



# SAP Business ByDesign and Concur Integration Guide

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# Set up SAP Concur Expense

You must perform the steps mentioned in this section to set up SAP Concur Expense before you integrate it with SAP Business ByDesign.

Your SAP Concur Implementation Project Manager can access the SAP Concur Integration Guide for the integration with SAP Business ByDesign using this link :

[https://www.concurtraining.com/customers/tech\\_pubs/Integration/ CCC SAP Integrations.htm](https://www.concurtraining.com/customers/tech_pubs/Integration/ CCC SAP Integrations.htm) .

## Activate SAP Concur Expense Interfaces

Before you can use the integration between SAP Business ByDesign and SAP Concur Expense, the integration interfaces in your SAP Concur Expense entity must be activated. This can only be done by your SAP Concur Technical Consultant.

You should contact your SAP Concur Implementation Project Manager for this activation. You should receive all the data that is required to connect your SAP Business ByDesign tenant with your SAP Concur Expense.

The following information is required to set up communication arrangement and communication system.

- Client ID
- Client Secret
- Company UUID
- URL of SAP Concur instance you must connect to

This information is required to set up communication arrangement and communication system.

## Set up SAP Business ByDesign

You can carry out the steps mentioned in this section, if you have the administrator rights in SAP Business ByDesign. You need to ensure that you are assigned to the **Business Configuration** and **Application and User Management** work centers.

## Installation of SAP Concur Certificates

To establish a secured system connection, you need to download and install the SAP Concur SSL certificates in your SAP Business ByDesign.

The number of required certificates depends on your integration scenarios and whether you are integration one or multiple financial systems with SAP Concur. For more information, see **Activate SAP Concur Expense Interfaces** section of this guide.

1. Open the SAP Concur login website <http://www.concursolutions.com> in your browser.
2. Add this website to your list of trusted sites in your web browser. In MS Windows, you can find the list of trusted sites in **Internet Properties Security Trusted Sites**.
3. Do not log on, click on the padlock icon in the address bar of your browser. In Internet Explorer® you can find it on the right end and in Chrome®, on the left end of the address bar.
4. View certificate details:
  - o **Internet Explorer®**: Click on the padlock icon and select **Security Reports**. From **Security Reports**, select **View Certificates**.

- o **Chrome®**: Click on the padlock icon and select **Certificate** from **View site information**. From **Certificate**, select **Valid** and then **Show certificate**.
- o **Both Browsers**: Go to **Certificate Path** tab.

5. Mark the **DigiCert** certificate then click **View Certificate**.

6. On the **Certificate** window, go to **Details** tab and choose **Copy to File**. In the **Certificate Export Wizard**, choose **Next**. In the step **Export File Format**, choose **Base-x64 encoded X.509** file (\*.cer file format). Then choose **Next** and export the file, for example, to your local hard drive. Choose a descriptive file name such as **DigiCert Concur.cer**.

7. After exporting **DigiCert Concur.cer**, close this **Certificate** pop-up.

8. On the other **Certificate** pop-up, mark the **GeoTrust RSA CA 2018** certificate and click **View Certificate**.

9. Repeat the steps to export the **GeoTrust** certificate mentioned in step 6.

10. Mark the **\*concur solutions.com** certificate and go to the **Details** tab. You should then choose **Copy to File** repeat the steps to export this certificate to your local hard drive.

11. Upload these three certificates to SAP Business ByDesign.

In SAP Business ByDesign, go to **Application and User Management** work center and select **Edit Certificate Trust List** from **Common Tasks**. Select **Upload** to upload the SAP Concur certificate.

12. On the **Certificate Trust List** screen, you can see these three certificate as a three-level hierarchy.

Repeat these steps for the certificates you can find on the API Gateway servers.

Your SAP Concur Integration Project Manager guides you in selecting on of the URLs that you should take:

- US Production: <https://us.api.concursolutions.com/> ➔
- EU Production: <https://emea.api.concursolutions.com> ➔
- US Implementation: <https://us-impl.api.concursolutions.com> ➔
- EU Implementation: <https://emea-impl.api.concursolutions.com> ➔

You may encounter a **404 Not Found** error when you try to open one of these URLs with your browser. However, you can download the **DigiCert**, the **DigiCert SHA2 High Assurance Server CA** and the **\*api.concursolutions.com** certificates. We recommend using **Google Chrome®** browser for this activity.

## Business Configuration Scoping

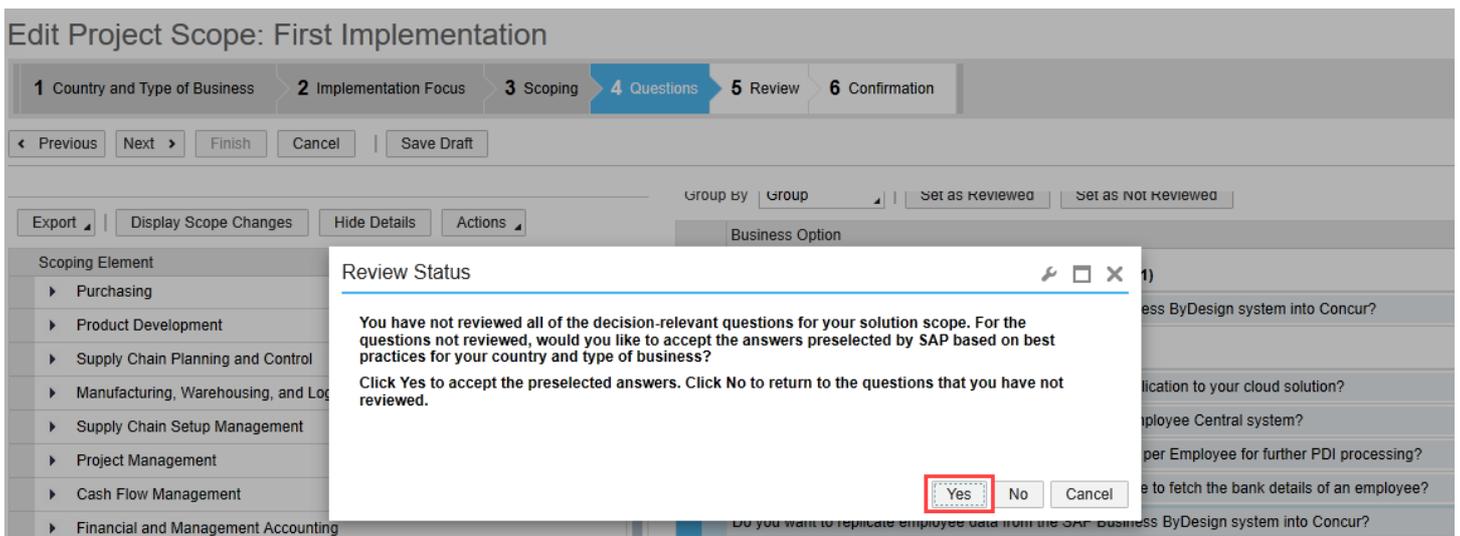
In SAP Business ByDesign, you need to activate the application integration business package for the integration from SAP Business ByDesign to SAP Concur Expense.

1. In the Business Configuration work center, Implementation Projects view, select your current implementation project.
2. Click **Edit Project Scope**.
3. On the guided activity, click **Next** to go to the **Scoping** step. Expand **Communication and Information Exchange**, select **Integration with External Applications and Solutions** and then select **Integration Scenarios for Cloud Solutions from SAP**.
  - a. To enable replication of cost objects and employee data, expand **Communication and Information Exchange**, select **Integration with External Applications and Solutions** and then select **Integration of Master Data**.
  - b. To enable replication of expense reports from SAP Concur Expense to SAP Business ByDesign, expand **Financial and Management Accounting**, select **General Ledger** and then select **Concur Integration**.

- c. If in case you have not activated **Personnel Administration**, you need to make sure that **Employees** is enabled under **Employees and Services Agents** in **General Business Data**.
4. Click **Next** to go to the **Questions** step. Expand **Communication and Information Exchange** and select **Integration with External Applications and Solutions**. Select **Integration Scenarios for Cloud Solutions from SAP** and answer the scoping question **Do you want to enable integration with Concur Solutions?**.
    - a. For replication of cost objects and employee data, expand **Communication and Information Exchange** and select **Integration with External Applications and Solutions**. Select **Integration of Master Data** and answer the scoping questions **Do you want to replicate cost object data from the SAP Business ByDesign system into Concur?** and/or **Do you want to replicate employee data from the SAP Business ByDesign system into Concur?**.
    - b. For replication of expense reports from SAP Concur Expense to SAP Business ByDesign, expand **Financial and Management Accounting** and select **General Ledger**. Select **Concur Integration** and answer the scoping question **Do you want to integrate with Concur to fetch and post expense reports?**.
  5. Complete the guided activity.

### i Note

When you progress from step **4 Questions** to step **5 Review**, SAP Business ByDesign may show a notification that you haven't reviewed all the decision-relevant questions for your solution scope. If you have followed all configuration steps as described in this document, you can choose "Yes" from the pop-up.



## Register Client for OAUTH Web Services

Using the following steps you are going to connect SAP Business ByDesign with two different SAP Concur servers in order to control the data flow.

The SAP Concur server requires a set of credentials: **Client ID**, **Client Secret**, and **Company ID**.

1. In the **Business Configuration** work center, **Implementation Projects** view, search for the recurring activity **Integration with Concur Solutions**.

### i Note

In case you do not find the activity, choose **Show All Activities** and add the activity to your project. A recurring activity is not visible in a local change project prior to the merge.

2. Click **Open**.
3. Select service provider **CONCUR\_INTEGRATION\_OAUTH\_JWT** and click **Register Client**.

4. On the pop up screen, enter the **OAUTH** client credentials for the application server of your SAP Concur Expense entity. You receive these credentials from your SAP Concur Implementation Project Manager.

a. **OAUTH Client Settings**

- i. **Client ID:** enter the SAP Concur Client ID
- ii. **Client Secret:** enter SAP Concur Client Secret

b. **OAUTH Server Settings**

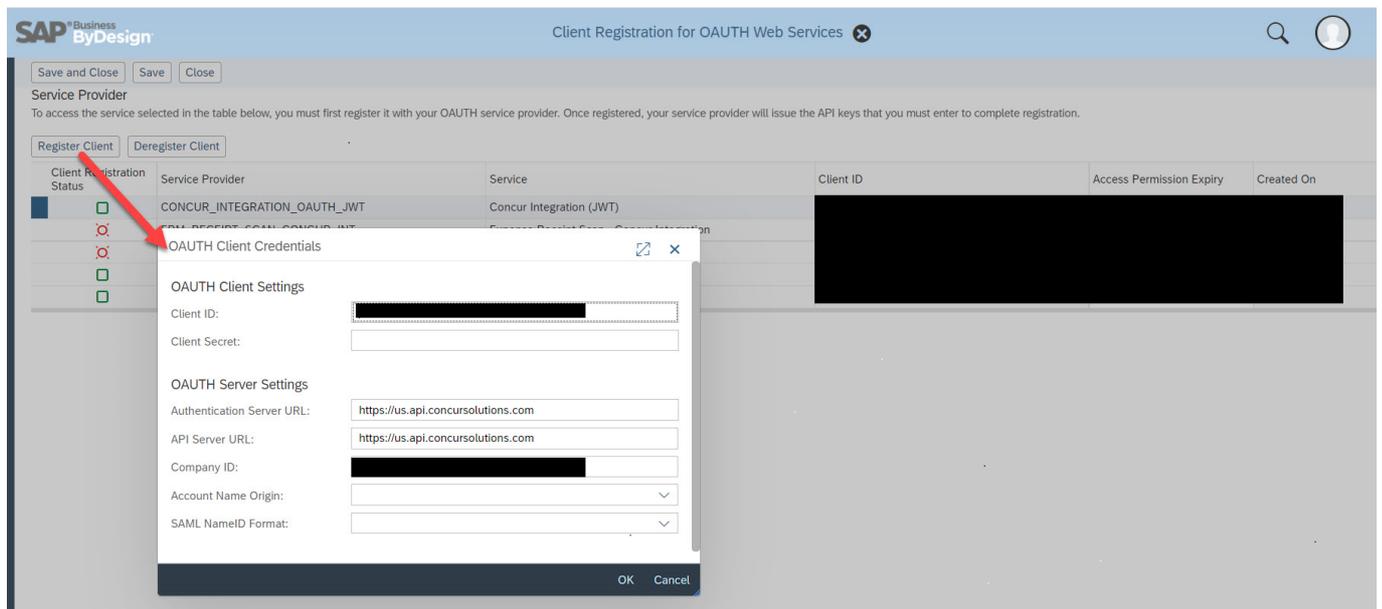
- i. **Authentication Server URL:** enter the SAP Concur Application Server URL
- ii. **API Server URL:** enter the SAP Concur Application Server URL (For a list of possible Application Server URLs see below.)
- iii. **Company ID:** enter the SAP Concur Company ID
- iv. **Account Name Origin:** leave blank
- v. **SAML NameID Format:** leave blank

### Possible Server URLs

Your SAP Concur Implementation Project Manager provides you with the required URLs. You can use one of the following URLs:

- o <https://emea.api.concursolutions.com/>
- o <https://us.api.concursolutions.com>

These are dependent on the type of SAP Concur Expense system (production or test) and the geo location of the data center. You must ensure that you enter the complete URL including the https:// prefix.



## Set up Communication System

You can follow the steps mentioned in this section to set up your communication system.

1. Go to the **Application and User Management** work center, **Communication Systems** view.
2. Click **New** to create a new communication system.

3. On the new screen, enter the following details that you have received from your SAP Concur Implementation Project Manager.
  - o **ID** : Concur
  - o **Host Name** : Enter the URL of your SAP Concur entity (Your SAP Concur Implementations Project Manager provides you this URL. You can enter the URL in the format such as [concursolutions.com](https://concur.com) ↗ ).
  - o **System Access Type** : Internet
4. Save the changes.
5. Under **Actions**, set the communication system to Active.

## Set up Communication Arrangement

You can follow the steps mentioned in this section to set up your communication arrangement.

1. Go to the **Application and User Management** work center, **Communication Arrangements** view.
2. Click **New** to create a new communication arrangement.
3. In the step **1 Select Scenario**, select scenario **Concur Integration User Credentials** and click **Next**.
4. In the step **2 Define Business Data**, enter **System Instance ID** as CONCUR. Click **Next**.
5. In the step **3 Define Technical Data**, enter the following basic outbound communication details:
  - o **Application Protocol** : Http
  - o **Authentication Method** : User ID and Password
  - o **User ID** : SAP Concur Company ID (Provided by your Concur Implementation Project Manager)
  - o Click **Edit Credentials** and enter as password the Concur Request Token (Provided by your Concur Implementation Project Manager).
  - o Click **Next**.
6. Complete all the remaining steps in the guided procedure and close the set-up.

### **i Note**

Even though the Application Protocol is listed as **Http**, the communication takes place using the **https** protocols.

In the **Communication Arrangement Overview** screen, under **My Communication Data**, in **My System** field, you can see the logical system ID of your SAP Business ByDesign tenant. This Source System ID is the first level of your connected list in SAP Concur that contains the cost objects from all the connected SAP Business ByDesign tenants. With this Source System ID, you can identify from which SAP Business ByDesign tenant the cost objects are coming. You can see the levels below this source system.

## Register User for OAUTH Web Services

These step are required if you want to allow selected administration users to trigger replication runs on request in addition to the regularly scheduled runs.

### **i Note**

An entry with user SAP\_SYSTEM gets created automatically if you have enabled scoping in the section **Installation of Concur Certificates**. This user is mandatory for the scheduled jobs and must not be deleted.

This is custom documentation. For more information, please visit the [SAP Help Portal](#)

1. Go to the [Application and User Management](#) work center, [User Registration for OAUTH2 Web Services](#) view.
2. On the [Overview](#) screen, select service [CONCUR\\_INTEGRATION\\_OAUTH\\_JWT](#) and click [Switch Edit Mode](#).
3. On the pop-up screen, enter the [Client Secret](#) for the Concur application server. (For more information, see chapter [Register Client for OAUTH Web Services](#)).
4. Click [Add Row](#). You can choose the employee from the drop-down list in the field [User Logon Name](#). In the field [User Account](#) you can enter the employee's name or any other descriptive text. Click [OK](#).

When you add a new employee to the list of registered users, you will see the [User Logon Name](#) and the [User Account](#) text in the columns [User ID](#) and [Description](#).

## Business Configuration Fine-Tuning for Master Data Replication

This section guides you in setting up the code list mapping for regions and configure standard and additional fields for concur employee integration.

### Code List Mapping for Regions

When an employee record is replicated to SAP Concur, the employee/user has to be assigned to the appropriate region in the country of employment in SAP Concur Expense.

SAP Concur Expense uses the two digit country code and two or three digit state or province code. For example, Washington State, United States is US-WA.

#### i Note

It is required to create code list mappings if the country and region code in SAP Concur differs from the codes in SAP Business ByDesign. For example, this is the case for Germany(DE), United Kingdom (UK) but not for United States (US). The integration solution is preconfigured for DE, UK and US and the required code list mappings have been created. You can create your own code list mapping for any other country. You can contact your SAP Concur Implementation Project Manager for the list of region codes of the country for which you are creating the code list mapping.

You can create your own code list mapping by following these steps:

1. Go to the [Business Configuration](#) work center, [Implementation Projects](#) view.
2. Search for the fine-tuning activity [Code List Mapping for Integration with External Applications and Solutions](#), and open it.
3. Click on [Maintain Code List Mapping](#).
4. Under [Code List Mapping Definition](#), choose the mapping group [ByD Concur Integration](#) for Local Data Type Name [RegionCode](#).
5. In the section [Code List Mapping Rule](#) add a new row, choose the mapping rule [Map Individual Codes](#) and in the field [Local Context](#), choose the country for which you want to create this rule.
6. In the [Code List Mapping](#) section, add a new row for each region in this country. You can choose the region from the drop-down list in the field [Local Code](#). In the field [External Code](#) enter the region code that SAP Concur uses for this region. For example, for Aberdeenshire in UK, the region code in SAP Business ByDesign system is AB. However, it is ABD in SAP Concur.

# Configure Standard Fields for SAP Concur Employee Integration

You can check the list of proposed field mappings between SAP Business ByDesign and SAP Concur Expense.

You can choose the standard fields that should be transferred in the employee replication. To do so:

1. Go to the [Business Configuration](#) work center, [Implementation Projects](#) view.
2. Search for the fine-tuning activity [Employee Replication into SAP Concur](#).
3. Click on [Employee Replication into SAP Concur](#) to check or edit the settings.
4. Click on [Configure Standard Fields for Concur Employee Integration](#). You can choose the fields that should be transferred in employee replication, by setting or unsetting the flag in the columns [To Be Transferred](#) and [Mandatory](#)

If a field is set to mandatory and this field is empty for a certain employee, the employee is not sent to SAP Concur Expense. Some fields cannot be de-selected since they are mandatory in the SAP Concur API.

## i Note

You should not de-select the field [Expense User](#). You should only select the field [Trip User](#) if you are using [SAP Concur Travel](#).

# Configure Additional Fields for SAP Concur Employee Integration

You can add additional field mappings, if there is additional information that you want to replicate to SAP Concur Expense and is not available in the standard field mappings.

To perform this step, you need to have knowledge of SAP Business ByDesign and the SAP Concur Expense. You can add additional fields for the SAP Concur Employee integration using the following steps:

1. In the fine-tuning activity [Employee Replication into SAP Concur](#) in the [Business Configuration](#) work center, click on [Configure Additional Fields for Concur Employee Integration](#).
2. Add field mappings between SAP Business ByDesign and SAP Concur Expense.

# Activate Work Centre Views for Admin Users in SAP Business ByDesign

Admin users who are responsible for configuring, executing and monitoring the master data replication must have access to specific work centre views.

1. In the [Application and User Management](#) work center, [User Access Management](#) view, select the [Business Users](#) sub-view.
2. Assign the following views to all business users who works on the cost object replication:
  - o [Cost Object Outbound Runs](#) view under [Master Data Replication](#) work center
3. Assign the following views to all business users who works on the employee replication:
  - o [Employee Outbound Runs](#) view under [Master Data Replication](#) work center
4. Assign the following views to all business users who works on the expense reports replication:

- o [Expense Reports](#) sub-view under [Concur](#) view in [General Ledger](#) work center
- o [Cash Advance](#) sub-view under [Concur](#) view in [General Ledger](#) work center
- o [Acknowledge Concur Documents Run](#) sub-view under [Concur](#) view in [General Ledger](#) work center
- o [Get Concur Documents Run](#) sub-view under [Concur](#) view in [General Ledger](#) work center
- o [Post Concur Documents Run](#) sub-view under [Concur](#) view in [General Ledger](#) work center

## Integration via Middleware

We recommend running a direct point-to-point integration of SAP Business ByDesign and SAP Concur Expense if this integration covers your integration requirements and match you SAP Concur configuration.

If the connected list structure, field mapping or the data format is not compatible, we recommend integrating via SAP Cloud Integration services. It provides you with the required flexibility for customer specific field and value mapping. For more information on default mapping that is used with this standard integration, see the section ***Configure SAP Concur Forms and Fields***.

In case, you decide to use a middleware instead of running a direct point-to-point connection, you need to do the settings mentioned in this section in addition to the settings mentioned in the previous sections.

## Set up Communication System

You can use the steps mentioned in this section to set up your communication system.

1. Go to the [Application and User Management](#) work center, [Communication Systems](#) view.
2. Click [New](#) to create a new communication system.
3. On the new screen, enter the following details that you have received from your Concur Implementation Project Manager
  - o **ID** : CONCURROUTETHROUGH
  - o **Host Name** : Enter the host name of your SAP Cloud Integration System for example: <my-instance>.sap.hana.ondemand.com
  - o **System Access Type** : Internet
4. Save the changes.
5. Under **Actions**, set the communication system to Active.

## Set up Communication Arrangement

You can use the steps mentioned in this section to set up your communication arrangement.

1. Go to the [Application and User Management](#) work center, [Communication Arrangements](#) view.
2. Click [New](#) to create new communication arrangement.
3. In the step **1 Select Scenario**, select scenario [Concur Integration Middleware](#) and click [Next](#).
4. In the step **2 Define Business Data**, enter **System Instance ID** as **CONCURROUTETHROUGH**. Click [Next](#).
5. In the step **3 Define Technical Data**, enter the following basic outbound communication details:
  - o **Application Protocol** : Http

- **Authentication Method** : User ID and Password
- **User ID** : SAP Cloud Integration User ID
- Click **Edit Credentials** and enter the password of the SAP Cloud Integration User ID
- Click **Next**.

6. Click **Edit Advanced Settings** and enter the following details:

- Uncheck **Use Basic Settings**
- **Port**: 0
- **Path**: /http/byd/concur/passthrough
- Click **Next**.

7. Complete all the remaining steps in the guided procedure and close the set-up.

### **i Note**

Even though the Application Protocol is listed as Http, the communication takes place using the https protocols.

## **Deploy SAP Cloud Integration Flow**

In your SAP Cloud Integration instance, go to the Discover area. Search for the package **SAP Business ByDesign to SAP Concur Integration**.

Copy the package to your workspace and deploy the Integration Flow **Integrate SAP Business ByDesign with SAP Concur - route through**.

For more information – especially regarding the customer specific message mapping – please refer to the following:

- [API hub info on SAP Cloud Integration pass-through scenario](#)
- [API hub info on SAP Cloud Integration extension scenarios](#)

## **Create and Replicate Expense Reports**

This section provides you the details of how you can create, retrieve, acknowledge and post expense reports in the SAP Business ByDesign system.

## **Configuration in the SAP Concur Expense**

Depending on your project setup, the configuration activities in this section that are done in SAP Concur can only be carried out by your SAP Concur Implementation Project Manager. However, most of these configuration activities need to be carried out collaboratively between SAP Business ByDesign and SAP Concur experts.

## **Assign Account to Expense Type**

This section describes how to assign the SAP Business ByDesign G/L Account Group ID to the SAP Concur Expense Type.

When SAP Concur compiles the submitted expense report for SAP Business ByDesign, it stores the G/L Account Group IDs along with the expense types that have been used in this document so that SAP Business ByDesign can determine the appropriate G/L account ID during posting. You need to do this assignment manually for each SAP Concur expense type you are

planning to use. There is no automatic process as each client has its own list of standard or client-specific expense types and G/L Account Group IDs.

1. In SAP Business ByDesign, go to the **Business Configuration** work center and select **Implementation Project**. Select your implementation project and click **Open Activity List**, search for the **Chart of Accounts, Financial Reporting Structures, Account Determination** fine-tuning activity. In the section **Account Determination Groups**, click **Edit**.
2. In the section **Group Types by Ledgers**, expand **Costs** and click **Groups for General Expenses**.
3. In SAP Concur Expense, under **Expense Admin** panel, click on **Accounting Administration**. Maintain the **Group ID** from SAP Business ByDesign, under **Account Code** to assign the account to a SAP Concur expense type.

## Configure Tax Code

This section is relevant if you need to calculate and post for example VAT (Value Added Tax) in your financial system.

This section describes how to assign SAP Business ByDesign Tax Codes in SAP Concur Tax Administration. SAP Business ByDesign is the leading financial system. Therefore, you must ensure SAP Concur Expense uses the same tax (reclaim) codes to ensure successful financial posting in SAP Business ByDesign.

In SAP Business ByDesign, you can find the available tax codes for countries in the **Business Configuration** work center. The tax code group assignment for the expense types for each country are maintained in the country-specific **Expense Reporting** fine-tuning activity (e.g. **Expense Reporting – Germany**). You can find the corresponding tax codes in the fine-tuning activity **Tax on Goods and Services**, sub-activity **Tax Codes**. You can find the applicable tax rates in the fine-tuning activity **Tax on Goods and Services**, sub-activity **Tax Rate Schedules**. In SAP Concur, under **Expense Admin** panel, select **Tax Administration**.

### For Non-Domestic Taxes

1. In the **Tax Authorities** tab, select the tax authority that you want to configure.
2. In the field **Non-Domestic Code** enter the tax code you are also using in SAP Business ByDesign for non-domestic purchases. In most cases this is a tax code without **Tax Rate Type** and without **Tax Deductibility** in SAP Business ByDesign.
3. Complete the guided activity in SAP Concur Expense. In the last step choose **Done**.
4. In the **Employee Related Configurations** tab, select the country you have just configured and make sure the checkboxes **Only Calculate Domestic** and **Reclaim Domestic Taxes** are ticked.

### For Domestic Taxes

1. In the **Tax & Reclaim Groups** tab, select the tax authority that you want to configure.
2. Double click on each group name to maintain the reclaim tax code.
3. In the step **3 Tax Rates**, maintain a condition if required and leave the **Tax Code** field empty.
4. In the step **4 Reclaim Rates**, maintain the tax codes from SAP Business ByDesign for each reclaim configuration (if applicable) and for each reclaim condition. Copy the respective **Tax Code** from SAP Business ByDesign and enter this value in the column **Reclaim Tax Code** in SAP Concur Expense.

The **Reclaim Type** as well as the **Reclaim Rate** you have configured for a **Reclaim Tax Code** in SAP Concur Expense must match the **Tax Rate Type** and the **Tax Deductibility** information you have maintained for the respective **Tax Code** in SAP Business ByDesign.

For more information, see the appendix.

## Example

This is custom documentation. For more information, please visit the [SAP Help Portal](#)

In SAP Business ByDesign, if the **Tax Code 2** has a **Tax Rate Type** "1 – Standard" and **Tax Deductibility** "1 – Fully Deductible" then in SAP Concur Expense the **Reclaim Tax Code 2** must have a **Reclaim Rate** of 100% and must be of **Reclaim Type** "Standard".

## Configure Payment Types

This section describes how to configure payment types in SAP Concur.

You can modify the clearing account code as below:

1. In the SAP Concur Expense, under **Expense Admin** panel, select **Payment Types**.
2. Select the payment type and click the **Modify**.
3. Enter ID of an existing business partner from SAP Business ByDesign in the **Clearing Account Code field**.

Following are the supported **Payment Type Code**:

- **Company Billed/Company Paid (reimbursement offsets not used)**

To handle credit card payments, you can maintain a business partner for the payment type Company Billed/Company Paid (reimbursement offsets not used) in the SAP Concur Expense. Assign an existing business partner from SAP Business ByDesign, to the clearing account code of Company Billed/Company Paid.

When you post an expense report with this payment type, an open item is created against the business partner in SAP Business ByDesign. This open item can be viewed from the payables supplier account and can be later cleared.

- **Company Paid**

To handle company paid expense, you can maintain a group ID (GL Alias code) for the payment type code Company Paid in the SAP Concur Expense. The group ID must be for Other Liabilities account type. The posting for the company paid expense is made against the Other Liabilities account.

## Configure SAP Concur Forms and Fields

In this step, your Concur Implementation Project Manager configures the fields on the forms in SAP Concur and confirms that they contain the right information.

For **Employee Form** and **Expense Report Header Form**, the following mapping must be considered:

1. Org Unit 1 = Logical System
2. Org Unit 2 = Company
3. Org Unit 3 = Cost Object Type
4. Org Unit 4 = Cost Object ID

This mapping also represents the sequence of fields in your connected list in SAP Concur which contains the cost objects.

If you want to pass a specific external reference, configure and use the report custom code 06 field (reportCustom6Code). If not mapped, the report key will continue to be considered as the **External Reference** and displayed in the **Open Item** in **Employee Account Monitor** and **Supplier Account Monitor**.

If you are using report custom code 06 field for any other purpose, review your usage and ensure that this field is used only for passing external reference. **External Reference** can contain a maximum of 35 characters, therefore ensure that custom code 06 is maintained accordingly.

For the **Allocation Form**, you must consider the following field mapping:

1. Custom 1 = Logical System
2. Custom 2 = Company
3. Custom 3 = Cost Object Type
4. Custom 4 = Cost Object ID

For more information, see this link:

[https://www.concurtraining.com/customers/tech\\_pubs/Integration/ CCC SAP Integrations.htm](https://www.concurtraining.com/customers/tech_pubs/Integration/ CCC SAP Integrations.htm) .

## Configuration in SAP Business ByDesign

This section guides you in configuring SAP Business ByDesign that aids in creating and replicating expense reports.

### Code List Mapping for Expense Type Code

When a SAP Concur Expense report is processed in SAP Business ByDesign, the expense types in the expense report should be mapped to the appropriate SAP Business ByDesign expense types.

#### i Note

It is required to create code list mappings only if the expense type codes contained in the SAP Concur expense report differ from the expense type codes used in SAP Business ByDesign. If you are using expense types in SAP Concur that are unknown in SAP Business ByDesign, your SAP Concur Expense report can still be posted successfully in SAP Business ByDesign as long as the G/L Account Group ID has been maintained correctly in SAP Concur.

If you find that in such cases the expense type description from SAP Concur are not being transferred correctly to the journal entries in SAP Business ByDesign, you should maintain this code list mapping.

#### i Note

**Expense and Reimbursement Management** must be scoped in SAP Business ByDesign in order to use this Expense Type Code Mapping.

To create your own expense type code mapping, you can follow these steps:

1. Go to the **Business Configuration** work center, **Implementation Projects** view.
2. Click **Open Activity List** and search for the fine-tuning activity **Code List Mapping for Integration with External Applications and Solutions**, and open it.
3. Click on **Maintain Code List Mapping**.
4. Under **Code List Mapping Definition**, choose the mapping group **ByD Concur Integration** with local data type name **ExpenseReportExpenseTypeCode**.
5. Create the required code list mapping rule and mapping entries modification, and select the inbound indicator for the created code.

### Code List Mapping for Tax Type Code

You can follow the steps mentioned in this section to perform code list mapping for tax type code.

1. Go to the [Business Configuration](#) work center, [Implementation Projects](#) view.
2. Click [Open Activity List](#) and search for the fine-tuning activity [Code List Mapping for Integration with External Applications and Solutions](#), and open it.
3. Click on [Maintain Code List Mapping](#).
4. Under [Code List Mapping Definition](#), choose the mapping group [ByD Concur Integration](#) for local data type name [ProductTaxationCharacteristicsCode](#).
5. In the section Code List Mapping Rule choose an existing mapping rule or add a new row, choose the mapping rule [Map Individual Codes](#) and in the field [Local Context](#), choose the country for which you want to create this rule.
6. In the section [Code List Mapping](#), add a new row for each expense type. You can choose the local expense type code from the drop-down list in the field [Local Code](#). In the field [External Code](#), enter the code SAP Concur uses for this expense type.

## Creating a Tax Code

You can use the steps mentioned in this section to create custom tax codes if in case the provided combination of Tax Rate and Tax Deductibility does not suit your business requirements.

1. Go to the [Business Configuration](#) work center and choose the [Implementation Projects](#) view.
2. Select your implementation project and click [Open Activity List](#).
3. Select the [Fine-Tune](#) phase, then select the [Tax on Goods and Services](#) activity from the activity list. Select [Define Tax Codes](#) activity from the subsequent screen.
4. To create a tax code, click [Add Row](#).
5. Select a country/region in which this tax code is valid from the dropdown list.
6. Enter an ID for the tax code of your specific tax use case.
7. Enter a description.
8. Enter a date for the start and the end of the validity period.
9. Select a tax event from the dropdown list that characterizes the business transaction from a taxation point of view.

It is the result of tax determination and the key factor in financial accounting for tax returns. The tax event is based on the data that is transferred from the business transaction.

10. Select a tax type from the dropdown list that is used for this tax code, for example, Sales and Use Tax or VAT.
11. Select a tax rate type from the dropdown list that is used, for example, Standard Rate, Reduced Rate, or Zero Rate.
12. For deductible input tax, select an option from the [Tax Deductibility](#) dropdown list. For other types of tax, leave this field empty. If applicable, the tax deductibility to apply for deductible input tax in purchasing events, for example, 100% or 50% deductible.
13. Save your entries.

## Example

To add a tax code, click [Add](#).

- [Country/Region](#): DE
- [Tax Code](#): DT50

- **Description:** Domestic Acquisition
- **Valid-From Date:** 01.01.2019
- **Valid-To Date:** 31.12.2019
- **Tax Event:** Domestic Acquisition (ID: 10)
- **Tax Type:** VAT
- **Tax Rate Type:** Standard
- **Tax Deductibility:** Not deductible

## Create and Submit Expense Reports in SAP Concur Expense

When you create expense reports in the SAP Concur Expense and submit them, they are available for retrieval in SAP Business ByDesign.

Before you start, ensure that the users in SAP Business ByDesign that are responsible for retrieving Expense Reports from SAP Concur are registered for OAUTH web services in SAP Business ByDesign. For more information on user registration, see section Register User for OAUTH Web Services of this document.

The following four chapters describe how to configure SAP Business ByDesign to automatically retrieve expense reports from SAP Concur Expense.

## Retrieve Expense Reports in SAP Business ByDesign

You can retrieve the expense reports created and submitted in the SAP Concur Expense from SAP Business ByDesign.

To retrieve the expense reports, you can use the following steps:

1. Go to the **General Ledger** work center, **Get Concur Documents Run** view.
2. Click **New**, and then **Get Concur Documents Run**.
3. Enter all the necessary details for the run.
4. Activate the run. You can either execute the run immediately or schedule it for a later time.

You can view all expense reports retrieved from the SAP Concur Expense in the **Expense Reports** view in the **General Ledger** work center. These expense reports are displayed with the status **New** and the acknowledgment status **No Acknowledgment Sent**. You can also retrieve single expense reports using the SAP Concur Expense report ID by clicking **Get Expense Report** in the **Expense Reports** view in the **General Ledger** work center.

## Acknowledge Receipt of Expense Reports in SAP Business ByDesign

You can send an acknowledgment from SAP Business ByDesign to SAP Concur Expense once the expense reports have been received.

1. Go to the **General Ledger** work center, **Acknowledge Concur Documents Run** view.
2. Click **New**, and then **Acknowledge Concur Documents Run**.
3. Select **Send Acknowledgment** as the status.
4. Enter all the necessary details for the run.

5. Activate the run. You can either execute the run immediately or schedule it for a later time.

You can also send an acknowledgment for an expense report in the [Expense Reports](#) view. To do so, select a new expense report and click [Send Acknowledgment](#).

Once the acknowledgments have been sent, the acknowledgment status of the expense reports is set to [Acknowledgment Sent](#).

## Post Expense Reports in SAP Business ByDesign

You can post the acknowledged expense reports using the steps mentioned in this section.

1. Go to the [General Ledger](#) work center, [Post Concur Documents Run](#) view.
2. Click [New](#), and then [Post Concur Documents Run](#).
3. Enter all the necessary details for the run.
4. Activate the run. You can either execute the run immediately or schedule it for a later time.

When the run is finished, the status of the successfully posted expense reports is set to [Posted](#) and journal entries gets created for these reports. You can review the business transactions and journal entries, and process the re-imbursements. After the re-imbursements are processed, the status of the expense reports in SAP Business ByDesign is set to [Paid](#).

### **i** Note

This integration solution is taking over the [Submit Date](#) from the SAP Concur expense report as posting date in SAP Business ByDesign.

## Send Posting Confirmation to SAP Concur Expense

You can send posting confirmation of the expense reports back to SAP Concur Expense by using the steps mentioned in this section.

1. Go to the [General Ledger](#) work center, [Acknowledge Concur Documents Run](#) view.
2. Click [New](#), and then [Acknowledge Concur Documents Run](#).
3. Set the status to [Send Posting Confirmation](#).
4. Enter all the necessary details for the run.
5. Activate the run. You can either execute the run immediately or schedule it for a later time.

When an expense report posting fails, a Financial Posting Failed notification is sent to SAP Concur Expense. The expense report processor in SAP Concur Expense can recall this expense report for correction. The corrected expense report should be re-submitted, that are then available for retrieval from SAP Business ByDesign.

## Cash Advances

SAP Business ByDesign supports the retrieval and the financial posting of SAP Concur cash advances. It also supports the offsetting of these cash advances in SAP Business ByDesign with the SAP Concur expense report that contains the allocation of these cash advances.

Before your employees can use the cash advances in Concur your SAP Concur Implementation Project Manager must activate this feature in SAP Concur and provide you with more details how to use this feature in SAP Concur.

You also need to make sure that each user in SAP Concur, who should be able to create cash advances, has a valid entry in the field **Cash Advance Account Code** in the SAP Concur user profile. This field must contain an Account Group ID which belongs to the group for **Other Current Assets** in SAP Business ByDesign.

## Determining an Account Group ID for Concur Cash Advances

You can follow these steps to determine an Account Group ID for Cash Advances.

1. In SAP Business ByDesign, go to the **Business Configuration** work center and select **Implementation Project**. Select your implementation project and click **Open Activity List**, search for the **Chart of Accounts, Financial Reporting Structures, Account Determination** fine-tuning activity. In the section **Account Determination Groups**, click **Edit**.
2. In the section **Group Types by Ledgers**, expand **General Ledger** and click **Groups for Other Current Assets**.

Pick the appropriate Group ID.

## Maintaining the Cash Advance Account Code in SAP Concur User Profile

At the moment, the employee replication in SAP Business ByDesign does not automatically assign the **Account Group ID** to the **Cash Advance Account Code** field in the SAP Concur user profile.

You have the following options to maintain this field in SAP Concur:

1. In SAP Concur you can maintain this field manually with the appropriate SAP Business ByDesign **Account Group ID** for each user who should be able to create cash advances.
2. Integrate SAP Business ByDesign with SAP Concur through middleware (for example SAP Cloud Integration services) and use the provided extension iFlow to update the field **CashAdvanceAccountCode** according to your requirements.

## Create and Submit Cash Advances in SAP Concur Expense

When you create cash advances in SAP Concur Expense and submit them, they are available for retrieval in SAP Business ByDesign.

Before you start, ensure that the users in SAP Business ByDesign that are responsible for retrieving Expense Reports from SAP Concur are registered for OAUTH web services in SAP Business ByDesign. For more information on user registration, see section Register User for OAUTH Web Services in this guide.

## Retrieve Cash Advances in SAP Business ByDesign

You can retrieve the cash advances created and submitted in SAP Concur Expense from SAP Business ByDesign using the following steps:

1. Go to the **General Ledger** work center, **Get Concur Documents Run** view.
2. Click **New**, and then **Get Concur Documents Run**.
3. Enter all the necessary details for the run.
4. Activate the run. You can either execute the run immediately or schedule it for a later time.

You can view all cash advances retrieved from SAP Concur Expense in the **Cash Advance** view in the **General Ledger** work center. These cash advances are displayed with the status **New** and the acknowledgment status **No Acknowledgment Sent**.

# Acknowledge Receipt of Cash Advances in SAP Business ByDesign

You can send an acknowledgment from SAP Business ByDesign to SAP Concur Expense once cash advances have been received.

1. Go to the [General Ledger](#) work center, [Acknowledge Concur Documents Run](#) view.
2. Click [New](#), and then [Acknowledge Concur Documents Run](#).
3. Select [Send Acknowledgment](#) as the status.
4. Enter all the necessary details for the run.
5. Activate the run. You can either execute the run immediately or schedule it for a later time.

You can also send an acknowledgment for a cash advance in the [Cash Advance](#) view. To do so, select a new cash advance and click [Send Acknowledgment](#).

Once the acknowledgments have been sent, the acknowledgment status of the cash advance is set to [Acknowledgment Sent](#).

## Post Cash Advances in SAP Business ByDesign

You can post the acknowledged cash advances as below:

1. Go to the [General Ledger](#) work center, [Post Concur Documents Run](#) view.
2. Click [New](#), and then [Post Concur Documents Run](#).
3. Enter all the necessary details for the run.
4. Activate the run. You can either execute the run immediately or schedule it for a later time.

When the run is finished, the status of the successfully posted cash advances is set to [Posted](#), the journal entries gets created for these reports, and a posting confirmation gets sent to SAP Concur. You can also post a cash advance in the [Cash Advance](#) view. To do so, select an acknowledged cash advance and click [Post](#).

## Send Posting Confirmation to SAP Concur Expense

You can send posting confirmation of cash advances back to SAP Concur Expense as below:

1. Go to the [General Ledger](#) work center, [Acknowledge Concur Documents Run](#) view.
2. Click [New](#), and then [Acknowledge Concur Documents Run](#).
3. Set the status to [Send Posting Confirmation](#).
4. Enter all the necessary details for the run.
5. Activate the run. You can either execute the run immediately or schedule it for a later time.

You can also send a posting confirmation in the [Cash Advance](#) view. To do so, select a posted cash advance and click [Send Posting Notification](#).

## Restrictions

Cash Advances must not be split across multiple expense reports in SAP Concur.

Your SAP Concur Implementation Project Manager must make sure the option **Allow user to carry a Cash Advance balance from one report to another** is inactive in the Group Configuration in SAP Concur.

If the amount of the cash advance exceeds the total amount of all expense items in this expense report, the traveler must create a Cash Advance Return item for the difference.

Cash withdrawals you have undertaken with a corporate credit card (CBCP credit cards) must not be converted into cash advances in SAP Concur and sent to SAP Business ByDesign.

## Migration to your Production Landscape

After you have successfully implemented and tested your integration scenarios in your test landscape, you can start preparing your production systems.

## Separate SAP Concur Test Entity

This section helps you in ensuring that you are in correct and separate concur test entity.

If you were using a SAP Business ByDesign test tenant along with a SAP Concur test entity, you do not have to take any actions in your test landscape before you prepare your production landscape. The SAP Concur URL you were using indicates if this entity is a SAP Concur test entity. The URLs <https://implementation.concursolutions.com> and <https://eu1imp.concursolutions.com> are SAP Concur test entity URLs.

## SAP Concur Production Entity was used for Testing

You can use the details mentioned in this section if you have used SAP Concur production entity for testing.

If you were using a SAP Concur production entity for your test phase (typical URLs are <https://www.concursolutions.com> or <https://eu1.concursolutions.com>) you definitely need to take actions to suppress the further replication of master data from your SAP Business ByDesign test tenant into your SAP Concur entity.

At the end of the testing phase, your SAP Concur Implementation Project Manager purges all transactional data in your SAP Concur entity. However, the user profiles will not be purged. The user profiles contain the organizational assignment to the organization structures of your SAP Business ByDesign test tenant. Once you start replicating employee data from your SAP Business ByDesign production tenant, these organizational assignments will be overwritten with data from your production tenant. If you do not suppress the data replication from your test tenant, employee master data changes in your test tenant gets overwrite the user profiles in SAP Concur.

## Deactivating the Integration Activities in your SAP Business ByDesign Test Tenant

You can choose one of the actions to deactivate the integration activities.

- Delete your SAP Business ByDesign test tenant.
- Deactivate/delete all replication jobs, in particular those for the employee replication.

In Communication Arrangement (Concur Integration User Credentials or Concur Integration Middleware) remove User ID and password in the credentials section.

Deregister CONCUR\_INTEGRATION\_OAUTH and CONCUR\_INTEGRATION\_OAUTH2

Revert the integration configuration settings in the SAP Business ByDesign business configuration.

For more information, see the respective chapters of this guide.

