

For Microsoft Dynamics 365 Finance & Operations

User Instructions







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Overview

ExpenseConnect is an integration application that integrates expense reports from Concur into Microsoft Dynamics D365 Finance and Operations (FO). With ExpenseConnect, companies using both Concur and FO can integrate expenses into FO into the FO general journal. ExpenseConnect reports come directly from Concur without any user intervention using the Concur Application Programming Interface (API) option and Dynamics FO managed interop. Refer to this document for the installation, usage, and definitions of ExpenseConnect.

Prerequisites

Permissions

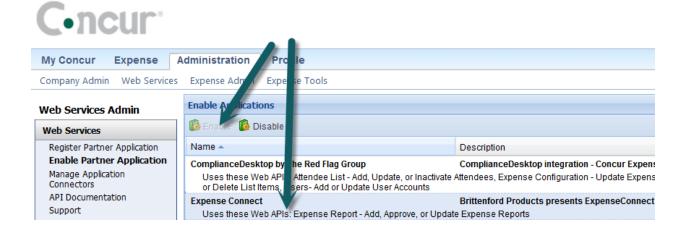
FΟ

Make sure you have access to the Asset Library in Lifecycle Services (LCS).

Concur

To create a token, the Concur user needs access to view and modify all reports company-wide and access to enable Expense & Invoice Connect by Brittenford via Administration → Web Services → Enable Partner Application. They will also need:

- 1. For Concur Standard Edition:
 - a. The "Can Administer" checkbox selected in their user account
 - b. The "Can Approve" checkbox selected in their user account
 - c. The "Can Submit" checkbox selected in their user account
- 2. For Concur Advanced Configurations:
 - a. The "Web Services" role added to their user account
 - b. The "Expense User" checkbox selected in their user account



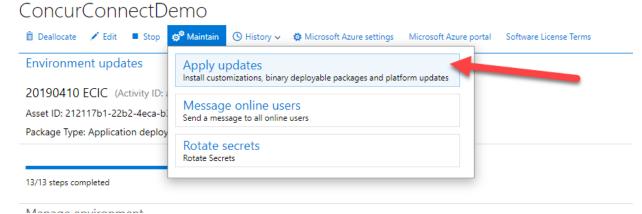




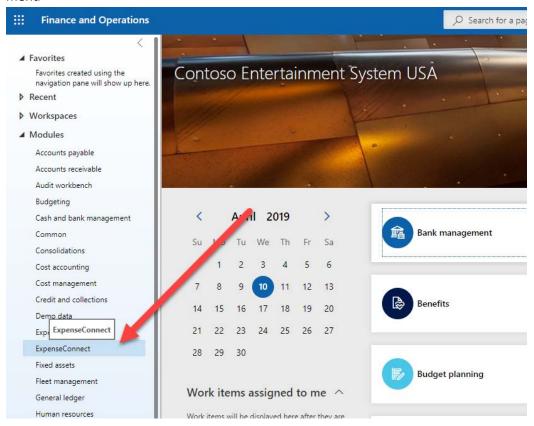


FO Installation into a testing environment

- 1. Take the deployment zip file given to you by your Wipfli implementation specialist and import it into your LCS Asset Library
- 2. In LCS, go into the environment to update, start it (if necessary), and click on Maintain → Apply Updates



- 3. Find the deployment artifact and click Apply
- 4. Once the installation is over, you can login to the environment and see ExpenseConnect in the menu









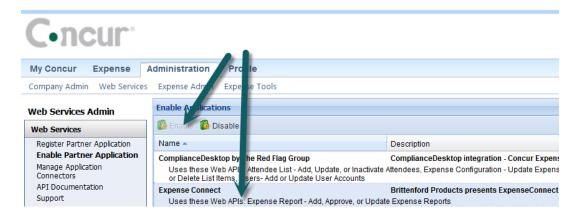
AX migration from testing to live

Steps in **bold** are steps that the client or client's AX partner is responsible for taking care of. Wipfli or the client can take care of the other steps.

- 1. Export out your field mappings, value transformations, and Concur extracts from the forms in the testing environment
- 2. Follow the same installation instructions from above
- 3. Re-apply your API Key, start date (and other settings), field mappings, value transformations, and Concur extracts into your live environment
- 4. Recreate a Concur token in your live environment

Concur Installation

- 1. Logon to Concur using the newly created wsadmin account.
- 2. Enable the application in Concur (Administration → Web Services → Enable Partner Application)
 - a. Select the Expense & Invoice Connect by Brittenford entry
 - b. Select the Enable button



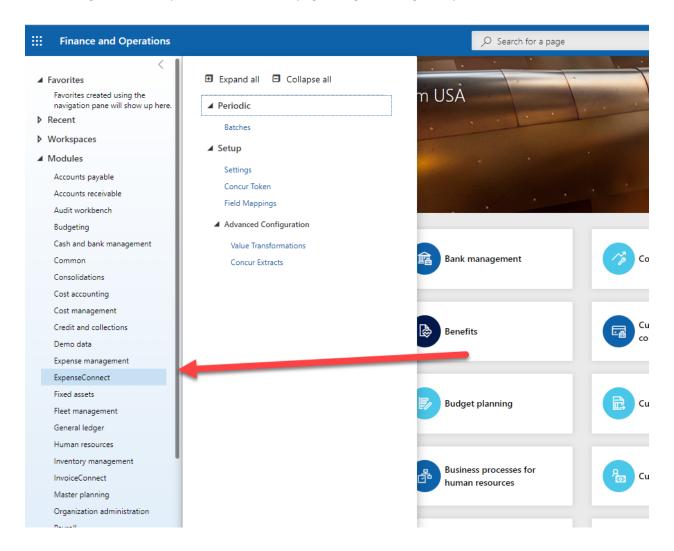






ExpenseConnect configuration in FO

1. In FO, navigate to the ExpenseConnect home page using the navigation pane.

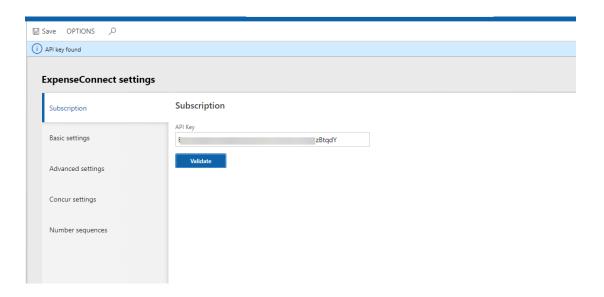


2. Open the Settings form and enter in the API Key provided by Wipfli to register the application. Click Validate to test it.

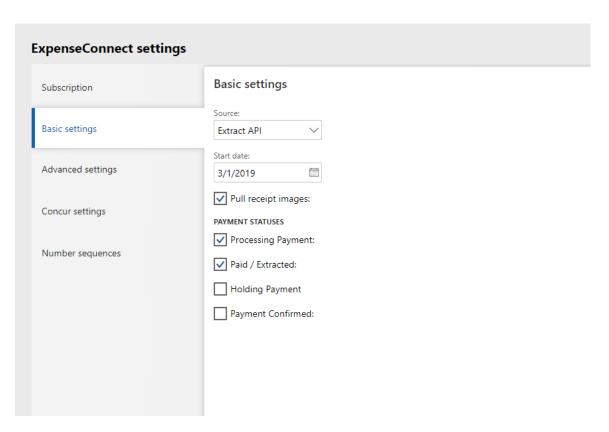








3. Under Basic Settings select a Start Date and Payment Statuses. These choices determine how far back to look for reports and which Concur Payment Status(es) reports need to be in for the connector to pull them.

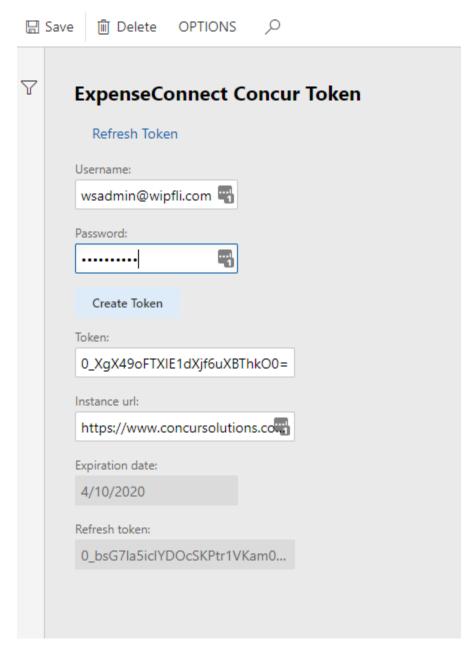








4. Open the Concur Token form and use the "WS Admin" Username and Password to Create a new token. After hitting Create Token, if a token is successfully created, you will see it in the Token textbox.

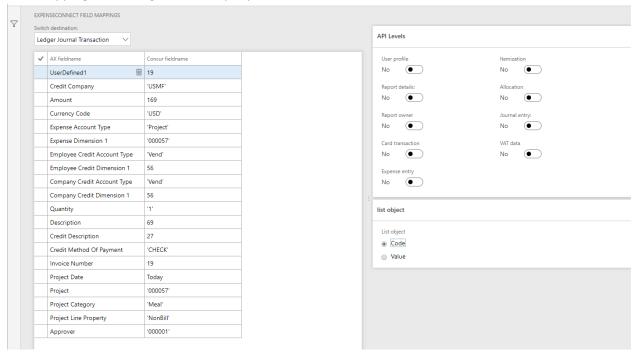




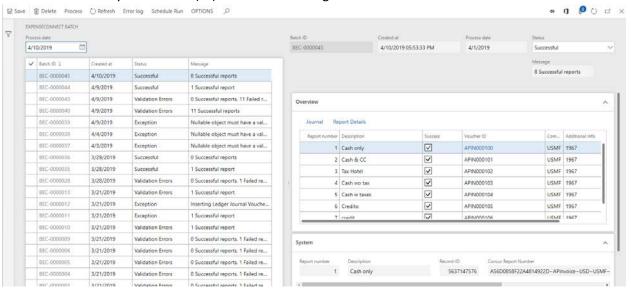




5. Open the Field Mappings form to import the default field mappings provided by Wipfli. Edit the field mappings according to the company's need.



6. Open the ExpenseConnect Batches form. You are now ready to test a batch. Start a batch by clicking the Process button. It should pull all the reports going back as far as the Settings Start Date for the Payment Status(es) selected in Settings.









Installation media

The latest installation media is found here:

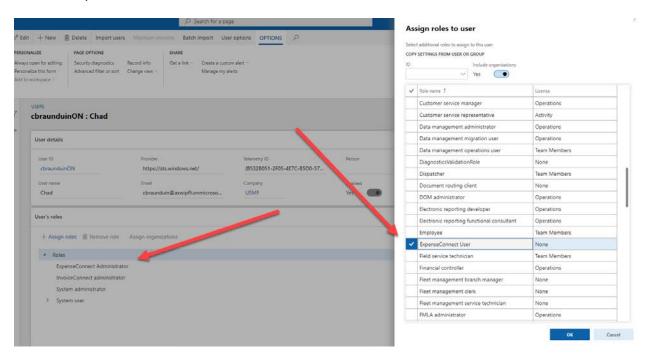
https://brittip.blob.core.windows.net/ecfo/EC-AXDeployablePackage.zip

ExpenseConnect Security

The token used to access the Concur API is stored internally and all programmatic requests between Concur and ExpenseConnect are encrypted (HTTPS), so the token is never seen nor handled as plain text.

FO Windows and Forms permissions for ExpenseConnect

Assign each user of ExpenseConnect either the ExpenseConnect Administrator role of the ExpenseConnect User role. The Administrator role can do everything within ExpenseConnect. The User role can only run EC Batches.









Concur Site Overrides (Implementation sites)

If the Concur domain differs from www.concursolutions.com (the default for production Concur sites), the domain needs overridden in the Settings form → Concur settings tab.

If ExpenseConnect is implemented in a Concur implementation site, the Concur Key and Concur Secret fields need overridden. Obtain the Key and Secret fields after registering a new partner application in the Concur implementation site at Administration \rightarrow Company \rightarrow Web Services.

Choose an appropriate name and description, and select the following boxes:

- Expense Report
- Extract
- List Items
- Users

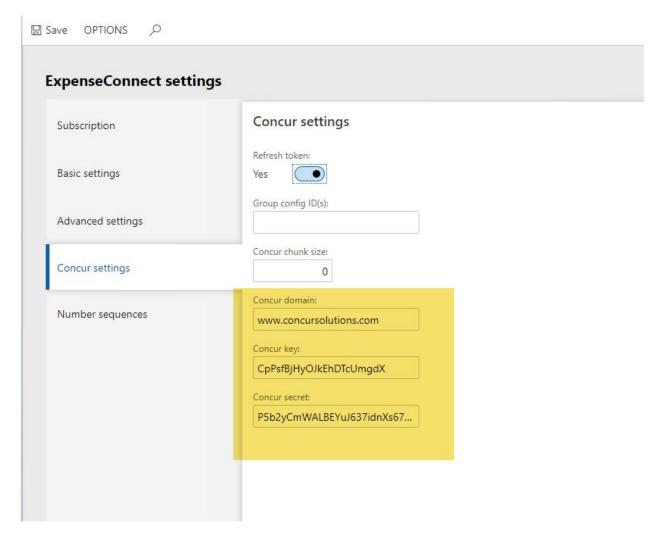
Scroll to the bottom and copy-and-paste the Key and Secret into the corresponding fields in the form.











Renew the Concur token using the Concur Token form.

ExpenseConnect Features

Batches

Batches store a log of the integrations performed between Concur and FO along with a list off all the Concur reports integrated. During production, it is important not to delete Batches from ExpenseConnect because ExpenseConnect uses existing Batches in two ways:

- 1. ExpenseConnect uses the Created Date and Time of the last fully successful Batch as the Start Date of the next Batch. A Batch is considered fully successful only if all reports successfully integrate.
- ExpenseConnect prevents duplicate integrations by checking the existing Batch Report lists before integrating a report.

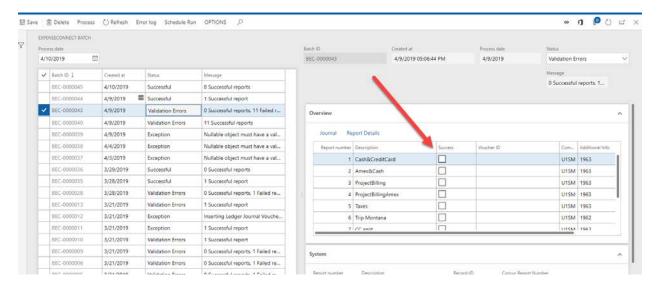






When first creating a Batch, there is an editable field called the Process date that defaults to today's date. By changing the date field, ExpenseConnect imports a Batch at an earlier or later date. For example, if reports need imported on the last day of the month, but the last day of the month falls on a Sunday, the reports can be run on the following Monday by changing the Current Date to Sunday's date.

If a report will not integrate, prevent ExpenseConnect from continuing to try to integrate the report by selecting the "Success" checkbox. In production, it is best to find the root cause of a report not integrating before choosing to skip reports.



Payment Statuses

It is possible to configure ExpenseConnect to integrate reports from four different Concur payment statuses:

- Processing Payment
- Paid / Extracted for Payment
- Holding Payment
- Payment Confirmed

With the box selected for one of these statuses in the Settings form, ExpenseConnect integrates all of the reports transferred to that status on or after the date of the last fully successful batch.







Scheduling Batches

To schedule batches to run automatically, open the Batches form and click on the Schedule Run button. That will open a scheduler setup form. The important choices to make on this form are:

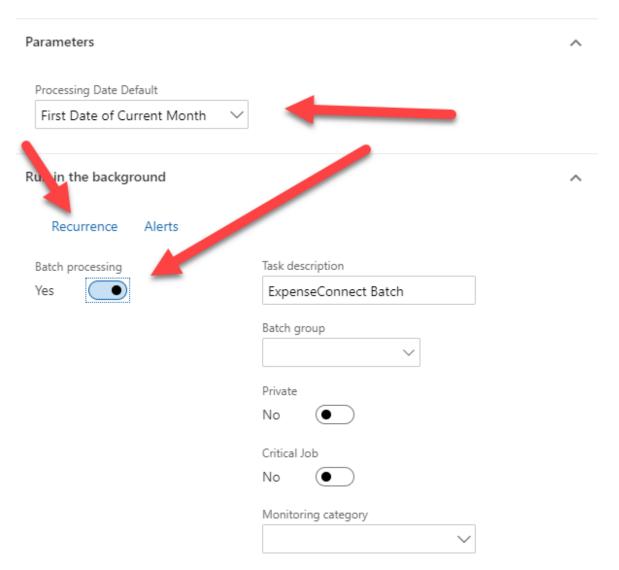
- 1. What value will populate in the Processing Date field. There are 4 choices that should be selected based on accounting need
- 2. Select Yes for Batch Processing
- 3. Click on the Recurrence link to configure when the schedule will run







ExpenseConnect Batch Run Setup



Start date: 4/10/2019 (07:33:13 pm) (GMT) Coordinated Universal Time







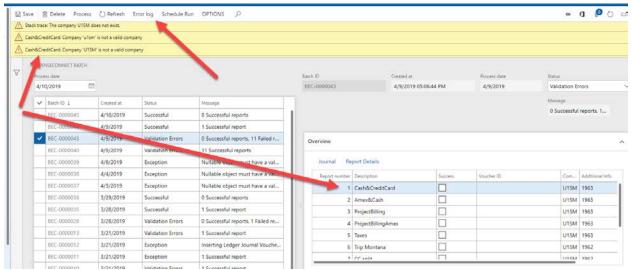
Debugging Validation Errors

Sometimes Concur expense reports fail to integrate when data they contain is not valid. The main causes are:

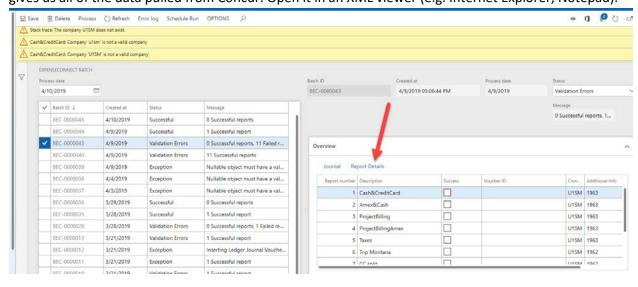
- An invalid Ledger account of dimension
- An invalid Ledger name
- A Transaction date in a closed period

When this happens, it is important to know how to debug those validation issues. First, identify which report caused the error. Sometimes identification can be a multi-step process.

Step 1: Open the Error Log to identify the problem



Step 2: Find the Report Details for an offending report by clicking on the Report Details button. This gives us all of the data pulled from Concur. Open it in an XML viewer (e.g. Internet Explorer, Notepad).









Step 3: After identifying the issue, fix the issue in either Concur or FO (whichever is more appropriate), and re-run another batch

Transaction Splitting

In the course of integrating expense reports into FO, reports split into different FO journals and vouchers.

Ledger Journal

Journal records split because of the following differences:

- LedgerName
- Currency Code
- Company ID

Ledger Journal Voucher

Vouchers split for the following differences:

- Credit Dimension Ledger Account
- Transaction Date
- Exchange Rate
- Extra Grouping Key (A pseudo field which can cause vouchers to split if desired)

Field Mapping

Values in Concur map to fields in FO via entries in the Field Mappings ExpenseConnect form. There are a few rules to follow when mapping fields.

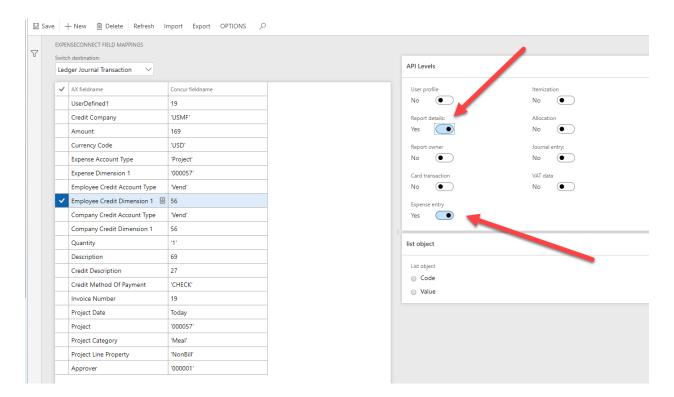
- Using the Expense API, Concur fields map by entering the exact (case-sensitive) fieldname into the Concur Fieldname field. Example: ReportName
- Using the Extract API, Concur fields map by entering the 1-based ordinal of which column number they are in the file. Example: 19
- Map literal values by enclosing them with single quotes. Example: 'EC'
- Fields concatenate together by delimiting them with an ampersand or comma. Using a comma puts a space in between the fields whereas using an ampersand does not include a space.
 - Example: ExpenseTypeName,Amount (produces: Lunch 15.46)
 - o Example: 'EC-'&ReportKey (produces: EC-2883)
- Custom fields in Concur are not just straight values. They are XML elements, which have subelements of "Code" and "Value". Use the List Object field to select which of these to use. Code is the most common choice.
- It is possible to map a value from a specific level(s) of the Concur API response. This is sometimes necessary if, for example, the field Custom1 contains project values in the







ExpenseEntry section but department values in the Allocation section. If project values need mapping, edit the mapping record by selecting the appropriate API level(s). In the screenshot below, the description will only be pulled from the Report details and Expense entry sections. The other sections will be skipped.



• It is also possible to map conditionals. In the example below, ExpenseConnect first finds the value of the Concur field PayeePaymentTypeName. If that value is "Employee", it returns the value of the Concur field ExpenseTypeName, otherwise it returns the literal value 'Other'. In this example, 'Other' is the default value because it has a blank conditional check. As many conditionals as needed may be used. The pipe character (|) divides up the conditionals. A colon character (:) separates each conditional check with the conditional result. A question mark character (?) tells ExpenseConnect to treat the text as a conditional expression.

PayeePaymentTypeName?Employee:ExpenseTypeName|:'Other' It is also possible to nest conditions by using parenthesis such as this:

PayeePaymentTypeCode?CBCP: '1517' |: (OrgUnit1?US~UK: '1010' |: '2010')
It is also possible to concatenate conditional results by using parenthesis such as this:

PayeePaymentTypeCode?1000:'American

Express'|:(PayeePaymentTypeCode, 'Unknown'), 'Card'

The above conditional results in one of the following lines:

American Express Card 1001 Unknown Card







The tilde character (~) delimits multiple conditional checks. In the above case, '1010' is the return if OrgUnit1 is either "US" or "UK". Otherwise, '2010' is the return.

As a conditional check, use the underscore character for not found values:

Custom1?_:'00'|:Custom1

In the above case, if Custom1 is blank or not found in the Concur data, '00' is the return. Otherwise, the value from Custom1 is the return.

It is also possible to do simple math operations if both sides resolve to a number:

TransactionAmount*'1.05'

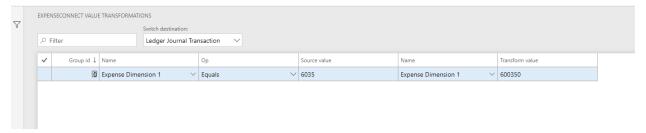
The TransactionAmount multiplies by 1.05.

Find the possible fields to map from Concur under the "Response" header at the following link:

https://developer.concur.com/api-reference-deprecated/version-two/expense-reports/expense-report-get.html

Review the exact Concur API response by opening up the Report Details.xml text file on the Batch Reports line

Value Transformations



Value Transformations work with Field Mappings to transform FO values into other values. Value Transformations (VTs), unlike Field Mappings, act on already mapped values and not directly on fields from Concur data. Here are several cases for using VTs:

- To correct mistakes in Concur that are not easily fixed (e.g. incorrect natural account)
- To work with a single Concur configuration value that is used in several places. For example, if a customer has an account number string where the first financial dimension segment denotes the company, that segment value may need to direct that report line to the appropriate company value. If the segment value is "100" and the company name is "AAA", a VT can transform the company to be AAA whenever 100 is mapped to the Employee Dimension 2 value.
- VTs can group together using the Group value to create transformations from multiple criteria (e.g. a transformation on an entire account string instead of just a single segment).

Whenever possible, fix the data in Concur rather than using a Value Transformation.

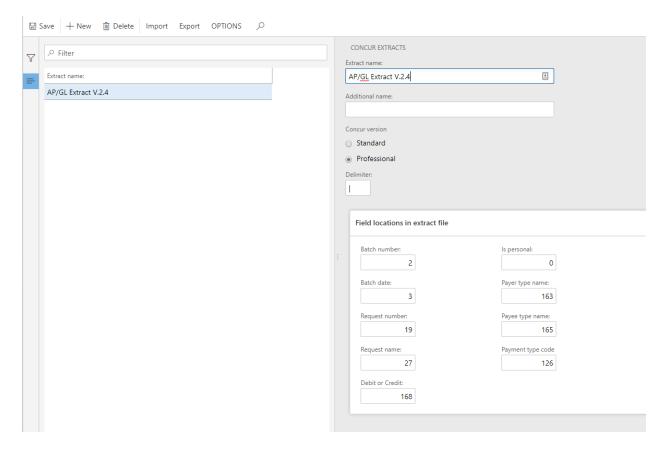






Concur Extract

The Concur Extract setup form is only necessary if using the Extract API source.



- Extract Name: A Concur system can have multiple extracts setup. The Extract Name is the name of the expense extract that ExpenseConnect uses. Use the Additional name field to configure multiple names for the same extract format. Generally, the additional name is only needed if you have an "Emergency Run" extract in Concur.
- Concur Version: The extracts look and work differently between Concur versions. Set the radiobutton to the correct Concur version.
- Delimiter: The different Concur versions use a different delimiter character to delimit the fields of data.
- Field Locations in Extract File: ExpenseConnect uses certain fields to drive behavior, so identify
 these fields before configuring the field mappings. Define the field locations and their 1-based
 column indexes in the Field Locations in extract file section. A field with a negative number or
 zero means it is not in the extract detail and it should be blank or default to the value from the
 extract header.





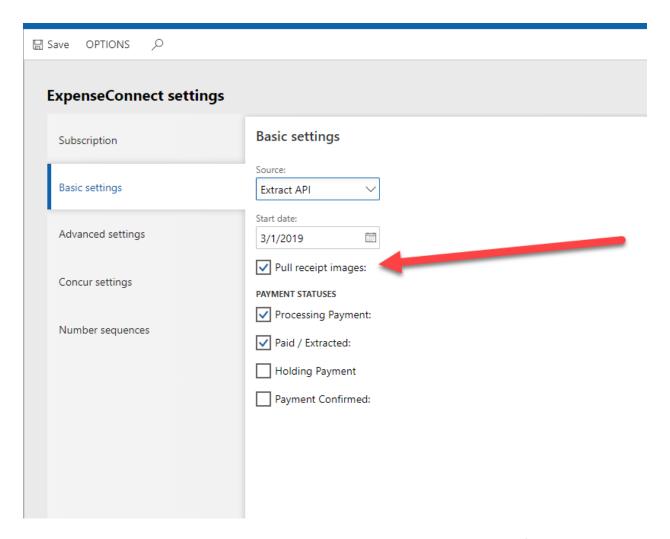


Receipt Images

Select the Pull receipt images checkbox in the Settings form and the receipt image will import as an FO Attachment on the Ledger Journal Transaction credit line.

This requires that document attachments have first been setup and configured in FO for the table LedgerJournalTrans. Here is a link explaining how to setup document management in FO.

https://technet.microsoft.com/en-us/library/dn636897.aspx?f=255&MSPPError=-2147217396

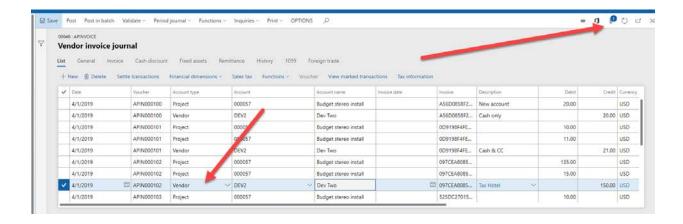


For all vouchers that have receipt images, they will be accessible on the credit line of the voucher by clicking on the document attachment button from the status bar. If you are using the "offset style" mappings, this file will be accessible on the first line of each voucher.









Current Limitations

The sections below explain the current limitations of ExpenseConnect.

Marking integrated reports as "Paid" back into Concur

The current functionality of ExpenseConnect cannot synchronize reports paid in FO as "Paid" back into Concur.

Cash Advances

The Concur API does not give enough information to parse out properly the amount owed to individuals with the use of Cash Advances. The workaround is to use the Extract API if you using Concur Cash Advances.

Wipfli Support

For Wipfli support with ExpenseConnect, please create a support ticket by emailing productsupport@wipfli.com. A Wipfli support engineer will be in contact shortly after to resolve any issues.