SAP SuccessFactors

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Importing Account Codes with the Account Code Connector

THE BEST RUN SAP

Content

1 Change History

Learn about changes to the documentation for Importing Account Codes with the Account Code Connector guide.

2H 2020 – Present

Type of Change	Description	More Info
None	We did not update this document.	

1H 2020

What's New	Description	More Information
New User Interface for SAP SuccessFactors Learning Administration	In the 1H 2020 release, the user interface for SAP SuccessFactors Learning Administration was updated to enhance the user experience and streamline navigation and terminology.	New User Interface for SAP SuccessFactors Learning Administration

Q4 2016 - Q4 2019

What's New	Description	More Info
Initial Publication in Q4 2016	The Account Code Connector guide is for implementing the account code connector with SAP SuccessFactors Learning	

2 Engage Certified Partner to Import Data to SAP SuccessFactors Learning

Learning connectors can import thousands of entities in the system, so we highly recommend that you engage with our Professional Services organization or a certified Learning implementation partner before you attempt to use connectors or any data import, especially in a production environment.

You can attempt to implement connectors on your own, but in doing so, you assume full responsibility for your actions. While we provide safeguards when able, it’s possible to load thousands of erroneous data in the system and end up incurring significant costs to correct them. Operational interruptions can be caused by having incorrect completion data; causing severe impact in regulated trades and industries. As with any other opt-in feature, we highly recommend that you do thorough testing before turning on connectors.

3 About Account Code Connector

This topic describes the Account Code connector, how it works generally, and what you can use it for.

Previously, it was only possible to automatically bring account codes into the LMS that were associated to users or organizations. Account codes that were associated with users or organizations can now be automatically imported into the SAP SuccessFactors Learning with the Account Code connector. Maintaining account code details in the LMS is a prerequisite for implementing the integration with SAP FICO.

The Account Code connector template can be downloaded from *System Administration* > *Connectors* > *Download Connector Template*.

> **Note**
>
> An optional Account Code field is included on the Account Code entity. Previously, only Account ID existed on the Account Code entity.

4 Common Connector Configuration

4.1 Configuring the Connector FTP Site

Configure the SAP SuccessFactors Learning FTP site so that when the connector job runs, it knows where to get the data files to import and where to write detailed logs.

Prerequisites

You run User Connector - SF, which contains user data. To encrypt this data, you need PGP encryption.

The keyring must be provided to the party that is generating the PGP encrypted file so that the encryption and decryption match. The keyring value is a base64 encoding of the binary keyring file. Use the Linux base64 command or other tool for decoding the property value to obtain the public keyring file that needs to be provided to both ends of the transaction.

Procedure

1. Go to SAP SuccessFactors Learning Administration and then go to *System Administration* > *Configuration* > *System Configuration*.
2. Edit *CONNECTORS*.
3. Set `connector.input.file.location` to `FTP`.
4. Set the location of the FTP site and directory where the connectors fetch their data files.

Property	Description
`connector.ftp.protocol`	The protocol used by the FTP server. Valid values are `ftp`and `sftp`.
`connector.ftp.server`	The name of the FTP server. For example, `ftp.acme.internal`.
`connector.ftp.port`	The port that the FTP server listens to. For example, `22`.
`connector.ftp.userID`	The user ID on the FTP server that owns this process. When specifying the user, make sure that the user has access to the directories where the system reads data files and writes log files.
`connector.ftp.password`	The password for the user. The password is clear text until you save the *CONNECTOR* file. On save, the system encrypts the value.

Property	Description
connector.ftp.input.remoteDirectory	This is the folder where SAP SuccessFactors looks for data files. If for example, you plan to drop data files in /root/connectors/input, add the folder path as follows. **Sample Code** `<...>.remoteDirectory=/root/connectors/input`

5. Set connector.input.file.name.tenant.suffix.enable to false.

   When false, the connector **doesn't** expect a suffix. If you set it to true, the connector expects a data file that ends in your tenant ID.
6. Add encryption settings.

Property	Description
connector.pgp.enabled	If you encrypt the data file, set to true so that the system can decrypt the files. If this setting is set to true, it impacts all connectors. If the connector doesn't find a .pgp file, it will still process other file types such as .csv, .txt., and .zip. Encrypted files are common when they contain sensitive information, like user identification numbers.
connector.pgp.public.keyring connector.pgp.secret.keyring connector.pgp.passphrase connector.pgp.file.extension	The connector.pgp.public.keyring property value is the public keyring used by the system to decrypt the encrypted files. The secret keyring, passphrase, and extension are standard PGP encryption properties. The extension is usually .pgp.

7. Set connector.input.file.fetch.retry.enable to cause the connector to wait until the next run to retry or to retry again before the next run.
   - Set to false if you want to wait until the next connector run if there's a file read error. Set to true to try to fetch two more times on file read error. In practice, many organizations set to false because they run a connector every day and they believe that the information can wait until the next connector run in the unlikely event of a file read error. Additionally, file read errors are often caused by issues like missing files or a bad FTP password: issues that won't be solved by trying the fetch again.
   - Set to true if you believe that the connector information has more time sensitivity than the next connector run. For performance reasons, we control the amount of time that the connector waits before attempting another fetch.

4.2 Enabling Connector Logging

Enable connector logging during initial implementation so that your team can be alerted to trouble with connectors and easily see a log of the connector.

Prerequisites

Enable Learning email notifications. You usually enable Learning email notifications as part of your overall implementation because they apply to more than just connector logs. Think broadly about Learning email notifications when you enable them.

Set up an email distribution list of the people who are to be notified of connector trouble.

Procedure

1. Go to SAP SuccessFactors Learning Administration and then go to *System Administration* > *Configuration* > *System Configuration*.
2. Edit *CONNECTORS*.
3. Set `connector.ftp.output.report.enable` to `true` to enable the reports to go to your FTP site.
4. Set `connector.ftp.output.report.remoteDirectory` to `/logs` so that logs are written to a folder called logs in the FTP site.
5. Decide how SAP SuccessFactors sends status of the connector.

Property	Value
`connector.report.email.enable`	Set to `true` to receive an email copy of the report.
`connector.report.email.toAddresses`	The email distribution list address that receives the emailed report log if the emailed report is enabled. Don't use a person's email address.
`connector.report.email.CCAddresses`	If you also want to copy an address, add the address here.
`connector.report.email.mailSubject`	The value of this property is the subject line of the report email. We recommend a value like `$interfaceId$ - Connector Results`. At run time, the system substitutes the name of connector for `$interfaceId$`.
`connector.report.email.enableDetailReportAttachments`	If set to `true`, then a detailed log is sent as an attachment to the email. Otherwise, the email contains the time of the run and success or failure. A good strategy to reduce the size of the email messages: set this property to `false` and then tell the recipients to look at the detailed report in the *System Administration* > *Connectors* section of the Admin-

Property	Value
	istrator interface. To use this strategy, recipients must have access to the SAP SuccessFactors Learning Administration environment.

6. Decide how SAP SuccessFactors handles the detailed report.

Property	Description
`connector.report.detail.displayMessageTypes`	This property specifies the level of log entries that must be part of the detailed report. Possible values are: Exception, Warning, FATAL, and info. To include more than one, add as a comma-separated list. For example: `<property>=Exception,Warning,FATAL`
`connector.report.detail.numberOfExceptionsDisplayed`	Change the default value of `5000` only if you need to. For example: if you're troubleshooting during implementation.

7. Save and close *CONNECTORS*.

4.3 Enabling Email Notifications in SAP SuccessFactors Learning

Enable email notifications in SAP SuccessFactors Learning so that Learning can send email messages about training and system information.

Prerequisites

We rely on a separate (Simple Mail Transfer Protocol) SMTP server to send email. The configuration of the SMTP server is done at the backend. You can also use the server we provide. If you plan to use your own, your configuration is more complex. You must, however, have an SMTP server identified **before** you enable the email notifications.

Context

You typically enable notifications during implementation and when you start a new instance.

> **Note**
>
> When you select a custom certificate for *Default Certificate Template for Items* and *Default Certificate Template for Programs*, email notifications are sent to users irrespective of the *Enable email* configuration in *Global*

Application Settings > *Mail* . If you don't select a custom certificate, then email notifications are sent based on the *Enable email* configuration in *Global Application Settings* > *Mail* .

Procedure

1. Go to SAP SuccessFactors Learning Administration and then go to *System Administration* > *Configuration* > *Global Application Settings* > *Mail* .
2. Select *Enabled* in *Enable email*.

   i Note

   The SMTP server settings are handled at the backend.
3. Type the email addresses that administrators see as the sender in *Admin Email Notification* and that learners see as the sender in *User Email Notification*.

   For example, you can type `noreply@<your company domain>`.
4. In *Email Frequency*, type `5`.

   Email Frequency is the number of minutes that you want the application server to wait before it contacts the SMTP server to send notification messages.
5. In *Send email notification from* select *Select from list* and then type a comma-delimited list of email addresses.

   Select from list allows administrators to choose an address from one or more addresses that you provide and control. When administrators create ad-hoc notifications, Learning adds the email address of the administrator who is attempting to send the notification to the top of this list automatically, but they can select any one of the emails addresses you provide.
   - *Free-form* allows administrators to type any email address with valid syntax. It doesn’t do a legal check of the text that an administrator types.
   - *Admin* forces administrators to use their own email addresses.
6. Choose *Apply Changes*.

Next Steps

Configure email invitations and email archiving.

4.4 Enabling the Connector Archive

Enable the SAP SuccessFactors Learning connector archive so that you have a record of connector files for troubleshooting connector issues.

Context

Enable the connector archive and keep archived files for three months for troubleshooting. If you **don't** select *Enable input file archive*, you increase your troubleshooting efforts.

Procedure

1. Go to SAP SuccessFactors Learning Administration and then go to *System Administration* > *Connectors* > *Connector Settings*.
2. Select *Enable input file archive*.

   > **Note**
   >
   > *Enable input file archive* **doesn't** work for *User Connector - Federal*, so *System Administration* > *Connectors* > *User Connector - Federal* never has a *Show archived input files* button.

   On each connector run, SAP SuccessFactors compresses and encrypts all input files for that run into a .zip file. To access the input files, go to *System Administration* > *Connectors*, select the connector, and then click *Show archived input files*.
3. In *Purge archived input files older than*, type `3`.
4. Click *Apply Changes*.

5 Adding Learning Account Code Types

Add account code types in Learning to categorize account codes in Finance.

Context

Account codes define how money flows during Learning chargebacks. Each account code is fully identified by the account code ID, the account code type, and the company code. You must have a fully identified account code to post chargebacks to SAP Financials because the fully qualified account code tells SAP Financials exactly how to move the money.

For example, the system can execute a chargeback against a Work Breakdown Structure (WBS) element so that the system can account for the chargeback against a phase, function, or object of a project. You can create multiple accounts each of the type WBS, for different phases of constructing a building: a WBS account for design planning, a WBS account for developing contract deliverables, a WBS account for site work, and so on.

Your account code types appear with your accounts throughout SAP SuccessFactors Learning Finance. For example, when you search for account codes, you can filter your search by account codes of type WBS.

Procedure

1. Go to Learning Administration and then go to *References* > *Finance* > *Account Code Types*.
2. Click *Add New*.
3. Add an ID and a *Description* to help others understand the account code type.
4. Click *Add*.

5.1 Numeric Type Requirements in Learning

When you replicate FICO elements to SAP SuccessFactors Learning, you must conform to the length requirements of Learning for numeric types.

All number places must exist in Learning, with zeros preceding. For example, if the value of Cost Center on SAP FICO system is `10100`, then the value on SAP SuccessFactors Learning system must be `0000010100`.

Length Requirements by Type

Type	Required Length
Cost Center	10

Type	Required Length
Internal Orders	12
Cost Elements	10
Activity	6

5.2 The Importance of Account Code Type, Company Code, and Controlling Area

If you’re using finance features, you likely pull data from the transactions table, where account code type, company code, and controlling area are important categorization tools.

External financial systems need attributes to categorize transactions. The attributes help the external system categorize the transaction. You might want to see all transactions in a given company code, for example, or all transactions of a given account code type.

SAP SuccessFactors Learning doesn't use account code type, company code, or controlling area for itself. We simply make them available on the accounts. Your particular values for these three fields will depend on your external financial system.

5.3 Assigning an Account Code to Learners

Assign account codes to learners if you are using the Finance module of Learning, then you can authorize a user for an account code with this information.

Context

If you do not use Finance, then you do not use account codes.

Procedure

1. Go to Learning Administration and then go to *People* > *Users*.
2. Search for the user who needs an account code.
3. Go to *Account Code*.

   When you select an account code, learners can purchase items with the chargeback payment method and the purchase is reflected in the account.

4. Set the account code in *Account ID*.
5. If you centralize purchasing accounts organizations, select *User can use Org Accounts* and clear *Account ID*.

   Some companies charge learners' organizations as opposed to the learner themselves. If you have implemented Learning to charge costs to organizations, you can allow some learners to charge their learning costs to the organization.
6. To allow learners to use a user group account, select *User can use User Group Accounts*.

   A few companies assign account codes to user groups and use the user groups like organizations. If you have implemented Learning to charge costs to user groups, you can allow some learners to charge their learning costs to the user group.
7. Click *Apply Changes*.

6 Importing Account Codes to Learning with the Account Code Connector

Import account codes to add many account codes in bulk so that you can use them when you integrate with an outside financial controlling system.

Prerequisites

Many customers set up an automatic export of account codes to a flat file that matches the connector template. These instructions tell you how to manually copy a file to the SFTP site. If you plan to maintain your account codes over a long term, consider setting up an automatic export to the template format from the accounting system.

Create account codes

Procedure

1. Go to Learning administration, go to *System Administration* > *Configuration* > *System Configuration*, and then edit *CONNECTORS*.
2. Set the account code properties.

Property	Description
`accountcode.connector.defaultValue.domainID`	This is the default security domain for any connector in the feed file that **doesn't** specify a security domain. It's usually `PUBLIC`.
`accountcode.connector.defaultValue.acctTypeID`	In most cases, the default account type should be `Cost Center` because most implementations track costs to training.
`accountcode.field.mapping.data.*`	Don't change these values. They match the connector template.

3. Select *Apply Changes*.
4. Go to *System Administration* > *Connectors* > *Download Connector Template* and download the account code connector template.

   The template shows you the order of the comma-separated columns for your import file. You provide a file that matches the template so that we can import the account codes.
5. Create the import file based on the template and copy it to the SFTP site you configured for your connectors.
6. Go to *System Administration* > *Connectors* > *Account Code Connector* and schedule the import job to run.

   Schedule the account code connector to run on a schedule that makes sense for your business: the frequency with which you add new account codes. In most cases, you can run the job weekly.

6.1 Account Code Connector Header Mapping

The account code connector header mapping describes what data should go in each column of the feed file.

When you create your data file, it must be named as follows, where <Suffix> is your tenant ID. In some uncommon cases, customers set a different suffix in *System Administration* > *Configuration* > *System Configuration* > *CONNECTORS*. If you have set a different suffix, you can find it in the `connector.input.file.name.tenant.suffix.override` property.

Data file name: user_data_<Suffix>.txt

Connector configuration settings can be updated by going to *System Administration* > *Configuration* > *System Configuration* and editing "CONNECTORS" under Configuration ID.

LMS Database Column Name	Description and Rules	LMS Data Type	LMS Character Length in Bytes
ACCT_ID This field is referenced in the database.	Required to be present in the input file. Unique identifier for Account Code record. For LMS-FICO Integration this field is used for the posting.	Alpha Numeric	90
ACCT_CODE	If you are integrating with SAP FICO, this field is required. Account Code value	Alpha Numeric	90
ACCT_DESC	Account Code description	Alpha Numeric	100
ACCT_TYPE_ID This field is referenced in the database.	If you are integrating with SAP FICO, this field is required. Account Code Type ID. Maps to reference field “Account Code Types.”	Alpha Numeric	30
COMPANY_CODE	If you are integrating with SAP FICO, this field is required. Company Code	Alpha Numeric	90
CO_AREA	If you are integrating with SAP FICO, this field is required. Controlling Area	Alpha Numeric	90
DMN_ID This field is referenced in the database.	Security Domain ID	Alpha Numeric	30
REMOVE_ACCT	Indicates if the Account Code record is being added (`N`) or deleted (`N`).	Alpha Numeric	Y or N only (Boolean

6.2 Downloading Learning Connector Templates

Download Learning connector templates to see sample import files so that you can see the correct format of Learning connector import files.

Context

When you configure connectors, you usually want to know what Learning expects for the format of the file. Connector files are delimited files where the first row is the header row, so by looking at an example of the headers, you can see data that you can import with the connector file. If you match your delimited file to the template, and if you followed the configuration of the data, you can expect a smooth data import.

Procedure

1. Go to SAP SuccessFactors Learning Administration and then go to *System Administration* > *Connectors* > *Download Connector Template*.
2. In *Action*, decide if you want to download all headers or only the headers you have already mapped.
   - Select *Download Template (all columns)* if you want to see all possible columns that the connector accepts.
   - Select *Download Template (only mapped columns)* if you want to see what the connector accepts **based on your configuration**. You map columns in *System Administration* > *Configuration* > *System Configuration* > *CONNECTORS*.
3. In *Connector*, select the connector template that you want to download.

   > **Note**
   >
   > Competency - SF and User Connector - SF export from platform. For these connectors, also check the headers in the export from platform.

4. In *Supported files*, select the file that you want to export for the connector.

   > **Note**
   >
   > Some connectors, like the learning item connector, use more than one import file.

5. In *File extension*, select the file extension for the export.

   The headers remain the same regardless of the file format you choose, but we understand that some companies restrict the types of files that their employees can download, so we offer you choices.
6. Choose *Submit*.

6.3 Enabling Learning Administrators to Work With the Account Code Connector

Enable administrators to work with account code connectors if you need the administrators to import account codes to SAP SuccessFactors Learning from an external financial system.

Procedure

1. Go to SAP SuccessFactors Learning administration and then go to *System Administration* > *Security* > *Role Management*.
2. Find and open the role that should be able to work with the account code connector.
3. Open *Permissions*.
4. Add the Edit Account Code Connector and View Account Code Connector permissions.
5. Click *Apply Changes*.

6.4 Scheduling Learning Connector Jobs

Schedule learning connector jobs daily so that the connector knows when to import data.

Procedure

1. Go to SAP SuccessFactors Learning Administration and then go to *System Administration* > *Connectors*.
2. Find the connector that you want to schedule and select it.

   If you want to schedule User Connector - SF, for example, select *User Connector - SF*.
3. Choose *Schedule This Process*.
4. Schedule the process to run daily at the least disruptive time to for your business.

   > **Note**
   >
   > If you schedule multiple connectors to run on an hourly basis, then you can't define the sequence of executing these jobs.

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