PUBLIC
2022-02-07

Integration in SAP S/4HANA

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Content

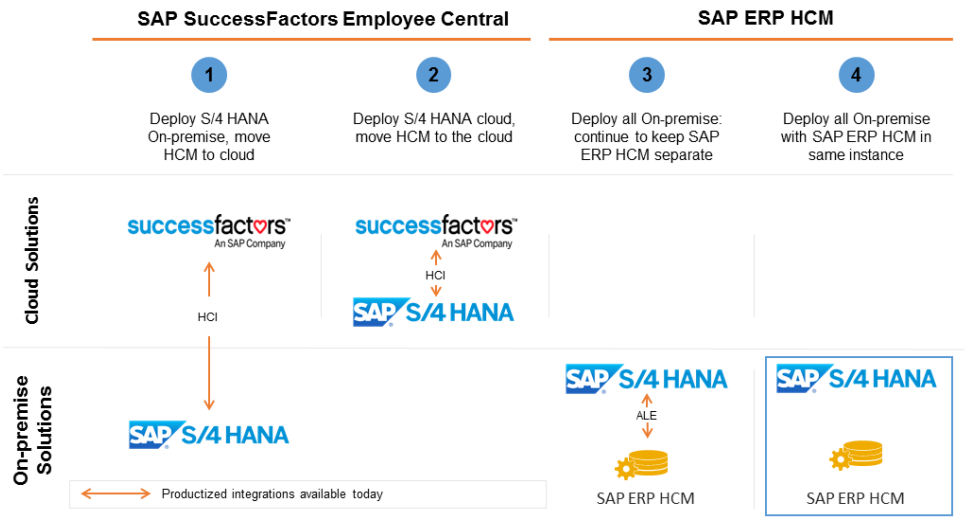
1 Integration in SAP S/4HANA

Introduction

The recommended HCM solution for SAP S/4HANA is the SAP SuccessFactors HCM Suite. You can use the existing integration based on HANA Cloud Integration (HCI) to connect SAP SuccessFactors to the SAP S/4HANA system.

> **i Note**
>
> No integration is required if the SAP S/4HANA system is used to store the data. This information is only relevant if you want to replicate data from your HR master system to the SAP S/4HANA system.

To enable the transition to SAP S/4HANA, it is important that at least the basic employee master data-related infotypes (infotypes 0,1,2,3,6,7,9,17, 32, 105 and 315) are moved into the PA table in order to achieve that this data is synchronized with BP data in the SAP S/4HANA system. Currently, the following transition options are available:



Transition Options in SAP S/4HANA

This document is only relevant if you are using integration options for SAP S/4HANA (options 1, 3 and 4).

1. The following integration option is available for new customers:
   - If you are a new SAP HR or SAP S/4HANA customer (without a legacy SAP HCM system), you can implement SAP SuccessFactors and connect EC with SAP S/4HANA (option 1 from the diagram).

2. The following integration options are available for existing customers:
   If you are an SAP S/4HANA customer also using SAP ERP HCM and are not able to make the move to SAP SuccessFactors in the near term, you can continue to use SAP ERP HCM. You have two options:
   - Running SAP ERP HCM on a separate instance, integrated via ALE with SAP S/4HANA (option 3 in the diagram)
   - Running SAP ERP HCM on the same instance with SAP S/4HANA (co-deployed; option 4 in the diagram)

   This integration helps minimize disruption in your HR processes during the SAP S/4HANA migration and enables the migration of your HR processes to SAP SuccessFactors whenever you are ready.

2 Integration Scenarios

2.1 Implementing SAP SuccessFactors

If you are using SAP SuccessFactors Employee Central as your HR master data system, you can use the pre-packaged integration to replicate employee master data and organizational data from SAP SuccessFactors Employee Central to the SAP S/4HANA system and cost center data from SAP S/4HANA to SAP SuccessFactors Employee Central.

Based on your business requirements, you have the following possibilities:

- Replication of employee mini master (basic infotypes) for using employee data in processes that are not HR-specific
- Replication of global employee infotypes for using employee data in HR-specific processes (such as payroll)

Prerequisites

In SAP S/4HANA, the Integration Add-On software component `PA_SE_IN` (responsible for the inbound processing of the incoming employee and organizational data from SAP SucessFactors via SAP Cloud Platform Integration Suite) has to be installed.

Steps for Execution

Full Implementation

If you want to replicate employee data, organizational data, and cost center data for the full scope of integration, please refer to the documentation at Replicating Employee Master Data and Organizational Assignments from Employee Central to SAP S/4HANA On Premise.

For further information on the integration of SAP SuccessFactors Employee Central Integration, refer to SAP S/4HANA under *Integrate* > *SAP SuccessFactors Employee Central Integration to SAP Business Suite*.

Employee-Business Partner Synchronization

Execute the employee synchronization after employee replication. For more details, refer to section Employee-Business Partner Synchronization [page 33].

Notes

- The cost center and company code are owned by SAP S/4HANA Finance. The cost centers defined in Financials need to be replicated to SAP SuccessFactors Employee Central to enable the assignment of employees to the cost centers. This integration is supported by SAP Cloud Platform Integration Suite.
- Company codes are not replicated and have to be created manually in SAP SuccessFactors Employee Central (SFSF EC) as the definition of companies in SFSF EC requires some additional information.
- SAP SuccessFactors Employee Central is responsible for the employee administration, including the organizational assignment of employees to a cost center. This employment information is replicated to SAP S/4HANA via SAP Cloud Platform Integration Suite.
- The inbound processing within SAP S/4HANA maps existing users with the corresponding Employee, Business Partner (BP), and Employment instances.

2.2 Running SAP ERP HCM on a Separate Instance, Integrated via ALE with SAP S/4HANA

The purpose of this section is to enable the integration of employee data into the SAP S/4HANA system for being able to run the employee-related processes in SAP S/4HANA. The HR master system is SAP ERP HCM, which is the source of the employee data.

For this integration, Application Link Enabling (ALE) from SAP ERP HCM is reused; no specific changes are required for SAP S/4HANA. This section describes the steps involved in ALE configuration.

Prerequisites

The Application Link Enabling (ALE) HR master data replication for employees is a 1:1 replication of the values. To ensure that the ALE replication works successfully both systems must have the same HCM configuration.

Steps for Execution

ALE Configuration Steps

1. Create users for ALE transfer in both the receiving and the sending system.
   Create users with the same user names and relevant authorizations in both systems. The user IDs are used to log on to the remote connection and to perform IDoc transfers.
   Make the necessary Customizing settings under *IDOC Interface/ Application Link Enabling* > *Basic Settings* > *Logical Systems*.
2. Make entries in *ALE: Original System Active for HR Data*.
   1. Call up transaction `SALE` in SAP ERP HCM (SSP Client 105).

2. In the Customizing, go to *IDOC Interface/ Application Link Enabling* > *Modelling and Implementing Business Processes* > *Configure Predefined ALE Business Processes* > *Human Resources* > *Master Data Distribution* > *Distributed HR Master Data*.
3. Choose *ALE: Original System Active for HR Data*.
4. Make the following entries:

Field Name	Value
Group	ALE
Sem.abbr.	REPPA
Value abbr.	

5. Save your changes.
6. Choose *Continue*.

3. Define the logical systems.
   Create logical systems for both the SAP ERP HCM system and the SAP S/4HANA On-Premise system.
   1. Call up transaction `SALE` in SAP ERP HCM (SSP Client 105).
   2. In the Customizing, go to *IDOC Interface/ Application Link Enabling* > *Basic Settings* > *Logical Systems* > *Define Logical System*.
   3. Choose *New Entries*.
   4. Make the following entries:

Logical System	Name
Enter logical systems according to the following naming convention: **<system name>+'CLNT'+<client number>** (for example, SSPCLNT105 for the sending system).	Enter a name to identify your SAP ERP HCM system.
Enter logical systems according to the following naming convention: **<system name>+'CLNT'+<client number>** (for example, SEDCLNT800 for the receiving system).	Enter a name to identify your S/4HANA On-Premise system.

> **i Note**
>
> The distribution of data between systems requires that each system in the network has a unique identification. The logical system is used for this purpose.

   5. Save your entries and choose *Continue*.
   6. In the SAP S/4HANA On-Premise system (SED Client 800), repeat step **1** to **5** to create the logical systems for the sending and receiving system (for example, SEDCLNT800 and SSPCLNT105).

4. Assign the logical system to the client.

Assign the logical system for SAP ERP HCM and the SAP S/4HANA On-Premise system to the corresponding client.

1. Call up transaction `SALE` in SAP ERP HCM (SSP Client 105).
2. In the Customizing, go to *IDOC Interface/ Application Link Enabling* > *Basic Settings* > *Logical Systems* > *Define Logical System*.
3. Search for the client you are currently logged in on and choose the corresponding entry to display the details.
4. Check the following entry:

Field Name	Value
Logical System	Logical system: name of the system and client that you are logged in on

5. Save your entry and choose *Continue*.
6. In the SAP S/4HANA On-Premise system (SED Client 800), repeat step **1** to **5** and check the logical system for the SAP S/4HANA On-Premise system/client.

5. Create RFC connections.
   1. Call up transaction `SM59` in SAP ERP HCM (SSP Client 105).
   2. Choose *Create* in the *Configuration of RFC Connections* view.
   3. Make the following entries in the *RFC Destination* view:

Tabs	Field Name	User Action	Comments
	RFC Destination	Enter a destination name (for example, SEDCLNT800)	`<S/4HANA System ID>CLNT<Client>`
	Connection Type	3 ABAP Connection	
	Description	Enter a description for the RFC	
Technical Settings	Load Balancing Status	'NO'	
	Target Host	Enter the S/4HANA On-Premise host – fully qualified with domain	
	Instance Number	Enter the Instance number	
	Save to Database as	Host or IP address	Save the target host or message server internally in the database either as the host name or as its IP address.

Tabs	Field Name	User Action	Comments
Logon & Security	Client	Enter the receiver system client	
	User	User ID	Created in “Create Users for ALE transfer ...”
	Password	Enter user password	
	Current User	Not checked	
	Trust Relationship	'NO'	
Special Options Tab	Special Flags	Not checked	
	Activate RFC Trace	Not checked	
	Trace Export Methods	Default Gateway Value	
	Keep- Alive Timeout	Default Gateway Value	
	Transfer Protocol	'Classic with tRFC'	

4. Save your changes.
5. Choose *Remote Logon* to test the RFC.
6. In the SAP S/4HANA On-Premise system (SED Client 800), repeat step **1** to **5** and create an ABAP connection `SSPCLNT105` pointing to the SAP ERP HCM system giving logon credentials to client 105.

6. Maintain the distribution model.
   The distribution model is created in the original system (sending system) and then distributed to other systems.
   You can create a distribution model using the following steps:
   1. Call up transaction `BD64` in SAP ERP HCM (SSP client 105).
   2. Choose *Create Model view* (CTRL + F4) in the *Distribution Model* view (in change mode).
   3. In the **Create Model View** dialog box, enter a short text and a technical name.
   4. Choose *Continue* and save your entries.
   5. Select the newly created model and choose *Add Message Type*.
   6. In the **Add Message Type** dialog box, enter the logical system of the SAP ERP HCM system in the *Sender* field and the logical system of the SAP S/4HANA On-Premise system in the *Receiver* field. As message type, select `HRMD_A`.
   7. Expand the model view and double-click *No filter set*.
   8. Select *Create Filter Group* in the **Change Filter** view and restrict the replication to the required objects.

Field name	Value
Type of related objects	CP
	P

Field name	Value
Infotype	0000
	0001
	0002
	0003
	0006
	0007
	0009
	0105
	1000
	1001
Object Type	CP
	P

9. Choose *Enter*.
10. Save your entry.
11. Select the model view that you have created and go to *Environment* > *Generate Partner Profiles*.
12. Select *Transfer IDOC Immediately* and *Trigger Immediately* in the **Generate Partner Profile** view.
13. Choose *Execute*. Go back to the main view.
    If the execution has been successful, a green list is displayed.
14. Select the model view again and choose *Edit* > *Model view* > *Distribute*.
15. Choose *Continue*.
    A list is displayed with a message to inform you that the model view has been successfully distributed.

7. Activate the change pointer.
   1. Call up transaction `SALE` in SAP ERP HCM (SSP Client 105).
   2. In the Customizing, go to *IDOC Interface/ Application Link Enabling* > *Modelling and Implementing Business Process* > *Master Data Distribution* > *Replication of Modified Data* > *Activate Change Pointers for Message Types.*
   3. In the change view **Activate Change pointers for Message Type**, verify that the activation is set for message type `HRMD_A`.
8. Maintain the port.
   1. Call up transaction `WE21` in SAP ERP HCM (SSP Client 105).
      Alternatively, you can go to the corresponding Customizing activity under *SAP Menu* > *Tools* > *ALE* > *ALE Administration* > *Runtime Settings* > *Port Maintenance.*
   2. Select *Transactional RFC* in the navigation panel of the **Ports in IDOC processing** view.
   3. Choose *Create*.
   4. In the **Ports in IDoc processing** view, select *own port name* and enter a technical name.
   5. Choose *Enter*.

6. Make the following entries on the **Creating a tRFC port** view:

Field name	Value
Description	Enter a description for your port name.
Version	
IDoc record types SAP Release 4.x	X
RFC destination	Enter the technical name of your RFC destination for the receiving SAP S/4HANA On-Premise system.

7. Save your entries.

9. Create partner profiles
    1. Call up transaction `WE20` in SAP ERP HCM (SSP Client 105).
    2. Select *Partner Type LS* in the navigation panel of the **Partner profiles** view.
    3. Choose *Create* and make the following entries:

Field name	Value
Partner No.	Enter the ID for your partner number. Your ALE partner is an SAP system that is addressed by your system (using RFC).
Partn. Type	LS

    4. On the **Post processing: permitted agent** tab, specify the job (person or group of people) to be notified if processing errors occur.
    5. In the *Outbound parmtrs.* section, choose *Create outbound Parameter*.
    6. In the **Partner profiles: Outbound parameters** view, make the following entries:

Field name	Value
Message Type	HRMD_A
Receiver Port	Enter the technical name of the created port.
Pack. Size	(for the first testing, use 1)
Output Mode	
Transfer IDoc Immed.	X
Basic Type	HRMD_A07
Cancel Processing After Syntax Error	X

Field Name	Value
Message Type	SYNCH
Receiver Port	Enter the technical name of the created port.
Pack. Size	
Output Mode	
Transfer IDoc Immed.	X
Basic Type	SYNCHRON
Cancel Processing After Syntax Error	X

7. Save your entries.
8. Call up transaction `WE20` in the SAP S/4HANA On-Premise system (SED Client 800).
9. Select *Partner Type LS* in the navigation panel of the **Partner profiles** view.
10. Choose *Create* and make the following entries:

Field name	Value
Partner No.	Enter the ID for your partner number. Your ALE partner is an SAP system that is addressed by your system (using RFC).
Partn. Type	LS

11. On the **Post processing: permitted agent** tab, specify the job (person or group of people) to be notified if processing errors occur.
12. In the *Inbound parmtrs.* section, choose *Create inbound Parameter*.
13. In the **Partner profiles: Inbound parameters** view in the *Inbound options* section, make the following entries:

Field name	Value
Message Type	HRMD_A
Process Code	HRMD
Cancel Processing After Syntax Error	X
Processing by Function Module	
Trigger Immediately	X

14. Save your entries.

> **i Note**
>
> By default, IDocs are grouped together in the receiving system.

10. Run the initial distribution.
    1. Call up transaction `PFAL` in the SAP ERP HCM system (SSP Client 105).
    2. In the **HR: ALE Distribution of HR Master Data** view, specify the required values (object type, object ID, and so on) before executing. Then choose the following option:

Field Name	Value
Insert (complete distribution: delete in target system, re-create)	X

    3. Choose *Execute*.

11. Check IDocs.
    In the receiving system (SED Client 800), check the inbound IDocs (transaction `WE02/WE05`). Some inbound IDocs may have errors. This may be due to some HR-specific data and configuration issues in the receiving system. In this case, contact a functional consultant for HR.
12. Define a background job for delta distribution.
    To schedule the background job in the sending system (SSP Client 105), create a variant of ABAP program `RBDMIDOC`.
    1. Create a variant.
        1. Go to transaction `SE38` in SAP ERP HCM (SSP Client 105).
           Alternatively, you can go to the corresponding Customizing activity under *SAP Menu* > *Tools* > *ABAP Workbench Development* > *ABAP Editor*.
        2. On **ABAP Editor: Initial Screen**, enter **`RBDMIDOC`** in the `Program` field.
        3. Choose *Execute*.
        4. In the **Creating IDoc Type from Change Pointers** view, enter the following value:

Field Name	Value
Message Type	`HRMD_A`

        5. Choose *Save as Variant* to create a new variant.
        6. In the **Variant Attributes** view, enter the following values:

Field Name	Value
Variant Name	`YK_HRMD_A`
Description	Enter a description for the variant.

        7. Save your entries.

> **i Note**
>
> A system notification confirms the creation.

2. Schedule a job
    1. Call up transaction `SM36` in SAP ERP HCM (SSP Client 105).

       Alternatively, you can go to the corresponding Customizing activity under *SAP Menu* > *System* > *Services* > *Jobs* > *Define Job*.
    2. In the **Define Background Job** view, choose *Define Job using Wizard* (Ctrl+F1).
    3. In the **Create a Job** dialog box, choose *Continue*.
    4. In the **General Job Information** dialog box, make the following entries:

Field Name	Value
Job Name	YK_ALE_DELTA_HRMD_A
Job Class	C – Low priority
Job Status	Scheduled
Target Server	

    5. Choose *Continue*.
    6. In the **Job-Definition: Job step** dialog box, select *ABAP program step* and choose *Continue*.
    7. In the **ABAP program step** dialog box, make the following entries:

Field Name	Value
ABAP program name	RBDMIDOC
Variant	YK_HRMD_A
Execution language	EN

    8. Choose *Continue*.
    9. In the **Multi-step option** dialog box, choose *Continue*.
    10. In the **Job Definition: Start conditions** view, choose *Immediately*. Choose *Continue*.
    11. In the **Def. of start immediately** dialog box, select the *Period* checkbox in the **Periodic jobs** section and choose *Continue*.
    12. In the **Period definition** dialog box, choose *None of the Above*.
    13. Choose *Other Periods*.
    14. In the **Other Period** dialog box, schedule the service according to your needs.
    15. Choose *Create*.
    16. Choose *Continue*.
    17. In the **Set job** dialog box, choose *Complete* to finish the setup.

Employee-Business Partner Synchronization

After employee replication, you must execute the employee synchronization. For more details, refer to section Employee-Business Partner Synchronization [page 33].

2.3 Running SAP ERP HCM on the Same Instance with SAP S/4HANA (Co-deployed)

The purpose of this section is to enable you to run SAP S/4HANA HCM on the same instance with SAP S/4HANA. All the required steps to implement this integration are listed in the Customizing documentation under *Personnel Management* > *SAP S/4HANA for Human Resources* > *Synchronization of Business Partner for SAP HCM Employee Role*.

All the existing employees have to be synchronized during business downtime. For more information, refer to the section Employee-Business Partner Synchronization [page 33].

Prerequisites

You must have an existing SAP ERP HCM solution as your HR master data system.

Notes

HRALXSYNC and similar reports

You cannot use this synchronization report for employee synchronization in SAP S/4HANA. For any other object synchronization (of organizational units, for example), you can use it.

Transaction `PRAA`

This transaction was used for the creation of Vendor roles for employees in the SAP ERP system for travel expenses. However, this transaction is no longer valid in SAP S/4HANA.

3 Conversion from SAP ERP to SAP S/4HANA

This section is relevant only if you are converting from SAP ERP to SAP S/4HANA.

There are two processes involved in the conversion to SAP S/4HANA:

- **CVI conversion in the SAP ERP system**
  This can be considered as a pre-conversion process that has to be performed in the SAP ERP system. This is relevant only if you are using employees in Vendor roles in the SAP ERP system. For more information about the CVI conversion process, refer to the SAP Note 2265093.
- **Employee-BP Synchronization in the SAP S/4HANA System**
  This is the post-conversion process that has to be performed in the SAP S/4HANA system during business downtime. For more information, refer to section Employee-Business Partner Synchronization [page 33].

BP Synchronization Data Models for SAP ERP and SAP S/4HANA

Source Data Model (SAP ERP)

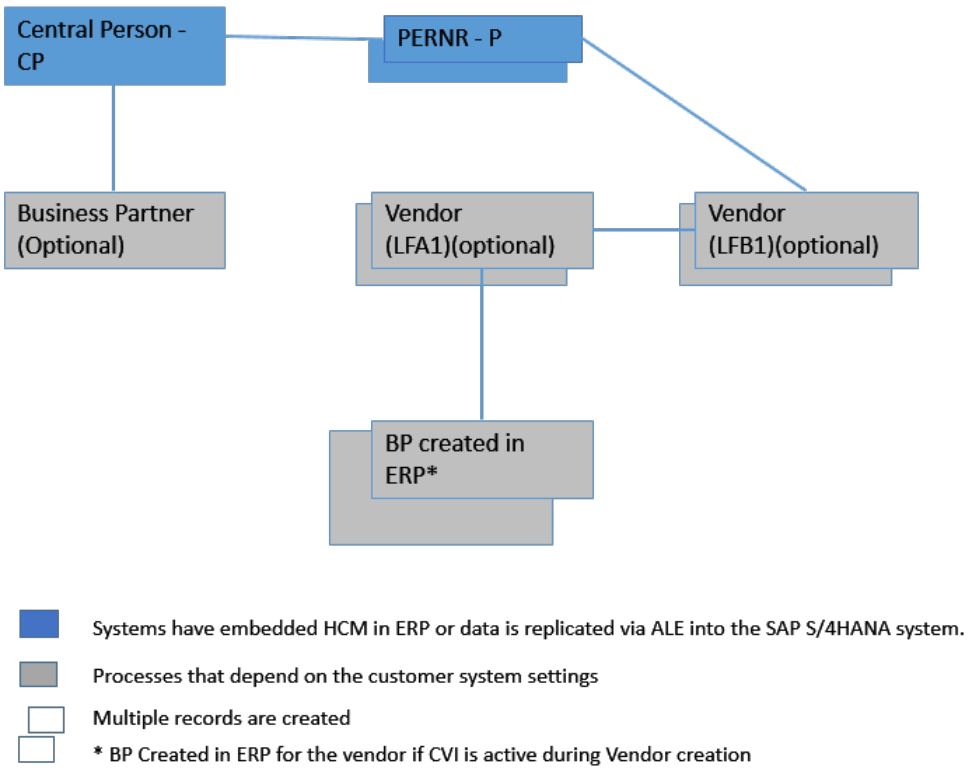
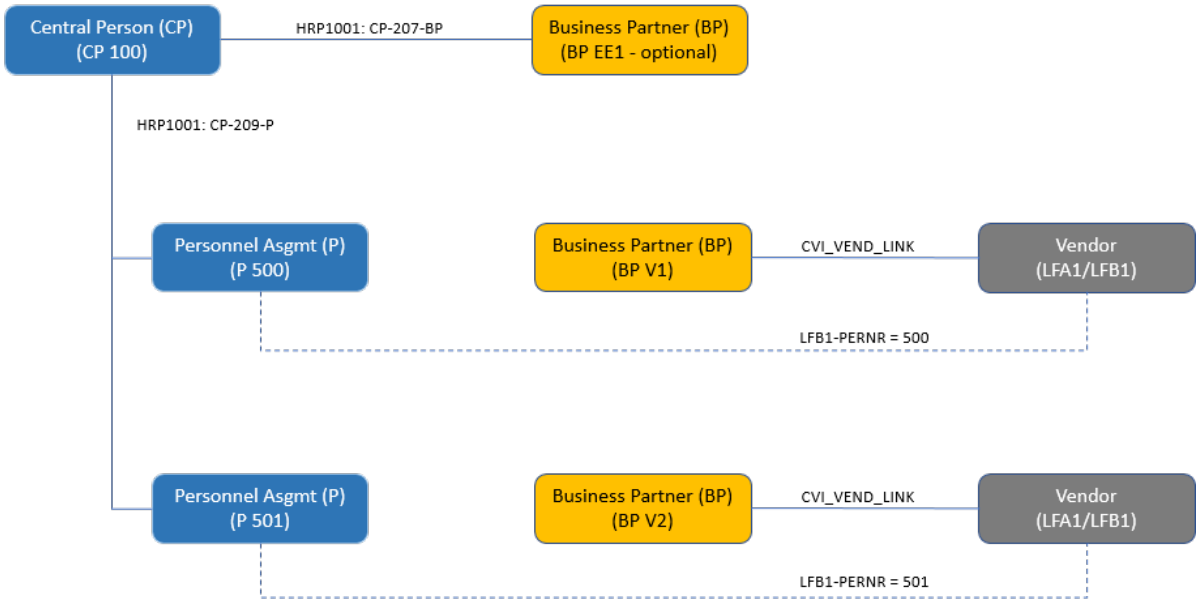


Diagram 1

In the above data model, each central person can have a single or multiple PERNR associated with it. A Vendor can be created for a PERNR. This is an optional step. In case of concurrent employment, multiple Vendors can be created for a person.

Example: If a record 100 (CP) exists and a PERNR 500 (P) exists for the CP, a Business Partner BP EE1 is created for this CP. In case of additional assignment, PERNR 501 also exists (for CP-100). You can additionally create Vendors for PERNRs, for example, V1, and V2. Another BP is created for each of these associated Vendors (if CVI is active during Vendor creation), BP V1, and BP V2. Hence, in the SAP ERP model, each employee can have two or more associated BPs, depending on the number of Vendors and configuration.

Target Model ERP after CVI - Example



> **i Note**
>
> To reuse the BP or to create a new BP in the Person category in the CVI for Vendors, you can apply the following SAP Notes:
>
> - 2539457: If CVI is active, BP is created in Person category during Vendor creation or conversion.
> - 2542175: If CVI is active, Employee BP is reused during Vendor creation or conversion (instead of creating new BP for the Vendor).
> - 2869343: If CVI is active, Employee BP is reused despite potential restrictions during Vendor creation or conversion.

New Business Partner Model

The S/4HANA Business Partner model has been established to reflect the employee roles and their relationship to the users and some other, employment-specific roles (like Vendor). The basics of this model are always the same. However, depending on whether the business function `/SHCM/EE_BP_1` is switched off or on, there are some differences regarding the structure of the model. For more detailed information on this business function, refer to New Employee Business Partner Model in SAP S/4HANA under **Related Information**. Due to its benefits regarding flexibility, we recommend switching the business function on. In the following, you can find the two versions of the models – with business function switched off and on:

Business Partner Model with Business Function `/SHCM/EE_BP_1` **switched off**

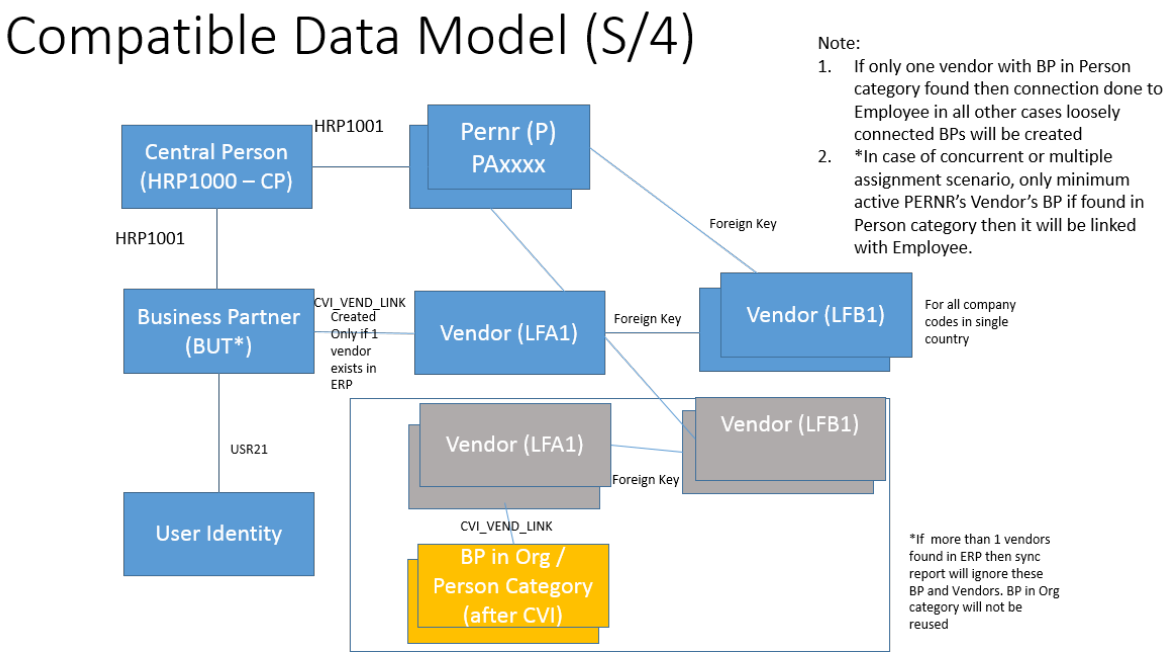


Diagram 2

Each CP is associated with personnel numbers. If a BP is already associated with the CP, then information is synchronized to this BP and BP is linked to the user identity (if user is maintained in infotype 105/subtype 0001 for the employee).

> **i Note**
>
> By default, the smallest active PERNR will be synchronized with the BP employee if no specific main PERNR has been defined.

If both an Employee-BP (`HRP1001` table, CP-P and CP-BP) relationship and a Vendor-BP (of type Person category) relationship exist, the synchronization report does not update the Employee BP with Vendor roles. Consequently, the Vendor BP will be logged in the application log due to a conflicting scenario: The BP is to be linked with Employee, but Vendor is unknown (depending on business scenario). In such a scenario, you need to remove one of the BPs or relationships.

If no BP exists for the Employee (CP-BP relationship), the system checks for the associated Vendor.

In case of single assignment: If one Vendor exists for the employee with BP of Person category, the BP (of category Person) associated with the Vendor is linked with the CP and user identity. If no Vendor exists, a new Vendor is to be created for the personnel numbers, depending on the data and configuration. Then, Permanent address (subtype 1 of infotype 6) and Payment (Main Bank or Travel Expense – subtype 0 or 2 of Infotype 9) is assigned to the employee. This is a mandatory step. For more information, refer to the SAP Notes 2632026 and 2517507

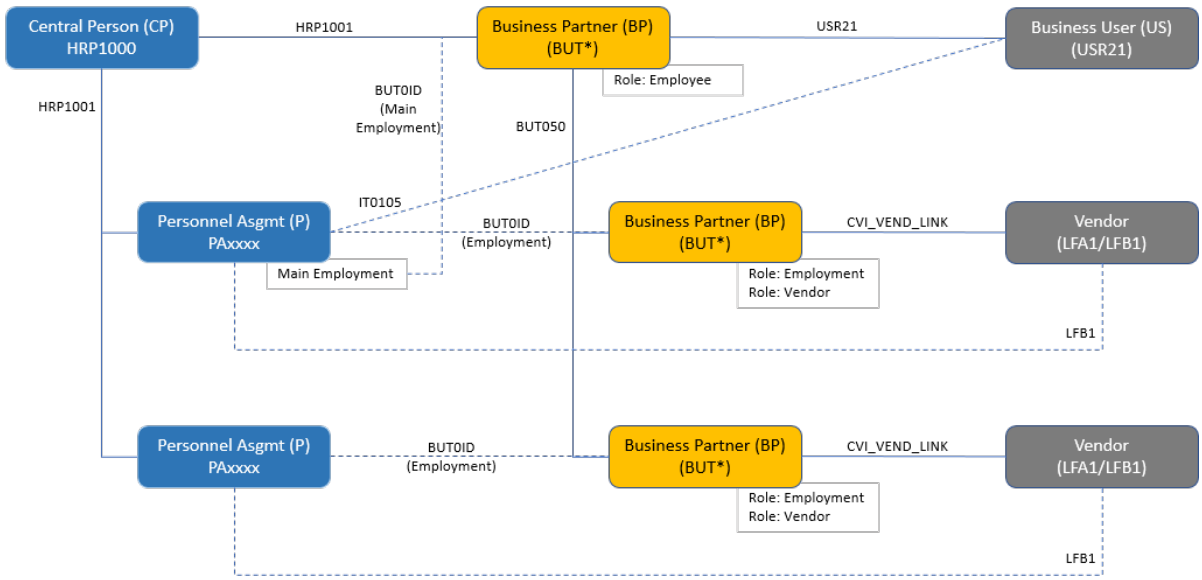
In case of multiple assignment: Only the smallest active personnel number of the Vendor BP found in the Person category will be linked with the employee.

> **i Note**
>
> In case of concurrent employment or multiple assignment in the ERP system, one Vendor exists for each assignment. The following happens during employee synchronization:
>
> - Employee BP will be linked with smallest active personnel number of the Vendor. In case the smallest active personnel number has a different BP (case 1: `HRP1001` CP-BP exists in ERP and Vendor also has BP; case 2: Vendor has BP of category Organization), Employee BP will not be linked with the Vendor.
> - Only loosely coupled BPs exist. Loosely coupled BPs will be created for additional assignments (PERNRs). For more information, refer to 2517507.
> - If Vendor has BP of type Organization, the BP will not be deleted. Instead, a warning message is displayed in the application log so that BP of type Organization category can be found. You can remove the BP or retain it as standalone BP in case it is still consumed in business processes

Example: If a record 100 (CP) exists, then a PERNR 500 (P) is associated with it. After the integration, if a BP1 associated with this CP is found, this data is used for synchronization. The user identity is also linked to this BP1. If, for example, a Vendor V1 is associated with this PERNR, this vendor has BPV1. In case BP1 already exists for CP 100, a warning message is displayed informing you that multiple BPs have been found. In case no BP exists for CP 100, the Vendor BP BPV1 is used for synchronization (if BPV1 is of category Person). Otherwise, this BP will be named in the warning message and new BP of category Person will be created and linked with the objects.

Business Partner Model with Business Function `/SHCM/EE_BP_1` **switched on:**

New Target Model



The employee is represented by a BP instance with the role Employee. This instance does not have further roles, especially no Vendor role, and can therefore flexibly react on a change of the main employment. The BP/EE instance can always display both the private address and the bank information of the current main employment and can always provide the workplace information derived from the current main employment.

Every employment is reflected by a separate BP instance in the role Employment (Contract). This employment instance keeps a link to the Employment (= PERNR) and is also linked to the BP in role Employee by a new

BUT050 association. A consuming application can easily navigate from such an employment instance to the employee/user/all other employments (via CP) and can also access employment-specific services by utilizing the PERNR information. The BP in role Employment is provided with some basic data (like name and the private address information) and the bank details of the specific employment. Such an instance is then prepared to enable a later addition of employment-specific roles (like Vendor). This role assignment is implemented in a flexible way and is based on the individual situation.

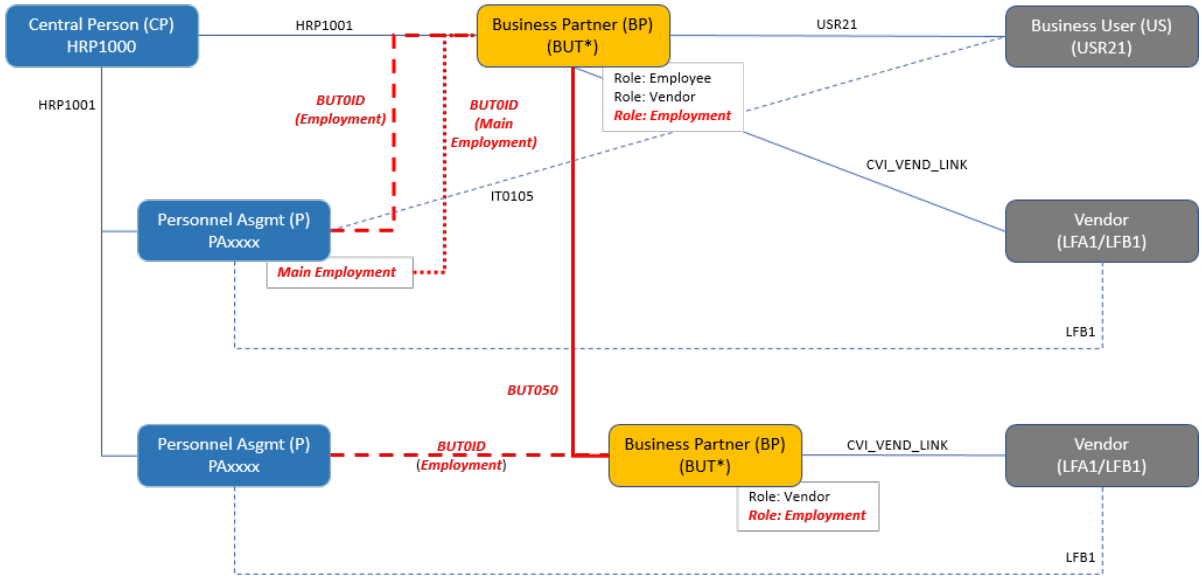
Before creating a new BP for the employment, it will be checked if there is already a single Vendor BP for that employment (LFB1-PERNR) for reusing purposes. In this case, the Employment role will be added for the Vendor BP. Otherwise, a new BP employment will be created during the BP synchronization. Other roles can be added by means of the role synchronization report.

New role-specific features

- The validity of the role Employee corresponds to the validities of all PERNRs of the CP. The validity starts with the earliest active PERNR and ends with the latest active PERNR.
- The validity of the role Employment corresponds to the validity of the PERNR it belongs to (PERNR of BUT0ID/HCM033) and reflects the active periods.
- The validities of all other roles provided by the customer in the corresponding BAdI implementation are neither checked nor overridden.

Legacy Model:

Transformation S/4 Default & VMODE 1 to New Target Model (Legacy Model)



The legacy model is the fallback model in case that the target model cannot be applied to a specific employee when the business function is activated. The reason for this might be that a BP in role Employee is already bound to one employment via an existing Vendor role. This employment must therefore be kept stable. Otherwise, the CVI would fail.

In the legacy model, the employee is represented by a BP instance with the role Employee. However, unlike to the target model, this instance has also a role Vendor. This Vendor determines the employment, which is explicitly expressed at this instance via adding the role Employment. For additional employments, the same

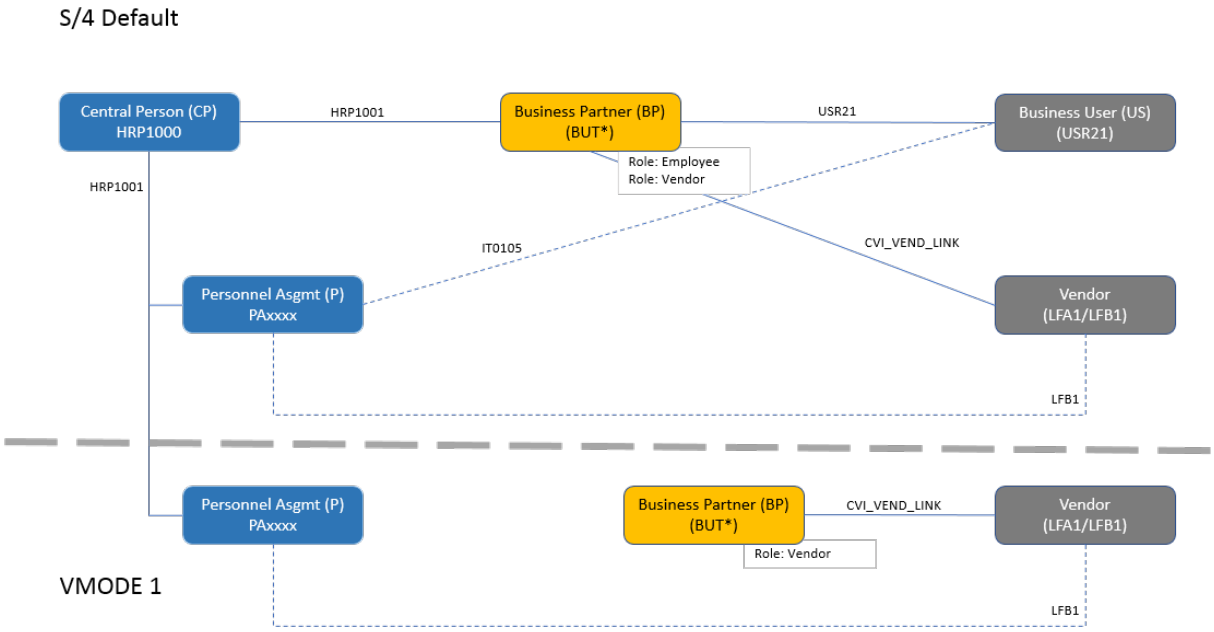
mechanism as in the target model is effective. For every additional employment, a separate BP instance in role Employment is created and assigned to the leading BP in role Employee (via a `BUT050` association).

A change of the main contract cannot be completely expressed for all data of the BP instance in the role Employee:

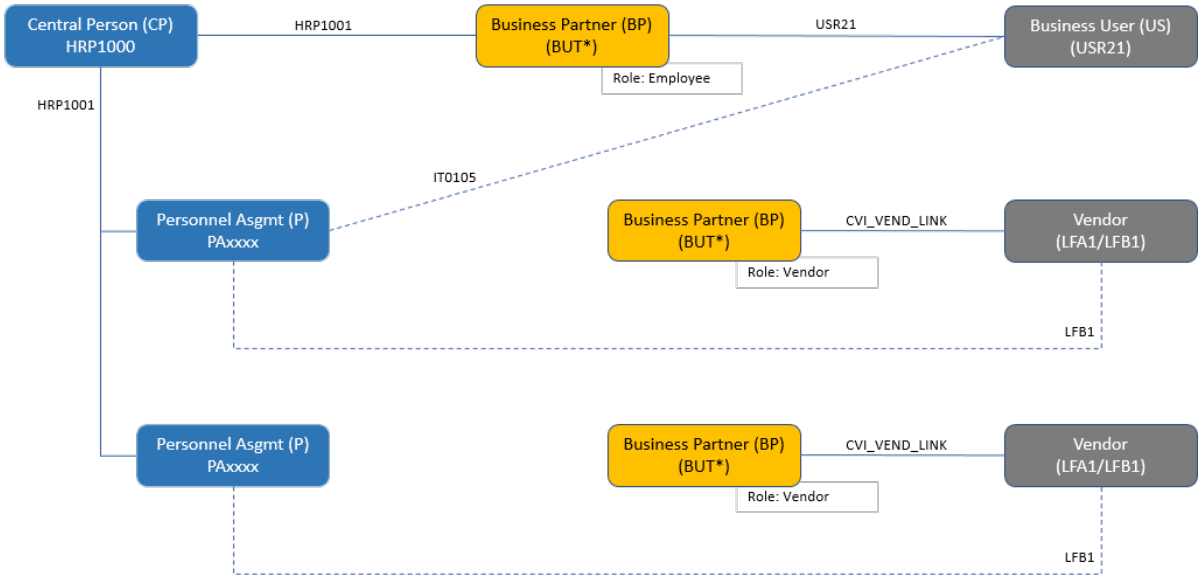
Private Address	The private address, specified by address usage type `HCM001`, must always persist to keep the private address of the Vendor employment to serve the needs of CVI. The `HCM001` address must still be the default address, cannot change the relationship to the Vendor employment and therefore cannot display the address of the current main contract. To make a change in main contract clear to the consumer of the BP/EE instance, a new address usage `HCM003` (Main Address) is introduced, which displays the private address of the current main employment. This address can flexibly react on a change of the main contract.
Bank Details	Bank detail information must also be kept stable when it comes to the Vendor employment. However, the situation cannot be improved as bank data does not have an appropriate criterion (like, for example, bank usage type). The bank details would always point to the Vendor employment and can never be updated by the data of the current main contract.
Workplace Address	There is no difference to the target model.

Comparison of the Different Modes after Conversion

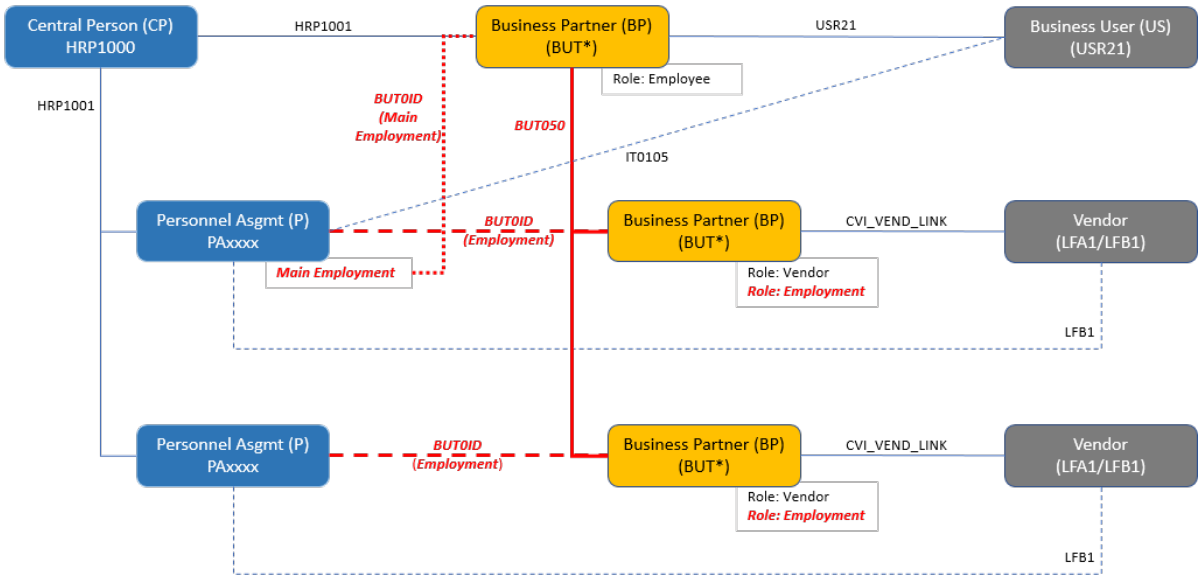
In the following, please find a graphical overview of the different modes in S/4HANA (default model, VMODE1, VMODE2) and of what happens to them after conversion:



VMODE 2



Transformation VMODE 2 to New Target Model



Some constellations prevent from applying always the pure new model and therefore require a more flexible approach. Consequently, the final state, when applying the new model, is employee-specific and depends on the situation of the BP instance carrying the role Employee.

The pure new model can be applied for an employee if the corresponding BP in role Employee did not have the role Vendor before starting the transition. In such constellations, the transition is always compatible. This model can be applied for the following types of employees:

- All employees of greenfield S/4HANA customers starting with the new model from scratch
- All employees of existing S/4HANA customers applying VMODE2

- Newly hired employees of brownfield S/4HANA customers applying the S/4 standard model or VMODE1

The legacy model is applied as a fallback for employees whose BP instance in role Employee additionally keeps the role Vendor (as the target model cannot be applied for them). In comparison with the new model, the legacy model has some minor restrictions (see graphic **Legacy Model**).

Differences Between SAP ERP and SAP S/4HANA Data model

- **Synchronization**
  This process was optional and based on the switch setting in the SAP ERP system. However, it is a mandatory step in the SAP S/4HANA system.
- **Vendor and BP relation**
  An employee could have multiple Vendors and BPs associated with his/her PERNR in the SAP ERP system. In case of single assignment in SAP S/4HANA, a single BP and Vendor is created for an employee (depending on data and Customizing).

  > **i** Note
  >
  > In case of concurrent employment or multiple assignments, loosely coupled BPs will be created for additional assignments (PERNRs). Refer to note 2517507 for more information.

- **User Identity**
  - In SAP S/4HANA, user identity is connected to the BP only if it is maintained in infotype 105.
  - In the SAP ERP system, workplace address was modeled using the BP (Organization) -> BP (Employee) relationship. In SAP S/4HANA, Workplace Address information (business phone, e-mail) is stored in the workplace address connected to the BP.

    > **i** Note
    >
    > You can only maintain one workplace address per employee.

  - In SAP S/4HANA, if a BP-User relationship exists, the relationship is always 1:1. Only single users (SY-UNAME) across all employments (P) of employees (CP) are supported. Refer to note 2570961 for more information.
- **Address Types and Identification**
  In SAP ERP, employees were linked to the corresponding BP via the Personnel Number field in BP. In SAP S/4HANA, new address types (`HCM001`, private address of employee) and new identification types (`HCM001`) are created for the BP employee.

  > **i** Note
  >
  > In S/4HANA, it is recommended to use the `HRP1001` table (relationship P-CP and CP-BP) to determine the BP for an Personnel Number (PERNR).

4 Conversion Scenarios for Employee Vendors in SAP S/4HANA

Different scenarios based on the `/SHCM/EE_BP_1` switch:

Business Function `/SHCM/EE_BP_1` **switched off:**

In SAP S/4HANA, each employee will have a corresponding BP and Vendor (if address, bank, and configurations exist) for the employee. So, any Vendors created manually in the SAP ERP system (using the transaction PRAA or other transactions) have to be migrated consistently into the SAP S/4HANA system. The following scenarios might exist:

- **Migration scenario 1: No BP or Vendor exists for an employee**
  After the synchronization, a BP has been created. Vendor will be created if the appropriate configurations and information (like Permanent address - subtype 1 of infotype 6, or Payment - Main Bank or Travel Expense – subtype 0 or 2 of Infotype 9) is maintained for the employee.

  > **i** Note
  >
  > In case of concurrent employment or multiple assignment, loosely coupled BPs will be created for additional assignments (PERNRs). Refer to SAP Note 2517507 for more information.

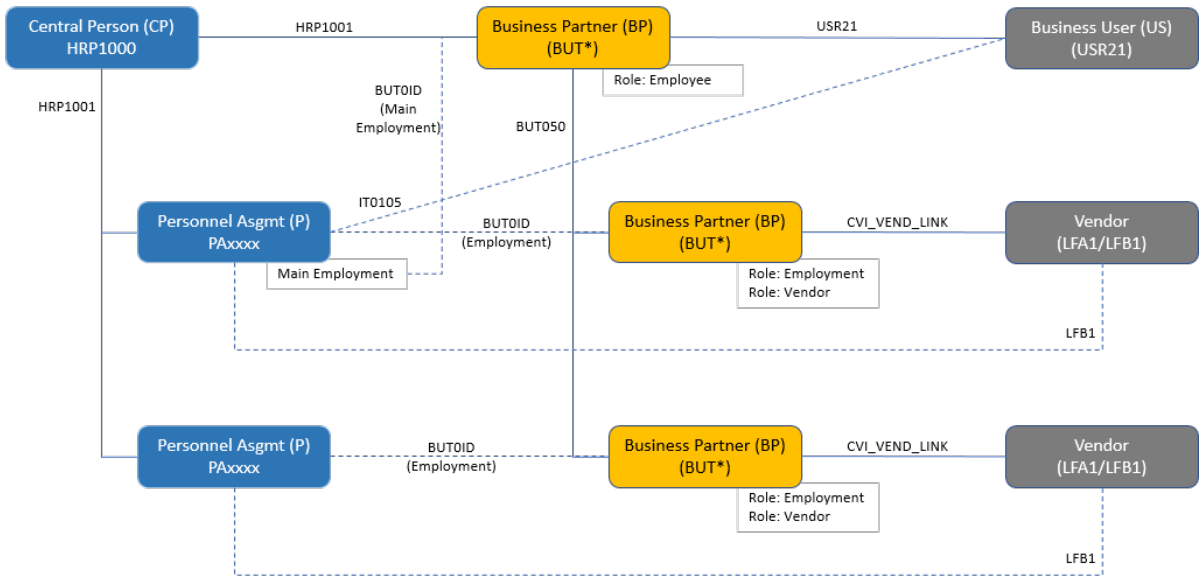
- **Migration scenario 2: Only a BP exists**
  The BP has to be enriched. If Vendor and payment information is appropriately maintained for the employee (`LFB1-PERNR` must be filled), a Vendor role has to be created (requirement: appropriate configurations and information are maintained).
- **Migration scenario 3: A Vendor for an employee exists via** `LFB1-PERNR` **but is assigned to a different BP of category Person than the BP related to the CP of the corresponding personnel number.**
  This will lead to an error scenario. Thus, you need to accordingly correct one of the BPs and to adjust the relationships.

The first two scenarios are transformed using the Employee-Business Partner Synchronization. This is triggered by any change made on employee side affecting integration-relevant infotypes (0, 1, 2, 6, 9, 17, 32, 105).

Business Function `/SHCM/EE_BP_1` **switched on:**

Migration Scenario 1: ECC Customer Migrates to New BP Model

New Target Model



This constellation in ECC would trigger these conversion steps in S/4 OP:

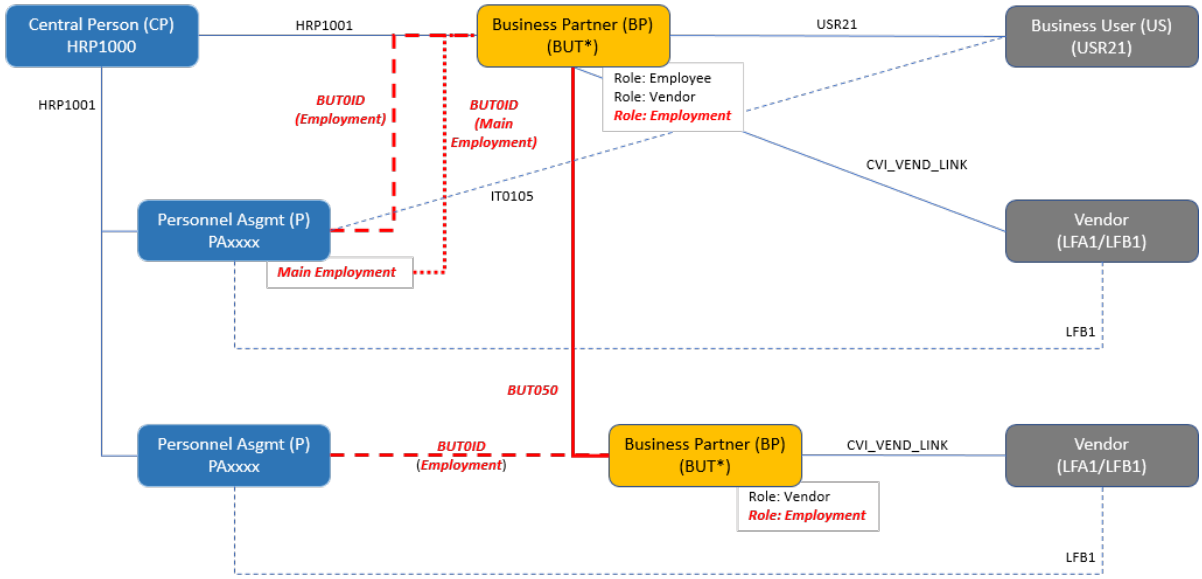
- A BP instance in role Employee is created and linked via `HRP1001` to the CP.
- The BP instance in role Employee will be fed with data from the main employment.
- `BUT0ID/HCM032` is filled by the PERNR of the main employment.
- Since there is not yet a BP instance with role Employee and Vendor, the following logic can be applied for all employments belonging to that CP:
  - If there is a BP instance in role Vendor existing for an employment, this BP instance additionally gets the role Employment. This instance gets the private address, bank information and communication data of the respective employment. All other roles are kept for this instance. `BUT0ID` for `HCM033` is filled with the respective PERNR; `HCM001` is not filled.
  - If there is no BP in role Vendor existing for an employment, a new BP instance is created with role Employment and provided with private address, bank details and communication data of the respective Employment. Later, you can decide to add employment-specific roles (like Vendor) to such an instance. `BUT0ID` for `HCM033` is filled with the respective PERNR; `HCM001` is not filled.
- The BP instance in role Employee is linked to the user via `USR21`.
- The BP instance in role Employee is linked to all BP instances in role Employment via `BUT050`.

Impact

- Newly created Employment instances do not impact running processes.
- All accesses to Vendors and BPs in role Employee remain the same; all `LFA1/LFB1` accesses still work.

Migration Scenario 2: ECC Customer with BP in Role Employee and at Maximum one Vendor Migrates to New BP Model

Transformation S/4 Default & VMODE 1 to New Target Model (Legacy Model)



This situation in ECC would trigger these conversion steps in S/4 OP:

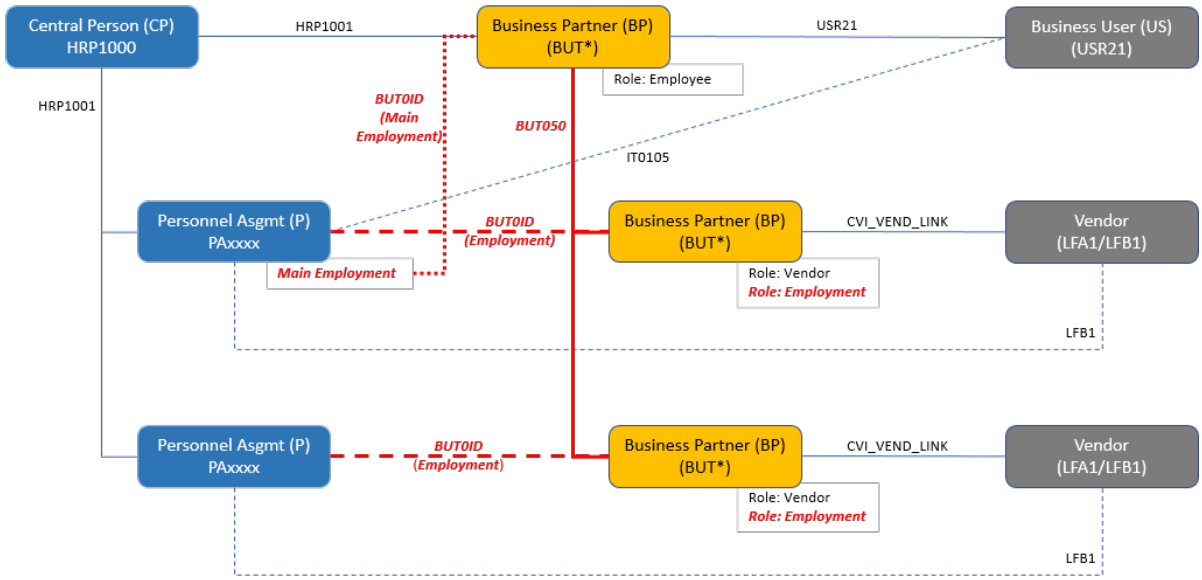
- The already existing BP instance in role Employee and Vendor is taken over and is still linked to the CP via `HRP1001`.
- Due to the existing role Vendor, the BP instance additionally gets the role Employment.
- Although the role Vendor exists, `BUT0ID` for `HCM001` does not exist. If no entry exists, table `CVI_VEND_LINK` is read, and the Employment is derived via `LFB1-PERNR` and stored in `HCM001`. This entry is then kept stable. This Employment defines the data source for CVI.
- This BP instance gets the private address and bank data from `BUT0ID-HCM001` (Personnel Number).
- `BUT0ID` for `HCM032` is populated by the Main Employment. This Main Employment is used to fill the address of address usage type `HCM003`.
- The communication/workplace data is populated by the Main Employment from `HCM032`.
- For all other Employments belonging to the CP but differing from the one stored in the BP/Employee instance in `BUT0ID` for `HCM001`, the following logic can be applied:
  - If there is a BP instance in role Vendor existing for such Employment, this BP instance additionally gets the role Employment. This instance gets the private address, bank information and communication data of the respective Employment. All other roles like Vendor are kept for this instance. `BUT0ID` for `HCM033` is filled with the respective PERNR, `HCM001` is not filled.
  - If there is no BP in role Vendor existing for an Employment, a new BP instance is created with role Employment and provided with private address, bank details and communication data of the respective Employment. Later, you can decide to add employment-specific roles (like Vendor) to such an instance. `BUT0ID` for `HCM033` is filled with the respective PERNR; `HCM001` is not filled.
- The BP instance in role Employee is linked to the user via `USR21`.
- The BP instance in role Employee is linked to all BP instances in role Employment via `BUT050`.

Impact

- This constellation leads to the BP legacy model.
- The new Employment instances created in addition to the Employment that is already used in the BP/EE instance do not impact running processes.
- All accesses to Vendors and BP in role Employee remain the same; all `LFA1/LFB1` accesses still work.

Migration Scenario 3: ECC Customer with BP in Role Employee and Several Vendors Migrates to New BP Model

Transformation VMODE 2 to New Target Model



This situation in ECC would trigger these conversion steps in S/4 OP:

- The already existing BP instance in role Employee is taken over and is still linked to the CP via `HRP1001`.
- The BP instance in role Employee will be fed with data from the Main Employment.
- Since there is not yet a BP instance with role Employee and Vendor, the following logic can be applied for all Employments belonging to that CP:
  - If there is a BP instance in role Vendor existing for an Employment, this BP instance additionally gets the role Employment. This instance gets the private address, bank information and communication data of the respective Employment. All other roles are kept for this instance. `BUT0ID` for `HCM033` is filled with the respective PERNR; `HCM001` is not filled.
  - If there is no BP in role Vendor existing for an Employment, a new BP instance is created with role Employment and provided with private address, bank details and communication data of the respective Employment. Later, you can decide to add employment-specific roles (like Vendor) to such an instance. `BUT0ID` for `HCM033` is filled with the respective PERNR; `HCM001` is not filled.
- The BP instance in role Employee is linked to the user via `USR21`.
- The BP instance in role Employee is linked to all BP instances in role Employment via `BUT050`.

Impact

- Newly created Employment instances do not impact running processes since they have not been known before.
- All accesses to Vendors via a BP instance with role Vendor and accesses to employees via BP in role Employee are not impacted; all `LFA1/LFB1` accesses still work and are fully compatible.

4.1 External Resource in the New Target Model

You can maintain HR master data for external resources (e.g. contingent workers) in the business partner model with business function `/SHCM/EE_BP_1` switched on. Also, scenarios of external resources with multiple external contracts can be reflected, as well as mixed employment scenarios (internal and external assignment of an employee).

You use the Business Add-In (BAdI) *BAdI: Contingent Worker* (`/SHCM/B_EXTERNAL_EMPLOYEE`) to distinguish between internal and external employees. An implementation of this BAdI must be active. You use the infotype *Supplier* (`3435`) to maintain the supplier master data.

BP Instances and BP Relationships for External Resources

In the new target model, a BP instance representing the contract is created for each external employment. This BP is linked to the corresponding BP instance representing the external employee. To maintain the external resource master data, additional role types, additional BP relationship categories, and an additional BP identification type are used.

Additional Roles

- The role *Service Performer* (`BBP005`) is added to the root BP representing the external employee.
- The role *External Employment* (`BUP011`) is assigned to the BP representing the contract.

Additional BP Relationship Categories

- The BP relationship category *External Employment* (`HCM002`) links the root BP to the BP representing the contract.
- The BP relationship category *Service Performer* (`BUR025`) links the root BP to the BP of the external supplier.
- The BP relationship category *Service Performer Contract* (`HCM003`) links the BP representing the contract to the BP of the external supplier.

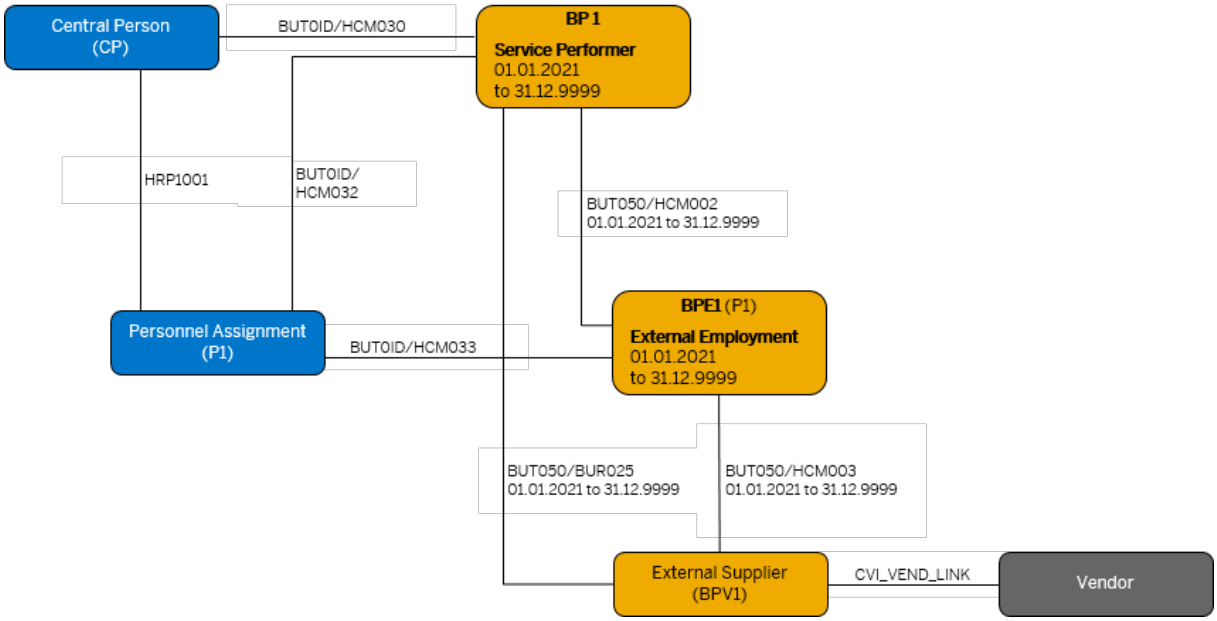
Additional BP Identification Type

The BP identification type *Service Performer* (`HCM030`) links the root BP to the central person (CP).

The following examples cover some cases of external employment in the new target model.

External Employment with a Single External Assignment in the New Target Model

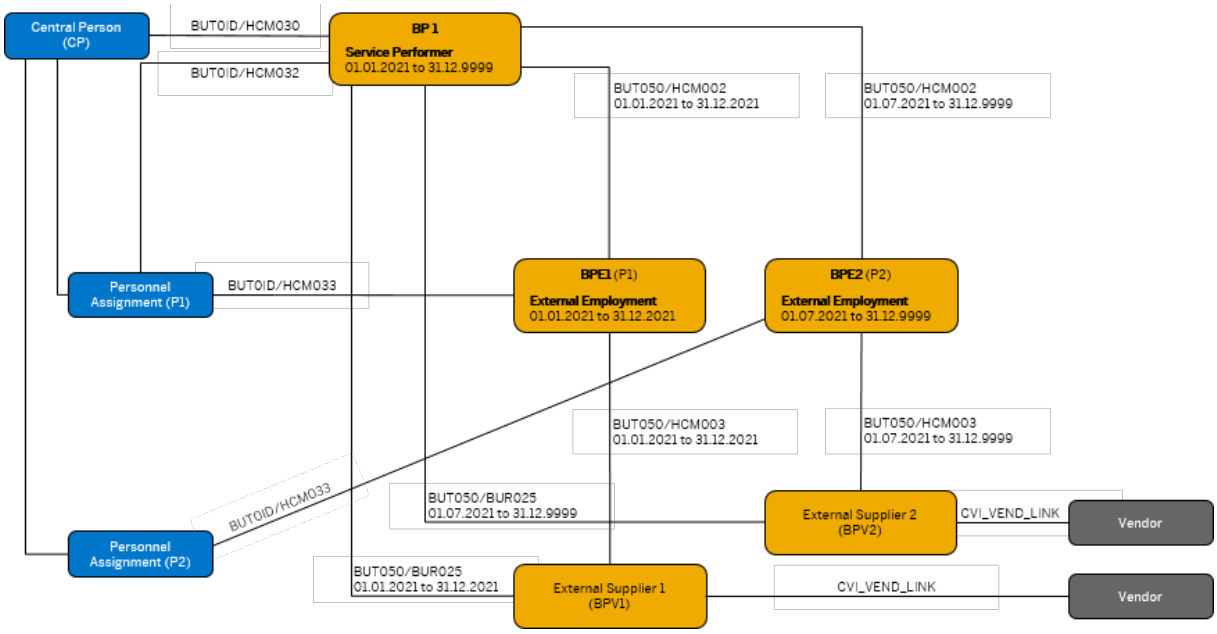
P1 is assigned externally from 01.01.2021 to 31.12.9999.



External Employment with Multiple External Assignments in the New Target Model

P1 is assigned externally from 01.01.2021 to 31.12.2021
P2 is assigned externally from 01.07.2021 to 31.12.9999

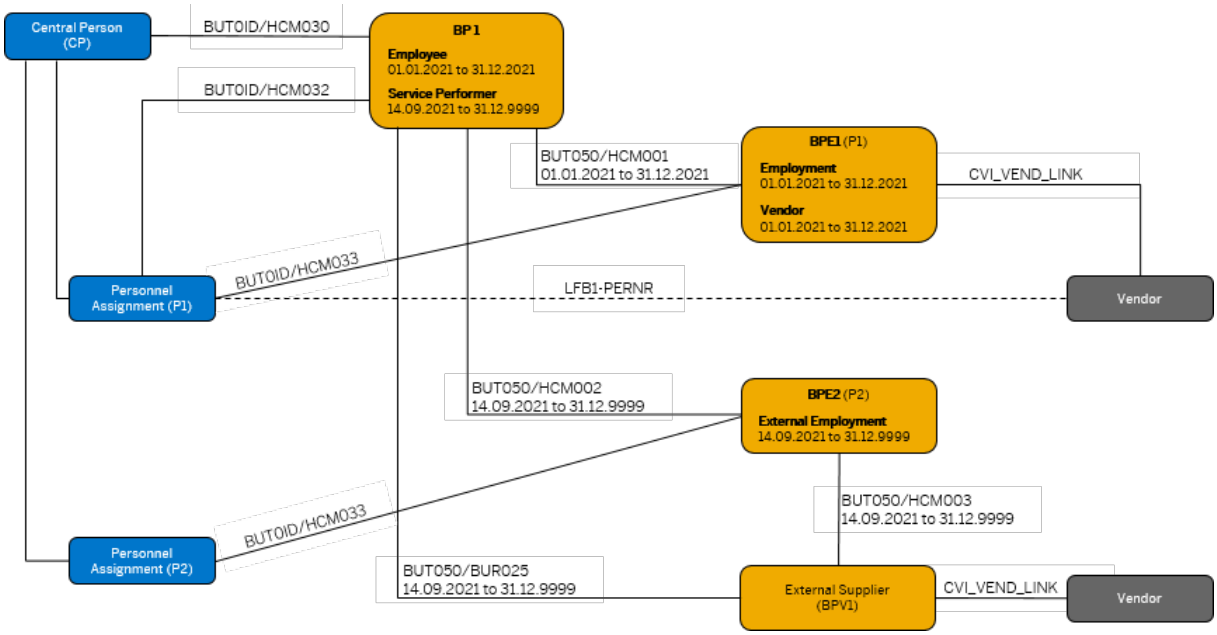
Data for workorder details in infotype *Supplier* (3435):
P1 is associated with External Supplier 1 from 01.01.2021 to 31.12.2021
P2 is associated with External Supplier 2 from 01.07.2021 to 31.12.9999



Mix of Internal and External Employment in the New Target Model

P1 is assigned internally from 01.01.2021 to 31.12.2021
P2 is assigned externally from 14.09.2021 to 31.12.9999

Data for workorder details in infotype *Supplier* (3435):
P2 is associated with External Supplier from 14.09.2021 to 31.12.9999

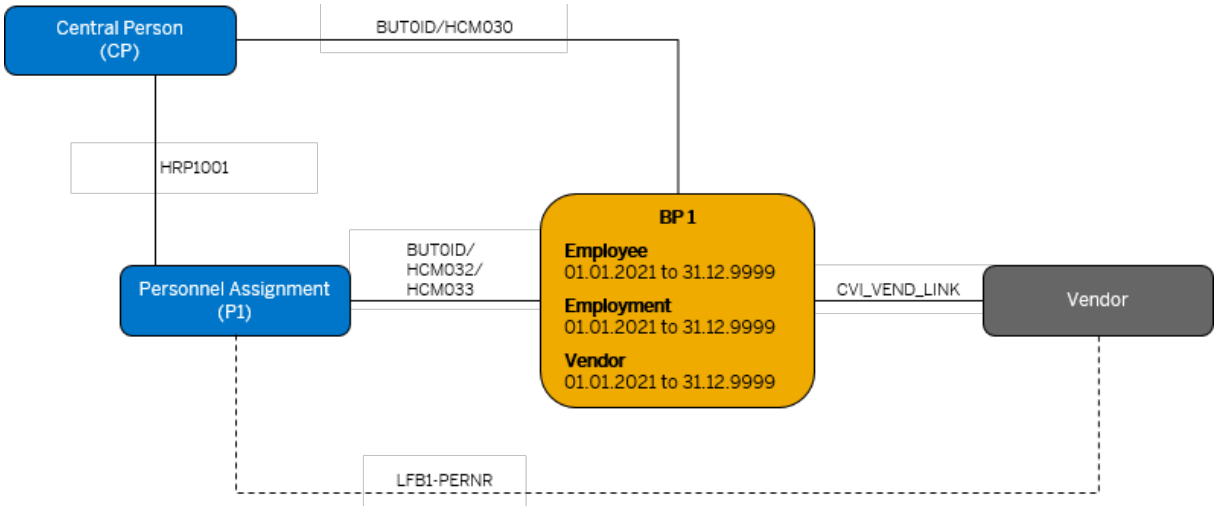


Conversion of an Internal Employee (Legacy Model) into an External Employee (New Target Model)

The following example shows the conversion of an internal employee in the legacy model to an external employee in the new target model.

Before the Conversion (Legacy Model)

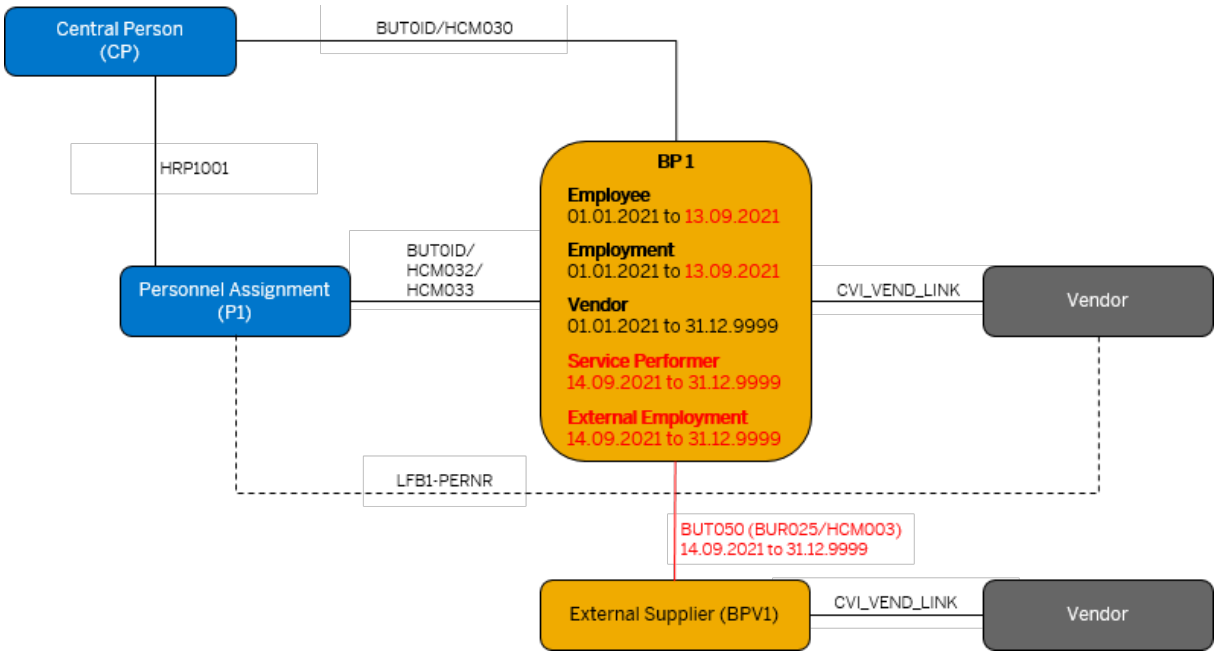
P1 is assigned internally from 01.01.2021 to 31.12.9999



After the Conversion (New Target Model)

P1 is assigned internally from 01.01.2021 to 13.09.2021
P2 is assigned externally from 14.09.2021 to 31.12.9999

Data for workorder details in infotype *Supplier* (3435):
P2 is associated with External Supplier from 14.09.2021 to 31.12.9999



For more information, you can also refer to the corresponding Customizing documentation under *Personnel Management* > *SAP S/4HANA for Human Resources* > *Synchronize Business Partners with an Active Business Partner Integration* > *External Resource* > *External Resource* (when business function `/SHCM/EE_BP_1` is switched on).

5 Employee-Business Partner Synchronization

The following steps enable you to synchronize employee information with BPs. This synchronization is a mandatory activity for SAP S/4HANA to make sure the follow-up activities and the CDS views work.

For more information, you can also refer to the corresponding Customizing documentation under *Personnel Management* > *SAP S/4HANA for Human Resources* > *Synchronize Business Partners for SAP HCM Employee Roles* (when business function `/SHCM/EE_BP_1` is switched off) or *Personnel Management* > *SAP S/4HANA for Human Resources* > *Synchronize Business Partners with an Active Business Partner Integration* (when business function `/SHCM/EE_BP_1` is switched on).

For more information on selection, refer to the documentation of the report `/SHCM/RH_SYNC_BUPA_FROM_EMPL`.

> **i** Note
>
> - Initial synchronization of all employees must be done during the initial business downtime before the production starts.
> - In case of large volume of employee data, standard report `/SHCM/RH_SYNC_BUPA_FROM_EMPL` may take a lot of time to synchronize the employees. Refer to the corresponding FAQ note for 2409229 to process the employees in parallel jobs.

Notes (SAP S/4HANA)

Report `HRALXSYNC`

You cannot use this synchronization report for employee synchronization in SAP S/4HANA. For any other object synchronization (for example, organizational units), you can use it.

Transaction `PRAA`

This transaction was used for Vendor creation in the SAP ERP system for travel expenses This transaction is no longer valid in the SAP S/4HANA system.

Prerequisites

- Set the following switches in the table `T77S0`:
  - Set `HRALX HRAC` to 'X' and `HRALX PBPON` to 'ON'
  - `HRALX ENUMB` (type of number assignment for BPs with Employment role) and `HRALX ESUBG` (subgroup of the number range interval for BPs with Employment role): Use these switches to provide

information regarding types of number assignment and subgroups of number range intervals for BPs with Employment role.

- `HRALX PNUMB` (Business Partner Number Assignment Employee) and `HRALX PSUBG` (Business Partner Subgroup Emmployee): Use these switches to provide different number ranges to BPs.
- `PLOGI PLOGI` Integration Plan Version / Active Plan Version: Use this switch to determine the active integrated plan version.

> → Tip
>
> For additional information on same numbers, visit the FAQ via SAP Note 3023906.

> ℹ Note
>
> All other switches under `HRALX` are not relevant in SAP S/4HANA for employee-BP synchronization.

- Execute the relevant BP Customizing activities for the CVI and Vendor account.

> → Tip
>
> Refer to the FAQs in SAP Note 2713963 for additional information. Under *Where can I find the guide for Business Partner conversion Activities - Customer Vendor Integration (CVI)?*, you will also find the link to a cookbook that provides further details.

- CP should exist for all the employee records (`HRP1001` table should have CP-P relationship record for all the employees).
- All the employees should have at least infotype `0` (*Actions*), `1` (*Organizational Assignment*) and `2` (*Personal Data*) maintained.
- You need to install the following notes before you can start replicating employee master data and organizational data:
  - 2539457: BP is created in Person category during Vendor creation or conversion when CVI is active.
  - 2542175: Employee BP is reused during Vendor creation or conversion when CVI is active.
  - 2517507: Reference Vendor data, company code, and bank account are created based on HR master data.
  - 2568251: Invalid BP assignments are deleted.
  - 2991508: Use of business partner identification type 'Employee ID' (`HCM001`)
- To maintain HR master data for external employees, create an active implementation of the Business Add-In *BAdI: Contingent Worker* (`/SHCM/B_EXTERNAL_EMPLOYEE`). For further information, refer to SAP Note 2340095.

5.1 SAP S/4HANA Business Partner Synchronization Report and Role Synchronization Report

Business Partner Synchronization

You can use the BP Synchronization Report (`/SHCM/RH_SYNC_BUPA_FROM_EMPL`) to synchronize employee data stored in HCM master data persistences (infotypes) with the BP and Vendor as well as to link BPs to users (if infotype `105`, subtype `0001` is maintained) and to the corresponding workplace address.

The BP Synchronization Report has the following functions:

- Synchronizing the HCM infotypes of new employees
- Synchronizing employees who haven't been synchronized successfully during the last synchronization run
- Synchronizing employees with split records

For more information, you can also refer to the Customizing under *Personnel Management* > *SAP S/4HANA for Human Resources*.

Data is synchronized if employee data is created or changed in the following ways:

- **Inbound processing using ALE**
  The synchronization is triggered using the following BAdI implementation: `HRALE00INBOUND_IDOC: /SHCM/BUPA_SYNC_TRIG`

  > **i** Note
  >
  > By default, this implementation is not active.

- **Personnel master data maintenance (for example, transaction `PA30`/`PA40`)**

> **i** Note
>
> - Certain HCM master data is time-independent but some BP data is not. Therefore, schedule this report to run on a daily basis (or according to your required frequency) to update the BPs and receive up-to-date employee data.
> - If a synchronization is unsuccessful, all the employee data is updated in the next synchronization run.

Role Synchronization

You can use the Role Synchronization Report (technical name: `/SHCM/R_EMPL_HDLE_BPRLES_DELTA`) to update or delete additional roles of personnel numbers with an existing BP instance with the Employment role. If the additional roles already exist (to be found in table `/SHCM/D_RLE_SYNC`), the system only updates the according BP master data.

The system updates the BPs with additional roles associated to the personnel numbers for which the BP synchronization has been executed by means of the above-mentioned reports. By this, you can flexibly adapt the roles in case of change of main employment.

For more information, you can also refer to the Customizing under *Personnel Management* > *SAP S/4HANA for Human Resources*.

Field mapping used for employee synchronization

BP Fields:

- BP grouping: If BP grouping is created with `BPEE`, it will be considered for BP creation in another way:
  1. If switch `HRALX PNUMB` is 1 and an internal number range scenario exists, set value 'True' to `XINST` (Standard Grouping for Internal Number Assignment) for the BP grouping; by this, BP group of internal number range type and field `XINST` is considered.
  2. If `HRALX PNUMB` is 2 or 3, BP grouping should be the same as for switch `HRALX PSUBG` in `T77S0`.

- BP category: 1 (Person)
- Identification Category:
  - Employee: `HCM001`
  - Service Performer Contract: `HCM003`
- Identification ID: in case of CE or single assignment, the smallest active PERNR is used. In case of SAP SuccessFactors Integration, the same PERNR or 105-ECUS is used.
- Roles:
  - Employee: `BUP003`, until 1511 SP1: `FLVN01`, for 1511 SP2 and higher releases: `FLVN00`
  - External Employee: `BBP005` and `BUP011`

> **! Restriction**
>
> For external employees, the **payment data** and the **address data** is not synchronized.

	Field description	Infotype	Field Name	Comments	BP Field name
Employee	First Name	2	VORNA		BUT000 - NAME_FIRST
	Last Name	2	NACHN		BUT000 - NAME_LAST
	Middle Name	2	MIDNM		BUT000 - NAME-MIDDLE
	Second Name	2	NACH2		BUT000 - NAME_LST2
	Initials	2	INITS		BUT000 - INITIALS
	Academic Title 1	2	TITEL	TSAD2	BUT000-TITLE_ACA1
	Title	2	Based on ANRED and GESCH	BBP_TSAD3HR or TSAD3HR	BUT000 - TITLE
	Academic Title 2	2	TITL2	TSAD2	BUT000- TITLE_ACA2
	Name Supplement	2	NAMZU	TSAD5	BUT000- TITLE_ROYL
	Name Affix 1	2	VORSW	TSAD4	BUT000- PREFIX1
	Name Affix 2	2	VORS2	TSAD4	BUT000- PREFIX2

	Field description	Infotype	Field Name	Comments	BP Field name
	Gender	2	GESCH	Value 1 is mapped to 2 and vice versa because of domain value differences	BUT000 - XSEXF or XSEXM
	Preferred Language	2	SPRSL		BUT000 - LANGU_CORR BUT000-BU_LANGU
	Nationality	2	NATIO		BUT000 - NATIO
	Date of Birth	2	GBDAT		BUT000 - BIRTHDT
	Name at Birth	2	NAME2		BUT000-NAME_LAST2
	Nick name	2	RUFNM		BUT000- NICKNAME
	Place of Birth	2	GBORT		BUT000-BIRTHPL
	Marital Status	2	FAMST	BBP_TSAD3HR or TB027HR	BUT000- MARST
	Search term 1	2	NCHMC		BUT000-BU_SORT1
	Search term 2	2	VNAMC		BUT000-BU_SORT2
	Full Name	2		CNAME or ENAME or Concatenation of VORNA MIDNM NACHN	BUT000-NAME1_TEXT
Communication	E-Mail Address	105		Subtype 0010	ADR6-SMTP_ADDR
Address	From Date	6	BEGDA	Permanent Address (subtype 1) is synchronized	BUT020 - ADDR_VALID_FROM
	End Date	6	ENDDA		BUT020 - ADDR_VALID_TO

	Field description	Infotype	Field Name	Comments	BP Field name
	Country	6	LAND1		ADRC - COUNTRY
	Region	6	STATE		ADRC - REGION
	City	6	ORT01		ADRC -CITY1
	District	6	ORT02		ADRC -CITY2
	Postal Code	6	PSTLZ		ADRC – POST_CODE1
	Street	6	STRAS		ADRC – STREET
	Street 2	6	ADR03		ADRC – STR_SUPPL1
	Street 3	6	ADR04		ADRC - STR_SUPPL2
	Street 4	6	LOCAT		ADRC - STR_SUPPL3
	House number supplement	6	POSTA		ADRC – HOUSE_NUM2
	c/o	6	NAME2		ADRC – NAME_CO
	Building Code	6	BLDNG		ADRC –BUILDING
	Floor	6	FLOOR		ADRC –FLOOR
	House Number	6	HSNMR		ADRC – HOUSE_NUM1
	Telephone	6	TLNR		ADCP - TEL NUM-BER
Payment	Account Holder Name	1	EMFTX	If infotype 9-EMFTX is not present: map infotype 1 ENAME	BUT0BK-KOINH
	Bank	9	BANKS	If Travel Expenses (subtype 2) Bank information exists, it is synchronized with BP or Vendor; otherwise, Main Bank (subtype 0)	BUT0BK - BANKS
	Bank Account	9	BANKN		BUT0BK - BANKN
	Control Key	9	BKONT		BUT0BK - BKONT
	Bank Key	9	BANKL		BUT0BK - BANKL

	Field description	Infotype	Field Name	Comments	BP Field name
	Reference specifications for bank details	9	BKREF	is synchronized. If both do not exist, Vendor will not be created.	BUT0BK - BKREF
	IBAN No.	9	IBAN		BUT0BK - IBAN
	Valid From	9	BEGDA		BUT0BK - BK_VALID_FROM
	Valid To	9	ENDDA		BUT0BK - BK_VALID_TO
Vendor Company Code	BUKRS	1	BUKRS		LFB1 -BUKRS
	ZLSCH	9	ZLSCH		LFB1 -ZWELS
	PERNR	1	PERNR		LFB1 -PERNR
	Reconciliation account		(see comment)	Read from `/SHCM/RECON` based on Employee's company code (IT0001-BUKRS)	LFB1 -AKONT

> **i Note**
>
> You can maintain the view `PTRV_VENDOR_SYNC` per company code to fulfill the additional requirements concerning:
>
> - Roles
> - Source of company code for company code segments
> - Source of subtype for address
> - Additional information for Vendor company code segments (`LFB1`), Vendor general data (`LFA1`) as well as for dunning data (`LFB5`) and withholding tax data (`LFBW`)
> - Source of bank account, bank account key on BP as well as partner bank type in Vendor bank data `LFBK`
> - Setting payment locks for inactive employees
> - Used identification categories for loosely coupled BPs
> - Address types to be used for BPs
>
> Either refer to the F1 help for the fields in maintenance view `PTRV_VENDOR_SYNC` or read the knowledge-based article 2632026 to learn more about the usage of the control table `PTRV_VENDOR_SYNC`.

Field mapping for Workplace Address:

- In case User (infotype 105, subtype 0001) is maintained for the employee: During employee synchronization, if the user is of type 00 (user's old type 3 address USR21-IDADTYPE: 00), the existing workplace address data is retained and only the following information is updated or overwritten (if present in the infotypes).

- If no user is maintained, following information is updated as workplace address.

> **i Note**
>
> You can use the view `TBZ_V_EEWA_SRC` to maintain the address data for users with a business partner assignment. For more information, see SAP Note 2813203.

Field Description	Infotype	Field Name	Comments	BP Field Name
Department	1	ORGEH	Text from organizational unit (ORGEH) from table T527X	ADCP - DEPARTMENT
Function	1	STELL	Text from job (STELL) from table T513S	ADCP - FUNCTION
Room Number	32	ZIMNR		ADCP - roomnumber
Building Number	32	GEBNR		ADCP - building
Telephone	105		If SAP SuccessFactors integration is used, infotype 105, subtype ECPB is used; otherwise, infotype 105, subtype 0020 is used.	ADR2 - telnr_long **i Note** Additional condition: r3_user = '1'
Cell Phone	105		If SAP SuccessFactors integration is used, infotype 105, subtype ECPC is used; otherwise, Infotype 105, subtype CELL is used.	ADR2 - telnr_long **i Note** Additional condition: r3_user = '3'
E-Mail Address	105		Infotype 105, subtype 10	ADR6 - flgdefault = 'X' ADR6- SMTP_ADDR

5.1.1 Authorizations

Human Resources uses the authorization concept provided by AS ABAP or AS Java. Therefore, the recommendations and guidelines for authorizations as described in the SAP NetWeaver AS Security Guide ABAP and SAP NetWeaver AS Security Guide Java also apply.

The SAP NetWeaver authorization concept is based on assigning authorizations to users based on roles. For role maintenance, use the profile generator (transaction `PFCG`) on the AS ABAP and the User Management Engine's user administration console on the AS Java.

> **i Note**
>
> For more information about how to create roles, see the information on user administration and authentication in the Product Assistance at https://help.sap.com/s4hana_op_2021 ▶ *Use* ▶ *Product Assistance* ▶ *English* ▶ *Enterprise Technology* ▶ *ABAP Platform* ▶ *Securing the ABAP Platform* ▶.

Standard Roles

The table below shows the standard roles that are used.

Role	Front-end Role	Back-end Role	Both (Front-end + Back-end)	Description
SAP_BR_ADMINIS-TRATOR_HRINFO	Yes	-	-	Administrator App (For example, Monitoring Employee Synchroni-zation)
SAP_BR_EMPLOYEE	Yes	-	-	Employee can search and display an over-view of the employee data in Employee fact-sheet

Standard Authorization Objects

The table below shows the security-relevant authorization objects that are used.

Authorization Object	Field	Value	Description
B_BUPA_ADR (Business Partner: BP Addresses)	ACTVT		Activity
	SENSTVT		Sensitivity
B_BUPA_BNK (Business Partner: BP Banks)	ACTVT		Activity
	SENSTVT		Sensitivity
B_BUPA_RLT (Business Part-ner: BP Roles)	ACTVT		Activity
	RLTYP		BP Role
B_BUPA_GRP	BEGRU		Authorization Group

Authorization Object	Field	Value	Description
	ACTVT		Activity
B_BUP_PCPT	ACTVT		Activity
F_LFA1_APP (Vendor: Application Authorization)	ACTVT		Activity
	APPKZ		Customer and Vendor Master Data Application Authorization
F_LFA1_BUK (Vendor: Authorization for Company Codes)	BUKRS		Company Code
	ACTVT		Activity
F_LFA1_GEN (Vendor: Central Data)	ACTVT		Activity
F_LFA1_GRP (Vendor: Account Group Authorization	KTOKK		Vendor account group
	ACTVT		Activity
P_ORGIN (HR: Master Data)	INFTY		Infotype
	SUBTY		Subtype
	AUTHC		Authorization level
	PERSA		Personnel Area
	PERSG		Employee Group
	PERSK		Employee Subgroup
	VDSK1		Organizational Key
PLOG (Personnel Planning)	PLVAR		Plan Version
	OTYPE		Object Type
	INFOTYP		Infotype
	SUBTYP		Subtype
	ISTAT		Planning Status
	PPFCODE		Function Code
S_USER_GRP (User Master Maintenance: User Groups)	CLASS		User group in user master maintenance
	ACTVT		Activity

Business Partner End of Purpose (EoP) Check in Human Resources

Human Resources provides an EoP check to determine whether Employee Business Partner is still relevant for business activities in the application or can be blocked.

Application Name	Application Description
BUCP	Central Business Partner: Employee

> **i** Note
>
> For more information, refer to 2142308.

5.2 Design Constraints

Workplace Address Data

If infotype 105, System User Name (SY-Uname) 0001, is maintained for the employee and if workplace address is synchronized, the user will be converted to type 04 (Identity with Workplace Address).

If user assignment is removed (infotype 105, subtype 0001 is removed for the employee), the user needs to be unassigned from the business partner by running the report `RSUID_REMOVE_FALSE_BP_ASGN` (after the employee synchronization report has been executed). Refer to note 2568251 for more information.

If user is converted to 02 or 04 (`IDADTYPE`), workplace address or address section will not be editable in user administration transactions like `SU01`.

6 FAQ

For more information about the FAQs, refer to the SAP Note 2409229.

7 Related Notes

- 2265093 - S4TWL - Business Partner Approach
- 2570961 - Simplification item S4TWL - Business User Management
- 2340095 - S4TWL - Conversion of Employees to Business Partners
- 2273108 - S4TWL - General HCM Approach within SAP S/4HANA
- 2383879 - S4TWL - Java-based ESS and MSS not available in Compatibility Mode
- 2393462 – All changes in 1610
- 2241838 – Limitations to PRAA transaction in S/4HANA
- 2399801 - Workplace Address synchronization corrections

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