by-side viewer from two places:

- In the **Captured invoices** list, double-tap (or double-click) a record, or single-tap (or single-click) the invoice number.



Invoice number	Status	Legal entity	Errors (La...	Warnings...
1001-1000-1	Captured		1	
1001-1000-1	Captured		1	
1001-1000-1	Captured	USMF	1	
1001-1000-1	In review	USMF	0	

- On the **Received files** page, select an invoice that has been successfully captured, and then select **View capture invoices**.



File name	State	Import channel
1001-1000-1.pdf	Captured	Direct
1001-1000-1.pdf	Captured	Direct
1001-1000-1.pdf	Captured	Direct
Invoice with 10 lines.pdf	Captured	Direct

9.3 Classify invoice

1. Assign legal entity in the list form

In the **Captured invoices** list, the legal entity might be missing because it wasn't successfully derived. The legal entity must be assigned before an invoice can be processed. Users can then review the invoices and make the corrections.

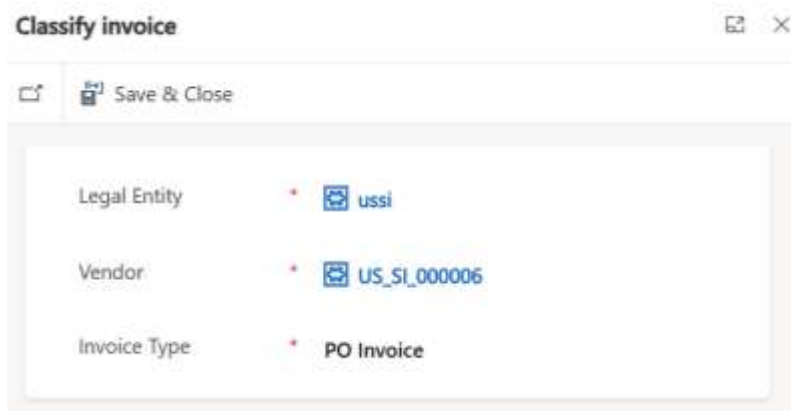
- Select the invoice, and then select **Assign legal entity**.
- Select the legal entity in the drop-down list.
- Select **Save**.

The correct assignment of legal entity can make sure that AP clerks can view the status of the invoice which are in their charge.

To successfully create the vendor invoice in D365 Finance, entities such as legal entity, vendor account and invoice type have to be determined before transferring. Among them, the legal entity and vendor account are the most important ones, which decides whether the derived invoice type is acceptable or not according to the setting in the assigned configuration group.

2. Classify invoice in the detailed form

When legal entity and vendor account are not determined by the derivation rule, user has to update these fields by selecting **Classify invoice**.



The side pane will pop up and ask user to complete the following information:

- Legal entity
- Vendor account
- Invoice type

AP clerks can search for the correct legal entity or vendor account by entering the code, name or address. The derivation and validation logic will trigger again right after selecting "Save and close".

9.4 Start manual review

An invoice document that has been captured might require manual review because of errors or warnings. In the side-by-side viewer, the document header will show a status of **Captured**, and the current version will be **Original Version**.

The precondition to start to review the invoice is that the invoice header information (legal entity, vendor account, invoice type) is complete. By selecting **Start review**, the **Status** field is updated to **In review**, and the **Current version** field is updated to **Modified version**. The invoice form will then be in edit mode. Users can change the field value and the entity lookup list will be enabled to select the correct the value from the list.

The screenshot displays the 'Start review' interface. On the left, the invoice document is shown with the header 'Fabrikam Electronics INVOICE'. The document includes fields for 'DATE: 11/02/22', 'INVOICE NO.: 4200', 'PO NO.: 00000015', and 'Due date: 11/02/22'. It also lists 'BILL TO' and 'SHIP TO' addresses for 'Contoso Entertainment System USA'. A table of invoice items is visible, with columns for 'ITEM NO.', 'DESCRIPTION', 'QTY', 'UNIT PRICE', and 'TOTAL'. The total amount is \$2,779.84. On the right, the 'Messages' section shows a warning: 'Invoice contains errors'. Below this, the 'Invoice Header' section displays various fields like 'Invoice number', 'Vendor name', 'Buyer name', 'Invoice date', and 'Total amount'. The 'Invoice Lines' section at the bottom shows a table of invoice lines with columns for 'Invoice line', 'Unit price', 'Quantity', 'Unit of measure', 'Amount', and 'Purchase order'.

AP clerk can input the value for invoice header or add/edit/delete lines in cards "Invoice lines, charges, sales tax". An additional option "Remove all" on card "Invoice lines" is provided to delete all the invoice lines by clicking it.

Map Key-Value-Pairs (KVPs) with fields

Sometimes, the prebuilt model doesn't extract the value from the right position of the document for some fields, users want to do some corrections and let application constantly extract the right value for the subsequent incoming invoices if they are coming from the same vendor with the same pattern. This can be done within the KVPs mapping form if the value that needs to be extracted is returned as a KVP from the AI model. In the meantime, the KVP mapping will be learned only when the continuous learning feature is enabled.

Note:

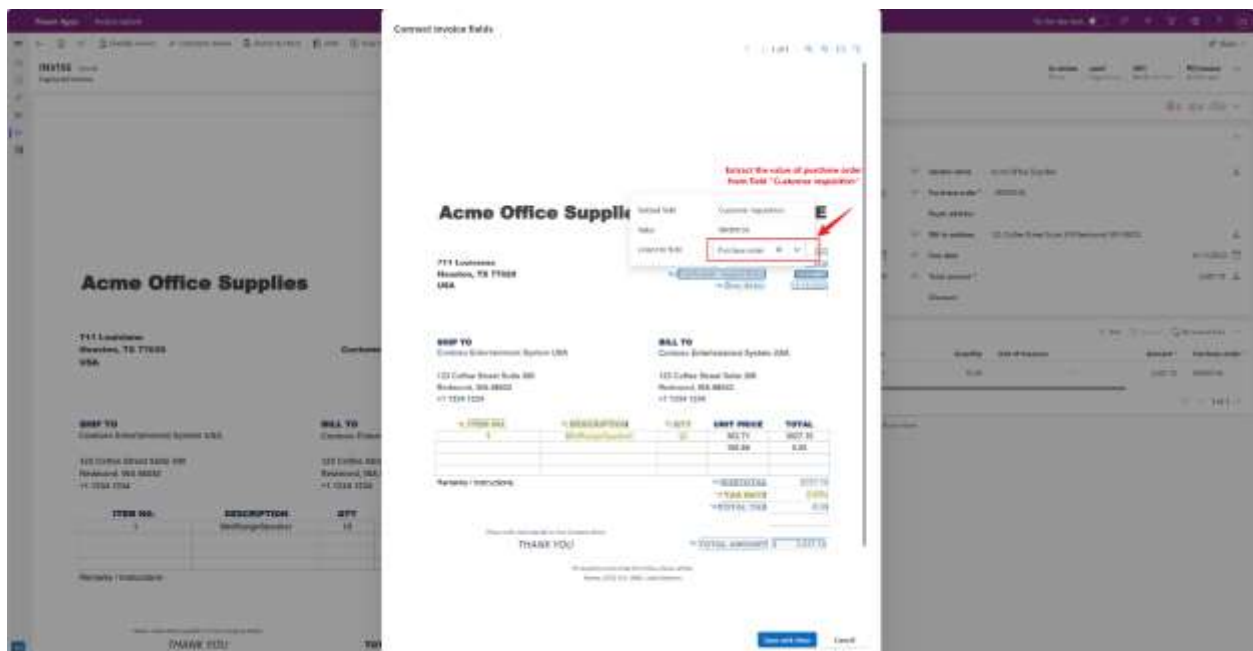
- The icon to call out KVPs mapping form is only available for invoices that are received after upgrading to 1.1.0.32. For invoices that were received before the upgrade, this button is disabled.

- This key-value pair (KVP) mapping function is **only applied when using the prebuilt model**. If you are using a custom invoice model, please utilize the custom field mapping to extract additional fields.

By clicking the top-right icon in the document preview pane, the invoice will enter the mapping mode. The light yellow will indicate that the KVPs have already been mapped with invoice fields. The light blue will indicate the available KVPs that haven't yet been mapped with any invoice fields.

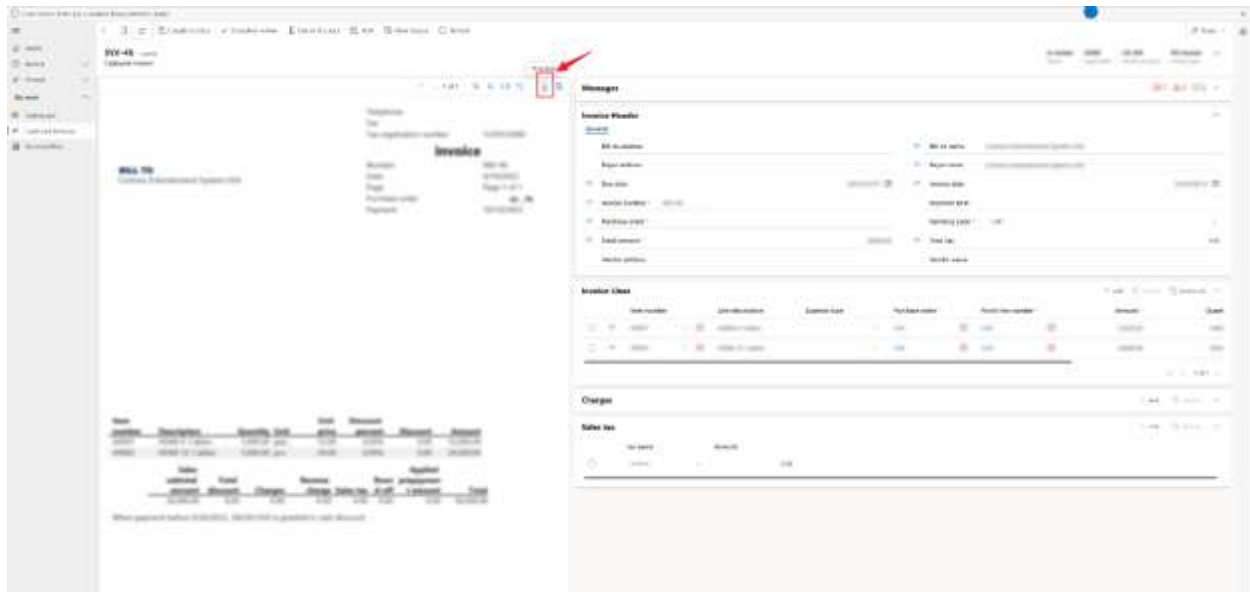
AP clerk can then correct/add the mapping by selecting the key-value pair and the mapped invoice field. After saving the changes, it will extract the value and apply it to the corresponding invoice field.

When the continuous learning feature is enabled, the system will learn the changes and apply the same on the invoice from the same vendor.



Download the original invoice document

In the document preview panel, the download button can help the user to download the original invoice document.



9.5 Derivation and validation logic

Some entity fields in the side-by-side viewer don't exist right after the invoice is recognized but are required to generate the invoice in Dynamics 365 Finance system. These entities are derived from a combination of the recognized invoice data and master data from Dynamics 365 Finance.

The entities include **Legal entity**, **Vendor account**, **Item number** and **currency code**. If derivation of a field fails, the process stops.

1. **Legal entity** – If an active mapping rule is found for the legal entity, the legal entity is derived based on the company's name and address.
2. **Vendor account** – Next, the vendor account is derived based on an active mapping rule and a combination of the derived legal entity and the vendor's name, address, or tax number.
3. **Item number** – Finally, the item name is derived from staging, based on the following three types of information:
 - a. Derived legal entity
 - b. Derived vendor account
 - c. Item description or external item number
4. **Currency code** – The currency code has to be determined before transferring the invoice from invoice capture to Dynamics 365 Finance.
 - a. When it is an invoice associated with purchase order (PO invoice or Header-only invoice), the currency code between invoice and purchase order must be consistent. Therefore, when there is no currency code returned from recognition result, it will derive the currency code from the purchase order directly.
 - b. When it is a cost invoice, customers can decide whether to derive the currency code from the vendor master data by the parameter "Derive currency code for cost invoice".

After the fields are derived, the following additional validation checks are run:

- **Mandatory check** – This check validates the mandatory fields for the side-by-side viewer. Users can select which fields must be mandatory on the **Configuration setting** page.
- **Confidence score** – Users can set the warning and error thresholds for the confidence score. This check focuses on the confidence score from optical character recognition (OCR) that's below those thresholds. Error or warning messages will be shown based on the validation result.
- **Existing check** – This check validates the existence of entities, including legal entity, vendor account, item number, procurement category, or purchase order.
- **Advanced check** – When a stock item is used, the purchase order details must be assigned to the invoice line.

When the user selects **Derive and check**, the derivation and validation processes are run. If there are no errors in the invoices, the validation logic is called only when the user selects **Complete review or Transfer**.

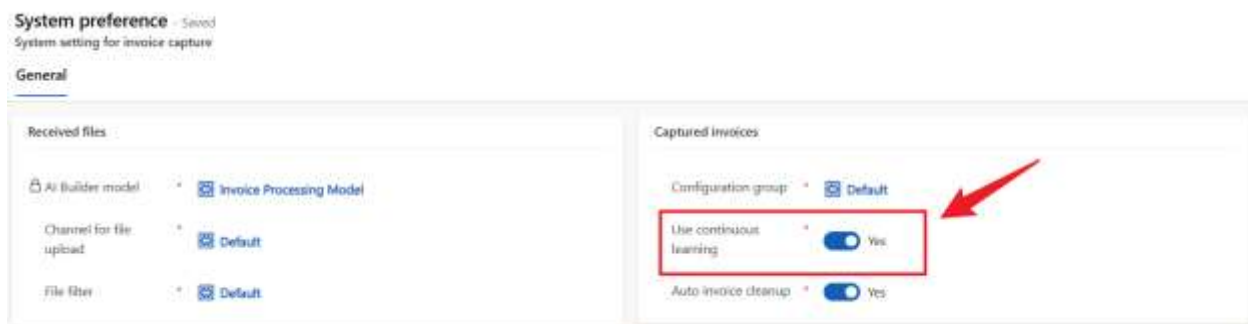
The derivation process occurs before the validation process, and all warnings or errors come from the validation process. The warnings and errors will be logged in the history log. Users can select **View history** to review the errors.

The current derivation and validation logic includes the most common scenarios.

Continuous learning

To help increase the touchless rate of invoice processing in Invoice capture, **Continuous learning** can derive entities (legal entity, vendor account, and item numbers) based on the mapping from the last transferred invoice. Meanwhile, it also supports the automatic value extraction from key-value pair (KVPs) and assigning it to the corresponding invoice fields. When it is an entry on the Charges, it will derive the Charges code as well based on the last matched record.

The feature can be switched on/off in Setup system >> System preferences.



Difference between continuous learning and mapping rules

The Continuous learning feature tries to record patterns between the invoice context and manually selected entities immediately after the invoice is successfully transferred. The affected entities include legal entity, vendor account, item number, expense type, charge code, and key-value pair mapping. Currently, continuous learning checks all the header information, such as

the company name, company address, vendor name, address, and vendor tax registration number, to determine the value of the legal entity and vendor account. When the first invoice arrives, users must manually specify the legal entity and vendor account if they can't be successfully derived from other mapping rules. After the invoices are reviewed and transferred to Dynamics 365 Finance, the relationship is recorded. When any invoice that has the same context arrives, continuous learning tries to find the same pattern and to derive the legal entity and vendor account automatically.

Mapping rules are in some ways an optional approach to derive the value of entities. They can derive entity values when the conditions are fulfilled for all the fields. Because the maintenance load is quite high, we don't recommend that customers use this approach. The only exception is the expense type. For the expense type, we recommend that customers use the pending vendor invoice framework for non-PO invoices. For this approach, you can define a default expense type (procurement category) that is applied to all the lines for invoices from a specific vendor. This assigned procurement category is used to derive the expense accounting during accounting distribution on the finance and operations apps side. It can increase the touchless rate for the processing of non-PO invoices.

- **Date formatting**

Sometimes, you may face the issue that the date is not formatted correctly when the invoice contains the ambiguous date. In version 1.8.3.0 or later, when a user corrects the date on the first invoice, the corresponding date format will be automatically applied to the future invoice if it is coming from the same vendor.

- **Decimal formatting**

When using a custom invoice model to extract additional amount fields from an invoice document, only a single decimal format can be defined for new amount fields in AI Builder interface. This limitation may result in incorrect formatting of amount values as customers might receive the invoice with different decimal formats.

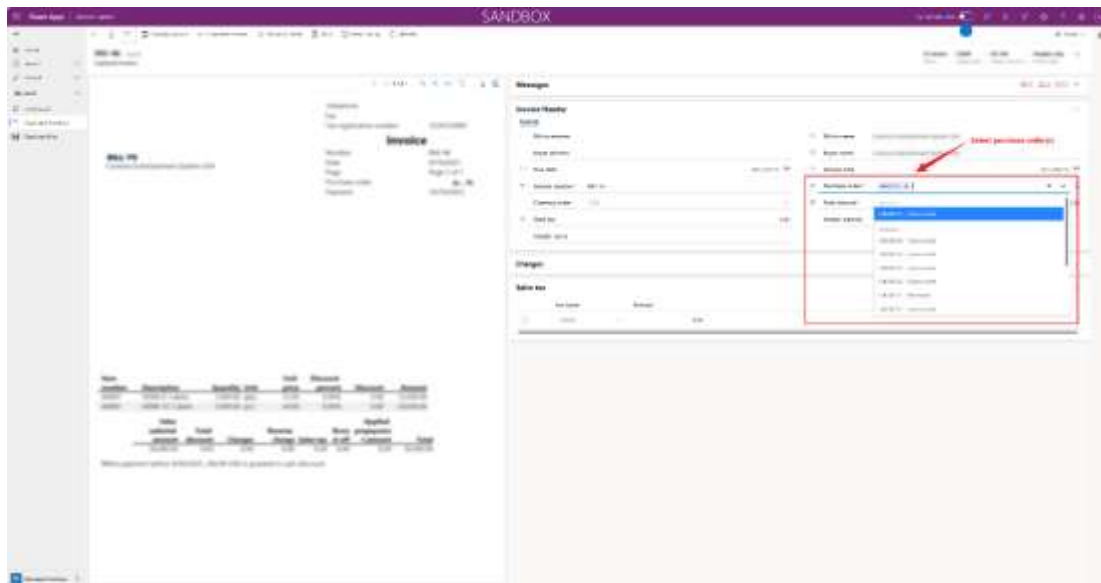
With this feature, the system learns and records the correct decimal format for a vendor invoice after you manually correct the first incoming invoice. For subsequent invoices from the same vendor, the learned decimal format is automatically applied to all amount fields, ensuring consistent and accurate invoice capture processing.

9.6 Link purchase order(s)

a) **Header-only invoice**

When the invoice type is header-only, the user can select one or multiple purchase orders from the lookup list by clicking the field "Purchase order" on invoice header. The purchase orders from the same vendor account with status "Open order", "Received" will be shown under the list.

If the recognized purchase order(s) is invalid, it will show in red color and the users must remove the invalid purchase order(s) by clicking the "x" button first before choosing the ones from the lookup list.



b) Purchase-order invoice

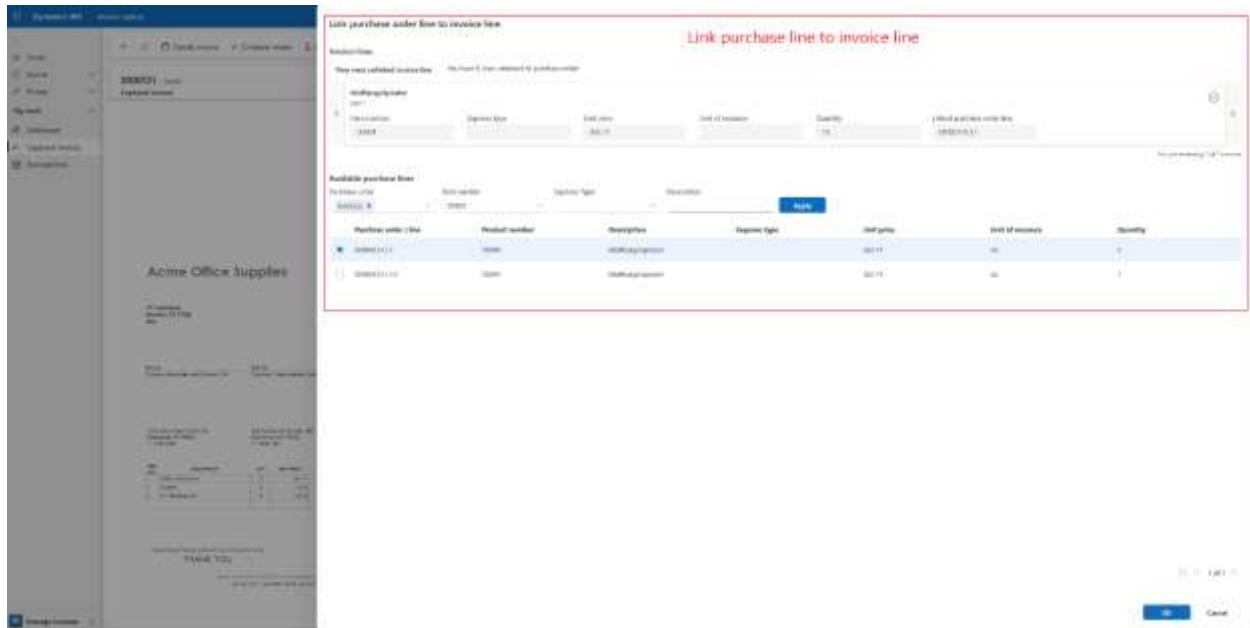
When the invoice type is a PO invoice, the relationship between the invoice line and the purchase line must be established correctly within Invoice capture. If the purchase line cannot be automatically derived, Accounts Payable clerk can manually establish this relationship using the "Link purchase line with invoice line" form. This form can be accessed by clicking the purchase order field on the invoice header or by clicking the purchase order number (or purchase order line number) on the invoice line.

In the form, the first section displays the currently selected invoice line. AP clerk can navigate to the previous or next record by clicking the corresponding arrow button(s).

The "Available purchase lines" section shows all the purchase line candidates that match the item (or expense type) on the invoice line based on specific criteria. These criteria include purchase order, item number, expense type, and item description. The available purchase lines will have the same quantity sign as the invoice line.

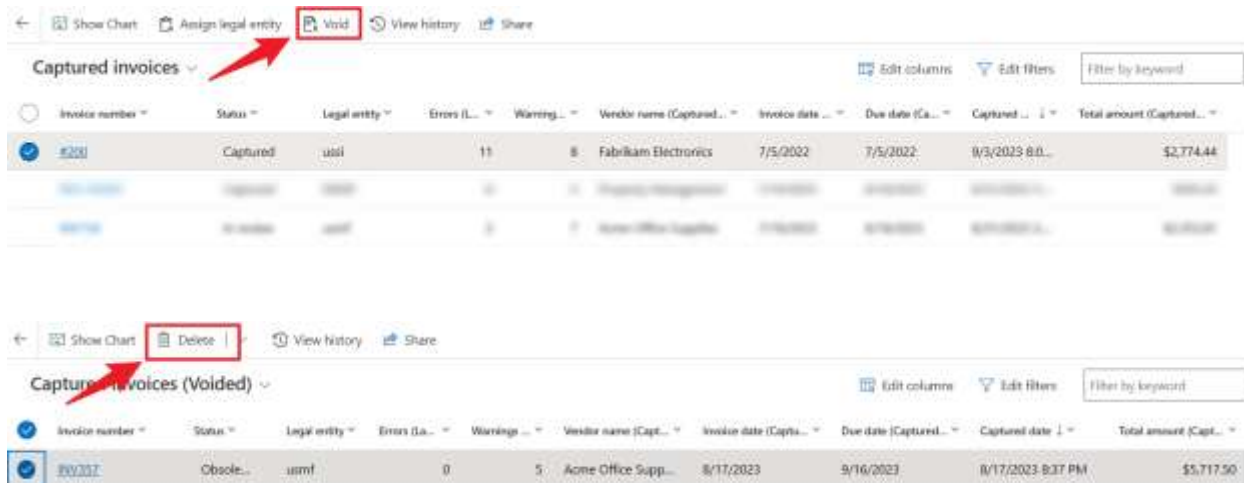
When an invoice line is linked to a purchase line, a radio button is enabled for the corresponding record, and the icon changes to a green check mark in the top right of the invoice line pane. If no purchase line is associated, a red cross icon is displayed.

After confirming the association, the linked purchase line and item number (or expense type) are written back to the invoice line. Additionally, the purchase order on the invoice header is updated based on the associated purchase order(s).



9.7 Void and delete the captured invoice(s)

If the invoice contains errors, users can void it by selecting **Void**. After an invoice is voided, it will be displayed in the Capture invoices (Voided) which can't be reviewed and included again unless the status is changed from Void to Capture from Dataverse. The user can delete the invoice by selecting **Delete**. This will permanently delete the invoice from Dataverse and cannot be recovered. When an invoice is deleted, the linked entry on the **Received files** page is also deleted.



9.8 Transfer an invoice

When users complete their review, if the invoice contains no errors, by selecting **Transfer**, it will send the invoice to the connected Dynamics 365 Finance.

- If invoice generation fails, an error message is shown.

- If the invoice is successfully generated, the status of captured invoice is **Complete**.

We have two ways to transfer the complete invoice:

1. If invoice transfer is triggered manually, it will use synchronous mode.
2. If the invoice transfer is triggered automatically through the touchless process, it will be submitted into the awaiting list and the process automation job "**Transfer invoices from invoice capture**" will regularly pick up and process these invoices.

9.9 States of Captured invoices

a) In Processing

The invoice has been successfully captured and is currently being processed for creation in the captured invoices section. It is not allowed to apply any action on the invoices with this status.

b) Captured

The invoice is ready for further action. Account payable (AP) clerk can choose to apply the classify invoice function to determine the legal entity, vendor account, and invoice type if the system has not been able to do so automatically.

c) In Review

The invoice is being reviewed in a modified mode, usually because it is incomplete or incorrect. The Accounts Payable (AP) clerk has the following options:

- Assign correct values for entity details such as items, and procurement categories.
- Choose the correct associated purchase order number.
- Disregard any confidence score warnings or errors.
- Correct the invoice context.

d) Verified

The invoice has been reviewed and does not contain any errors. It is now ready for transfer. The AP clerk can click the "Transfer" button to move the invoice from the invoice capture system to Dynamics 365 Finance.

e) Transferred

The invoice has been successfully transferred to Dynamics 365 Finance. The button "Open Dynamics 365" will become visible on the ribbon. By clicking the button, it can navigate to the corresponding form based on the invoice status.

The following navigation function is only available when the Dynamics 365 Finance version is 10.0.41 or higher:

- When the invoice is transferred to pending vendor invoice and not yet posted, it will navigate to the pending vendor invoice list form and show the specific record.

- When the invoice is transferred to the invoice journal and not yet posted, it will navigate to the invoice journal list form and show the specific record.
- When the invoice is posted, it will navigate to the invoice journal and show the specific record under path Accounts payable >> Inquiries and reports >> Invoice >> Invoice journal.

When the invoice is transferred but is deleted on the Dynamics 365 Finance side, it will still navigate to the pending vendor invoice list or invoice journal list form. However, no record will be shown in the form.

f) Voided

The invoice is no longer needed and can be considered obsolete. All the records and attached invoice files will be permanently deleted from the system.

g) Awaiting

The invoice is submitted to the waiting list to be picked up by the automation job in Dynamics 365 Finance side for further processing.

9.10 Currency code in Captured invoice list

Due to the platform restriction, it will always display the currency symbol based on the default currency settings, which give confusion to the user when the currency on the invoice is different from the default currency. To display the currency code correctly, please apply the workaround:

- Remove the currency symbol for the corresponding currency in table "Currency".



- Add the currency code column from related table "Captured invoice header (Staging Invoice Header)".

9.11 Security

Both AP admin and AP clerk are allowed to access Received files.

10. Financial dimensions in Invoice capture

10.1 Background

Financial dimensions play a crucial role in optimizing the invoice processing workflow for cost invoices. This ensures the invoices can be redirected to the appropriate individuals for approval within Dynamics 365 Finance. Financial dimensions can be specified at either the invoice header or line level. When financial dimension value is not provided in Invoice capture, defaulting logic comes into play during the transfer of the invoice from Invoice capture to Dynamics 365 Finance.

Financial dimensions are not applicable for PO invoices and header-only invoices within Invoice capture, because for PO relevant invoices, the financial dimensions of the invoice are always derived from the purchase order.

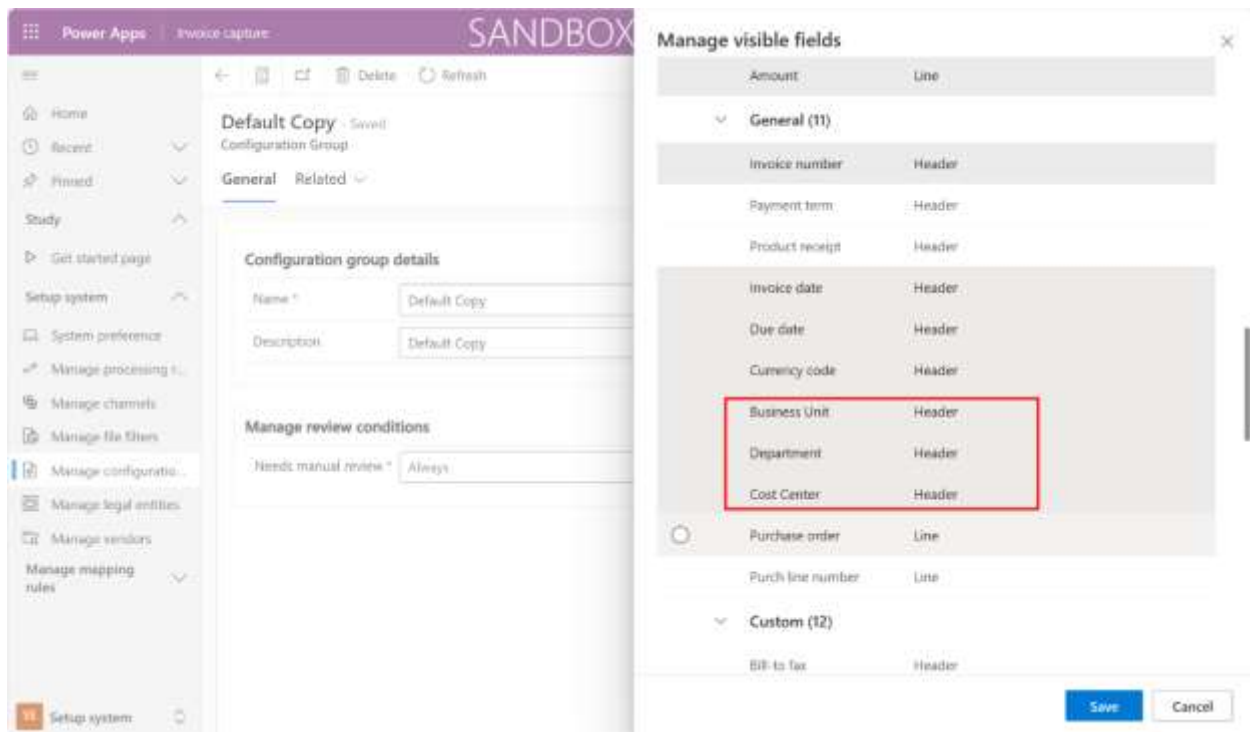
This chapter aims to provide insights into the support for financial dimensions within Invoice capture. Additionally, it guides customers on extending the solution to cater to the dynamic financial dimension settings that align with their specific business requirements in the Dynamics 365 Finance system.

10.2 Standard financial dimensions

In the standard field definition for cost invoices, Invoice capture offers three default financial dimension fields on both the header level and line level that are commonly utilized to determine the right person for approval:

- Business unit
- Department
- Cost center

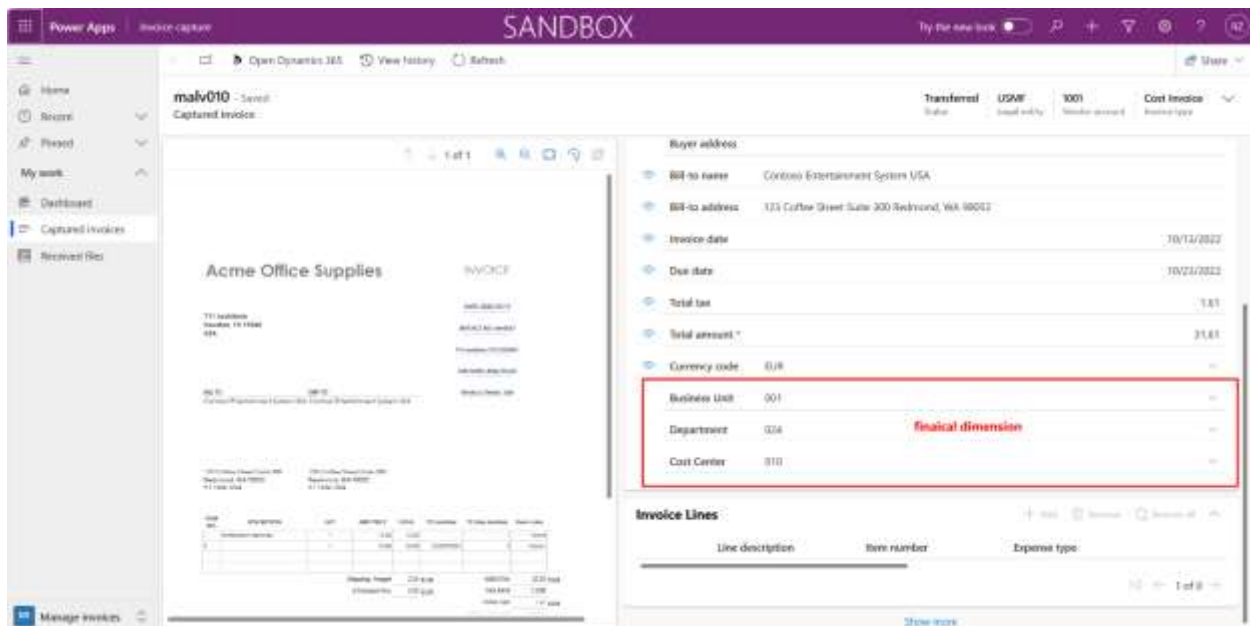
Customer can make these fields visible in SBS viewer under the configuration group >> Select configuration group >> Choose "Cost invoice" type >> Click "Manage visible fields".



Then the financial dimension fields will be available on the invoice header panel in SBS viewer if the financial dimension header fields are added. Similarly, when the line-level financial dimension fields are added, additional columns will be shown on the invoice line table. During manual reviews, AP clerks can enter the financial dimension value from the lookup lists.

Note:

When the feature "Integration of custom prebuilt model" is ready, the value can be automatically captured from the document and assigned to the corresponding fields.



During the invoice transfer, the default financial dimension fields from invoice capture will be automatically mapped to the relevant fields in the invoice header in Dynamics 365 Finance. The financial dimension set will be automatically serialized to accommodate the financial dimension setting within Dynamics 365 fields.

- In case the invoice is created within the "Vendor Invoice" framework, the transferred financial dimensions value can be found within Pending Vendor Invoice >> Invoice Header >> Financial Dimensions.
- In case the invoice is created within the "Invoice journal" framework, the transferred financial dimension value can be found under the offset account field in the invoice journal detailed form.

Note:

The standard financial dimension field mapping and serialization logic on header-level was available after release version 10.0.39 in the Dynamics 365 Finance. The logic on the line-level was available after the release of version 10.0.40 in Dynamics 365 Finance. If the version doesn't match, customers must implement their own logic to cover both in their own extension.

10.3 Extension

Under "Financial dimension configuration for integration application", customers can cater to the financial dimension setting to meet their own business need by incorporating additional fields and adjusting their order. To accommodate the flexible settings of financial dimensions, two extensions are required to build such an end-to-end vendor invoice automation solution for cost invoices.

Adding financial dimension fields in Invoice Capture:

The definitions of financial dimension fields have no difference from the ones on invoice header or line within the Invoice capture. For detailed guidance, please refer to the chapter "Support custom fields in Invoice capture".

Financial dimension serialization

To successfully import the financial dimensions value set into Dynamics 365 Finance, it must be serialized to a string before importing the value into corresponding vendor invoice entities.

Following the 10.0.39 update, a standardized serialization logic will be provided. Customers will then only require focusing on the definition of the mapping between Invoice Capture and Dynamics 365 Finance fields.

Taking the scenario below as an extension example: customers want to transfer these dimensions from invoice capture to F&O on pending invoice lines. The logical field names of those dimension fields are "vis_businessunit", "vis_costcenter" and "vis_department". Following the 10.0.39 updates, we will expose a class VendInvoiceCapInvDataUpdateHandler for customer to make extension, we provide 4 methods in the class to update header and lines for pending invoice and invoice journal.

```
using Newtonsoft.Json.Linq;
public class VendInvoiceCapInvDataUpdateHandler
{
    public static void updateInvoiceHeader(VendorInvoiceHeaderEntity _header, JArray
_attributes, CapturedInvoiceType _invoiceType)
    {
    }

    public static void updateInvoiceLine(VendorInvoiceLineEntity _line, JArray _attributes,
CapturedInvoiceType _invoiceType)
    {
    }

    public static void updateInvoiceJournalHeader(VendInvoiceJournalHeaderEntity
_journalHeader, JArray _attributes)
    {
    }
}
```

```

    public static void updateInvoiceJournalLine(VendInvoiceJournalLineEntity _journalLine, JArray
_attributes)
    {
    }
}

```

Customers need to use COC (chain of command) to extend their own logic, example code segment to extend the functionality to update pending invoice lines as below:

```

using Newtonsoft.Json.Linq;
[ExtensionOf(classStr(VendInvoiceCapInvDataUpdateHandler))]
internal final class VendInvoiceCapInvPendingVendorInvoiceProcessor_Extension
{
    public static void updateInvoiceLine(VendorInvoiceLineEntity _line, JArray _attributes,
CapturedInvoiceType _invoiceType)
    {
        next updateInvoiceLine(_line, _attributes, _invoiceType);
        Map dimensionMap = new Map(Types::String, Types::String);
        System.Collections.IEnumerator iterator = _attributes.GetEnumerator();
        while (iterator.MoveNext())
        {
            JObject attribute = iterator.Current;
            str propName = attribute.GetValue('Key').ToString();
            switch (propName)
            {
                case "vis_businessunit":
                    dimensionMap.insert("BusinessUnit", attribute.GetValue('Value').ToString());
                    break;
                case "vis_costcenter":
                    dimensionMap.insert("CostCenter", attribute.GetValue('Value').ToString());
                    break;
                case "vis_department":
                    dimensionMap.insert("Department", attribute.GetValue('Value').ToString());
                    break;
            }
        }
        // below is the logic how to serialize the financial dimension set to a string
        str displayValue;
        str dimensionSegmentDelimiter = DimensionParameters::getDimensionSegmentDelimiter();
        DefaultDimensionIntegrationStructureDisplay dimensionAttributesFormat =
DimensionHierarchy::getDisplayStringDimensionIntegrationStructure(DimensionDataEntityStruct
ureType::DataEntityDefaultDimensionFormat);

```

```

    List dimensionNames =
DimensionResolver::splitByDimensionIntegrationDelimiter(dimensionAttributesFormat);
    ListEnumerator listEnum = dimensionNames.getEnumerator();
    while (listEnum.moveNext())
    {
        str dimensionName = listEnum.current();
        str segmentValue;
        if(dimensionMap.exists(dimensionName))
        {
            segmentValue = any2Str(dimensionMap.lookup(dimensionName));
        }
        displayValue += ((displayValue == "")? segmentValue : (dimensionSegmentDelimiter +
segmentValue));
    }
    // select the target entity before update
    VendorInvoiceLineEntity vendorInvoiceLineEntity;
    select firstonly forupdate vendorInvoiceLineEntity where vendorInvoiceLineEntity.ReclId ==
_line.ReclId;
    vendorInvoiceLineEntity.DimensionDisplayValue = displayValue;
    vendorInvoiceLineEntity.update();
}
}

```

11. Support custom field in Invoice capture

11.1 Background

The Invoice capture functionality has introduced the standard fields on the header and lines to address the MVP scopes for processing invoices. However, due to the complexity of the business, customers often have additional fields that need to be supported to meet their own business requirements. By introducing the feature "Support custom fields in Invoice capture", customers can tailor the solution on the top of Invoice capture by adding additional field with different properties. The value of these fields can be either automatically extracted from the original document or manually entered by the reviewer.

11.2 Properties of custom fields

Scope

Invoice capture has two scopes of the invoice fields: Header and Line.

Technical field group

Invoice capture has three field groups: General, Tax, Charges. Tax and Charges are used to increase the number of lines in Tax and Charges panels. Tax and Charges on the line level are not yet supported.

Type:

Invoice capture supports three data types for custom fields: single line of text, Date and time (Date only), and Currency.

Query:

The column aims to identify the appropriate data source to connect with the custom fields. Once the query is accurately defined, the lookup list will become operational. This enables the Accounts Payable (AP) clerk to conveniently select values directly from the list instead of manually entering them.

The query format should adhere to a structure similar to the following example:

XML

```
<fetch top='50'>
  <entity name='mserp_purchaseorderheaderv2entity'>
    <attribute name='mserp_invoicevendoraccountnumber'/>
    <attribute name='mserp_purchaseordernumber'/>
    <filter type='or'>
      <condition attribute='mserp_purchaseorderstatus' operator='eq' value='200000001'/>
      <condition attribute='mserp_purchaseorderstatus' operator='eq' value='200000002'/>
    </filter>
    <filter type='and'>
      <condition attribute='mserp_dataareaid' operator='eq' value=@legalEntity/>
```



```
</filter>
</entity>
</fetch>
```

In the query:

- `<fetch top='50'>`:
Specifies the maximum number of records to display in the lookup list.
- `<entity name='mserp_purchaseorderheaderv2entity'>`:
Identifies the entity to be associated with the custom field. Here the logical name shall be given.
- `<attribute name='mserp_invoicevendoraccountnumber'>`
- Identifies the attributes that need to be displayed in the lookup list. You must define at least two attributes.
- `<condition attribute='mserp_purchaseorderstatus' operator='eq' value='200000001'>`:
Represents additional conditions applied for filtering data retrieved from the selected virtual entity.

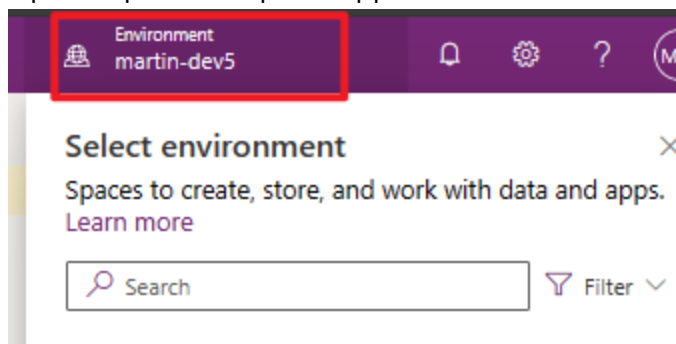
In this context, placeholders such as **@legalEntity**, **@vendorAccount**, and **@inputValue** are utilized to dynamically incorporate runtime data into the query.

The supported format follows the same as FetchXML. Please check the official doc [Use FetchXml to query data - Power Apps | Microsoft Learn](#) for more supported feature from FetchXML. Please check the correctness of the query before setting up the property of the custom fields. Please check the doc [FetchXML Builder for XrmToolBox - empower yourself to achieve more](#). how to test the correctness of FetchXml queries.

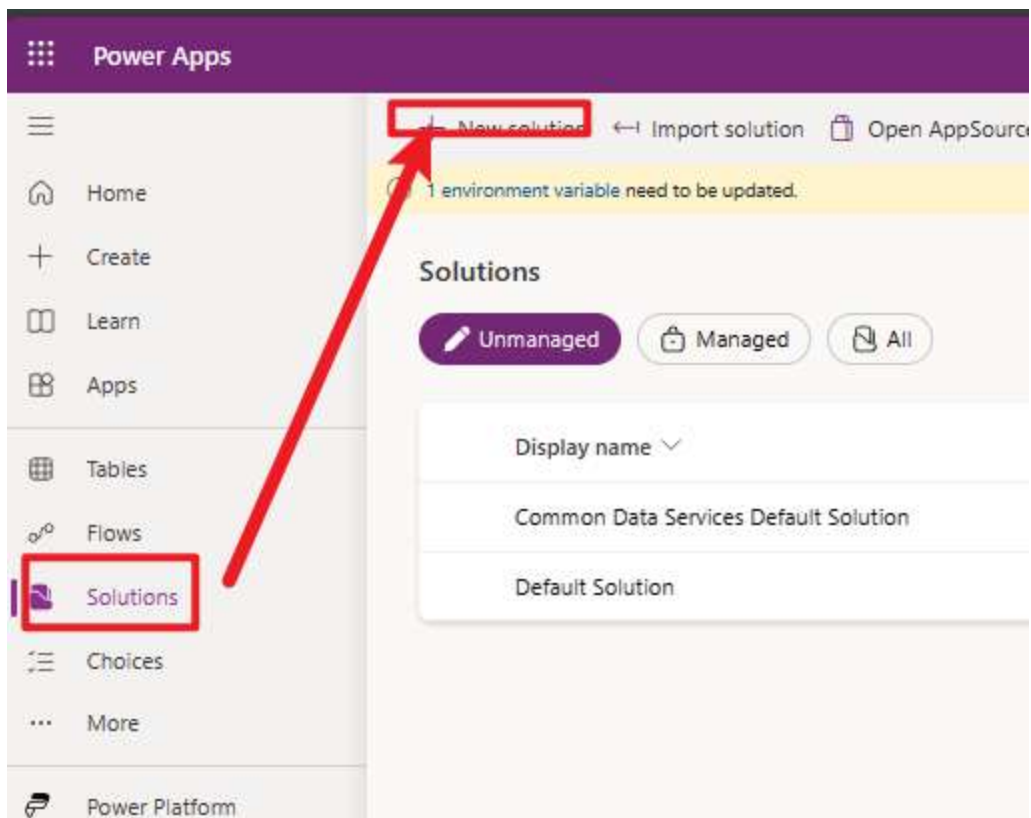
11.3 Implementation steps

Create a new solution and add custom fields

- a) Open <https://make.powerapps.com/> and select the target environment:

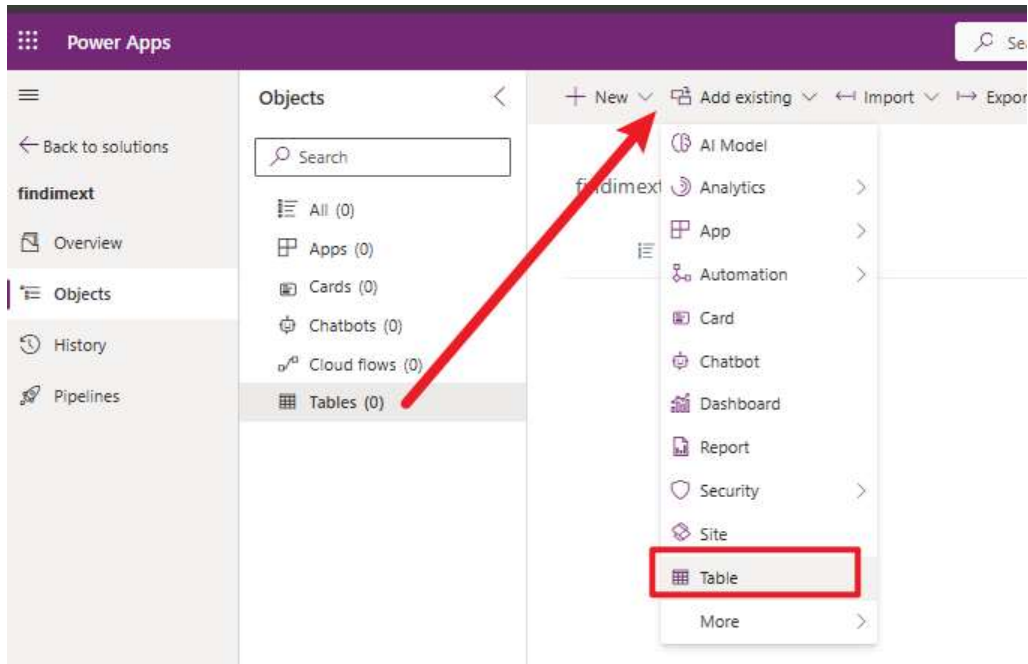


- b) Click "Solutions" and click "+ New solution":



c) Open the solution and add tables:

- Staging Invoice Header
- Staging Invoice Line
- User Defined Field Setting



- d) Choose table "Staging Invoice Header" or "Staging Invoice line" and click "Next".
- e) Click "Add".
- f) Choose the table and click "New >> Column".
- g) Enter the field name and select the data type.
- h) Click "Save".
- i) Find the created column and record the logical name.
- j) Choose table "User Defined Field Setting" and click "Edit".
- k) Click "New row using Form".
- l) Give the value for fields properties and click "Save".

Save Save & Close New Flow

New User Defined Field Setting - Unsaved

General

Scope	* Header
Field Logical Name	* cus_description
Field Tech Group	* General
Query	---

m) Set fields to be visible in SBS viewer:

- Open Invoice capture >> Setup System >> Manage configuration group.
- Choose configuration group and add the fields by clicking "Manage visible fields".
- In the SBS viewer, the added fields will be displayed for AP clerks to enter the value manually.

Transfer the value from invoice capture to Dynamics 365 Finance

The value of custom fields has to be transferred to Dynamics 365 Finance via custom extension. Following the 10.0. 39 updates, we have exposed a class VendInvoiceCapInvDataUpdateHandler for customer to make extension, we provide 4 methods in the class to update header and lines for pending invoice and invoice journal.

```
using Newtonsoft.Json.Linq;
public class VendInvoiceCapInvDataUpdateHandler
{
    public static void updateInvoiceHeader(VendorInvoiceHeaderEntity _header, JArray
_attributes, CapturedInvoiceType _invoiceType)
    {
    }

    public static void updateInvoiceLine(VendorInvoiceLineEntity _line, JArray _attributes,
CapturedInvoiceType _invoiceType)
    {
    }

    public static void updateInvoiceJournalHeader(VendInvoiceJournalHeaderEntity
_journalHeader, JArray _attributes)
    {
    }

    public static void updateInvoiceJournalLine(VendInvoiceJournalLineEntity _journalLine, JArray
_attributes)
    {
    }
}
```

To continue the example above, on the Invoice capture side, a field with logical name "cus_description" is created and the field value is assigned to the header field "InvoiceDescription" on Dynamics 365 Finance. The extension logic should be fulfilled in updateInvoiceHeader method.

```
public static void updateInvoiceHeader(VendorInvoiceHeaderEntity _header, JArray _attributes,
CapturedInvoiceType _invoiceType)
```

```

{
    next updateInvoiceHeader(_header, _attributes, _invoiceType);
    // extend logic based on invoice type
    if (_invoiceType == CapturedInvoiceType::CostInvoice)
    {
        System.Collections.IEnumerator iterator = _attributes.GetEnumerator();
        while (iterator.MoveNext())
        {
            JObject attribute = iterator.Current;
            str propName = attribute.GetValue('Key').ToString();
            str strValue = attribute.GetValue('Value').ToString();
            switch (propName)
            {
                case "cus_description":
                    _header. InvoiceDescription = strValue;
                    break;
            }
        }
        _header.update();
    }
}

```

12. Integration of custom invoice model within Invoice capture

Even though the prebuilt model can handle most invoices with common layouts, it may not provide accurate results for some complex invoices. To resolve this, instead of using the prebuilt model, customers can create their own model and replace the prebuilt model with the OCR recognition. As we only support a single AI model within Invoice capture for the recognition part, only custom invoice model which is built on the top of prebuilt model is supported. Within the custom invoice model, customers can rectify the recognition result by tagging the correct place of the invoice or capturing additional information by defining new model fields.

Remarks:

When the custom invoice model is used, the following functionalities are not supported:

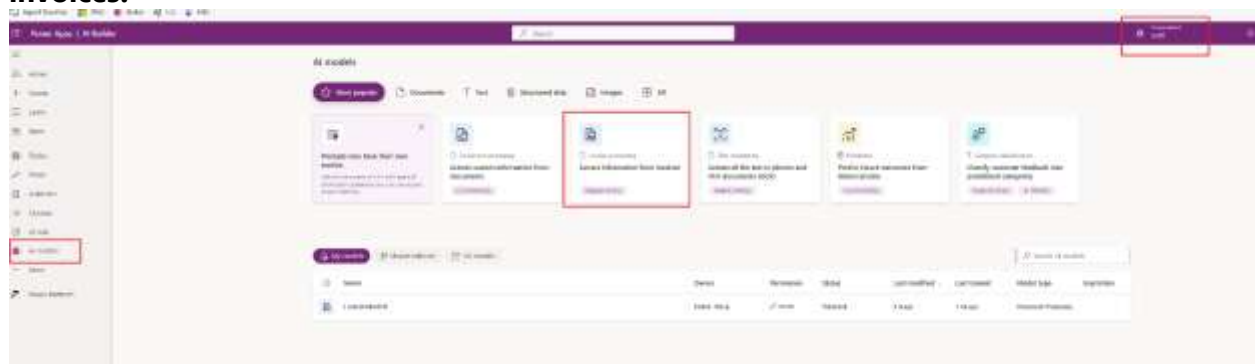
- The function “Mapping key-value pair” is not available anymore on the side-by-side viewer document preview panel.
- The eyeball on the invoice line is not available for highlighting the corresponding line on the original document.
- It cannot support the invoice with more than three pages.
- Multiple decimal settings are not supported.

When you want to use custom invoice model to extract the additional invoice field, charges field or sales tax fields, please refer to the details in [chapter 12](#).

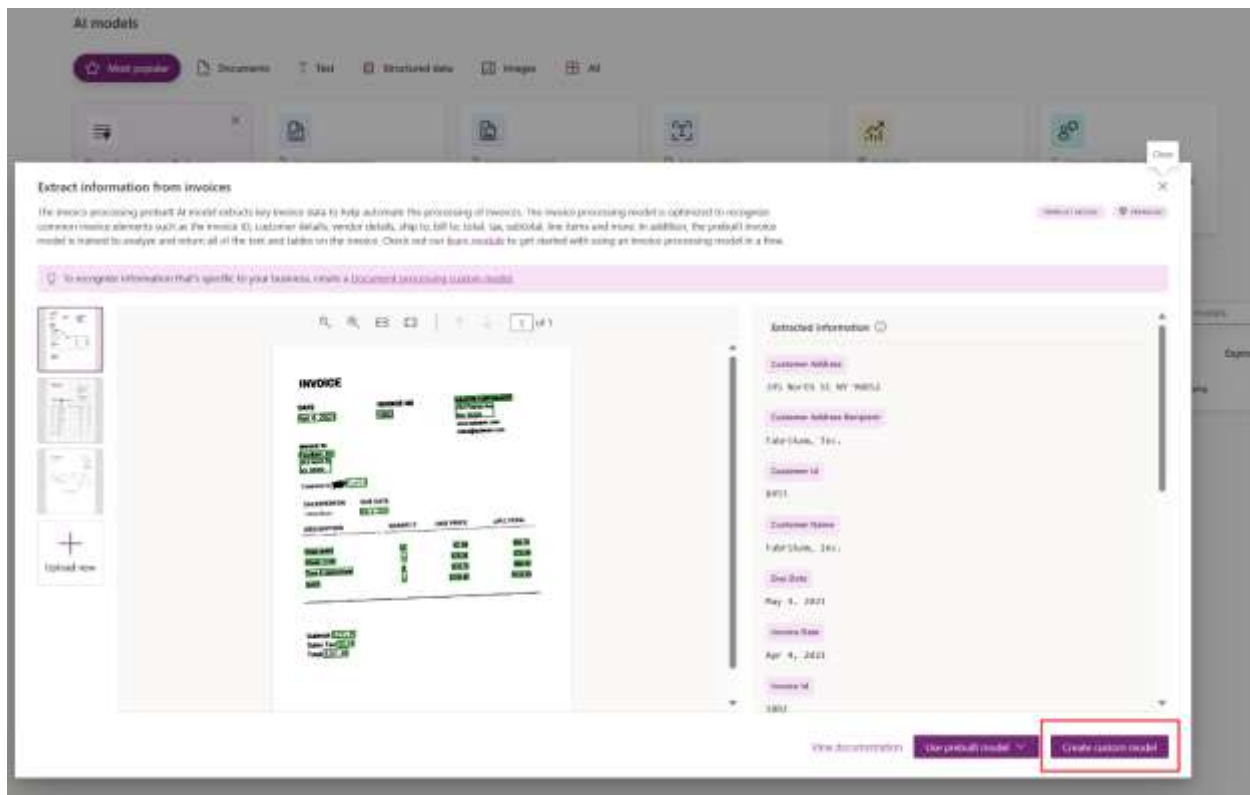
12.1 Process steps:

1. Create custom invoice model,

Please ensure the model entrance is **Power Apps >> AI models >> Extract information from invoices**:



2. Click “Create custom model”:



3. Define the new fields or tables if they are needed. Please ensure the correct field types are selected.
4. Upload the sample invoices (minimal 5 invoices are required) and do the tagging accordingly.
5. Train the model.
6. Rename the model if needed.



7. Publish the model by clicking the button "Publish".
8. Open Invoice capture app and go to system settings > > System preference, select the target AI Build model

Note: the user who select the model here should have the role "Environment maker" assigned , check <https://learn.microsoft.com/en-us/ai-builder/security> for more details. AP clerk and AP admin only have read privilege and they can't select the drop down here.

9. Click on the model name to modify the mapping, only AP admin can modify the mapping here. This is a mandatory step. Otherwise, the setting cannot be saved with the error message "AI Builder model: Field mapping for custom AI model is not configured. Please click on the model name to do so." and the change of AI model setting cannot be saved.

Note:

1. The mapping for the prebuilt fields is initialized during the first time when opening the mapping form.
2. The invoice field is the field logic name in staging invoice header or line fields.
3. The model field should be the same as user defined in custom invoice model.
4. One invoice field can only be mapped to one model field while a model field can be mapped to multiple invoice fields.
5. The model field can be blank if there is no suitable one to be mapped.
6. When adding/removing fields on staging invoice header or line table or modifying the user field setting table after the initialization of the mapping, it needs to go to the system preference page and open the mapping again to reflect the changes on the mapping.

12.2 How to support the additional Charges/Tax?

In the custom invoice model, you can define additional "Charges" at the header level and extract the amount by tagging the location in the original invoice document. When the "Charges" field is mapped to a corresponding field in the Invoice capture system, the value can be automatically extracted and stored. The captured "Charges" value will be then automatically transformed as an additional line on pane of Charges. The "Charges code" can be automatically derived based on the field's settings.

Steps:

1. Follow steps 1 to 7 in chapter 12.1 to create the Charges field in the custom invoice model.
2. Define a new Charges field in the Invoice capture system. The field type "Money" must be assigned here. The value "Charges" shall be assigned to the column "Technical field group" within the "User Defined Field Settings" table. You can also define the value of "Charges code" in the "Charges Code" column in order to automatically assign the Charges code once the Charges amount has been extracted from the original document.
3. Map the Charges field in the custom invoice model to the corresponding field in the Invoice capture system.

Note:

The same steps can be applied for capturing the additional sales tax amount fields. The difference is that we don't have an additional property for the sales tax code. Only the amount is considered.

13. Support the automatic conversion of the amount and qty fields for Credit note.

It's common that customers receive credit notes with positive values in the amount and quantity fields. However, transferring these credit notes accurately to Dynamics 365 Finance requires customers to manually set these fields to negative values, which can be time-consuming.

Capture version 1.5.0.x or higher, customers can streamline this process by enabling the credit note processing feature. This feature automatically converts the sign of the amount and quantity fields from positive to negative when a document is classified as a credit note.

13.1 How to enable credit note processing

1. Create and publish a custom invoice model after tagging the document title.
2. Go to Invoice capture Setup system >> System preference >> AI Builder Model, replace the prebuilt model (Invoice Processing Model) with the custom invoice model.
3. Open the form "Define custom AI model mapping" by clicking the model name and assign the model fields to the invoice capture field "vis_documenttitle".
4. Go to Setup system >> Manage processing rules >> Credit note processing and enable the parameter "Support credit note".
5. Define the value set for the setting "Credit note dictionary".

Note: Credit note dictionary lists all the terms of credit notes in different languages. When the document title contains one of the values from the set, the document will be classified as a credit note. The processing logic will automatically convert the amount and quantity fields to negative if the value is positive.