

Browse the Book

This sample chapter discusses the workings of the program responsible for point-to-point replication between Employee Central and Employee Central Payroll: RP_HRSFEC_PTP_EE_REPLICATION. It covers the information requested from the Employee Central Payroll System and what information is flagged as replicable material by the Employee Central system. It also covers how to be specific about the scope of replication, how to set up connectivity, how to launch replication from both systems, and to how investigate missing configuration once the setup is ready.



“Master Data Integration”



Contents



Index



The Authors

Deepankar Maitra, Stacy Wilkins

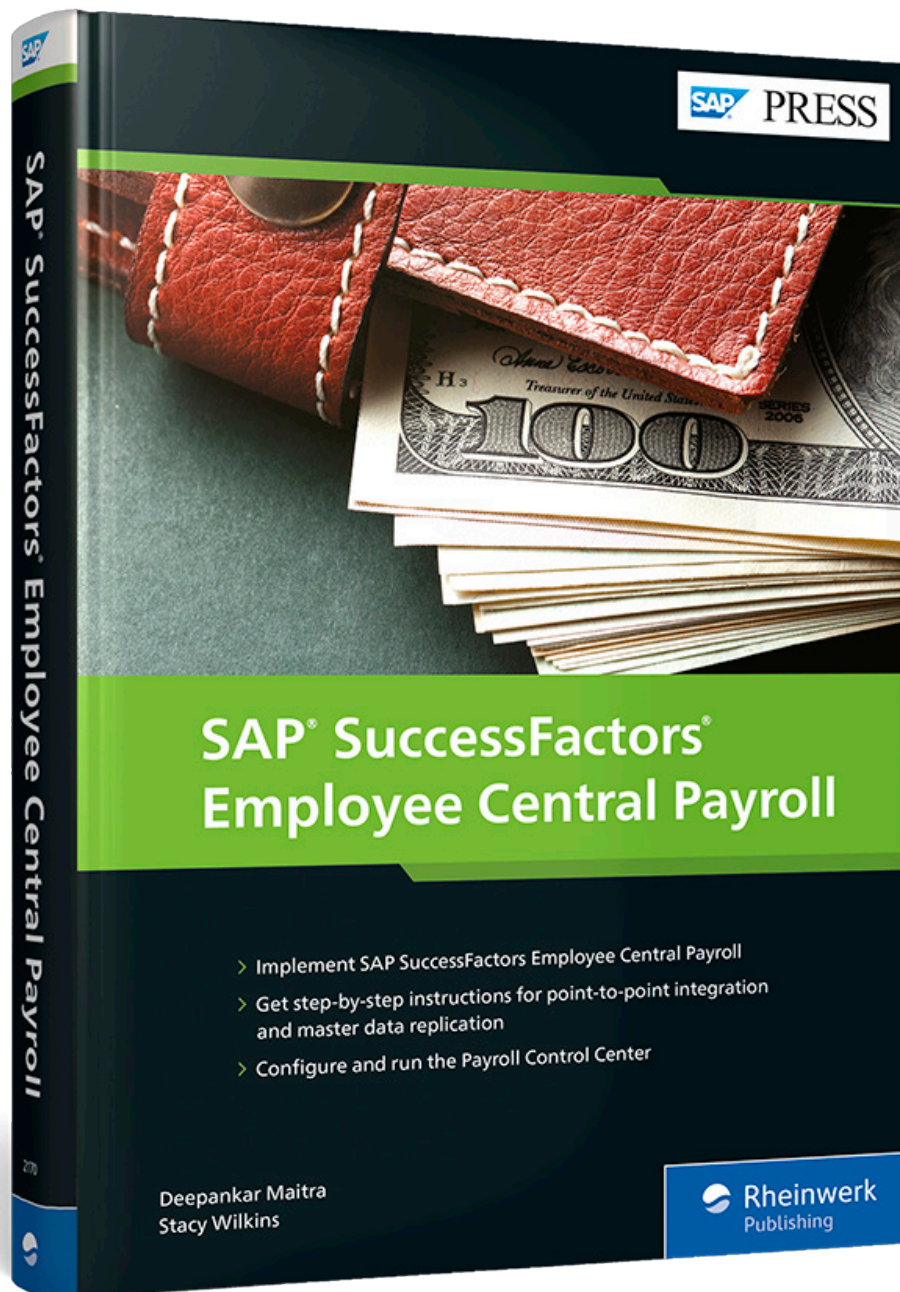
SAP SuccessFactors Employee Central Payroll

520 pages, 2022, \$89.95

ISBN 978-1-4932-2170-7



www.sap-press.com/5386



Chapter 7

Master Data Integration

Making employee data available is a key first step to determine pay for the workforce. Earnings, deduction, security, and operations all depend on this data to be timely and accurate. However, to avoid keying in this data manually—in the spirit of efficiency and elimination of redundant operational effort—we want this data to come directly from the human resources (HR) system.

In the previous chapter, you learned about the various types of integrations possible with Employee Central Payroll. Now, we'll examine the specific interface with Employee Central, an important discussion. In this chapter and the next, you'll learn everything you need to be proficient in connecting your Employee Central Payroll system to your Employee Central environment. The replication process is administered by a configurable web service commonly known as a *point-to-point replication*. This service is at the center of the exchange between the Employee Central Payroll and Employee Central systems, as shown in Figure 7.1.

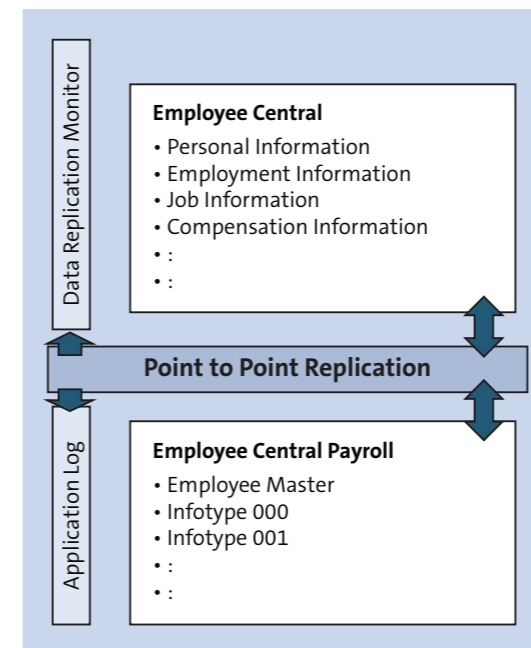


Figure 7.1 HR and Payroll Information Exchange

This entire chapter is devoted to discussing the workings of a single program responsible for this replication: RP_HRSFEC_PTP_EE_REPLICATION.

Two aspects drive the actual process of replication:

- What is requested from the Employee Central Payroll system
- What is flagged as replicable material by the Employee Central system

We'll discuss various aspects of these two operations, including how to control them, in the rest of the chapter. We'll discuss how to be specific about the scope of replication, how to set up connectivity, how to launch replication from both systems, and to how investigate missing configuration once the setup is ready.

7.1 Infotype Filtering

Infotype filtering is the step where you'll determine what is required by the Employee Central Payroll system. This task is not trivial. You must carefully review all the fields and field groups that may be required to drive payroll computation. At an infotype level, a global set is available, and local infotypes required by specific country payrolls can be added easily.

Once the list is finalized, configure the list in the Employee Central Payroll system by following the menu path **Personnel Management • Integration Settings for SuccessFactors Employee Central Payroll • Infotype Filter • Filter Infotypes**. Infotypes will be available for selection for each country, as shown in Figure 7.2. Our example shows the infotypes available for country grouping O6 (France), but other infotypes are available to you. If you need to add other infotypes, click on **New Entries**; choose the country grouping, infotype, and subtype; and then save.

Note that, if you leave this configuration blank, no infotype filtering occurs at all. However, if you add infotypes for countries, only those infotypes for those countries will be considered for replication. SAP recommends that the system is populated with all countries in scope.

Through this setting, you can record your decisions on all infotypes that must be replicated, country by country. You only need to set up the countries for which you'll run payroll. If your company operates in a country where payroll is outsourced, that country doesn't need be included in the infotype filter; the employee master data required by the payroll outsourcer of that country should derive from the Employee Central system.

We'll discuss these infotypes in a lot more detail in the next chapter.

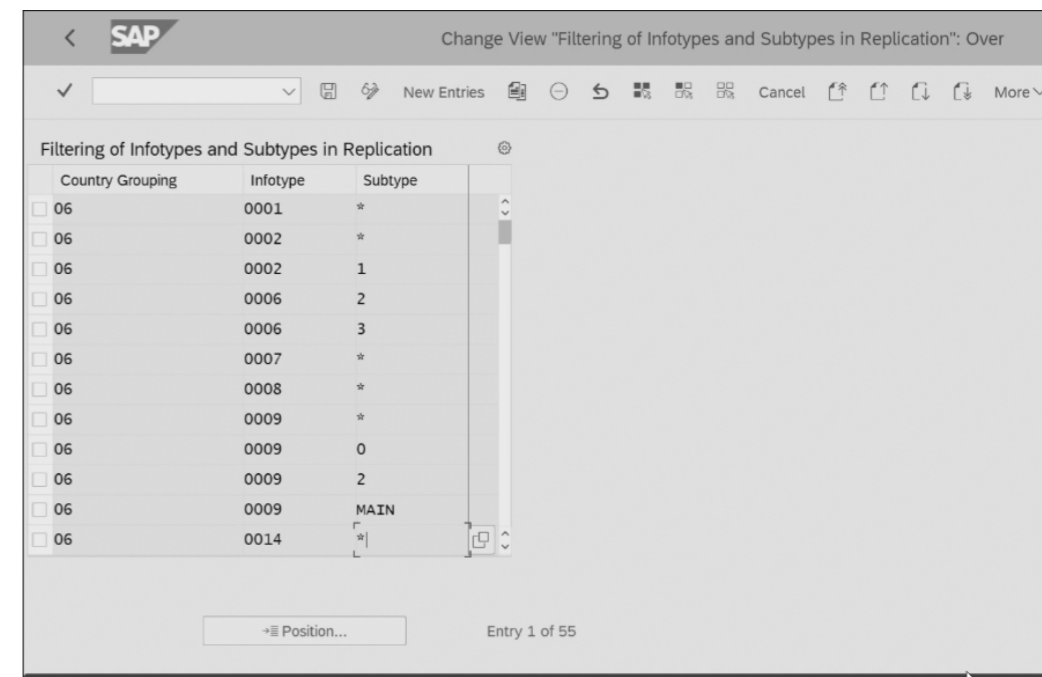


Figure 7.2 Infotype Filtering

7.2 Defining Customer-Specific Activities

The basic task of configuring replication involves several activities that will require planning, especially for dealing with values that are different for each customer based on country, industry, or locality.

Defining these activities involves four categories of tasks:

- Assigning code values from Employee Central to Employee Central Payroll
- Dealing with organizational elements
- Designing and mapping wage types
- Turning on extensibility

You can configure all these details in Transaction SPRO by following the menu path **Personnel Management • Integration Settings for SuccessFactors Employee Central Payroll**. However, before you can perform any of these tasks, you must set up the query by selecting from the available list. The following queries (portlets) can be used in the query:

- accompanying_dependent
- address_information

- alternative_cost_distribution
- compensation_information
- paycompensation_non_recurring
- paycompensation_recurring
- deduction_non_recurring
- deduction_recurring
- dependent_information
- email_information
- employment_information
- global_assignment_information
- ItDeclaration
- job_information
- job_relation
- national_id_card
- payment_information
- person
- personal_documents_information
- personal_information
- person_relation
- phone_information

7.2.1 Assigning Code Values

Settings enable the mapping of code values, field by field, for the standard SAP fields that are always required for running payroll.

To begin the process of assigning code values, bring up Customizing in Transaction SPRO and follow the menu path **Personnel Management • Integration Settings for SuccessFactors Employee Central Payroll • Assignment of Code Values • For Point-to-Point Replication • Display Code Value Mapping as Delivered by SAP**. The default code value mapping delivered by SAP, shown in Figure 7.3, will be displayed.

In the next step, you'll specify the following properties for these fields/portlets:

- Whether they are country specific by selecting the **Country** checkbox
- The mapping mode, in the **Mode** column
- The dates that they are effective, by maintaining the **Start Date** and **End Date** columns

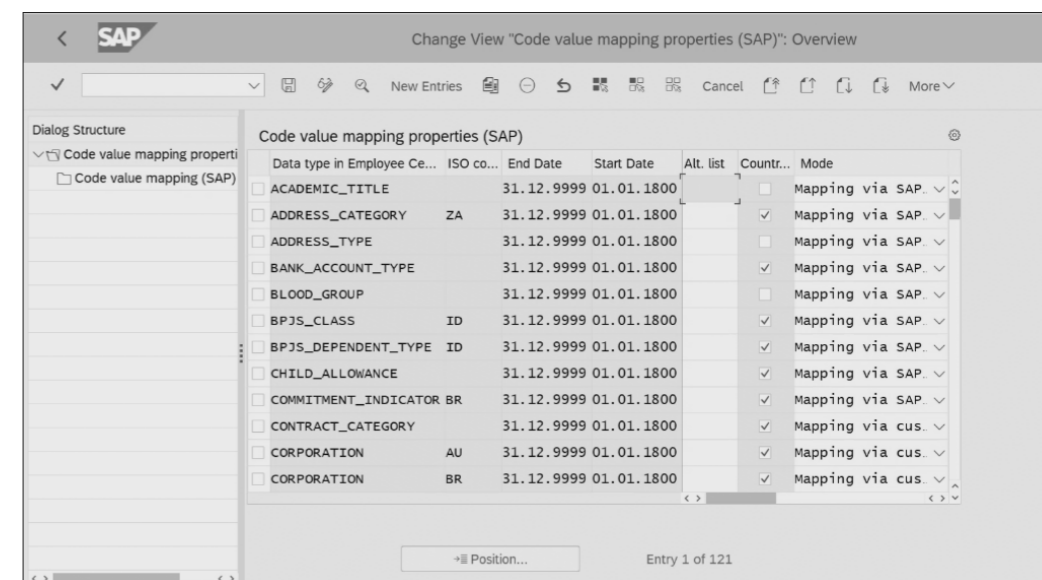


Figure 7.3 Standard Code Mapping

To maintain these properties for code value mapping, follow the menu path **Personnel Management • Integration Settings for SuccessFactors Employee Central Payroll • Assignment of Code Values for Point-to-Point Replication • Maintain Properties for Code Value Mapping**. These properties are revealed, as shown in Figure 7.4.

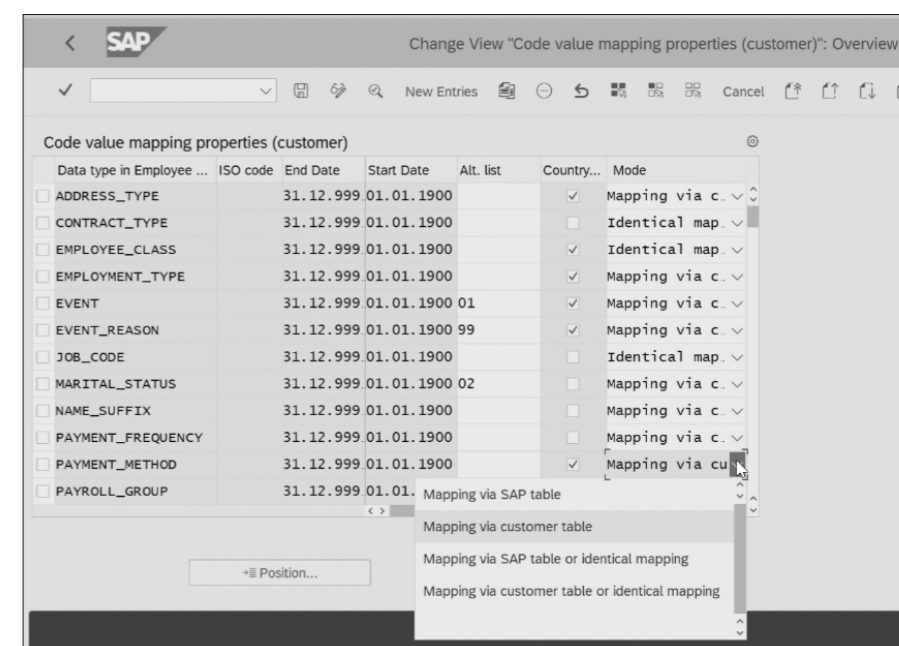


Figure 7.4 Properties of the Mapping

Let's focus on the **Mode** column. When you map code values, five methods are available to choose from:

1. Identical mapping (same as provided by Employee Central)
2. Mapping via an SAP table (provided in table T77SFEC_CVMAPS)
3. Mapping via a customer table (provided in table T77SFEC_CVMAPC)
4. Mapping via an SAP table or identical mapping. If the value is available in a standard table, use that value; otherwise, keep the same value as available in Employee Central.
5. Mapping via a customer table or identical mapping. If the value is available in a customer table, use that value; otherwise, keep the same value as available in Employee Central.

For choices 3 and 5, you'll need to map the values for your organization. In Customizing, follow the menu path **Personnel Management • Integration Settings for SuccessFactors Employee Central Payroll • Assignment of Code Values for Point-to-Point Replication • Maintain Code Value Mapping**. This task can also be performed by maintaining table T77SFEC_CVMAPC through Transaction SM30, as shown in Figure 7.5.

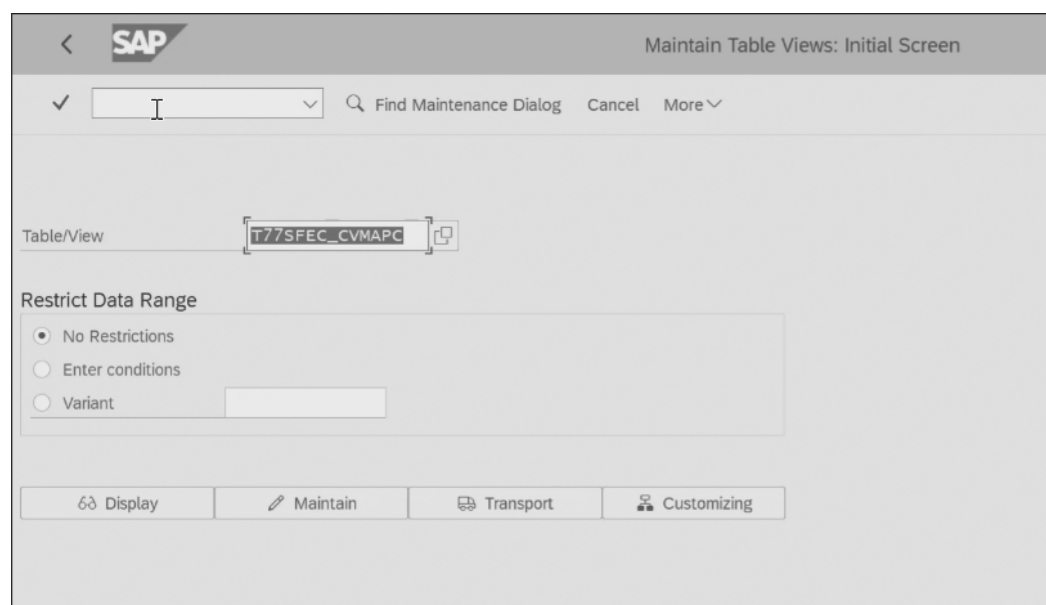


Figure 7.5 Transaction SM30

When you're finished, click on the **Maintain** button to see the code value map, as shown in Figure 7.6.

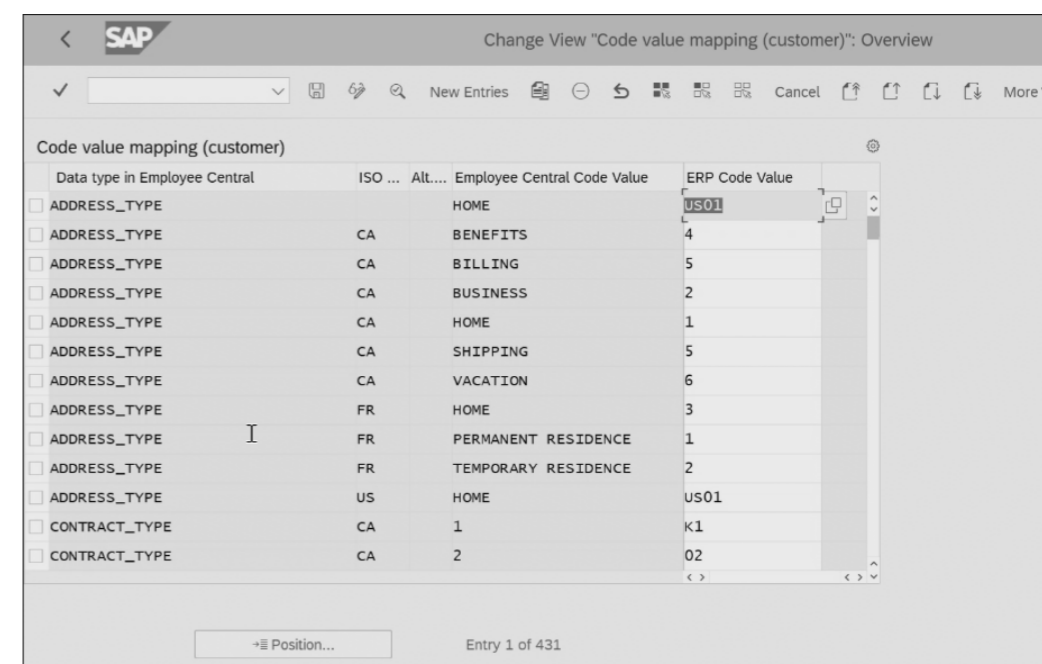


Figure 7.6 Customer Code Value Mapping

An additional step for country-specific items is required: The ISO code for that country must be selected. Follow these steps:

1. Click on **New Entries**.
2. Add the **Employee Central** field in the **Data Type in Employee Central** field. In our example, this field is **address_type**.
3. Select the ISO code for the country from the **ISO** dropdown list.
4. Enter the appropriate code from the Employee Central Payroll system in the **ERP Code Value** field.
5. Save your settings.

Two more data groups require special handling for code value assignment:

- Dates
- National IDs

To map dates, follow the menu path **Personnel Management • Integration Settings for SuccessFactors Employee Central Payroll • Assignment of Code Values • For Point-to-Point Replication • Maintain Date Type Mapping**. You'll map Employee Central date code values to Employee Central Payroll date code values, as shown in Figure 7.7 by following these steps:

1. Click on **New Entries**.
2. Select the country grouping in the **CGrpg** field.

3. Select the date segment and date field name from the corresponding dropdown fields.
4. Enter the Employee Central Payroll date type field in infotype 0041 in the DT (date type) field. These date types would have already been set up according to business requirements. Date types can be set up by following the menu path **Personnel Management • Personnel Administration • Contractual and Corporate Agreement • Evaluation Basis • Date Specifications**.
5. Save your settings.

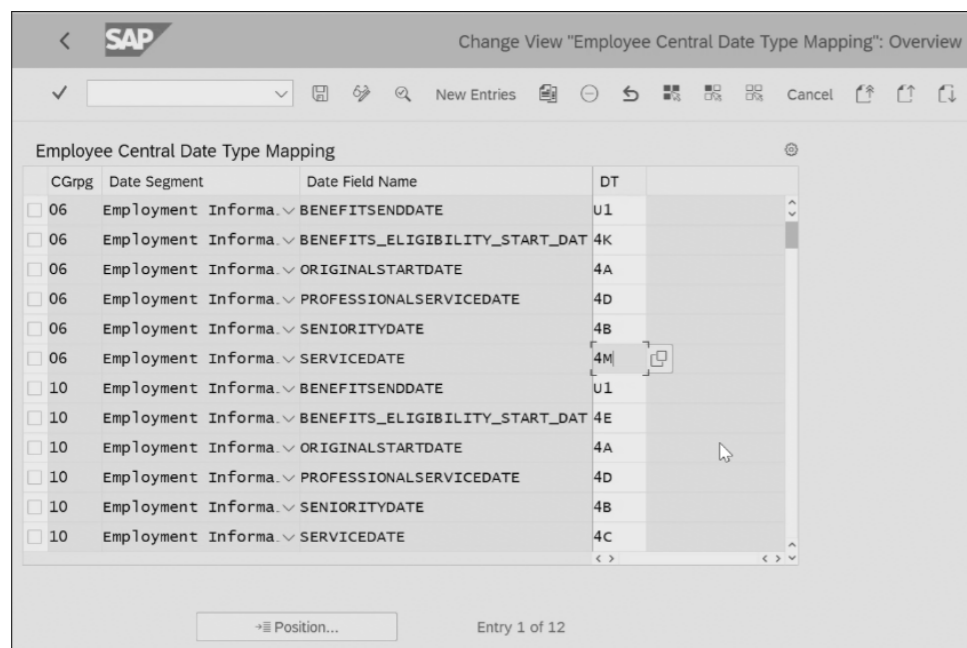


Figure 7.7 Maintaining a Date Mapping

For national IDs, first follow the menu path **Personnel Management • Integration Settings for SuccessFactors Employee Central Payroll • Assignment of Code Values for Point-to-Point Replication • Maintain Countries for IT0185 Replication**. Then, enable the replication of infotype 0185 for the specific countries that you want to implement. Start by clicking on **New Entries**, as shown in Figure 7.8.

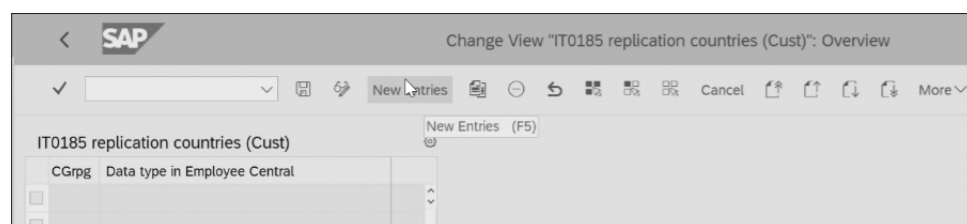


Figure 7.8 Infotype 0185 Countries

In the popup window that appears, enter the required values, as shown in Figure 7.9. Select the country from the **CGrpg** field and save.

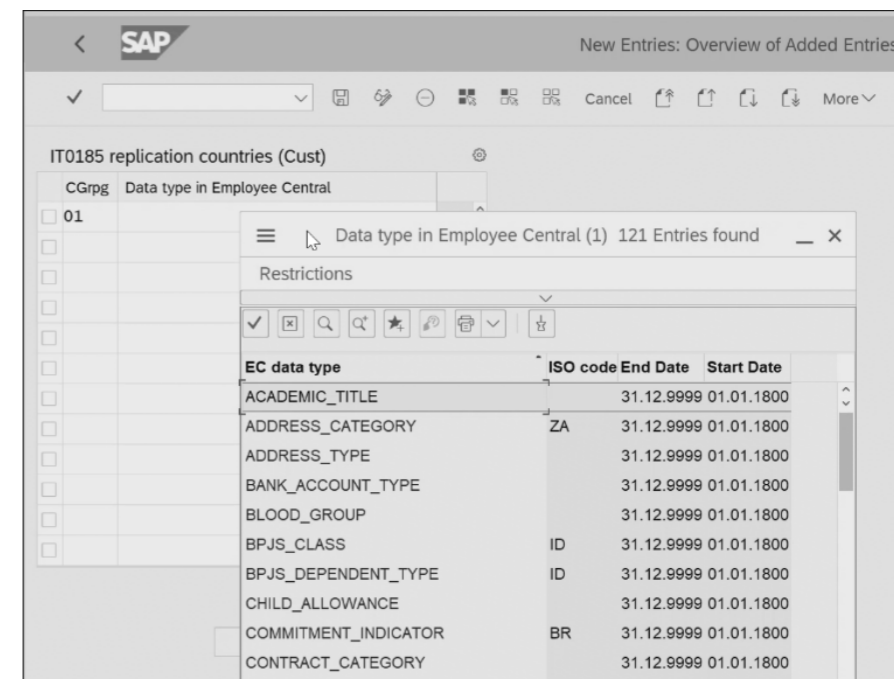


Figure 7.9 Infotype 0185 Replication Countries

Next, follow the menu path **Personnel Management • Integration Settings for SuccessFactors Employee Central Payroll • Assignment of Code Values for Point-to-Point Replication • Maintain Date for Replicating Personal ID from National ID Portlet**.

On this screen, you'll define the start date of the infotype 0185 record, as shown in Figure 7.10, by first clicking on **New Entries**.

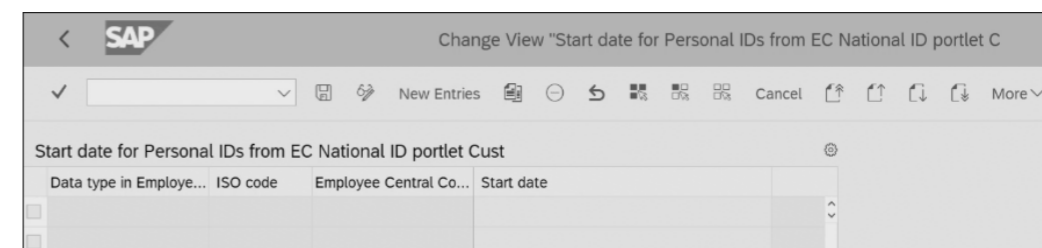


Figure 7.10 Start Date for Infotype 0185

Now, enter the values required, as shown in Figure 7.11, by following these steps:

1. Choose the type of data the **Data Type in Employee Central** field.
2. Choose the ISO code for the country you're configuring in the **ISO Code** field.

3. Choose the Employee Central code in the **Employee Central Code** field.
4. Select either **Hire Date** or **System Date** in the **Start date** column. Since this date is the date for the national ID, its validity before today may not be relevant. In this case, use the **System Date** option. However, if using this type of national ID is a criterion for hire, then choose **Hire Date**.
5. Save these settings.

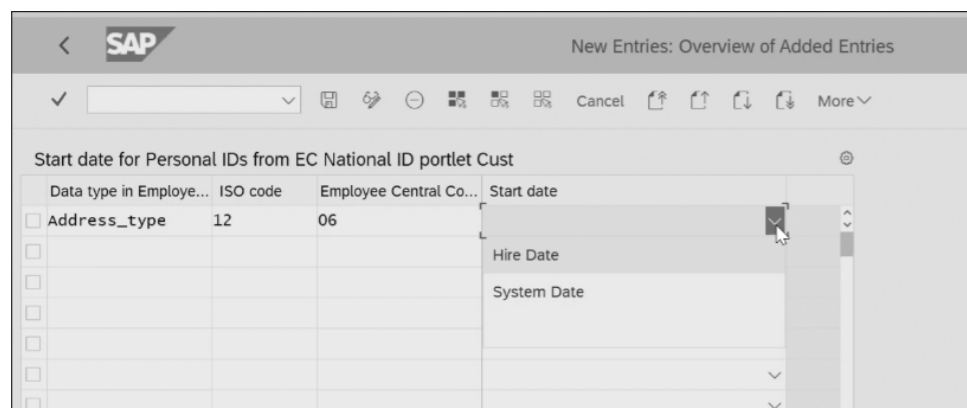


Figure 7.11 Start Date of Fields for a Country

Some countries have certain special methods for infotype 0185, as shown in Table 7.1.

Country	Method for Enabling Infotype 0185	Method for Setting Start Date of Infotype 0185
Saudi Arabia	Default is enabled. Use SAP table HRSFEC_D_IT0185S to change.	Hire date is configured as the start date by default. Use SAP table T77SFEC_DATEMAPS to change.
Hong Kong	Default is enabled. Use SAP table HRSFEC_D_IT0185S to change.	Hire date is configured as the start date by default. Use SAP table T77SFEC_DATEMAPS to change.
Thailand	Default is enabled. Use SAP table HRSFEC_D_IT0185S to change.	No default. Use SAP table T77SFEC_DATEMAPC to set the start date.
China	Default is enabled. Use SAP table HRSFEC_D_IT0185S to change.	Hire date is configured as the start date by default. Use SAP table T77SFEC_DATEMAPS to change.
United Arab Emirates	Default is enabled. Use SAP table HRSFEC_D_IT0185S to change.	Hire date is configured as the start date by default. Use SAP table T77SFEC_DATEMAPS to change.

Table 7.1 Special Methods for Infotype 0185

Country	Method for Enabling Infotype 0185	Method for Setting Start Date of Infotype 0185
Egypt	Default is enabled. Use SAP table HRSFEC_D_IT0185S to change.	Hire date is configured as the start date by default. Use SAP table T77SFEC_DATEMAPS to change.
India	Default is enabled. Use SAP table HRSFEC_D_IT0185S to change.	No default. Use SAP table T77SFEC_DATEMAPC to set the start date.
Oman	Default is enabled. Use SAP table HRSFEC_D_IT0185S to change.	Hire date is configured as the start date by default. Use SAP table T77SFEC_DATEMAPS to change.
Other countries	Default is disabled. Use SAP table HRSFEC_D_IT0185C to change.	No default. Use SAP table T77SFEC_DATEMAPC to set the start date.

Table 7.1 Special Methods for Infotype 0185 (Cont.)

7.2.2 Dealing with Organizational Elements

In terms of organizational elements, three elements must be configured:

- Cost center
- Company code
- Place of work

We'll look at each element in the following sections.

Cost Center

To configure a cost center, you first must assign external keys to internal keys in Customizing by following the menu path **Personnel Management • Integration Settings for SuccessFactors Employee Central Payroll • Assign External Cost Center Keys to Internal Cost Center Keys**.

To map external key values to internal key values, as shown in Figure 7.12, follow these steps:

1. Click **New Entries**.
2. Enter the Employee Central cost center in the **Cost Center ID** field.
3. Enter the company code in the **Company Code** field.
4. Enter the Employee Central Payroll cost center in the **Cost Center** field.
5. Save these settings.

Cost Centre ID	Company Code	Cost Center
<input type="checkbox"/> 10000	UAEC	10000
<input type="checkbox"/> 12113333	0001	66666666
<input type="checkbox"/> 200000	0001	200000
<input type="checkbox"/> 33000	0001	33000
<input type="checkbox"/> 7001342	0001	799999

Figure 7.12 Cost Center Mapping

Note that Employee Central automatically sends external keys if they are exactly 14 characters or 10 or less characters. If the key is 14 characters long, this key is a combination of 4 digits of the controlling area and 10 digits of the cost center. These keys do not need any assignment. If the external key is between 11 and 13 characters, the first few characters are used to search for a controlling area in Employee Central. If a match exists, the remaining characters are considered as passthrough cost centers and are transmitted to Employee Central Payroll as they appear.

Company Code

To configure a company code, you first must assign external keys to internal keys in Customizing by following the menu path **Personnel Management • Integration Settings for SuccessFactors Employee Central Payroll • Assign External Company Code Keys to Internal Company Code Keys • Value Mapping**.

To map external key values to internal key values, as shown in Figure 7.13, follow these steps:

1. Click **New Entries**.
2. Enter the Employee Central company ID in the **Company ID** field.
3. Enter the Employee Central Payroll company code in the **Company Code** field.
4. Save these settings.

Company ID	Company Code
<input type="checkbox"/> FR01	0001

Figure 7.13 Company Code Mapping

Place of Work

To configure a place of work, you first must assign external keys to internal keys in Customizing by following the menu path **Personnel Management • Integration Settings for SuccessFactors Employee Central Payroll • Assign External Place of Work Keys to Internal Place of Work Keys**.

To map external key values to internal key values, as shown in Figure 7.14, follow these steps:

1. Click **New Entries**.
2. Enter the Employee Central field for the work location in the **Permanent Establishment ID** field.
3. Enter the personnel area from Employee Central Payroll in the **Personnel Area** field.
4. Enter the personnel subarea from Employee Central Payroll in the **Personnel Subarea** field.
5. Save these settings.

Permanent Establishment ID	Personnel Area	Personnel Subarea
<input type="checkbox"/> CAN	AB01	1
<input type="checkbox"/> CAN01	BC01	0001
<input type="checkbox"/> CAN02	QC01	0001
<input type="checkbox"/> FRA01	FRA1	NEON
<input type="checkbox"/> FRA02	FRA2	NEON
<input type="checkbox"/> RALGH	US03	HN02
<input type="checkbox"/> USDC	US02	DC01
<input type="checkbox"/> USHN	US03	HN02
<input type="checkbox"/> US_MN	US01	MN01

Figure 7.14 Place of Work Mapping

7.2.3 Wage Types

Wage types are required for replication in cases where a value represents an earning. Earnings are typically entered in Employee Central or transferred to Employee Central from SAP SuccessFactors Recruiting when an employee is hired. Deductions are not entered into Employee Central as a general rule—they are entered directly into the Employee Central Payroll system. The name for a wage type in Employee Central is *pay component*.

The following infotypes deal with earnings (wage types):

- Infotype 0008 (Rate of Pay)
- Infotype 0014 (Recurring Earnings)
- Infotype 0015 (One-Time Earnings – On Cycle)
- Infotype 0267 (One-Time Earnings – Off Cycle)

Let's examine wage type assignment with all four of these infotypes and then move on to assigning currencies and checking for accuracy.

Assigning Wage Types for Infotypes 0014 and 0008

For this infotype, you must define the wage type and country in Customizing by following the menu path **Personnel Management • Integration Settings for SuccessFactors Employee Central Payroll • Wage Type Processing • Assign Wage Types to Infotypes**.

To map wage types, as shown in Figure 7.15, follow these steps:

1. Click **New Entries**.
2. Enter the country grouping in the **Country Grouping** field.
3. Enter the wage type from Employee Central Payroll in the **Wage Type** field.
4. Enter the infotype from Employee Central Payroll in the **Info Type** field.
5. Save these settings.

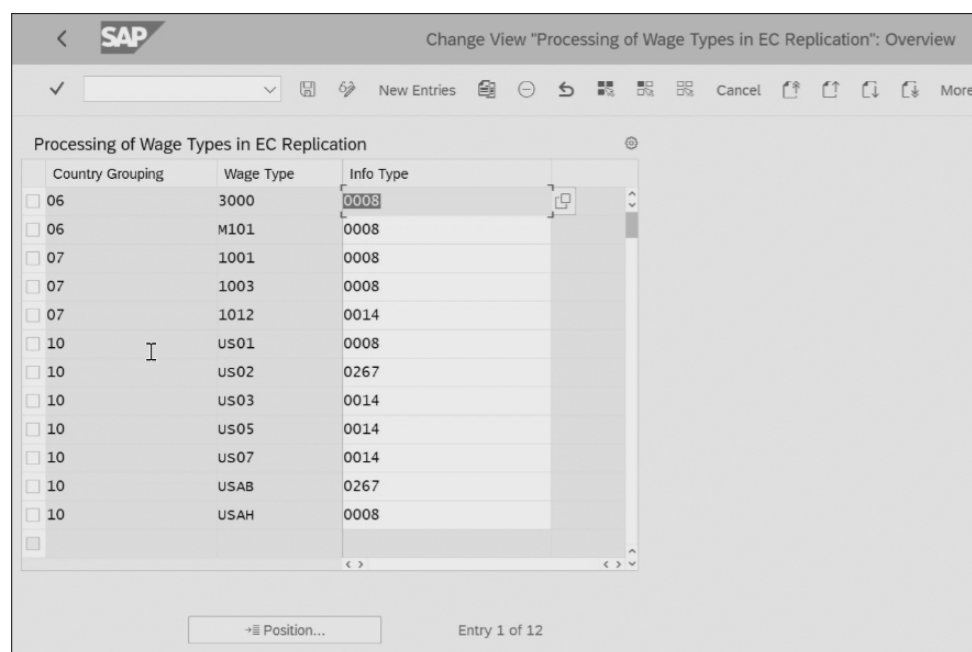


Figure 7.15 Mapping Wage Types

Assigning Wage Types for Infotypes 0015 and 0267

For this infotype, you must define the wage type and country in Customizing by following the menu path **Personnel Management • Integration Settings for SuccessFactors Employee Central Payroll • Wage Type Processing • Assign Non-Recurring Payment Wage Types to Infotypes**.

To map these wage types, as shown in Figure 7.16, follow these steps:

1. Click **New Entries**.
2. Enter the country grouping in the **Country Grouping** field.
3. Enter the wage type from Employee Central Payroll in the **Wage Type** field.
4. Enter the infotype from Employee Central Payroll in the **Infotype** field.
5. Save these settings.

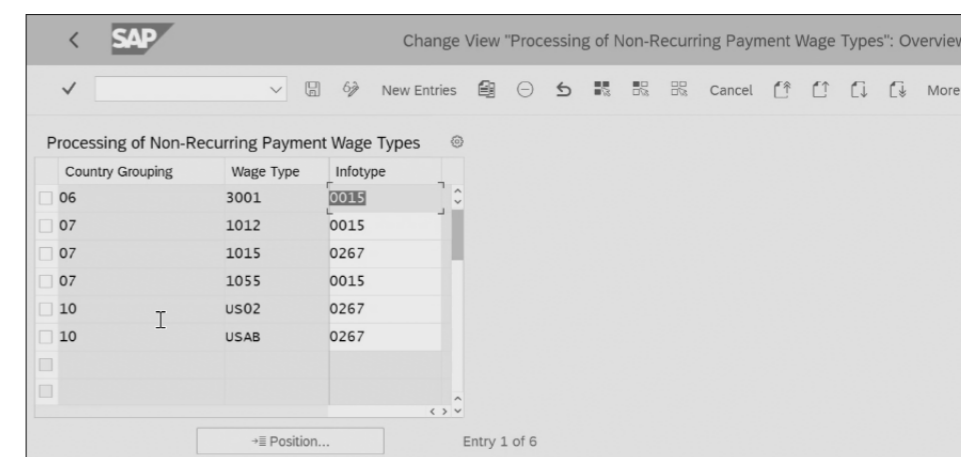


Figure 7.16 Non-Recurring Payment Wage Types

Assigning Currencies

Currencies are provided as standard in all SAP systems. But sometimes in payroll systems (not just Employee Central Payroll!), the number of decimal places required is higher than what is provided as standard. For example, in the US, the standard currency holds 2 decimal places (100 cents = \$1). However, you may need to store values with a third or fourth decimal place to accurately record someone's rate of pay. Quite often, the rate of pay is fixed for a week, month, or year, which requires conversion to derive an hourly rate. For example, the hourly rate for a person earning \$100,000 USD per year is approximately \$48.077 USD per hour based on a 52-week year and 40 hours of work per week.

To store this data, a custom currency may need to be used, since the standard currency USD only stores two decimal places. You can set a custom currency by following the menu path **SAP NetWeaver • General Settings • Currencies • Check Currency Codes**. On this screen, you'll see all the standard available currencies, as shown in Figure 7.17.

Change View "Currencies": Overview

Currency	Long text	Short text	ISO	Primary
<input type="checkbox"/> TTD	Trinidad and Tobago Dollar	T.+ T. Dollar	TTD	<input type="checkbox"/>
<input type="checkbox"/> TWD	New Taiwan Dollar	Dollar	TWD	<input type="checkbox"/>
<input type="checkbox"/> TZS	Tanzanian Shilling	Shilling	TZS	<input type="checkbox"/>
<input type="checkbox"/> UAH	Ukraine Hryvnia	Hryvnia	UAH	<input type="checkbox"/>
<input type="checkbox"/> UYU	Uruguayan Peso	Peso	UYU	<input type="checkbox"/>
<input type="checkbox"/> UZS	Uzbekistan Som	Total	UZS	<input type="checkbox"/>
<input type="checkbox"/> VEB	Venezuelan Bolivar (Old)	Bolivar (Old)	VEB	<input type="checkbox"/>
<input type="checkbox"/> VEF	Venezuelan Bolivar	Bolivar	VEF	<input type="checkbox"/>
<input type="checkbox"/> UTM			CLP	<input type="checkbox"/>
<input type="checkbox"/> UGX	Ugandan Shilling	Shilling	UGX	<input type="checkbox"/>
<input type="checkbox"/> USD	United States Dollar	US Dollar	USD	<input checked="" type="checkbox"/>
<input type="checkbox"/> USDN	(Internal) United States Dollar (5 Dec.)	US Dollar	USD	<input type="checkbox"/>

Entry 183 of 213

Figure 7.17 Standard Currencies

Click on your currency and then click the **Copy As** button, as shown in Figure 7.18.

Change View "Currencies": Overview

Copy As... (F6)

Currency	Long text	Short text	ISO	Primary
<input type="checkbox"/> TTD	Trinidad and Tobago Dollar	T.+ T. Dollar	TTD	<input type="checkbox"/>
<input type="checkbox"/> TWD	New Taiwan Dollar	Dollar	TWD	<input type="checkbox"/>
<input type="checkbox"/> TZS	Tanzanian Shilling	Shilling	TZS	<input type="checkbox"/>
<input type="checkbox"/> UAH	Ukraine Hryvnia	Hryvnia	UAH	<input type="checkbox"/>
<input type="checkbox"/> UYU	Uruguayan Peso	Peso	UYU	<input type="checkbox"/>
<input type="checkbox"/> UZS	Uzbekistan Som	Total	UZS	<input type="checkbox"/>
<input type="checkbox"/> VEB	Venezuelan Bolivar (Old)	Bolivar (Old)	VEB	<input type="checkbox"/>
<input type="checkbox"/> VEF	Venezuelan Bolivar	Bolivar	VEF	<input type="checkbox"/>
<input type="checkbox"/> UTM			CLP	<input type="checkbox"/>
<input type="checkbox"/> UGX	Ugandan Shilling	Shilling	UGX	<input type="checkbox"/>
<input checked="" type="checkbox"/> USD	United States Dollar	US Dollar	USD	<input checked="" type="checkbox"/>
<input type="checkbox"/> USDN	(Internal) United States Dollar (5 Dec.)	US Dollar	USD	<input type="checkbox"/>

Entry 183 of 213

Figure 7.18 Copying a Currency

Change the currency name in the **Currency** field to a different value (something as simple as "USD1" can work), as shown in Figure 7.19, and then save.

Change View "Currencies": Details of Selected Set

Currency: [USD1]

Currencies

Long Text	United States Dollar
Short text	US Dollar
ISO code	USD
Alternative key	840
Valid until	

Primary

Figure 7.19 Creating a New Currency

Since this step only copied an existing currency and gave it a new name, this currency is still currently set at 2 decimal places. You can increase the number of decimal places by following the menu path **SAP NetWeaver • General Settings • Currencies • Set Decimal Places for Currencies**. Change the number decimal places, as shown in Figure 7.20, by finding the currency we just created and increasing the value in the **Decimals** field.

Change View "Decimal Places for Currency Codes": Overview

Currency	Long Text	Decimals
<input type="checkbox"/> ADP	Andorran Peseta --> (Old --> EUR)	
<input type="checkbox"/> AFA	Afghani (Old)	
<input type="checkbox"/> BEF	Belgian Franc (Old --> EUR)	
<input type="checkbox"/> BHD	Bahrain Dinar	3
<input type="checkbox"/> BIF	Burundi Franc	
<input type="checkbox"/> BYB	Belorussian Ruble (Old)	
<input type="checkbox"/> BYR	Belorussian Ruble	
<input type="checkbox"/> CLP	Chilean Peso	
<input type="checkbox"/> COP	Colombian Peso	
<input type="checkbox"/> DEM3	(Internal) German Mark (3 dec.places)	3
<input type="checkbox"/> DJF	Djibouti Franc	
<input type="checkbox"/> ECS	Ecuadorian Sucre (Old --> USD)	
<input type="checkbox"/> ESP	Spanish Peseta (Old --> EUR)	
<input type="checkbox"/> GNF	Guinean Franc	

Entry 1 of 48

Figure 7.20 Changing the Decimal Places of Currency

Once this step is complete, you'll need to assign this currency (or a standard one) to wage types by following the menu path **Personnel Management • Integration Settings for SuccessFactors Employee Central Payroll • Wage Type Processing • Assign Currencies to Wage Types**.

Map wage types to currencies, as shown in Figure 7.21, by following these steps:

1. Click on **New Entries**.
2. Enter country grouping in the **Country Grouping** field.
3. Choose the wage type in the **Wage Type** dropdown menu.
4. Enter the currency to convert to in the **Currency to Convert To** field. The currency in the Employee Central Payroll system will rarely be different from the currency in the Employee Central system.
5. Enter the currency in Employee Central in the **Replicated Currency** field.
6. Save these settings.

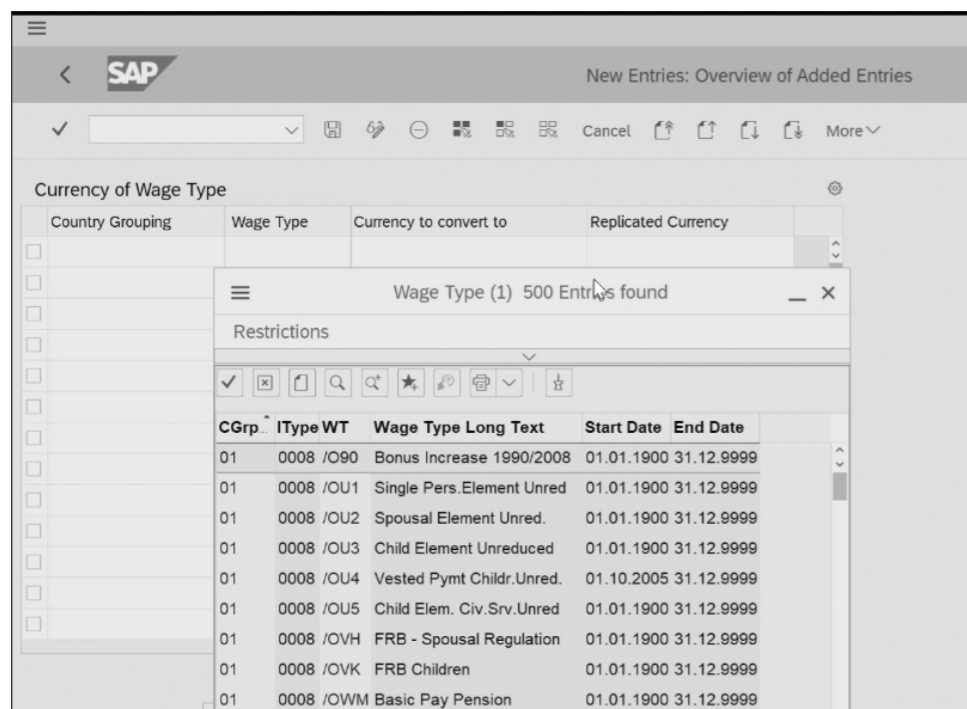


Figure 7.21 Mapping Wage Types to Currencies

Checking for Accuracy

You can check that the configuration is accurate using the standard report RP_HRSFEC_CHECK_PAYC_WAGETYPE. Execute the report using Transaction SE38, as shown in Figure 7.22.

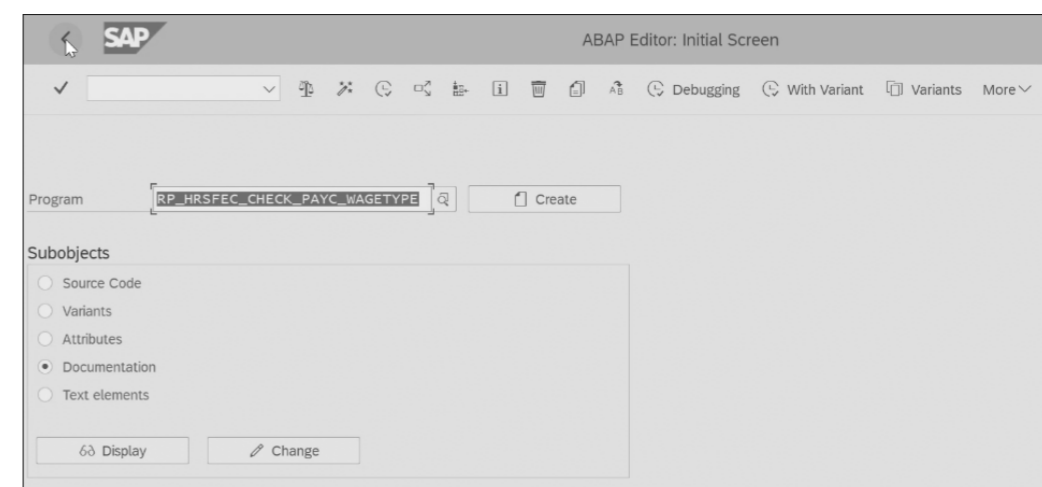


Figure 7.22 Executing the Check Report

You'll now see the selection screen shown in Figure 7.23. Choose the country in the **Country Grouping** field. Use the **Wage Type** field to select the wage types you need to check. If you want to hide entries that do not require any further changes, select the **Hide correct entries** checkbox.

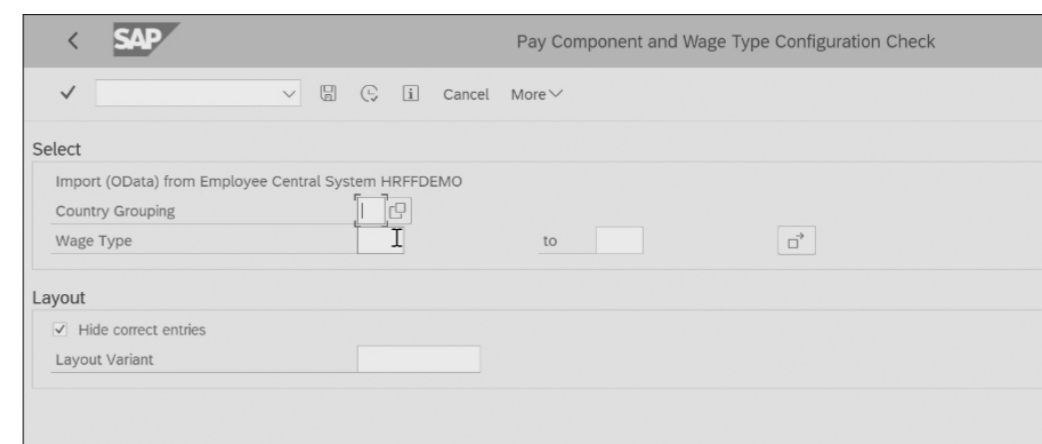


Figure 7.23 Selection Screen of a Check Report

Employee Central pay components that have not been mapped are displayed in the list and need further configuration. All records with an error are also displayed in the list. Records belonging to the same pay components and wage types are still displayed for completeness.

You can save your report selection by clicking on the **Save** button and providing a variant name, as shown in Figure 7.24. Now, execute the report by clicking on the **Execute** button.

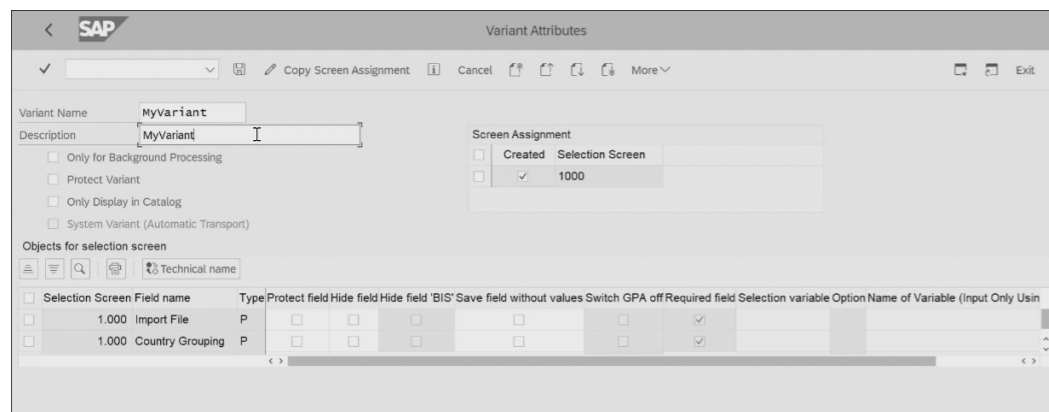


Figure 7.24 Naming a Selection Variant

The report uses color coding to communicate errors in the following way:

- Blue (validity period) means the time period displayed in the **Start Date** and **End Date** fields is relevant for each row separately, including pay component, mapping, and payroll data.
- Green (Employee Central data) displays pay component properties including the **External Code**, **Pay Comp. Text** (pay component text), **Status**, **Pay Comp.** (pay component type), **Currency**, **Freq.** (frequency code), **Is Earning**, and **Is Recurring** fields.
- Yellow (Employee Central Payroll data) displays wage type properties such as the **Wage Type** and **WT** (wage type text) fields. The actual required assignment of wage type to infotype is indicated in the **IT0008**, **IT0014**, **IT0015**, and **IT0267** columns and whether it is permitted is shown in the **IT0008 permitted**, **IT0014 permitted**, **IT0015 permitted**, and **IT0267 permitted** columns, as shown in Figure 7.25.
- Red (error) covers the following errors:
 - Wrong deduction, for instance, the operation indicator for the wage type is wrong and must be corrected.
 - Wage type text is missing.
 - Assignment to infotypes 0008, 0014, 0015, and 0267 is not permitted.
 - Overlapping time validity: Shows whether the start and end date of a pay component or wage type change overlap. Correct the database table entry provided in that column, so the report can process the other checks for this entry.

External Code	Pay Comp. Text	Status	Pay Comp.	Currency	Freq.	WT in T512W	Wage Type Text	Deduction	IT0008	IT0014	IT0015	IT0267	IT0008 permitted	IT0014
USAH	Hourly United States	A	AMOUNT	USD	HOU...								X	
USAH	Hourly United States	A	AMOUNT	USD	HOU...	USAH	Hourly Rate		X					X

Figure 7.25 Columns of a Wage Type Check Report

If pay component or wage type properties have been added or changed in any of the systems, a row is added to the list. This row shows the new or changed values. You can also download the report to Microsoft Excel by clicking the **Local File...** button, as shown in Figure 7.26.

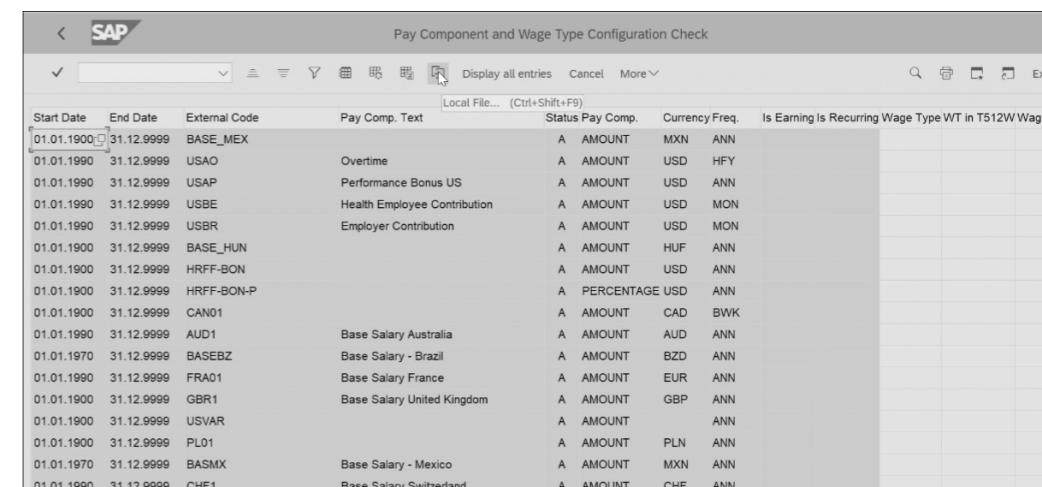


Figure 7.26 Running and Saving a Copy of a Check Report

Note
To run this check, you'll need to wait until the connection between the two systems is established, as discussed in more detail in Section 7.6.

7.2.4 Extensibility

Mapping Employee Central custom fields to Employee Central Payroll infotypes is possible through extensibility capabilities, which also allows for changes in the logic of how the system fills in Employee Central Payroll infotypes of the standard set (infotypes 0001, 0014, and 0015). Two types of extensibility are available: basic or custom. In this section, we'll explain both options.

Basic

With basic extensibility, you can map Employee Central custom or standard fields to Employee Central Payroll custom or standard fields. You can extend or overrule the standard mapping between Employee Central employee data fields and infotypes in Employee Central Payroll in various ways.

You can map standard and custom fields from the **Job Information**, **Personal Information**, and **Compensation Information** portlets to the Employee Central Payroll infotypes 0001, 0002, 0007, and 0008 in Employee Central Payroll. Table 7.2 lists further details.

Employee Central Portlet	Employee Central Payroll Infotype	Target Fields in Employee Central Payroll
Job Information	Infotype 0001 (Organizational Assignment) Infotype 0007 (Planned Working Time)	All standard and custom fields
Personal Information	Infotype 0002 (Personal Data)	All standard and custom fields
Job and Compensation Information	Infotype 0008 (Basic Pay)	TRFGR, TRFST, BSGRD, DIVGV, STVOR, ANSAL, ANCUR, and CPIND

Table 7.2 Scope of Basic Extensibility

Let's say you want to map the standard **contract_type** field from Employee Central to the **Work Contract** field of the **Personnel Structure** section (field ANSVH) of infotype 0001 in Employee Central Payroll.

First, make sure that the data type field **contract_type** is available in Employee Central by checking the data definition in the **Manage Business Configuration** screen in Employee Central (as described in Chapter 3, Section 3.2). Then, start the mapping by following the menu path **Personnel Management • Integration Settings for SuccessFactors Employee Central Payroll • Extensibility • Define Extensibility of Field Assignment**. You can also access this screen in Transaction SM30 by entering view V_HRSFEC_EXT-MAP. Either way, you'll see the screen shown in Figure 7.27.

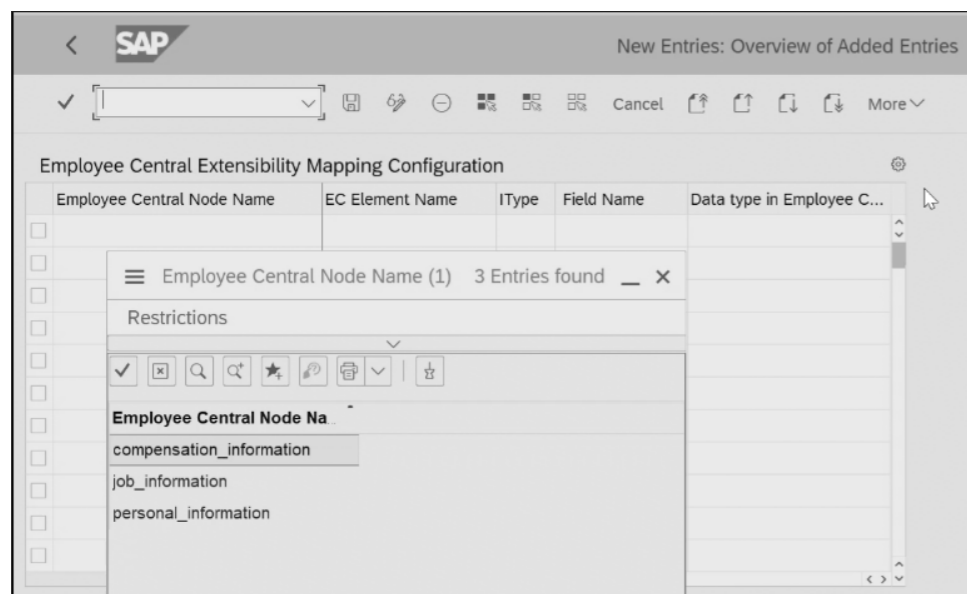


Figure 7.27 Extensibility Field Assignment

On this screen, you'll need to perform the following actions:

1. Press **F4** in the **Employee Central Node Name** column and select **job_information**.
2. Select **Employee contract_type** for the **EC Element Name** column.
3. Select **0001** for the **iType** column.
4. Select **CONTRACT_TYPE** for the **Data type in Employee Central** column.

Custom Example

Let's say you want to map the `custom_double20` field from Employee Central to the **Supervisor** field of the **Organizational Plan** section (field MSTBR) of infotype 0001 in Employee Central Payroll. For this scenario, you would follow these steps:

1. Make sure that the **data type** field `custom_double20` is available in Employee Central.
2. On the same screen shown in Figure 7.27, press **F4** in the **EC Element Name** column. You'll get the list of Employee Central elements; select `custom_double20` from them.

Let's look at another, more advanced example. Changing the logic of how infotypes are filled in or using infotypes outside the standard set requires advanced extensibility using Business Add-Ins (BADIs). Recall that a BADI is a pre-delivered enhancement spot in the replication engine where you can place your own code, with some restrictions.

To reveal available BADIs, follow the menu path **Personnel Management • Integration Settings for SuccessFactors Employee Central Payroll • Extensibility • Business Add Ins for Point To Point Replication**. You'll see the screen shown in Figure 7.28.

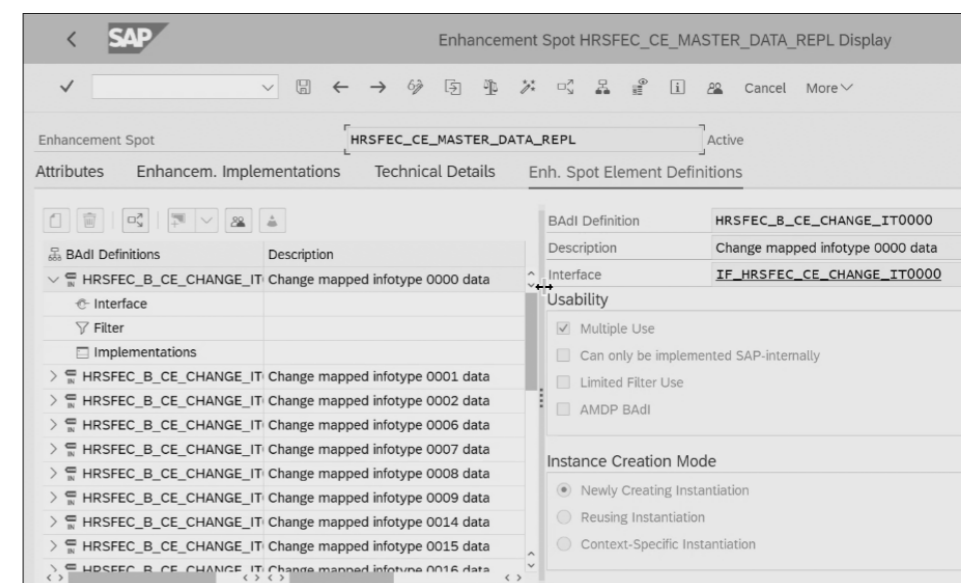


Figure 7.28 Extensibility BADIs

This activity leads you to the enhancement spot `HRSFEC_CE_MASTER_DATA_REPL`, where you can find all the BADIs available for use in replication. Two types of BADIs are available for enhancing the default logic in specific Employee Central Payroll infotypes:

- BADIs that are processed after the standard mapping logic but before the fields in the infotype are updated with a value. A BAdI exists for each infotype. Use these to extend or modify the mapping logic for the respective infotypes of the *standard set*, when basic extensibility is not sufficient. You do not need to update the infotype framework in the BAdI.
- BADIs that are processed after the standard import logic for an employee but before saving the employee record. Use these BADIs to extend the replication scope to infotypes that are not a part of the standard set. The comparison between old data and mapped data and the update to the infotype framework must be done in the BAdI. We recommend that you use generic update logic, as follows:
 - `ITF_CREATE`
 - `ITF_DELETE`
 - `ITF_MODIFY`
 - `ITF_READ`
 - `ITF_READ_ALL`
 - `ITF_READ_ALL_IT`
 - `ITF_READ_FOR_MODE`
 - `UPDATE_MASS_PNNNN_DATA`
 - `UPDATE_MASS_PNNNN_DATA_SUBTY`

The main operations performed for any update include the following:

- Comparison of old and new values
- Update of the infotype framework
- Deletion of records that did not come through in the replication

Note that every replication sends all the records for that employee from the designated date of system go-live, also known as the full transmission start date (FTSD), discussed in more detail in Section 7.4, which is stored in table `PAOCFEC_PN_FTSD`.

Note

Using BAdI involves coding, which means you'll need the assistance of a developer.

The standard infotype set for the first type of BAdI is shown in Table 7.3.

Infotype	Description	Employee Central Portlet	BAdI
Infotype 0000	Actions	Job Information and Compensation Information	HRSFEC_B_CE_CHANGE_IT0000
Infotype 0001	Organizational Assignments	Job Information and Compensation Information	HRSFEC_B_CE_CHANGE_IT0001
Infotype 0002	Personal Data	Personal Details and National ID	HRSFEC_B_CE_CHANGE_IT0002
Infotype 0006	Addresses	Address Information	HRSFEC_B_CE_CHANGE_IT0006
Infotype 0007	Planned Working Time	Job Information	HRSFEC_B_CE_CHANGE_IT0007
Infotype 0008	Basic Pay	Job Information and Compensation Information	HRSFEC_B_CE_CHANGE_IT0008
Infotype 0009	Bank Details	Payment Information	HRSFEC_B_CE_CHANGE_IT0009
Infotype 0014	Recurring Payments/Deductions	Job Information and Compensation Information (Recurring Payments/Deductions)	HRSFEC_B_CE_CHANGE_IT0014
Infotype 0015	Additional Payments	Job Information, Spot Bonus (Additional Payments), and One Time Deductions (Additional Deductions)	HRSFEC_B_CE_CHANGE_IT0015
Infotype 0016	Contract Elements	Employee and Employment Information	HRSFEC_B_CE_CHANGE_IT0016
Infotype 0021	Family Member/Dependents	Person	HRSFEC_B_CE_CHANGE_IT0021

Table 7.3 BADIs to Change Infotype Data

Infotype	Description	Employee Central Portlet	BAdI
Infotype 0027	Cost Distribution	Job Information and Cost Distribution	HRSFEC_B_CE_CHANGE_IT0027
Infotype 0041	Date Specifications	Job Information and Employment Information	HRSFEC_B_CE_CHANGE_IT0041
Infotype 0105	Email data	Email Information	HRSFEC_B_CE_CHANGE_IT0105_EMAIL
Infotype 0185	Personal IDs	Employee and Employment Information	HRSFEC_B_CE_CHANGE_IT0185
Infotype 0267	Additional Off-Cycle Payments	Job Information, Spot Bonus (Additional Payments), and One Time Deductions (Additional Deductions)	HRSFEC_B_CE_CHANGE_IT0267
Infotype 0709	Person ID	Employee ID	HRSFEC_B_CE_CHANGE_IT0709

Table 7.3 BAdIs to Change Infotype Data (Cont.)

The second type of BAdI is useful for extending replication to other infotypes not included in the standard set above. Only two BAdIs fall under this category:

- HRSFEC_B_CE_PROCESS_EMPLOYEE
- HRSFEC_B_CE_PROCESS_ET

In addition to these infotype-focused BAdIs, three other BAdIs provide special capabilities for replication not available with configuration:

- Change Mapping of External Personnel Number (HRSFEC_B_CE_EXT_PERNR_MAP)
- Exclude Certain Subtypes of Infotype Records from Deletion (HRSFEC_B_EXCLUDE_FROM_DELET)
- Decide on Hire or Rehire (HRSFEC_B_CE_DECIDE_HIRE_REHIRE)

Custom Metadata Framework Objects

Sometimes, a business scenario requires the capturing of HR data that is not available in a standard Employee Central system. SAP provides a mechanism for creating a table

structure in Employee Central, known as a *custom Metadata Framework (MDF) object*. To bring this object over to Employee Central Payroll, follow these steps:

1. In Employee Central, ensure the custom MDF object has the following values:
 - **API Visibility:** Read
 - **Status:** Active
 - **MDF Version History:** Complete history
2. Still in Employee Central, enter “Manage Data” in the search bar. When the screen shown in Figure 7.29 appears, enter your custom object in the **Object Type** field of the Compound Employee application programming interface (API) Object Types MDF, as shown in Figure 7.30, and save.

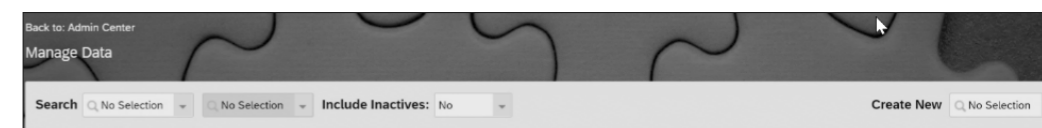


Figure 7.29 Managing Data in Employee Central

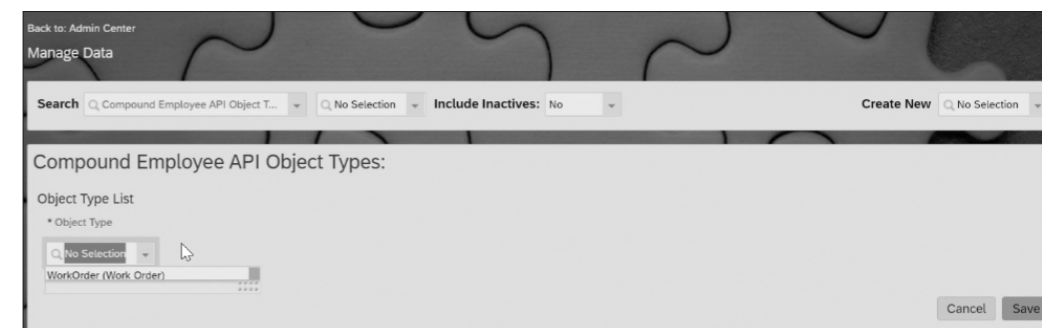


Figure 7.30 Compound Employee API Object Type

3. Let's move to Employee Central Payroll. Each segment of data from Employee Central is brought across to Employee Central Payroll based on the query segment configured by following the menu path **Personnel Management • Integration Settings for SuccessFactors Employee Central Payroll • Configuration of Point-to-Point Replication • Configure Compound Employee API Query**. Select the configuration ID you want to use and click on **Query Segments**. You'll see a screen with the query segments already configured, as shown in Figure 7.31.

Specify the custom object as another segment, as discussed in Section 7.1, as shown in Figure 7.31. After saving, you can now pull in this data into Employee Central Payroll through replication. Remember, you still must decide on the infotype and map the fields using one of the BAdIs mentioned earlier—this mapping does not happen automatically for custom MDF objects.

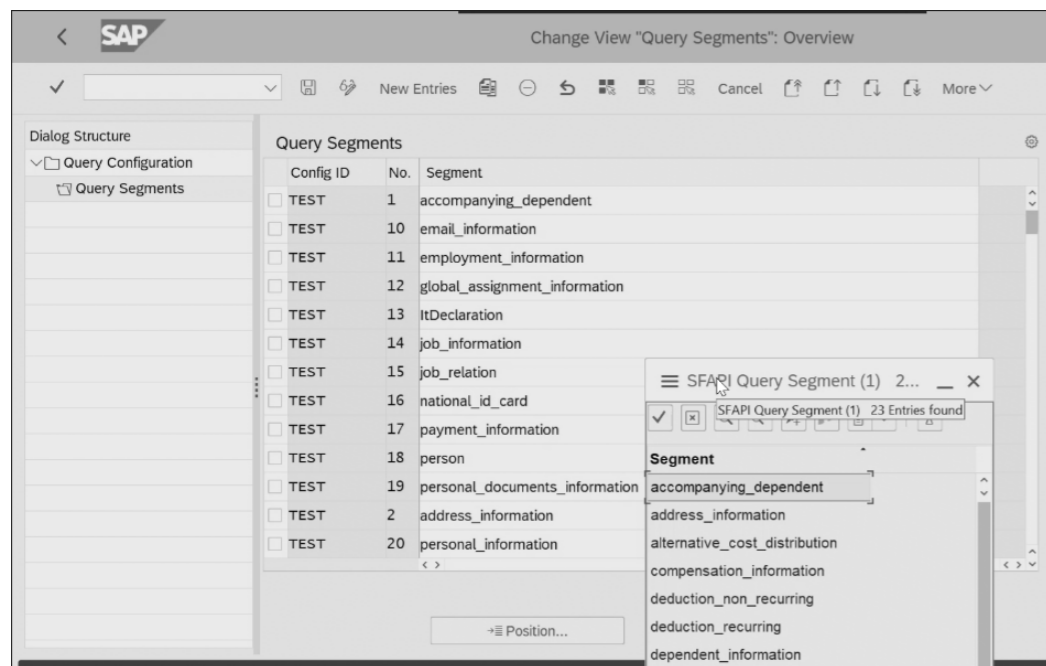


Figure 7.31 Query Segments in Replication Configuration

7.3 Country Filtering

Sometimes, you need to restrict data replication to certain countries. For example, let's say you need to exclude countries where payroll is outsourced due to the relatively small number of employees. You can bring up the configuration screen for country filtering by following the menu path **Personnel Management • Integration Settings for SuccessFactors Employee Central Payroll • Country Filter • Restrict Employee Master Data Replication to Given Countries**.

You'll see the screen shown in Figure 7.32. In the **ISO code** column, select the countries you want to replicate and then save.

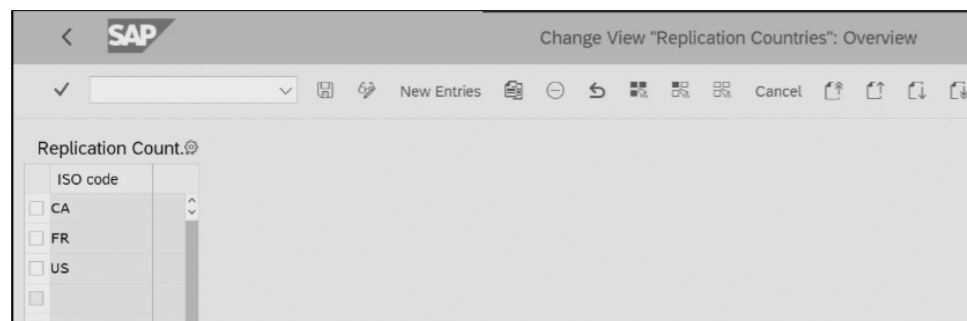


Figure 7.32 Country Filtering

7.4 Migration and Cutover Scenarios

Figure 7.33 shows a typical cutover scenario for an implementation. The data maintenance process passes over from old to new systems in a short period of time called a *cutover*. This time is when the data is migrated into the new system.

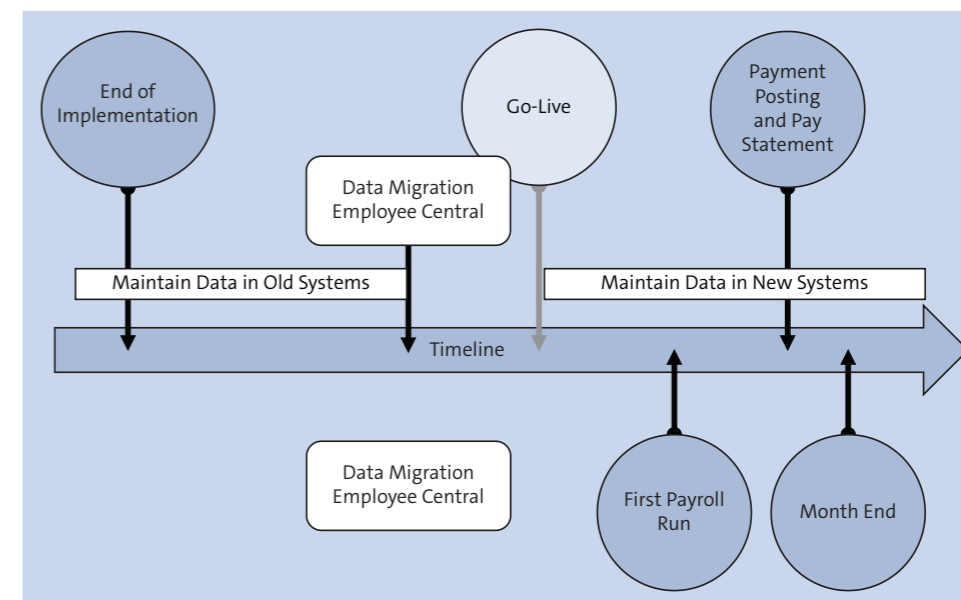


Figure 7.33 Sample Cutover Plan

For a payroll system, the following four tasks are relevant during conversion of data, as shown in Figure 7.34:

1. Extracting employee data from a legacy system (personnel information and employment information including organizational information and compensation information) and loading this data into Employee Central.
2. Loading employee data into Employee Central Payroll using the standard data replication capability.
3. Extracting employee data from a legacy system that is not maintained in Employee Central (tax information, social insurance information) and loading this data into Employee Central Payroll.
4. Extracting payroll results from a legacy system and loading this into Employee Central Payroll.

Note

Note that this first task listed is specific to Employee Central, so we won't cover this topic in detail in this book. The third and fourth tasks will be discussed in Chapter 16.

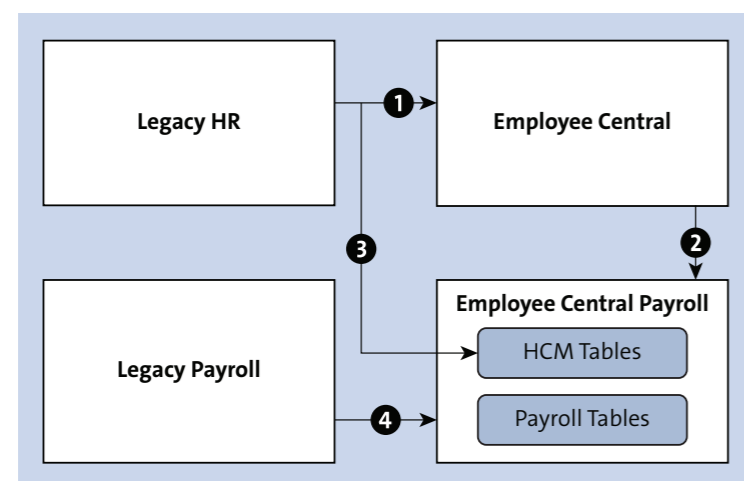


Figure 7.34 Data Migration Model

The second task, loading employee data, is critical to plan, with several questions that you must answer:

- How will the payroll history be loaded?
- How should terminated employees be handled?
- How should employees who are not paid out from the payroll system handled?

At this stage, we need to return to an important concept: the FTSD, which is used to delineate a time period from which the replication starts. This line in the sand is where the system starts looking for changes. In other words, the replication engine does not care about the history of the employee before this date and only looks forward from this date. Typically, this date is the go-live date for the system. Once the FTSD is specified, the following becomes true:

- Only records after this date are extracted from Employee Central.
- Records that end before this date are ignored.
- Replication errors out if a record in Employee Central has a start date before the FTSD and an end date after it.

Therefore, you must be careful about choosing the FTSD date, and you must ensure that the start dates of all records being replicated from Employee Central meet the outlined criteria; otherwise, they will never be successfully replicated.

Before going live with Employee Central Payroll, you must set a start date that matches the FTSD for *all* employees who are in scope for replication in the Employee Central system. This step is achieved through a mass loading process in Employee Central similar to task described earlier.

The most typical implementation starts off with a full load covering all historical data, and then the FTSD can be changed so that subsequent replications can focus on what is modified in the future, not the data in the past.

If you have a long data history, we recommend that you do not transfer all of this data to Employee Central Payroll. Some organizational or compensation structures may be so obsolete that creating those structures will require effort and may lack value for the future. Some companies transfer a history with a “fake” structure to ease the effort.

To set up the FTSD, follow the menu path **Personnel Management • Integration Settings for SuccessFactors Employee Central Payroll • Configuration of Point-to-Point Replication • Configure Compound Employee API Query**. From this screen, only three steps are required: Click **New Entries** (which will open the screen shown in Figure 7.35), set the date, and save these settings.

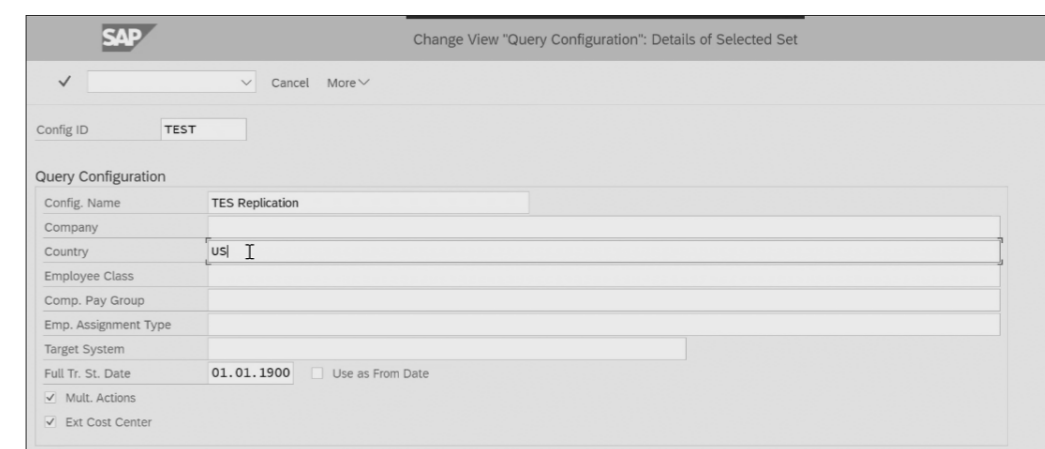


Figure 7.35 FTSD Parameter in Query Configuration

One scenario with terminated employees needs a small digression. If a terminated employee was not loaded during go-live, what happens if this person is rehired? You can exclude these employees from the replication. However, if this employee is rehired, the replication logic recognizes this fact and includes the employee in the replication processes after the rehire date. Unlike active employees, you do not need to split the data records of terminated employees on the cutoff date. This mechanism requires you turn on a switch by following these steps:

1. In Employee Central Payroll, go to Transaction SM30, as shown in Figure 7.36.
2. Enter “V_T77SO” in the **Table/View** field.
3. Click **Maintain**.
4. Click **New Entries**.

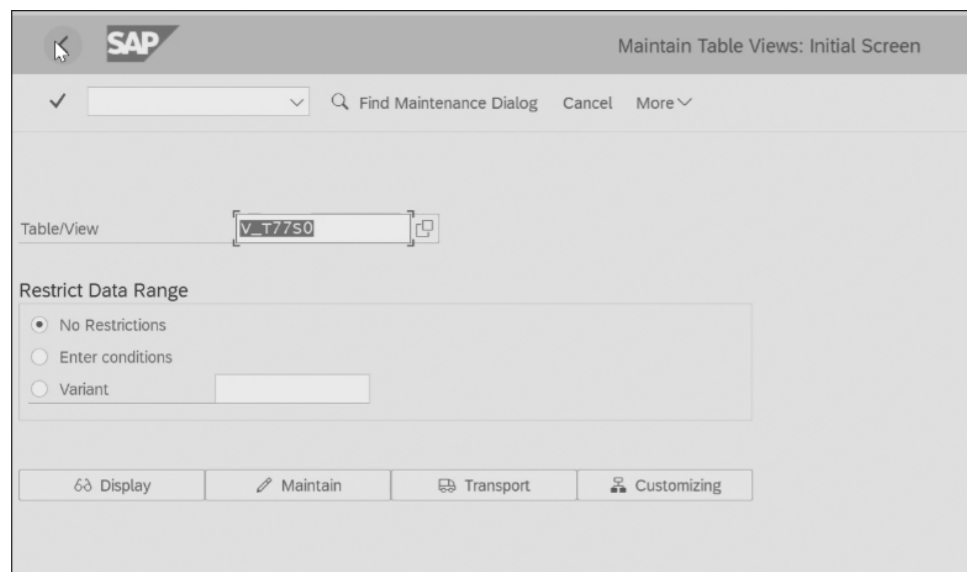


Figure 7.36 Transaction SM30 to Turn On Switch

5. Find **SFEC** under the **Group** field and then semantical abbreviation **EEOH** under the **Sem.abbr.** field, as shown in Figure 7.37.
6. Set the value abbreviation in the **Value Abbr** field to "X."
7. Save these settings.

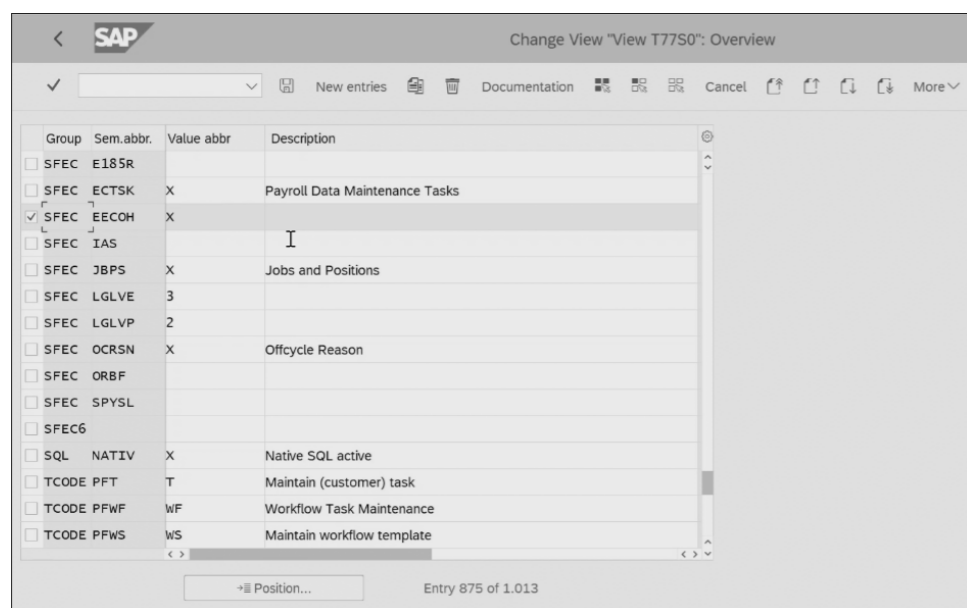


Figure 7.37 Switch Enabling Rehire of Terminated Employees without History

Note

This option is not currently supported if you have turned on multiple actions for the replication in the point-to-point replication configuration. For more information, see Chapter 8, Section 8.2.

In addition, quite a few infotypes are needed by Employee Central Payroll that are never captured in Employee Central. Table 7.4 shows the infotypes required for tax and benefit calculations in the US.

Infotype	Description
0045	Loans
0078	Loan Payments
0161	IRS Limits
0194	Garnishment Document
0195	Garnishment Order
0216	Garnishment Adjustments
0207	Residence Tax Area
0208	Work Tax Area
0209	Unemployment State
0210	Withholding Information W4/W5
0234	Additional Withholding Information
0235	Other Taxes
0506	Tip Indicators

Table 7.4 Infotypes Not Captured in Employee Central

Two methods for loading this data into Employee Central Payroll are popular:

- Using the Legacy System Migration Workbench, a standard method for SAP systems for many years
- Writing a special custom ABAP program to load the data

In both cases, the data is made available in a fixed or CSV file format that closely matches the infotype record. Transferring pay results before go-live is not common because of the complexity involved. But if required, you can transfer pay results before go-live. Usually, instructions for this step vary by country. For the US, you would load three tables and execute a payroll run for conversion. Instructions are available by

following the menu path **Payroll (Country) • Transfer Legacy Data • Define Period Table/ Define Wage Type Table/Define Tax/Arrears Table**.

Generally, you would perform the following four steps:

1. Extract the pay results that must be loaded and assign period and wage types.
2. Format the data in two tables T558B (Periods) and table T558C (Wage Types).
3. Load tables T558B and T558C using a custom program or using the configuration path mentioned earlier.
4. Run the payroll schema ULK9.

Even though your company may decide not to migrate payroll results from the past, you may still need to load cumulative balances of the last tax year if the go-live is planned in the middle of the tax year. This requirement stems from tax calculations that rely on information about deductions that have already taken place and calculations to determine limits in deductions—if the limits have been reached, then the deduction must stop.

7.5 Activating User Interface Integration Services

As described in Chapter 6, Section 6.1.2, the integration between Employee Central and Employee Central Payroll depends on web services. We described two services in an Employee Central system: the OData API and SFAPI. In the Employee Central system, equivalent services interact with web services on the HR side.

These services perform many things, but one goal is close to the user—the user interface (UI) integration service. A UI represents the way a human being communicates with Employee Central Payroll. By using these services, an employee can interact with Employee Central Payroll from the Employee Central frontend, enabling easy access through a single system. The service calls Employee Central Payroll behind the scenes and serves up the requested product seamlessly. The following UI services are available to use:

- **HRPAO_PAOM_MASTERDATA**
Allows the updating of Employee Central Payroll infotypes from the Employee Central frontend.
- **PAYSLIP**
Displays pay statements on the Employee Central frontend by retrieving pay results from Employee Central Payroll.
- **PAYMNT_SUM_AU**
Displays the Payment Summary Form for Australia in the Employee Central system by using pay results from the payroll system.
- **HRESS_A_PAYINFO**
Displays the Superannuation statement for Australia in the Employee Central system by using pay results from the payroll system.

- **HRESS_A_REP_IN_FORM16**
Displays Form 16 statement for India in the Employee Central system by using pay results from the payroll system.

Note that these services are all optional, but each must be turned on if required. You can turn on these services in Transaction SICF, as shown in Figure 7.38.

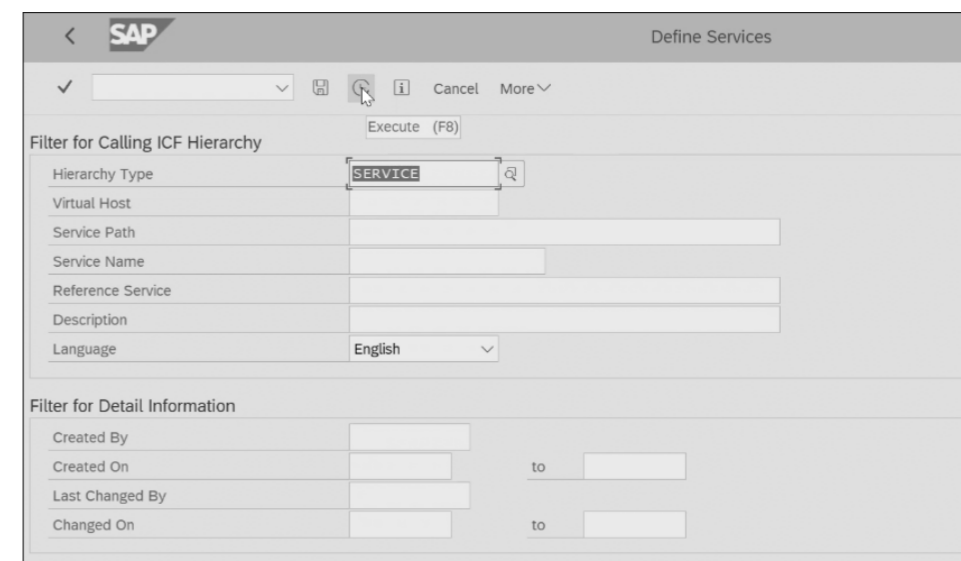


Figure 7.38 Transaction SICF

Click the **Execute** icon at the top of the screen. Then, as shown in Figure 7.39. Right-click on a service and select **Activate Service**. Save.

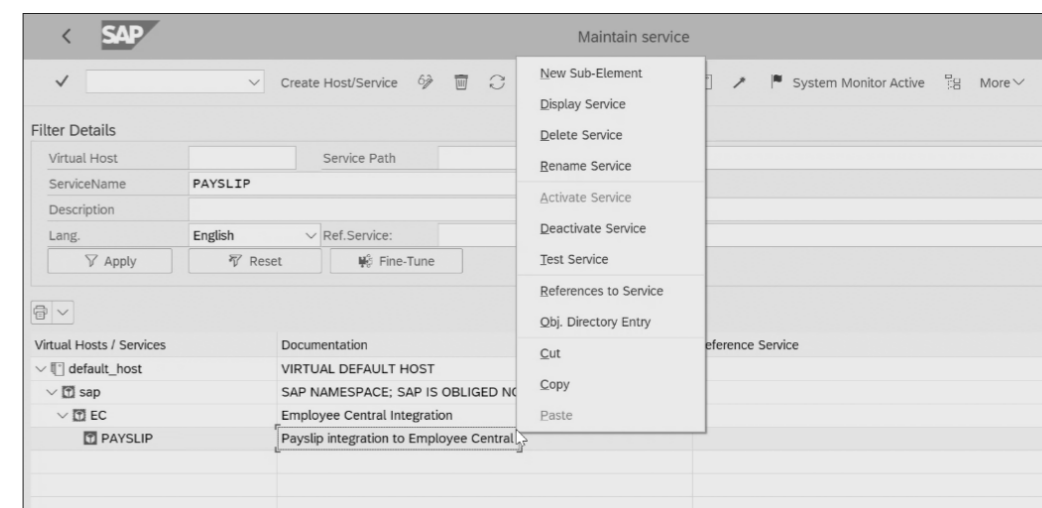


Figure 7.39 Activating Payroll Services in Employee Central Integration

7.6 Setting Up the Connection to Employee Central

The connection to Employee Central can be set up entirely in Transaction HRSFEC_PTP_CONFIG, which uses the program RP_HRSFEC_PTP_CONFIGURATION.

Before executing this program, make sure you've completed the following steps:

- Collect the SFAPI user name and password for the user that will be used to connect. This user needs permission to access Employee Central APIs and OData service communications.
- Create the replication target system.

Creating a replication target can be achieved in two ways. In the first approach, you would follow these steps:

1. Find the logical system name of Employee Central Payroll using Transaction SCC4, as shown in Figure 7.40.

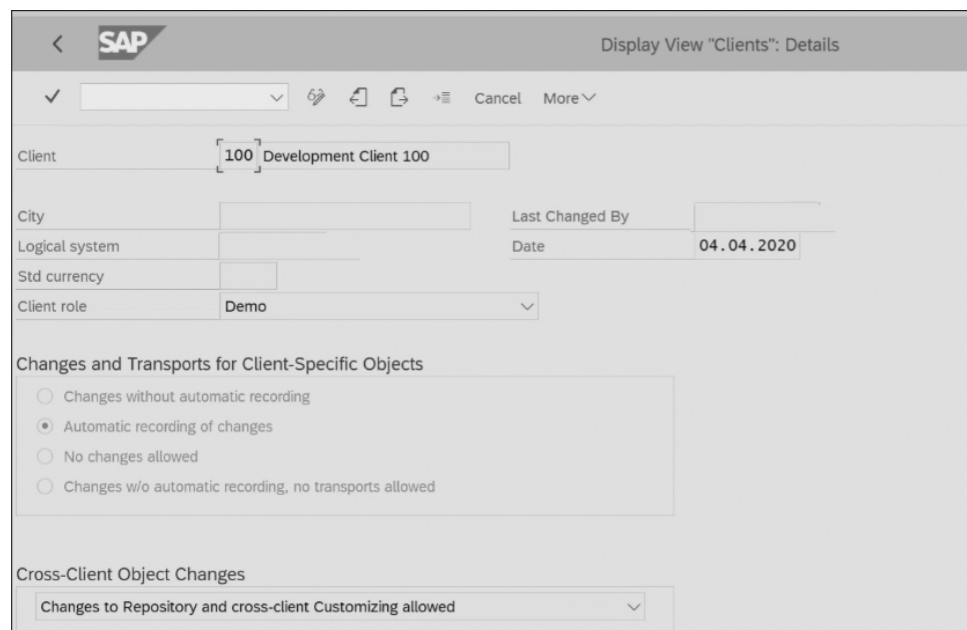


Figure 7.40 Transaction SCC4

2. Log on to the Employee Central system and go to **Admin Center • Manage Data**.
3. Click on the **Create New** button and search for “replication target system” in the first dropdown menu, as shown Figure 7.41.
4. In the **External Code** field, enter the logical system name you found from Transaction SCC4.
5. In the **External Name** field, define an external name according to your preferences.

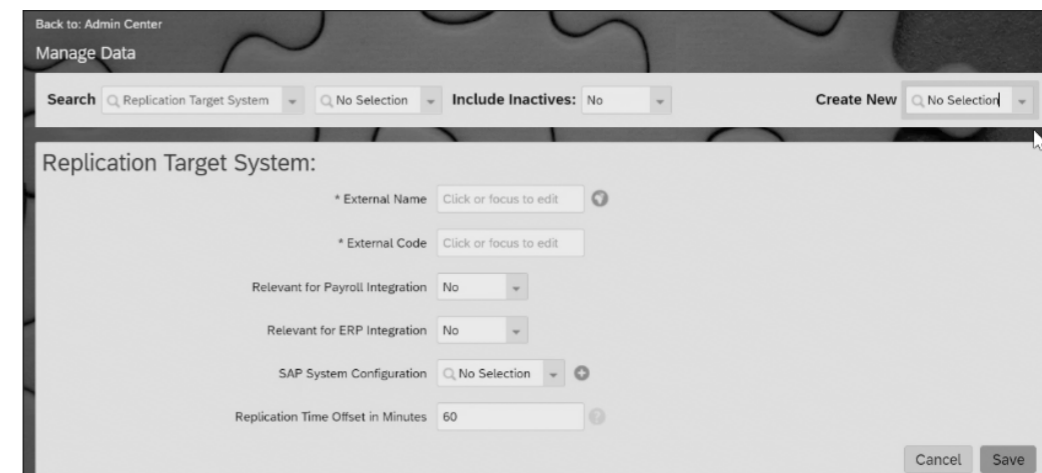


Figure 7.41 Setting Up Replication Target System

6. Choose **Yes** from the **Relevant for Payroll Integration** dropdown list.
7. In the **Replication Time Offset in Minutes** field, enter the delay in minutes you want the resending of data to be postponed by when the payroll area is locked or in correction phase. If you leave this field empty, the default time until resend is 60 minutes.
8. Click **Save**.

The second method of creating a replication target system is much simpler. Simply open Transaction HRSFEC_PTP_CONFIG and select the **Create Repl. Target System** checkbox. However, this method only works if the connectivity between the two systems is working perfectly. To avoid this dependency, defining a replication target system using the first method may be advisable.

Now that you've created the replication target system, let's return to setting up the connection to Employee Central. In Transaction HRSFEC_PTP_CONFIG, follow these steps:

1. Select the **Set Connection Data** radio button.
2. Select the correct API server URL, based on your data center, from the dropdown list.
3. Maintain the **Company**, **User**, and **Password** fields for Employee Central.
4. Click **Execute**.

The program creates everything you need, and you should see the following success messages:

- Creation of RFC destination ECP_PTP_SOAP_NNN was successful.
- Creation of RFC destination ECP_PTP_ODATA_NNN was successful.
- Employee Central credentials were saved successfully.

You can now test your connection via Transaction HRSFEC_PTP_CONFIG, but this time, select the **Ping Employee Central APIs** radio button. Now, click the **Execute** button. Three connections can be tested:

- **Employee Master Data API:** A logon and logoff to the Compound Employee API are executed.
- **Confirmation API:** An OData API query is performed on the `EmployeeDataReplicationConfirmation` object.
- **Time Data API used for time-off data replication:** An OData API query is performed on the `DataReplicationProxy` object.

7.7 Scheduling Master Data Replication from Employee Central to Employee Central Payroll

Once you've finished configuring the replication process and tested the connection, you're now ready to schedule the replication process. Scheduling is a technique for automatically running a transaction in the Employee Central Payroll system at a certain time on a certain day.

To begin scheduling master data replication, enter Transaction HRSFEC_PTP_EE_REPL and click **Execute**. Now, maintain the **Configuration ID** field, as shown in Figure 7.42. For our example, choose the configuration ID that we set up earlier.

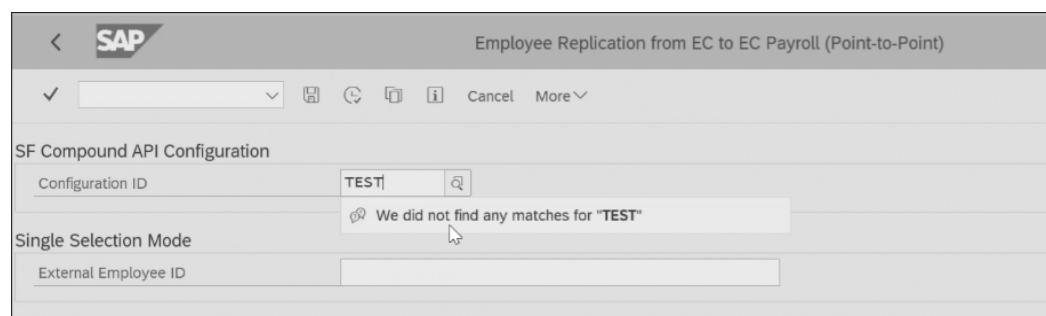


Figure 7.42 Transaction HRSFEC_PTP_EE_REPL

Click on the **Save** icon, and a variant screen appears, as shown in Figure 7.43. Maintain the **Variant Name** and **Description** fields and then click the **Save** icon.

Now, trigger a test run by entering a **Personnel Number** (`Person_Id_External`) and clicking the **Execute** button. Next, enter `/N HRSFEC_REPL_STATUS.` You should see a screen to find the latest replication status, as shown in Figure 7.44.

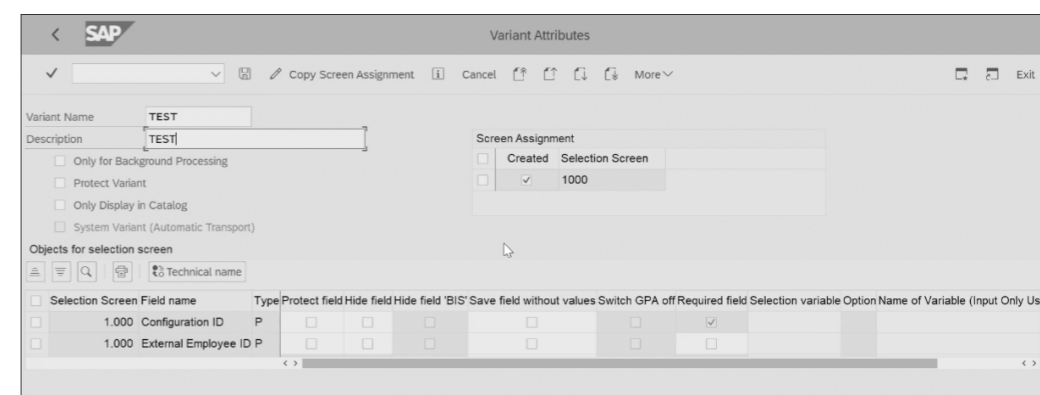


Figure 7.43 Variant for HRSFEC_PTP_EE_REPL

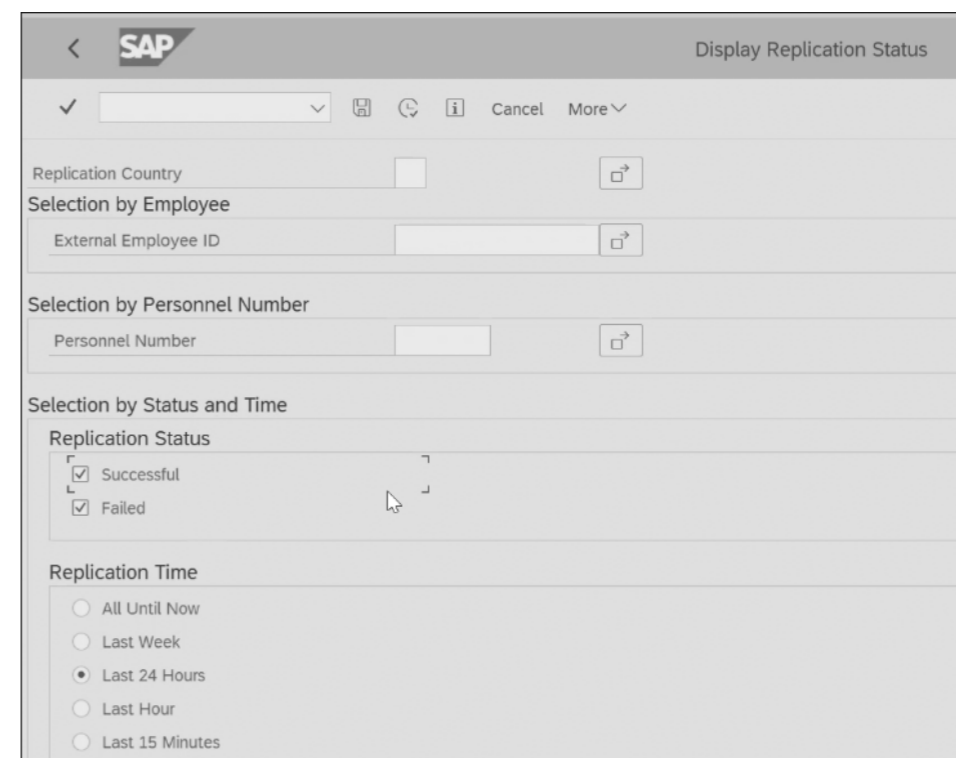


Figure 7.44 Checking the Replication Status

If the replication process was successful, the display will be green or yellow. If you see any red on the screen, a problem occurred. Double-click on the message to reveal the cause of the issue. (This report will be covered in more detail in Chapter 14.) Once the issue is fixed, run the replication again with a test employee and confirm the process is working. Now, run Transaction SM36, maintain the **Job Name** field, and choose **Start condition**, as shown in Figure 7.45.

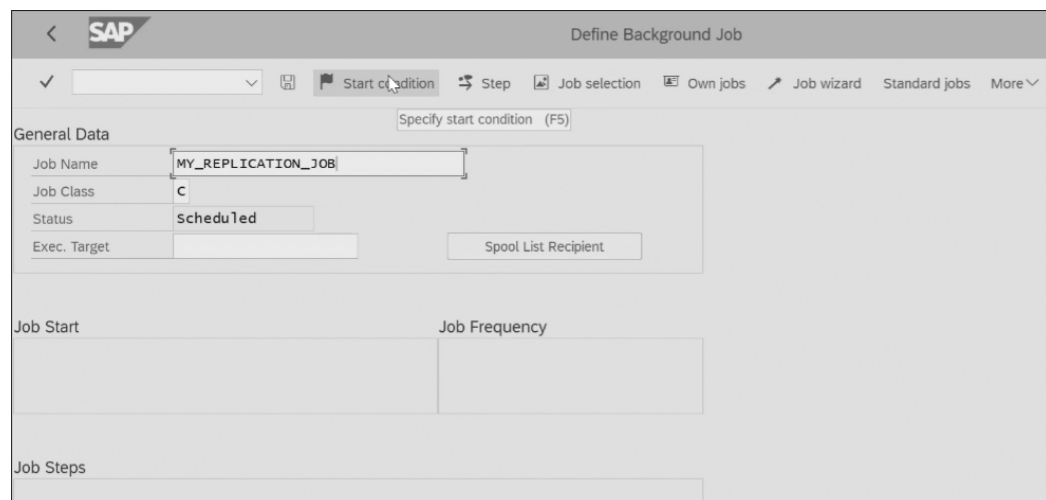


Figure 7.45 Transaction SM36

Click on **Step** and enter the ABAP program name "RP_HRSFEC_PTP_EE_REPLICATION," which is the variant that we saved earlier, and save these settings.

Next, you'll need to define the schedule, as shown in Figure 7.46. Click **Immediate** and select the **Periodic job** checkbox. Select **Period Values** and choose **Other Period**. Enter the timeframe of your choice (e.g., 2 hours) and save.

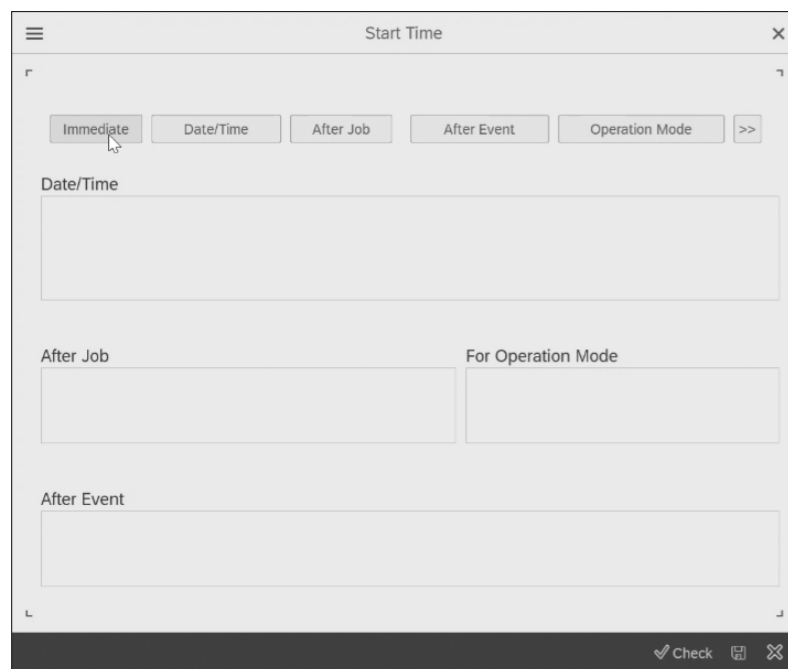


Figure 7.46 Job Timing

Now, the job will execute according to your specified periodicity and pick up all changes in Employee Central data, send these changes over to the Employee Central Payroll system.

7.8 Enabling Push Replication

Sometimes, having a scheduled job to replicate master data is not enough. However frequent the transfer of data may be, this replication is not in real time and therefore is sometimes unsuitable for certain business demands.

In these situations, a nearly real-time replication method can be enabled by utilizing SAP SuccessFactors's Intelligent Services. In this way, the data replicates as soon as critical events like hire, rehire, or termination actions occur.

Before you begin, ensure that Intelligent Services is enabled in provisioning. As a customer, you may not have access to these provisioning screens and instead will need to log a service ticket with SAP Support.

Next, import rules to trigger external events in Employee Central by performing the following steps:

1. Log on to Employee Central and go to the Admin Center.
2. Choose **Import and Export Data** from the menu shown in Figure 7.47.

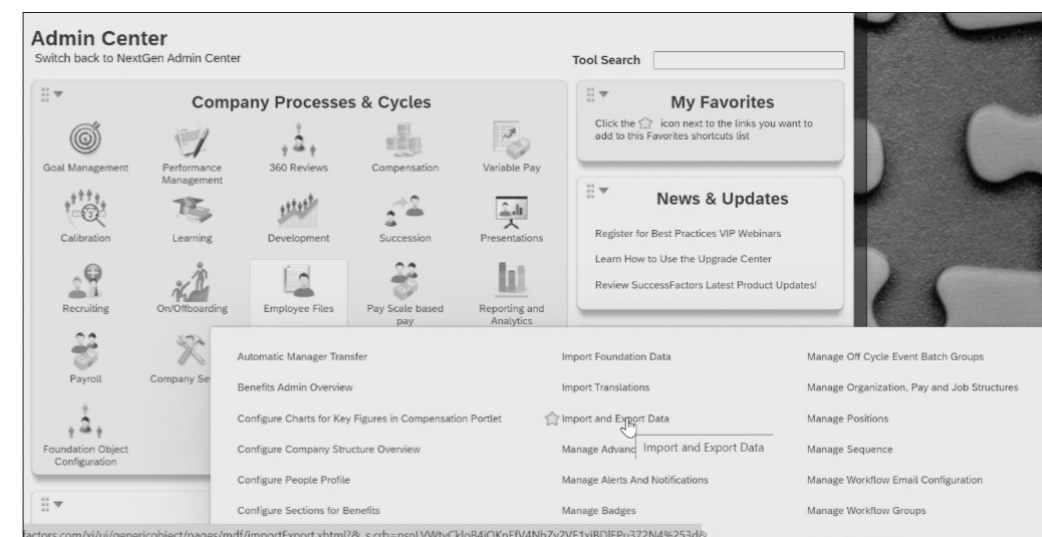


Figure 7.47 Import and Export Data

3. Now, choose **Import Data** from the **Select the action to perform** dropdown list, as shown in Figure 7.48.

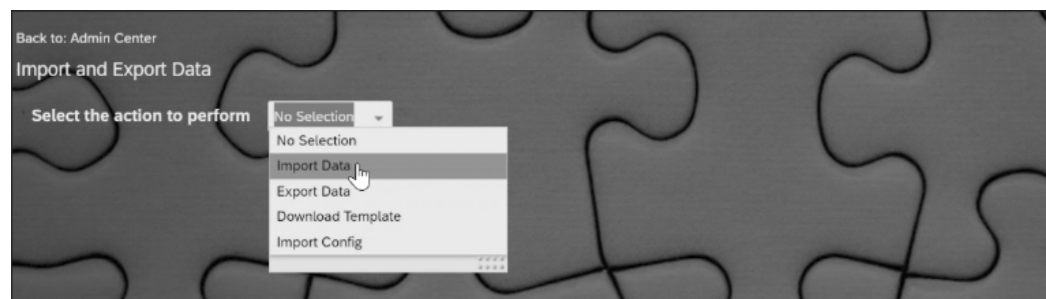


Figure 7.48 Import Data

- Choose **Success Store**. In the **Package Name** column, select the **Intelligent Service Rules** radio button. Click **Import**, as shown in Figure 7.49.

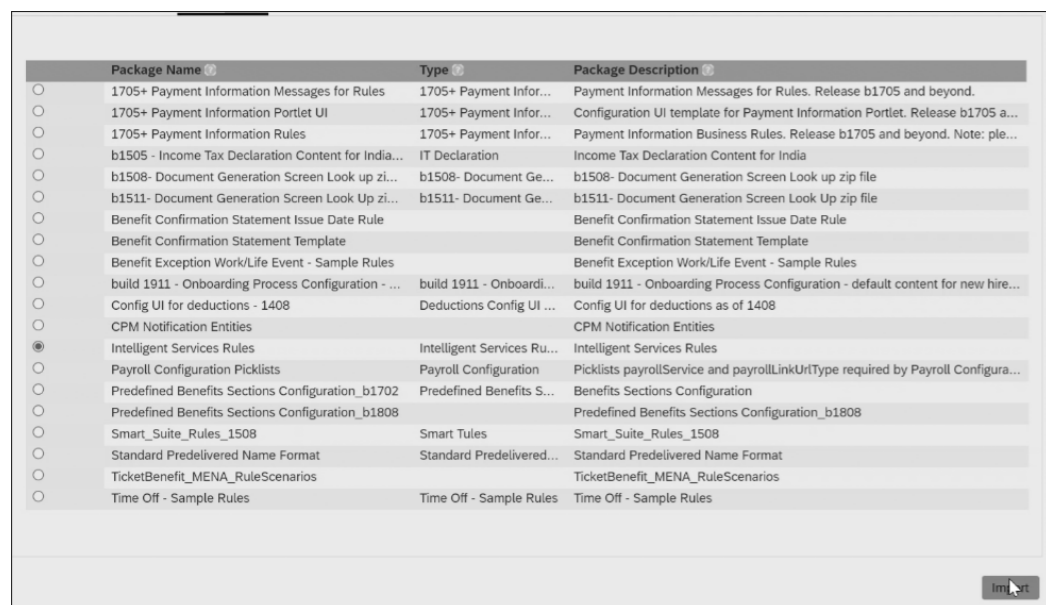


Figure 7.49 Import Package

- Now, go to the **Manage Business Configuration** screen by typing “Manage Business Configuration” in the search bar.
- Click **Job Info** and scroll down to **Trigger Rules**, as shown in Figure 7.50. You should see that the following rules have been successfully uploaded:
 - **Event_Hire**
 - **Event_Rehire**
 - **Event_Terminate**

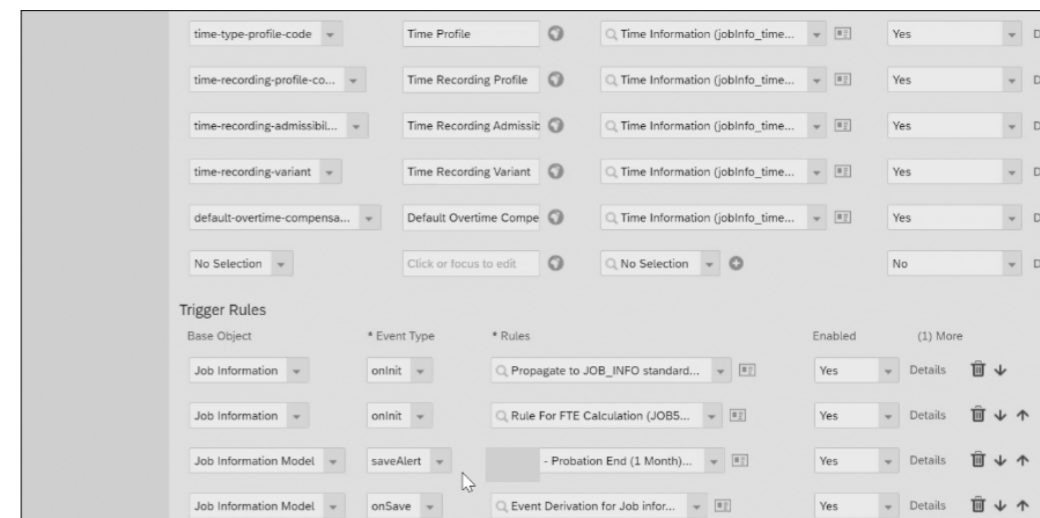


Figure 7.50 Trigger Rules

Assign the rules you just uploaded to this group by adding the following for each rule:

- **Base Object:** Select **Job Information Model**.
- **Event Type:** Select **onPostSave**.

Your next step is to find the access URL, as follows:

- In the Employee Central Payroll system, execute Transaction SOAMANAGER.
- Under **Service Administration**, choose **Simplified Web Service Configuration**
- As shown in Figure 7.51, enter “*masterdatapush*” in the **Search Pattern** field.

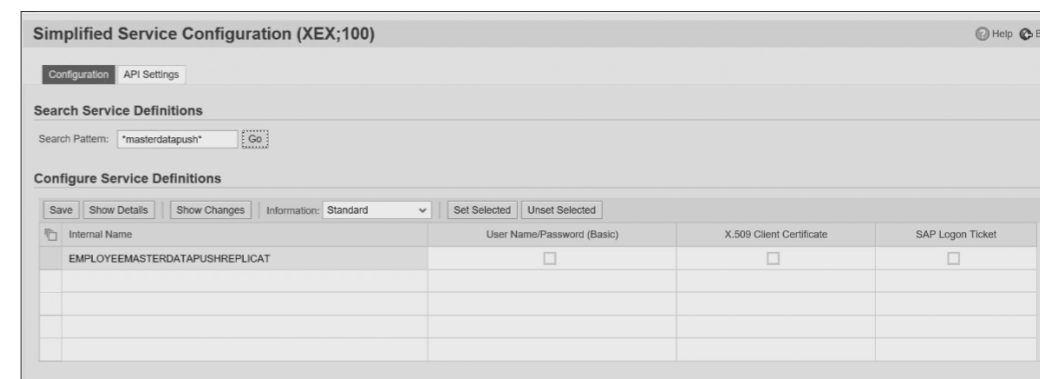


Figure 7.51 SOA Manager

- Select the relevant service definition, called **EMPLOYEEMASTERDATAPUSHREPLICAT**.
- Select the checkbox in the **User Name/Password (Basic)** column and click **Save**.
- Choose **Show Details**.

7. From the **Configuration Details** section, copy the **Access URL**, as shown in Figure 7.52.

Details of Provider Configuration

Details of the Service Definition

Internal Name: EMPLOYEEMASTERDATAPUSHREPLICAT
 External Name: EmployeeMasterDataPushReplicationRequest_In
 External Namespace: http://sap.com/xi/EA-HR
 Description: Employee Master Data Push Replication Request

WSDL URLs

With WS Policy: http://i.sap.corp:50000/sap/bc/srt/wSDL/flv_10002A1111D1/bndg_uri/sap/bc/srt/scs/sap/employeeemasterdatapushreplicat?
 Without WS Policy: http://i.sap.corp:50000/sap/bc/srt/wSDL/flv_10002A1011D1/bndg_uri/sap/bc/srt/scs/sap/employeeemasterdatapushreplicat?

Configuration Details

Configuration Name: 00163ER015CR1EDBA99544B40595D4CE
 Access URL: http://i.sap.corp:50000/sap/bc/srt/scs/sap/employeeemasterdatapushreplicat?sap-client=100
 Last Change User: DEM
 Last Change Date: 24.04
 Last Change Time: 03:07:04

OK

Figure 7.52 Access URL

- Paste this URL into an open Microsoft Word document so you can use it later in this task.
- The final task is to set the event notification subscription by entering “Event Notification Subscription” into the search bar, which will result in the screen shown in Figure 7.53.

Event Notification Subscription

Subscriber External Event SEB External Event Edit Subscriber

Category	Subscriber Id	Name	Group	Client Id	Created On	Last Modified	Last Modified	Deleted
Customized	HRFF_CPI			Client Id	2019-07-11 07:00	2019-07-11 07:00		<input type="checkbox"/>
Customized	HRFF_SCI_id-1f		group	Client Id	2019-07-25 04:00	2019-07-25 04:00		<input type="checkbox"/>
Customized	SAP_Qualtrics_I	SAP_Qualtrics_I	Group	Client Id	2021-02-12 07:00	2021-02-12 07:00	adminAPI	<input type="checkbox"/>
Customized	SAP_Qualtrics_I	SAP_Qualtrics_I	Group	Client Id	2020-06-24 06:00	2020-06-24 06:00	adminAPI	<input type="checkbox"/>
Customized	SAP_Qualtrics_I	SAP_Qualtrics_I	Group	Client Id	2021-02-12 07:00	2021-02-12 07:00	adminAPI	<input type="checkbox"/>
Customized	SAP_Qualtrics_I	SAP_Qualtrics_I	Group	Client Id	2020-06-24 06:00	2020-06-24 06:00	adminAPI	<input type="checkbox"/>
Customized	SFP_API_ECP	ECP	ECP	Client Id	2020-07-16 13:00	2020-07-16 13:00	saparasa	<input type="checkbox"/>
Customized	Test	Test	Test	Test	2017-02-06 01:00	2017-02-06 01:00	adminARC	<input type="checkbox"/>

Figure 7.53 Event Notification Subscription

- Go to the **Subscriber** view and create a subscriber.
- Then, under the **SEB External Event** tab, click **Add Topic** and maintain the following information:
 - SEB Event Type:** Select an external event alert type.
 - Endpoint URL:** Enter the URL you copied in the previous step.
 - Subscriber:** Enter the subscriber you created from the previous step.
 - Protocol:** Select **SOAP over HTTP/HTTPS**.
- Click **Authentication – Basic**.

A quick way to test if the configuration was successful is to follow these steps:

- In the Employee Central search bar, enter “Event Notification Audit Log.”
- In the **Event Details** column, you can access the log by clicking **View** in the **Event Details** column, as shown in Figure 7.54.

Admin Center

Back to Admin Center

Event Notification Audit Log

Filter Options Refresh Items per page 10 Page 1 of 99

ID	Event Type	Subscriber	Status	Event Details	Sent By	Send Time	Correlation ID	Action
21...	com.successfactor...	SAP_	DELIVE...	View	98	2021-04-22 04:16:43.0	6b4cead6-f4f6-44db...	
21...	com.successfactor...	SAP_	DELIVE...	View	98	2021-04-22 04:16:43.0	6b4cead6-f4f6-44db...	
21...	com.successfactor...	SAP_	DELIVE...	View	98	2021-04-22 04:15:40.0	776a362d-ddf0-41ce...	
21...	com.successfactor...	SAP_	DELIVE...	View	98	2021-04-22 04:15:40.0	776a362d-ddf0-41ce...	
21...	com.successfactor...	SAP_	DELIVE...	View	98	2021-04-21 15:19:29.0	8848a119-b304-404f...	
21...	com.successfactor...	SAP_	FAILED	View	98	2021-04-21 15:19:29.0	8848a119-b304-404f...	Retigger
21...	com.successfactor...	SAP_	DELIVE...	View	98	2021-04-21 14:43:26.0	96f48fe4-b93a-4e16...	
21...	com.successfactor...	SAP_	DELIVE...	View	98	2021-04-21 14:43:26.0	96f48fe4-b93a-4e16...	

Figure 7.54 Event Notification Audit Log

7.9 Using Mapping Check Tools in Employee Central Payroll

Two tools are available in Employee Central Payroll to detect errors in configuration that might lead to errors or dropouts (records going missing) in data integration. Of course, to run these tools, the connectivity between the two systems must have been set up already.

The first tool, the Pay Component and Wage Type Configuration Check tool, specifically focuses on wage type inconsistencies. (Recall our discussion of wage type synchronization in Section 7.2.3 and how the setup depends on appropriate pay components on the Employee Central system.) This tool will tell you if links are missing between wage types and pay components, highlighting wage types that should be assigned to

infotypes 0008, 0014, 0015, and 0267 but are not. It also highlights missing text, identifies if the validity of a pay component fails to match with the validity of a wage type, and identifies pay components or wage types that have been changed or recently added, as discussed earlier in Section 7.2.

The second tool, the Check Inconsistencies in Code Value Mapping and Properties tool, shows discrepancies in the mapping of code values, such as employee classes and action types. To use this tool, run Transaction SE38 and access report RP_HRSFEC_CHECK_EC2ECP_MAPPING. You should see the screen shown in Figure 7.55.

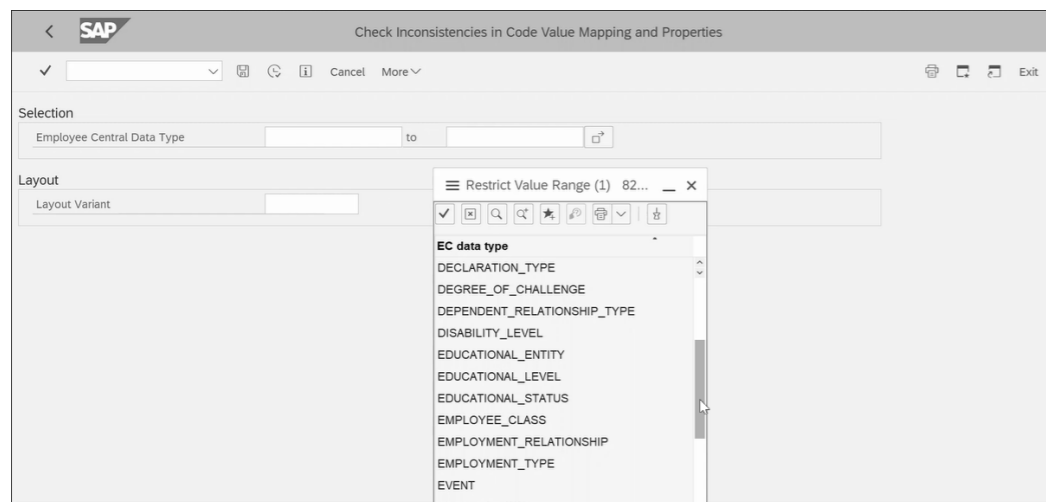


Figure 7.55 Check Tool for Data Type Mapping Inconsistency

Choose the data type you're checking from the **Employee Central Data Type** dropdown menu or leave it blank. Click on the **Execute** button.

You'll then see a report that identifies where an incorrect mapping occurs between the two systems.

7.10 Summary

This chapter explained the integration components related to point-to-point replication. You're now familiar with the basic tools for setting up connections between Employee Central and Employee Central Payroll systems. We also covered the scheduling of replication processing and explored how to simulate nearly real-time transfers through push replication. In the next chapter, we'll examine further intricacies related to the data replicated between the two systems.

Contents

Preface	17
1 Introduction to Payroll with SAP SuccessFactors	25
1.1 Payroll with SAP	26
1.2 Payroll Processes	34
1.2.1 Receiving Human Resources Master Data	35
1.2.2 Maintaining Payroll Data	36
1.2.3 Maintaining Time Data	39
1.2.4 Receiving Vendor Deduction Data	41
1.2.5 Running Simulations	42
1.2.6 Validating the Simulation Results	43
1.2.7 Running Production	44
1.2.8 Sending Pay Data to Banks	45
1.2.9 Sending Deduction Data to Vendors	46
1.2.10 Validating Postings	47
1.2.11 Reporting Wages	51
1.3 Entity Relationship Diagrams	53
1.4 Summary	54
2 Configuring Payroll Elements	55
2.1 Wage Types	55
2.1.1 Concepts	56
2.1.2 Categories of Wage Types	56
2.1.3 Attributes of Wage Types	57
2.1.4 The Lifecycle	57
2.1.5 Processing Classes	58
2.1.6 Cumulations	60
2.1.7 Creating a New Wage Type	60
2.1.8 Documentation and Numbering	61
2.2 Payroll Infotypes	63
2.2.1 Personal Data	64
2.2.2 Payroll/Compensation Data	68

2.2.3	Tax Data	80
2.2.4	Benefits Data	85
2.2.5	Garnishments	89
2.3	Schemas and Rules	91
2.3.1	Payroll Driver	92
2.3.2	Main Schema and Its Subschemas	93
2.3.3	Tables	96
2.3.4	Rules and Operations	96
2.4	Benefits	98
2.4.1	Types of Benefits	98
2.4.2	Benefits Processing	99
2.5	Subsequent Processing	100
2.5.1	Finance Postings	100
2.5.2	Third-Party Remittances	105
2.5.3	Electronic Funds Transfers, Including Data Medium Exchange	110
2.6	Summary	111
3	System Provisioning	113
<hr/>		
3.1	Activating Employee Central Payroll Integration	113
3.2	Setting Up the Succession Data Model for Master Data Replication	115
3.3	Setting Up the Corporate Data Model	118
3.4	Setting Up the Country-Specific Succession Data Model	119
3.5	Setting Up the Web Service	120
3.6	Enabling Push Replication from Provisioning	121
3.7	Summary	121
4	Configuring Employee Central	123
<hr/>		
4.1	Permissions for Employee Central Payroll	123
4.1.1	Administrator Role	124
4.1.2	General User Role	126
4.2	Configuration	127
4.2.1	Using the Check Tool	127
4.2.2	Using Employee Central Payroll System Information	129

4.2.3	Setting Up Payroll Configuration	129
4.2.4	Setting Up Pay Data in Payroll Block for Employee Self-Service	133
4.2.5	Uploading the Picklists	134
4.2.6	Exporting and Importing Payroll Calendar Date Information	135
4.3	Completing Payroll Tasks (Optional)	140
4.4	Payroll Information Application in Employee Central (Optional)	146
4.5	Summary	147
5	Configuring Employee Central Payroll	149
<hr/>		
5.1	Switches for Payroll	150
5.2	Defining Settings in Personnel Administration	154
5.2.1	Key Fields	155
5.2.2	Basic Settings	161
5.2.3	Payroll Organizational Data	167
5.2.4	Basic Pay	168
5.2.5	Recurring Payments and Deductions	170
5.2.6	Additional Payments	174
5.2.7	Communications	177
5.2.8	Actions	177
5.2.9	Disabling the Transport Connection for Personnel Planning	179
5.2.10	Integration between Personnel and Organization Data	180
5.3	Setting Up Pay Statements in Employee Central Payroll	181
5.3.1	HR Forms	181
5.3.2	Business Add-Ins for Pay Statements	181
5.3.3	Additional Pay Statement Security	182
5.4	Setting Up Concurrent Employment	182
5.5	Security in Employee Central Payroll	184
5.5.1	Defining Roles	184
5.5.2	Creating Users	188
5.6	Summary	190
6	Integration	191
<hr/>		
6.1	Integration Technologies	191
6.1.1	File-Based Integration	192

6.1.2	Web Services	197
6.1.3	Application Programming Interfaces	197
6.1.4	SAP Integration Suite	199
6.2	Time Data	200
6.3	Benefits Data	202
6.4	Finance Data	203
6.5	Summary	206
7	Master Data Integration	207
7.1	Infotype Filtering	208
7.2	Defining Customer-Specific Activities	209
7.2.1	Assigning Code Values	210
7.2.2	Dealing with Organizational Elements	217
7.2.3	Wage Types	219
7.2.4	Extensibility	227
7.3	Country Filtering	234
7.4	Migration and Cutover Scenarios	235
7.5	Activating User Interface Integration Services	240
7.6	Setting Up the Connection to Employee Central	242
7.7	Scheduling Master Data Replication from Employee Central to Employee Central Payroll	244
7.8	Enabling Push Replication	247
7.9	Using Mapping Check Tools in Employee Central Payroll	251
7.10	Summary	252
8	Master Data Replication	253
8.1	Maintaining Personnel Numbers	255
8.1.1	Using the Assignment ID	257
8.1.2	Enforcing New Employment Using Business Rules	263
8.2	Job Information: Infotypes 0000, 0001, 0007, and 0008	266
8.2.1	Infotype 0000	266
8.2.2	Infotype 0001	268

8.2.3	Infotype 0007	271
8.2.4	Infotype 0008	275
8.2.5	Events	277
8.2.6	Jobs, Positions, and Organizational Units	285
8.2.7	Locations	286
8.3	Compensation Information: Infotype 0001	286
8.4	Biographical Information: Infotype 0002	287
8.5	Personal Information: Infotype 0002	289
8.6	National ID Card: Infotype 0002	291
8.7	Address Information: Infotype 0006	292
8.8	Payment Information: Infotype 0009	296
8.9	Pay Component Recurring: Infotypes 0008 and 0014	302
8.10	Pay Component Non-Recurring: Infotype 0015	305
8.11	Contract Elements: Infotype 0016	306
8.12	Dependents Information: Infotype 0021	306
8.13	Cost Distribution: Infotype 0027	307
8.14	Dates: Infotype 0041	308
8.15	Email Address Information: Infotype 0105	310
8.16	National ID Card: Infotype 0185	311
8.17	Work Permit: Infotype 0185	311
8.18	Additional Off-Cycle Payments: Infotype 0267	312
8.19	Higher Duty or Temporary Assignment: Infotype 0509	314
8.20	Summary	315
9	Using the Payroll Control Center	317
9.1	Key Payroll Features	317
9.1.1	Scheduled and Off-Cycle Processes	318
9.1.2	Validations	319
9.1.3	Key Performance Indicators	321
9.1.4	Alerts	323
9.1.5	Solutions for Errors	324
9.1.6	Collaboration	324
9.2	Payroll Simulation	325

9.3	Payroll Processing	326
9.3.1	Performing Payroll Processing	327
9.3.2	Reports to Confirm Periodic Payroll	328
9.4	Post-Payroll Processing	334
9.5	Practical Example	334
9.6	Summary	341
10	Configuring the Payroll Control Center	343
<hr/>		
10.1	Concepts	343
10.2	Roles and Applications	347
10.3	Configuring the Payroll Control Center in Employee Central Payroll	347
10.3.1	Preparing the Backend System and Enabling Declustering to Store Payroll Result	348
10.3.2	Using the Configuration Workbench	356
10.3.3	Creating Validation Rules	361
10.3.4	Defining Solutions	380
10.3.5	Creating Analytics Charts	385
10.3.6	Creating Analytics Groupings	386
10.3.7	Creating Step Templates	388
10.3.8	Creating Policy Types and Process Types	394
10.3.9	Creating Policies and Processes	400
10.3.10	Setting Up Authorizations for the Payroll Control Center	411
10.3.11	Technical Tasks for the Payroll Control Center	414
10.4	Configuring the Payroll Control Center in Employee Central	421
10.4.1	Configuring System-Level Objects	421
10.4.2	Setting Up Role-Based Permission for Users	425
10.4.3	Assigning the Employee Central Payroll System to Users	426
10.4.4	Creating a Custom Tile for Audit Trails	427
10.5	Making the Payroll Control Center Operational	430
10.6	Operating the Payroll Control Center	433
10.6.1	My Processes Application	433
10.6.2	Manage Teams Application	439
10.6.3	My Off-Cycles Application	443
10.7	Summary	445

11	Setting Up Pay Statements	447
<hr/>		
11.1	Types of Pay Statements	447
11.2	Configuring Pay Statements	449
11.3	Viewing Pay Statements	452
11.3.1	Pay Statement on the My Employee File Page	452
11.3.2	Viewing Pay Statements via Quick Actions on the Latest Homepage	452
11.3.3	Off-Cycle Payment Cards and Reports	453
11.4	Summary	454
12	Using Payroll Results in Employee Central	455
<hr/>		
12.1	Configuration	455
12.1.1	Specifying the Relevant Wage Types in Employee Central Payroll	456
12.1.2	Setting Up Import Related Configuration in Employee Central	458
12.1.3	Creating a Business Rule for Payroll Run Type Picklist	459
12.1.4	Creating a Business Rule for Wage Type Picklist	462
12.1.5	Creating a Business Rule for Grouping Reason Picklist	464
12.1.6	Setting Up Payroll Key Figures	465
12.2	Setting Up Specific Permissions	466
12.3	Replicating Payroll Results from Employee Central Payroll to Employee Central	466
12.4	Limitations for Using Payroll Results	467
12.5	Summary	468
13	Setting Up Single Sign-On and Logout	469
<hr/>		
13.1	Single Sign-On Basics	470
13.2	Preparing for SAML 2.0	471
13.2.1	Employee Central Payroll	471
13.2.2	Employee Central	473
13.3	Configuring the Employee Central Payroll Service Provider for SAML 2.0	475

13.4 User Mapping and Identification	478
13.5 Establishing Identity Federation	479
13.6 System Settings	480
13.6.1 Browser	480
13.6.2 Mobile Operating System	481
13.7 OAuth 2.0	482
13.7.1 Initial Settings in Employee Central Payroll	482
13.7.2 Setting Up X.509 Keys in Employee Central	483
13.7.3 Configuring the OAuth Identity Provider in Employee Central Payroll	484
13.7.4 Creating Service Users in Employee Central Payroll	485
13.7.5 Registering the OAuth Client in Employee Central Payroll	486
13.7.6 Allowing Outbound Messaging for OAuth in Employee Central	486
13.8 Summary	487
14 Monitoring Tools	489
14.1 Checking the Status of Replicated Employee Data	490
14.2 Using the Employee Central Data Replication Monitor When Replicating Employee Master Data	492
14.3 Using the Application Log: Transaction SLG1	493
14.3.1 Application Log: Setting the Log Level	494
14.3.2 Deleting Expired Business and Technical Logs Using Transaction SLG2	495
14.4 Using Web Services Utilities: Transaction SRTUTIL	496
14.5 Using the Consistency Check Report for Replication Data	497
14.6 Read Access Logging for Employee Central Payroll	499
14.7 Summary	502
15 Troubleshooting	503
15.1 Troubleshooting Master Data Replication from Employee Central to Employee Central Payroll	503
15.1.1 Intercompany Transfer Errors	503
15.1.2 Conflicting Job Information Record Errors	504

15.1.3 Edit Feature Errors	504
15.1.4 Person Already Hired Error	504
15.1.5 Multiple Statuses Error	504
15.2 Enabling the Correction Phase Indicator	505
15.3 Changing the Hire Date	505
15.3.1 Prior to Payroll Run	506
15.3.2 After Payroll Is Run with Hire Date in the Past	509
15.3.3 After Payroll Is Run with Hire Date in the Future	510
15.4 Summary	514
16 Implementation Project Planning	517
16.1 Employee Central Payroll Implementation Phases	517
16.1.1 Discover	518
16.1.2 Design	519
16.1.3 Build	519
16.1.4 Deploy	520
16.1.5 Hypercare	520
16.2 Maintaining a Good Delivery Tracker	520
16.3 Conversion Scope Consideration	521
16.4 Special Testing Considerations	523
16.5 Key Project Considerations	528
16.6 Summary	528
The Authors	529
Index	531

Index

A

ACH payments	110
Actions	177, 435
<i>70 and 71</i>	510
<i>artificial</i>	278
<i>multiple same day</i>	282
<i>reasons</i>	179
<i>settings</i>	177
Ad hoc off-cycle payroll	319, 327, 443
Additional payments	174
Address data	67
Address Information portlet	292, 294
Address types	295
Administrator	167
Administrator role	124
<i>granting permissions</i>	126
<i>permissions</i>	124
<i>settings</i>	125
Alerts	323, 337, 344, 362
<i>assign</i>	436
<i>dependencies</i>	367
<i>forward</i>	438
<i>not assigned</i>	338
<i>operations</i>	364
<i>resolved</i>	338
<i>status</i>	438
Analytics charts	345
<i>basic information</i>	385
<i>chart logic</i>	386
<i>create</i>	385
<i>groupings</i>	386–387
<i>PYAC transport objects</i>	386
Annualization factors	304
Application Link Enabling (ALE)	204
Application log	493
<i>log level</i>	494
Application Programming Interfaces (APIs)	197
Assignment ID	257
<i>business rules</i>	258
<i>generate</i>	260
Attachments	435
Audit trails	427
Authentication	476
Authorization objects	187, 412
Authorizations	184, 411

B

Background jobs	414
BAdI Builder	162
Bank account numbers	301
Bank data	72
Bank details	165
Bank payments	45
B APIs	205
Basic pay	168
Benefitfocus	203
Benefits	98
<i>aggregator</i>	203
<i>data</i>	85, 202
<i>processing</i>	99
<i>types</i>	98
Biographical Information portlet	287, 289
BSI eForms	131
Business Add-Ins (BADIs)	162, 181, 229–230
<i>available</i>	229
<i>enhance default logic</i>	230
Business function HCM_SFEC_	
MDEC2HR	149
Business log	493
<i>levels</i>	495
Business roles	412
Business rules	258, 261, 460
<i>new employment</i>	263
<i>with error</i>	265
Business Software Incorporated (BSI)	131

C

Check Pay Comp and Wage Type Mapping	
report	225
Check Tool	127, 146
<i>errors</i>	128
<i>run</i>	128
Classes	362
Cloud system	27
Code values	210
<i>data groups</i>	213
<i>dates</i>	213
<i>mapping</i>	211
<i>mode</i>	212
Company codes	218, 286
Compensation data	32, 68

Compensation Information portlet	287
Component Non-Recurring portlet	305
Concurrent employment	182
<i>switches</i>	183
Configuration Workbench	348
<i>copy object</i>	357
<i>create object</i>	356
<i>deleting an object</i>	360
<i>navigation</i>	356
<i>save object</i>	358
<i>transport objects</i>	358
<i>using</i>	356
<i>using the where-used list</i>	359
<i>validating object</i>	359
Consistency Check report	497
Contract elements	306
Corporate data model	118
Correction phase indicator	493, 505
Cost center distribution	79
Cost centers	203, 217
Cost distribution	114
Cost Distribution portlet	307
Countries	216
<i>filtering</i>	234
Country availability	28
Country-specific succession data models	119
Cross-Application Timesheet System (CATS)	369
Cumulations	60
Currencies	221
<i>assign</i>	224
<i>copy</i>	222
<i>create</i>	223
<i>custom</i>	221
<i>decimal places</i>	223
<i>map wage types</i>	224
Custom Metadata Framework (MDF)	
object	233
Custom tile	428
<i>assignments</i>	430
<i>navigation</i>	428
<i>title</i>	428
Customer-specific activities	209
Cutover	235
D	
Daemon jobs	414
<i>recurrence</i>	417
Data conversion	235, 521
Data dictionary	197
Data Medium Exchange (DME)	45
Data Replication Monitor	492
Data sharing	163
<i>configuration</i>	164
Data source types	345
Database access options	418
Dates	308
Declustering	348, 351, 353
<i>reading payroll results</i>	354
<i>sequence number</i>	355
Deductions	170, 304
<i>configure</i>	172
<i>data</i>	46
<i>periods</i>	173
Dependents Information portlet	306
Deviation selection	415
Dialog wage types	56
<i>lifecycle</i>	57
Direct pay statements	448–449
E	
Earnings	56
Effective dating	35
Electronic funds transfers (EFTs)	110
Email Address Information portlet	310
Employee data	193
Employee groups	158
<i>list</i>	159
Employee Information record	256
Employee subgroups	159
<i>assign to employee group</i>	160
<i>list</i>	159
Employment Information portlet	309
employmentInfo object	116
End dates	35
Enterprise integration platform-as-a-service (eiPaaS)	199
Entity relationship diagrams	53
Evaluation class	458
Event handler	415
<i>recurrence</i>	417
Event notification	250
<i>audit log</i>	143, 251
Event reasons	280
Events	277
<i>create</i>	279
Export users	192
Extensibility	227
<i>basic</i>	227
<i>custom Metadata Framework objects</i>	232
External key values	217

F	
Features	162
DTAKT	110, 165
IVWID	290
NUMKR	261
PINCH	270
PPMOD	102
Field lengths	118
Finance data	33, 203
Finance postings	100
Financial account assignment	104
Financial postings	47
Flexible Spending Accounts (FSAs)	88
Foundation objects	118
Full transmission start date (FTSD)	236–237
G	
Garnishments	89
<i>adjustment</i>	91
<i>order</i>	90
General user role	126
<i>permissions</i>	126
Global employment	255
Group administrator	168
Grouping reason picklist	464
<i>populate</i>	464
Grouping reasons	458
H	
Health plans	86
Higher Duty or Temporary Assignment	
portlet	314
Hire date	
<i>change</i>	505
<i>correction</i>	513
<i>new</i>	508
Hourly employees	40
Hourly rates	72
House banks	165
HR Forms	181
HR payees	107, 109
<i>key fields</i>	107
HR Process Workbench	418
I	
ICF nodes	479
Identity federation	477
<i>establish</i>	479
Identity provider (IdP)	470
IDocs	41, 204
Implementations	517
<i>build phase</i>	519
<i>conversion scope</i>	521
<i>delivery tracker</i>	520
<i>deploy phase</i>	520
<i>deployment plan</i>	518
<i>design phase</i>	519
<i>discover phase</i>	518
<i>hypercare</i>	520
<i>phases</i>	517
<i>project considerations</i>	528
<i>testing activities</i>	525
Indirect valuation	169
Infogroups	179
Infotypes	63, 144, 163, 492
0000	65, 266, 512
0001	66, 180, 268, 286
0002	67, 287, 289, 291
0003	69, 509
0006	67, 292, 295
0007	71, 271, 273
0008	72, 220, 275, 302, 371
0009	72, 296, 300, 325
0011	370
0014	41, 74, 170, 220, 302
0015	42, 75, 174, 221, 305
0016	306
0021	306
0027	79, 307
0041	214, 308
0105	177, 310, 371
0167	86
0168	86
0169	87
0170	88
0185	214–216, 311
0194	89
0195	90
0207	81
0208	81
0209	82
0210	83
0216	91
0221	76
0235	84
0267	77, 221, 312
0302	282
0509	314
0709	165
2010	41, 78
<i>country-specific</i>	36

Infotypes (Cont.)	
<i>filtering</i>	208
<i>grouping reason</i>	164
<i>non-pay types</i>	253
<i>not captured in Employee Central</i>	239
<i>pay types</i>	253
Insurance plans	86
Integration	191
<i>file-based</i>	192
<i>landscape</i>	199
<i>technologies</i>	191
<i>web services</i>	197
Integration Center	193
<i>actions</i>	196
<i>integration type</i>	195
<i>My Integrations</i>	194
<i>selecting fields</i>	195
<i>workbench</i>	194
Intelligent Services	247
Intercompany transfer errors	503
Internal key values	217
International Bank Account Numbers (IBANs)	166
International transfer	255
ISO code	213, 215
J	
Job Information portlet	266–267, 269, 272, 277, 309
Job information record	
<i>edit</i>	514
<i>errors</i>	504
jobInfo object	117, 119
Jobs	285
K	
Key fields	155
Key performance indicators (KPIs)	321
<i>standard</i>	322
Kronos	40, 202
L	
Legacy pay statements	447, 449
Legacy System Migration Workbench	197
Live payroll	328
Loading employee data	236
Locations	286
Locks	492
Logs	45

M

Manage Payroll application	433
Manage Policies application	419
Manage Teams application	419, 439
Mapping check tools	251
Mashups	33, 383
Master data	35
<i>user lists</i>	418
Master data integration	207
Master data replication	115, 253
<i>errors</i>	503
<i>run</i>	245
<i>schedule</i>	244, 246
<i>test run</i>	244
Message types	206
Metadata	474
<i>upload</i>	475
Metadata Framework (MDF)	115, 296
Migration	235
Model wage types	56
Monitoring	318, 336, 431, 489
My Alerts application	366
My Off-cycles application	443–444
My Processes application	418, 433
My Teams application	437

N

National ID Card portlet	291, 311
National IDs	214, 216
Net pay	56
Net pay variance	373
New employment	263
Non-dialog user	416
No-shows	283
Number ranges	161
<i>define</i>	162

O

OAuth 2.0	482
<i>identity provider</i>	484
<i>initial settings</i>	482
<i>outbound messaging</i>	486
<i>register client</i>	486
OData services	350
Off-cycle payment	77
<i>cards</i>	453
Off-cycle payroll	327
Off-cycle reason codes	312
Off-cycle reasons	444

On-cycle payroll	326
On-premise system	27
Organizational assignment	66
Organizational elements	217
Organizational units	285
Overtime payment	373
P	
Parameter types	345, 378
<i>assign result type</i>	379
<i>custom</i>	379
<i>detail types</i>	380
Parameters	365
Pay calculation rules	169
Pay Component Non-Recurring portlet	312
Pay Component Recurring portlet	302
Pay components	219, 303
<i>unmapped</i>	225
Pay frequency	304
Pay groups	140
Pay periods	332
Pay Results report	331
Pay results tables	332
Pay scale types	169
Pay statements	181, 447
<i>BAdI</i>	181
<i>configuring</i>	449
<i>My Employee File page</i>	452
<i>quick actions</i>	452
<i>security</i>	182
<i>types</i>	447
<i>view</i>	452
<i>with key figures</i>	449
Payment Information portlet	299
Payment methods	165
Payment models	173
Payroll areas	44, 137, 167
Payroll calendar	135, 167
<i>configure</i>	136
<i>date modifiers</i>	136
<i>payroll periods</i>	138
<i>transfer</i>	139
Payroll compare testing	523
<i>acceptable differences</i>	527
<i>key questions</i>	523
<i>process overview</i>	526
Payroll Control Center	
<i>assign alerts</i>	436
<i>assign default processors</i>	437
<i>business functions</i>	349
<i>cockpit</i>	335

Payroll Control Center (Cont.)	
<i>configuration</i>	343, 424
<i>configuration for operational use</i>	430
<i>Employee Central configuration</i>	421
<i>Employee Central Payroll configuration</i>	347
<i>enable</i>	114
<i>ER Diagram</i>	343
<i>key features</i>	317
<i>manage payroll</i>	433
<i>manage teams</i>	439
<i>manual activities</i>	439
<i>OData services</i>	350
<i>off-cycle processes</i>	443
<i>operations</i>	433
<i>process alerts</i>	438
<i>SAPUI5 applications</i>	349
<i>scheduled and off-cycle processes</i>	318
<i>using</i>	317
Payroll data	36
Payroll driver	92, 416
Payroll elements	55
Payroll events	279
Payroll Information application	146
Payroll information block	129, 133
Payroll Journal report	328, 333
Payroll key figures	465
Payroll mapping	512
Payroll periods	136
Payroll processes	34, 345
Payroll Reconciliation report	330
Payroll results	455
<i>configuration</i>	455
<i>configuration replication</i>	458
<i>limitations</i>	467
<i>replicating</i>	466
<i>wage types</i>	456
Payroll run type picklist	459
<i>populate</i>	460
Payroll runs	44
Payroll status	69
Payroll tasks	140
<i>configure</i>	141
<i>event notification</i>	141
<i>notification subscriber</i>	142
<i>URL</i>	143
Payroll test runs	416
<i>start</i>	416
PC_CURE switch	163
People Profile	129, 133
Period numbers	138
Period parameters	137

Periodic payroll	328
Permissions	123, 422, 466
<i>business user</i>	425
<i>category</i>	423
Personal data	32, 67
Personal Information portlet	290
personalInfo object	115
personInfo object	115
Personnel administration	154
Personnel areas	155
<i>link to company code</i>	158
Personnel calculation rules (PCRs)	96
Personnel numbers	255, 490
<i>company codes</i>	255
<i>mapping table</i>	256
Personnel subareas	156
<i>list</i>	157
Picklists	134, 458
<i>search</i>	135
Place of work	219
Planned off-cycle processes	398, 405, 432
Planned off-cycle productive payroll	319
Point-to-point replication	197, 207
Policies	345, 400
<i>check types</i>	403
<i>create</i>	401, 407, 431
<i>status</i>	402
Policy types	346
<i>copy</i>	394
<i>create</i>	394
Portlets	132, 209
<i>admin service/self-service</i>	133
<i>service</i>	132
<i>types</i>	132
Positions	285
Posting date	103
Posting variants	103
<i>fields</i>	104
Post-payroll processing	334
Post-tax deductions	56
Prenotifications	110
Pre-tax deductions	56
Process types	346
<i>administrator group</i>	397
<i>basic information</i>	396
<i>copy</i>	395
<i>create</i>	395
<i>period parameters</i>	397
<i>sample</i>	400
<i>step selection</i>	398
Processes	400
<i>analytics</i>	406
<i>create</i>	403, 408, 431
Processes (Cont.)	
<i>generating recurrences</i>	410
<i>parameters</i>	404
<i>policies</i>	405
<i>recurrences</i>	406
<i>status</i>	404
<i>steps</i>	408
<i>tabs</i>	434
Processing classes	58
<i>custom</i>	58
Productive payroll	340, 432
<i>processes</i>	319, 409
Provisioning	113
<i>activating Employee Central Payroll</i>	
<i>integration</i>	113
<i>push replication</i>	121
<i>web services</i>	120
Push replication	247, 492
<i>access URL</i>	249
<i>trigger rules</i>	248

Q

Query segments	233
----------------	-----

R

Read access logging	499
<i>display</i>	502
<i>enable client</i>	501
<i>recording</i>	500
Reason codes	364
Recurrence types	365, 397
Recurring payments	74, 170
<i>configure</i>	172
Regulatory data	33
Rehire of terminated employees	238
Remittance rules	106
<i>key fields</i>	106
Remote function call (RFC)	204
Replication messages	496
Replication status	490
Report	
<i>HRSFEC_ESS_USER_UPDATE</i>	189
<i>PAOCF_EC_PAY_CALENDAR_INFO</i>	167
<i>PYC_ADMIN_TRANSACTION</i>	416
<i>PYC_EVENT_HANDLER_REORG</i>	414
<i>PYC_SUPPORT_DEL_COMPLETED</i>	420
<i>PYC_SUPPORT_DOWNLOAD_PI_ALH</i>	420
<i>PYD_DAE_PROCESS</i>	416–417
<i>PYD_DAE_REGS_REORG</i>	415
<i>PYD_DELETE_EXPIRED_SESSIONS</i>	415

Report (Cont.)	
<i>PYD_RC_SHADOW_REORG</i>	415
<i>PYD_REGULAR_WRAP_UP</i>	414
<i>PYD_SHADOWS_REORG</i>	415
<i>RP_HRSFEC_CHECK_EC2ECP_</i>	
<i>MAPPING</i>	252
<i>RP_HRSFEC_CHECK_PAYC_</i>	
<i>WAGETYPE</i>	224
<i>RP_HRSFEC_JOB_POS_REPL_WCS</i>	285
<i>RP_HRSFEC_PTP_TASK_CFG_REPL</i>	144
<i>RP_HRSFEC_PTP_UXR_OFF-CYCLE</i>	453
<i>RPCDCT_INITIAL_LOAD</i>	353
<i>RPCSHSOO</i>	136
<i>RPUFIXDS</i>	165
<i>wages</i>	51
Retention bonuses	33
Retroactive changes	43
Retroactive pay	372
Role-based permissions	423
<i>set up</i>	425
Roles	123, 184, 347
<i>assign</i>	190
<i>manage</i>	423
<i>process steps</i>	185
<i>standard</i>	187
<i>templates</i>	411
Root cause analysis	378
Rule logic	368
Rules	91
<i>create</i>	97
<i>operations</i>	98

S

Salaried employees	40, 72
SAML	470
SAML 2.0	471
<i>activate</i>	472
<i>configure service protocol</i>	475
<i>metadata</i>	473
<i>prepare system</i>	473
SAP Cloud Integration	203–204
SAP ERP	204
SAP ERP Financials	101
SAP ERP HCM Organizational	
<i>Management</i>	370
SAP ERP HCM Payroll	27
SAP ERP HCM Time Evaluation	71
SAP Fiori-like pay statements	449
SAP Gateway	351, 482
SAP Integration Suite	199, 201–202
SAP Master Data Integration	204

SAP S/4HANA Finance	101
SAP SuccessFactors Employee Central Time	
<i>Management</i>	40
SAP SuccessFactors Mobile app	451
SAP System Configuration	422
Savings plans	87
Schemas	91
<i>main</i>	93
<i>structure</i>	94
Secure File Transfer Protocol (SFTP)	193, 340
Security	184
Selection type	365
Service provider	470
Service users	485
Shadow processes	415
Simplified configuration	346, 400
Simulations	42, 325
<i>validating results</i>	43
Single sign-on (SSO)	469
<i>basics</i>	470
<i>browser settings</i>	480
SOAP API	198
Solutions	324, 344, 366
<i>define</i>	380, 382
<i>link</i>	383
<i>variable class</i>	382
<i>variable structure</i>	384
<i>variables</i>	381
Step templates	345, 388
<i>basic information</i>	389
<i>categories</i>	390
<i>parameters</i>	390
<i>provided by SAP</i>	391
Subapplications	457
Subsequent processing	100
Succession data model	115
Support pack EA-HR SP86	451
Support packages	129
Switches	150
<i>ADMIN</i>	154
<i>CCURE</i>	154
<i>SFEC</i>	151
<i>T77SO</i>	144
<i>WKWDY</i>	273
Symbolic accounts	101
<i>assign</i>	104
<i>fields</i>	102
System alias	351
System assignment	426
System overview	26
System responsibilities	27
System-level objects	421

T

Tables	96
Taxes	48, 52, 56, 80, 376
<i>mapping</i>	103
Team monitoring	318, 399, 409, 431
Teams	324, 440
<i>criteria</i>	441
<i>lead</i>	442
<i>members</i>	442
Technical log	493
<i>levels</i>	495
Testing	523
Third-party remittance	47, 49, 105
Time data	33, 200
<i>maintain</i>	39
Time management	40
Time wage types	56
Traditional configuration	401
Transaction	
/IFWND/MAINT_SERVICE	350
FIO1	297
HRFORMS	181
HRSFEC_EE_PTP_REPL	36
HRSFEC_PAY_CALENDAR	139
HRSFEC_PTP_CONFIG	242–243
HRSFEC_PTP_EE_REPL	244
HRSFEC_REPL_CONSIST	498
HRSFEC_REPL_STATUS	490, 493
OH13	47
PA20	39, 64, 165
PA30	39, 165, 506
PAUX	76
PAUY	76
PC_PAYRESULT	331, 354
PCOO_M99_CWTR	51
PCOO_M99_FPAYM	45
PCOO_M99_PAO3_RELEA	44
PCOO_M99_URME	49
PCOO_M99_URMP	49
PCOO_MXX_CALC	44
PCOO_MXX_CALC_SIMU	43
PCOO_MXX_CDTC	45
PCOO_MXX_CLJN	328
PCOO_MXX_REC	52, 330
PEO2	97
PEO3	162, 168, 261, 274, 290, 450
PFCG	187, 411
PUST	328
PYC_CONF_WB	348
PYC_ADMIN_TRANSACTION	348
PYC_CONF_WB	356, 385

Transaction (Cont.)

PYC_INSTANCE_GES	410
PYC_PROCESS_INSTANCES	410
RP_HRSFEC_JOB_POS_REPL	285
RZ10	481
SALE	204
SAML2	471
SCC4	242
SE18	162
SE38	467
SFW5	149
SICF	472, 479
SICF_SESSIONS	472
SLG1	493
SLG2	495
SM30	212, 352
SM36	245, 417
SOAMANAGER	142–143
SRALMANAGER	499
SRTUTIL	496
SUO1	478
SWF5	346
Transport Security app	481
Transports	179
Troubleshooting	503
Trusted providers	475

U

Unemployment insurance	82
Unified configuration	130
Unit of measure	303
User interface integration service	240
<i>activate</i>	241
User mapping	478
Users	188
<i>creation</i>	189
Employee Central	478
Employee Central Payroll	478

V

Validation rules	319, 344, 361
<i>create</i>	361
<i>result details</i>	366
<i>root cause analysis</i>	366
<i>rule logic</i>	368
<i>standard</i>	377
<i>steps</i>	363
Vendor deduction data	41
Vendor payments	50
View indicator	289

W

Wage type picklist	462
<i>populate</i>	463
Wage types	51, 55, 219, 329–330
<i>accumulation object</i>	465
<i>assign</i>	220–221
<i>attributes</i>	57
<i>benefits</i>	99
<i>catalogs</i>	62
<i>categories</i>	56
<i>create new</i>	60
<i>documentation and numbering</i>	61
<i>groups</i>	457
<i>payroll results</i>	456
<i>processing classes</i>	58
<i>subapplications</i>	456
Web services	197

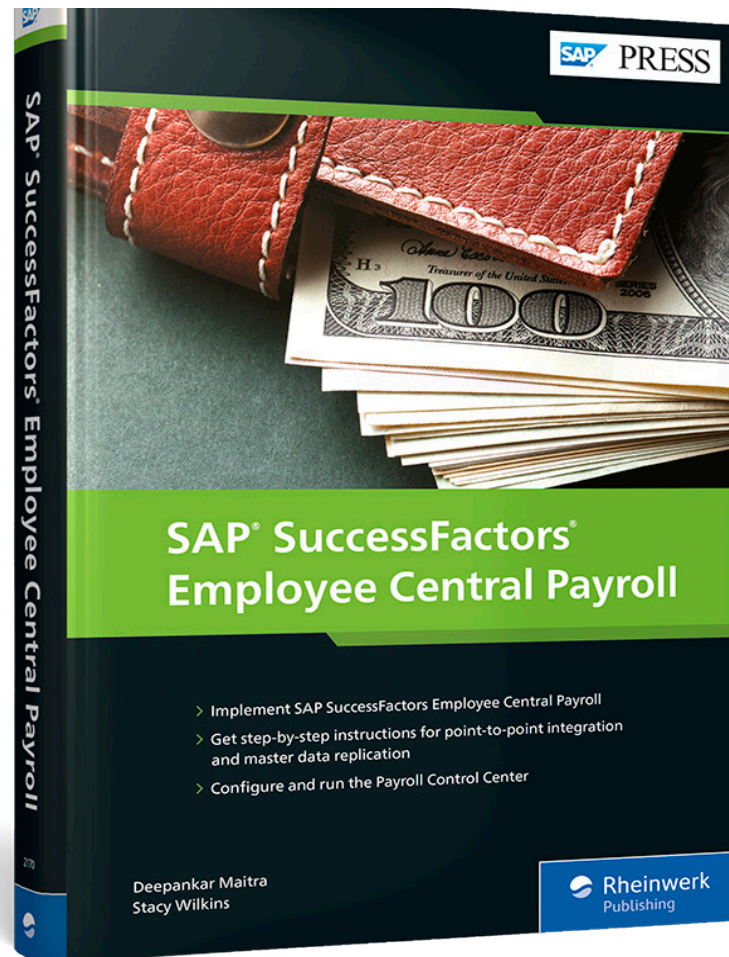
Where-used list	359
<i>types of objects</i>	360
Withholding info W4/W5 US	83
Work Permit portlet	311
Work schedule	71
Work schedule ID	275
WorkForce Software	40, 201
Working hours	274
Working week	275
Wrap-up jobs	414

X

X.509 key	483
-----------	-----

Z

Zero net check	110
----------------	-----



Deepankar Maitra, Stacy Wilkins

SAP SuccessFactors Employee Central Payroll

520 pages, 2022, \$89.95

ISBN 978-1-4932-2170-7



www.sap-press.com/5386



Deepankar Maitra has been leading payroll projects for more than 25 years for global businesses in industries such as media and communications, oil and gas, defense, and manufacturing. Currently at Deloitte, he is responsible for architecting and implementing payroll solutions for several Fortune 500 companies, having delivered payroll for over 2,000,000 employees in 50 states. Known for his solutioning skills and dependable experience in HR and payroll transformation projects, Deepankar has published articles and presented at conferences on topics that enhance the value customers receive from their SAP investment.



Stacy Wilkins is a global SAP SuccessFactors project manager with more than 20 years of experience with SAP and SAP SuccessFactors Employee Central Payroll. She has been involved with implementations and support, and has been a payroll manager at a global entertainment company.

We hope you have enjoyed this reading sample. You may recommend or pass it on to others, but only in its entirety, including all pages. This reading sample and all its parts are protected by copyright law. All usage and exploitation rights are reserved by the author and the publisher.