

# Browse the Book

This sample chapter starts by covering the SAP S/4HANA Finance customization required to set up business partners in SAP S/4HANA. Next, it provides instructions for undertaking the necessary business partner customization in materials management and the associated customization of customer-vendor integration (CVI) wherein the business partner is the leading object. Finally, it also discusses the varied number range assignment scenarios for all three master data objects: vendor, customer, and business partner.



"Vendors"



**Contents** 



Index



**The Author** 

Jawad Akhtar

Business Partners in SAP S/4HANA: The Comprehensive Guide to Customer-Vendor Integration

353 pages, 2022, \$89.95 ISBN 978-1-4932-2222-3



www.sap-press.com/5468

## Chapter 2

## Vendors

Whether a greenfield SAP S/4HANA implementation or a brownfield conversion from SAP ERP, this chapter shows you what it takes to set up vendors as business partners in the SAP S/4HANA system, as well as how to customize vendor account groups and the business partner role itself. We'll also walk through customer-vendor integration (CVI) with the same or different number range assignments.

In SAP S/4HANA, the business partner has become the leading object and the single point of entry to maintain supplier (also often called vendor) master data. This approach makes master data maintenance easier and achieves harmonization among the various business functions of a company. The business partner function brings together the different and diverse business processes a company manages with its partners—all via a single transaction and with a consolidated view of a partner's data. A business partner can have the role of a supplier (or vendor), a customer, or an employee.

This chapter covers the customization steps for setting up a vendor as a business partner. Next, the chapter covers the customization steps involved in SAP S/4HANA Finance with the focus on its integration with materials management to ensure the procure-to-pay process run smoothly. During an SAP implementation project, and due to the integrated nature of the business partner in materials management with SAP S/4HANA Finance, we highly recommend coordinating with the SAP S/4HANA Finance team to ensure that the customization and business processes between SAP S/4HANA Finance and materials management are completely aligned. Chapter 6 will show how the customization steps undertaken in this chapter are used in maintaining a business partner as a vendor/supplier.

The following sections cover the SAP S/4HANA Finance customization required for business partners with a focus on ensuring that it works effectively with materials management. We'll show you how to create an SAP S/4HANA Finance vendor account group and then how to create a number range, which is then assigned to the SAP S/4HANA Finance vendor account group. As already mentioned, it's always recommended to maintain a complete coordination with an SAP S/4HANA Finance consultant so that the materials management–SAP S/4HANA Finance integration is error free. We'll also cover business scenarios in which there may be the same or different number ranges for business partners, vendors, and customers, along with the associated customization settings to make.

The example in this chapter covers how to customize a new business partner purchasing role for vendors supplying high-value materials to the company. Next, we'll discuss the customization steps for setting up vendor account groups in materials management. This is then followed by showing you the step-by-step CVI customization setup.

### 2.1 Customizing Vendor Account Groups

In many SAP implementations, separate vendor account groups are created for foreign/import vendors, local vendors, and service vendors. Any logical grouping of vendor account groups should be created to meet the reporting needs of the company. This bifurcation of vendor account groups not only helps with better and more focused reporting on different vendor groups but also enables the assignment of specific pricing schemas for each vendor group.

For example, in foreign procurement, different types of charges (known as *conditions* in SAP) will have to be paid in more types than in local procurement. These different charges on imports range from a letter of credit (LC) opening fee with an opening bank, demurrage, wharfage, customs clearance, LC clearance charges, and shipment charges to customs agent charges. To attend to all kinds of charges in imports procurement, a pricing scheme is first customized that is then assigned to foreign vendors (business partners). Another pricing schema with fewer pricing conditions would be customized for local vendors and assigned to the local vendor group.

#### Note

Using the standard customization objects delivered by SAP is always recommended over creating new ones. However, as is often the case with most SAP implementation projects, specific business needs, authorizations, or reporting needs will require customizing new objects. Wherever possible and available, customize new objects by copying the standard objects already available to save time and effort.

#### Note

Despite the introduction of the terms "business partner" or "supplier" in SAP S/4HANA, be aware that the SAP ERP term "vendor" is still frequently used in customization, master data, business processes, and reporting.

A vendor account group is a way of grouping vendors with the same number range and the same attributes entered. The account group is defined to allow certain fields to be seen and maintained in the vendor master.

The vendor master record is especially relevant to a purchasing organization. When creating a vendor, a purchasing user determines what data associated with that vendor is relevant only to a single purchasing organization.

However, a vendor often deals with several purchasing departments in a single company, and the negotiations between the vendor and the company might be limited to a specific geographical area, which may relate to a single purchasing organization. For example, if a global fast-moving consumer goods (FMCG) company negotiates rates and discounts with a company, the terms may be different for the company's Canadian locations than for locations in Mexico or China. Therefore, when entering the vendor master record for this FMCG company, the differences between purchasing organizations may be significant.

Next, let's discuss the SAP S/4HANA Finance customization setup required for setting up a vendor as a business partner.

#### 2.1.1 Vendor Account Groups

To create a new vendor account group, follow the menu path SAP IMG • Financial Accounting • Accounts Receivable and Accounts Payable • Vendor Accounts • Master Data • Preparations for Creating Vendor Master Data • Define Account Groups with Screen Layout (Vendors).

#### Tips & Tricks

The customization menu paths in this book each begin with SAP Menu • Tools • Customizing • IMG • SPRO followed by clicking on Display Reference IMG or pressing F5. For the sake of brevity, each menu path won't include that repetitive section of the path but rather only begin the customization menu path with SAP • IMG.

In Figure 2.1, first create a new vendor account group, Group HVPV (high-value purchases vendors). Next, select the **Group HVPV**, and click on the **Details** icon **Q** to go to the screen shown in Figure 2.2.



Figure 2.1 Vendor Account Groups

A one-time vendor record, shown in Figure 2.2, can be used for a vendor that is only used once or very rarely. For example, a company may need a material in an emergency, and perhaps the normal vendor for that material can't supply the item in the requested time. In this instance, a local vendor or an unapproved vendor may be used for this one-off purchase. Such a record can be used for a number of vendors, which reduces the amount of data entry and data maintenance required. Companies can also use one-time vendor records for travel, expense reimbursement, and vendors that can't accept the company's purchase orders.

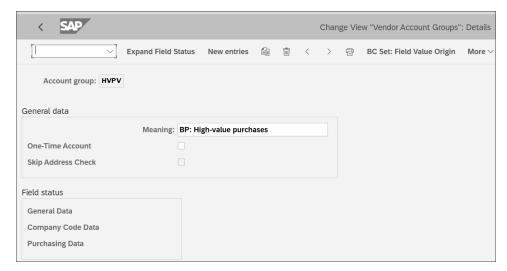


Figure 2.2 Field Control of the Vendor Account Group

A one-time vendor record can be created in the same way as any normal vendor by using Transaction BP. The difference is that a one-time vendor uses a special account group. One-time vendor records usually don't contain any significant data or any bank and financial information. Many companies have policies in place to ensure that vendor master records aren't created for one-time or limited-use vendors. Some of these policies may include establishing a limit on the number of transactions per year and restricting the yearly spend on these vendors. For example, if a vendor has more than four transactions a year, or if the total annual spending with a vendor is more than \$5,000, then company policy could require that a vendor master record be maintained for that vendor instead of that vendor being treated as a one-time vendor only.

To maintain the field status of any field, as shown in Figure 2.3, click on any of the three options in the **Field status** area shown in Figure 2.2:

- General Data
- Company Code Data
- Purchasing Data

The customization screen shown in Figure 2.3 allows certain fields to be suppressed (Suppress), as required (Req. Entry), as optional (Opt. entry), or simply display only (Display). This customization is specific to the account group that is entered when a vendor master record is created as a business partner. This figure shows one of five pages (Page 1/5), and clicking on the relevant icon right below it will bring up more fields for maintaining relevant controls.

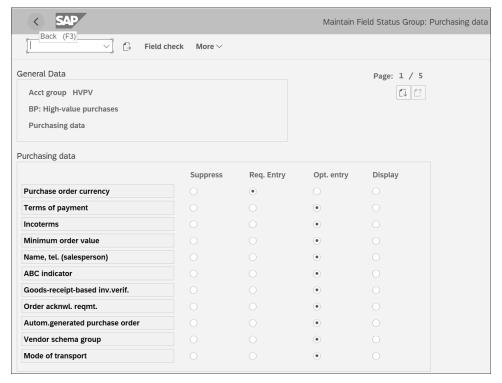


Figure 2.3 Field Status Group

#### Note

These screen layouts can also be modified by company code via menu path SAP IMG • Financial Accounting • Vendor Accounts • Master Data • Preparations for Creating Vendor Master Data • Define Screen Layout per Company Code.

#### 2.1.2 Number Ranges for Vendor Account Groups

When defining vendor number ranges, remember that, like material numbers, vendor numbers can be externally or internally assigned. Many SAP customers create different number ranges for each account group. Careful consideration is required when defining number ranges to prevent them from overlapping.

To create vendor number ranges, use Transaction XKN1 or follow menu path SAP IMG • Financial Accounting • Vendor Accounts • Master Data • Preparations for Creating Vendor Master Data • Create Number Ranges for Vendor Accounts. Figure 2.4 is the initial screen to maintain vendor number ranges. Choose Intervals to go to Figure 2.5.

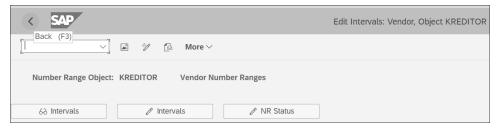


Figure 2.4 Number Ranges for Vendor Account Group: Initial Screen

In Figure 2.5, enter a unique identifier for the range, defined by a two-character field ("30" in this example), and then enter the range of numbers to define the number range. The NR Status field in edit mode allows for defining the current number. The External checkbox allows you to define whether the number range is externally defined or user defined. For this example, let's create a new number range by entering "30" in the Number Range No. column, clicking the Insert interval button, and maintaining the number range by entering "300000" in the From No. field and "399999" in the To Number field.

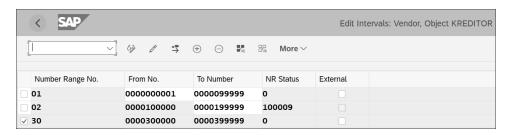


Figure 2.5 Defining a New Number Range

On saving a number range, the message shown in Figure 2.6 appears stating that number ranges aren't automatically included in the customization transported and must be manually transported to the next SAP client (e.g., from the development [DEV] client to the quality assurance [QAS] client, and finally to the production [PRD] client). Follow the instructions noted in the figure to transport all the number ranges to the next SAP client.

After *defining* a number range, the next step is to *assign* the number range to the vendor account group by following menu path SAP IMG • Financial Accounting • Vendor Accounts • Master Data • Preparations for Creating Vendor Master Data • Assign Number Ranges to Vendor Account Groups (see Figure 2.7).

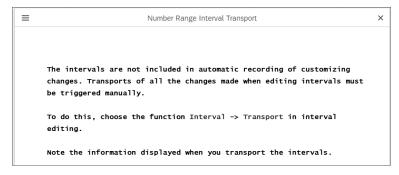


Figure 2.6 Message on Number Ranges Transport

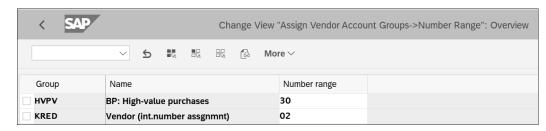


Figure 2.7 Assigning Number Ranges to a Vendor Account Group

A number range can be assigned to many vendor account groups. Therefore, if the company decides to use just one number range for several of its vendor account groups, the customization will ensure that only one number range is assigned to all account groups. For this example, assign the **Number range** "30" to the vendor account group **HVPV** in the **Group** column.

This was the minimal customization related to SAP S/4HANA Finance. The next section focuses on the steps involved in customizing a business partner.

## 2.2 Customizing a Business Partner

The following sections cover the steps involved in customizing vendors as business partners in the SAP system. We start by discussing how to create a number range for the business partner followed by assigning the same to the vendor account group. We'll also discuss the business partner role categories and then conclude with how to control specific fields for each business partner role category.

#### 2.2.1 Number Ranges for Business Partners

Just as the process of defining and assigning number ranges for vendor account groups in SAP S/4HANA Finance is important, the same steps have to be performed for business partner number ranges. The process of defining and assigning business partner

number ranges follows the same steps as given for vendor account groups in SAP S/4HANA Finance in the previous section.

To define a business partner number range, use Transaction BUCF or follow menu path SAP IMG • Cross-Application Components • SAP Business Partner • Business Partner • Basic Settings • Number Ranges and Groupings • Define Number Ranges. Figure 2.8 shows the newly defined business partner number range interval 30.

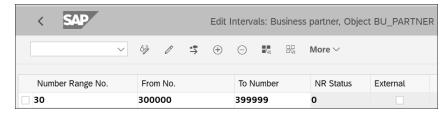


Figure 2.8 Defining Business Partner Number Ranges

To assign a business partner number range to a business partner grouping, follow menu path SAP IMG • Cross-Application Components • SAP Business Partner • Business Partner • Basic Settings • Number Ranges and Groupings • Define Groupings and Assign Number Ranges.

As shown in Figure 2.9, the **Number range 30** has been assigned to the business partner **Grouping HVPV**. It's also important to ensure that at least one internal standard grouping (**Int.Std.Grping**) and one external standard grouping (**Ex.Std Grping**) is selected to logically group business partners accordingly. The relevant radio button (either external or internal) will only appear for selection based on if the business partner number range is defined as external or internal, respectively (see Figure 2.8 again). For this example, choose the **Int.Std.Grping** radio button and save.

#### Note

A business partner is also always assigned to exactly one grouping when it's created (see Figure 2.9). This determines the number range (external/internal), which is also fixed and can't be changed afterwards, unlike the account groups for customers/vendors.

To display only customer-specific and selected SAP standard business partner groupings when selecting the grouping using Transaction BP, the unused ones can be hidden using the **Hide** checkbox on the far right (see Figure 2.9).

We recommend creating a business partner grouping for each vendor account group. To simplify customization and business processes, an even better method is to use the same identifiers between the SAP S/4HANA Finance vendor account groups and business partners in materials management. Later in this chapter, we'll also show how to create and assign either the same or different number ranges to vendors, business partners, and customers to meet any unique business needs.

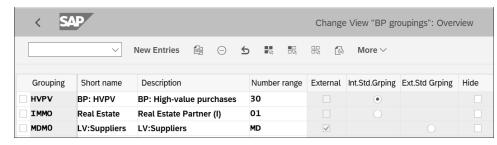


Figure 2.9 Assigning Business Partner Number Ranges to a Business Partner Grouping

#### 2.2.2 Business Partner Role Categories

In this step, customize or define a new business partner role category for vendors of high-value purchases by copying from the standard available business partner category FLVNO1. A business partner role is the highest level of business partner in which various business partner roles are created for an organization, group, or person.

To define business partner role categories, follow menu path SAP IMG • Cross-Application Components • SAP Business Partner • Business Partner • Basic Settings • Business Partner Roles • Define BP Roles.

The screen that appears will show a list of available business partner role categories, including the standard business partner role category FLVNO1, which is used in the purchasing process. Select FLVNO1 in the Role Cat. column, choose Copy As, and create the new BP Role Cat. as ZHVPRC, as shown in Figure 2.10.

In Figure 2.10, maintain the **Title** and **Description** fields of the new business partner role category **ZHVPRC**. The **Diff.Type** field (differentiation type) is the controlling field, that is, the field that controls the types of data or the screens available while creating a new business partner of this specific business partner role category. Type **0** will enable maintenance of the general data of a business partner. Type **2** will bring up purchasing related fields, tabs, and screens of a business partner for data maintenance, while type **3** will enable maintenance of the sales area data, wherein a business partner is a customer. It's also possible to control which (or all) of the three business partner categories (i.e., organization, person, or group) is allowed for a particular business partner role category by selecting the relevant checkboxes.

In other words, a *business partner role category* determines which data can be used for a particular business transaction; it's always assigned to exactly one business partner category (person, organization, or group) and can't be changed in future. When creating a business partner using Transaction BP, it's mandatory to first select the business partner category. Only after that, the selection of fields for data entry specified for this type will be available for maintaining data.

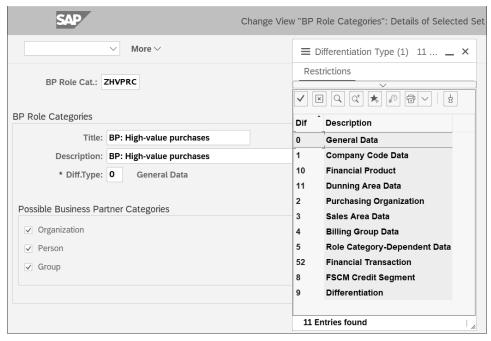


Figure 2.10 Customizing a New Business Partner Role Category

For this example, choose **Diff.Type 2** to create a new business partner role category for the purchasing function. The screen that appears (see Figure 2.11) shows the newly customized business partner role category **ZHVPRC**. Select it, and then choose **BP Roles** on the left-hand side of the screen.

As shown in Figure 2.11, create a new BP Role ZHVPRC by clicking New Entries and assigning the BP Role Category ZHVPRC just created in the previous step. Be sure the Std Assignment BP Role -> BP Role Cat. checkbox has been selected so that the system assigns the specific ZHVPRC business partner role to the business partner role category ZHVPRC.

A *business partner role* can be regarded as a kind of function that a business partner assumes depending on a business action. Table 2.1 is a list of business partner roles already delivered by SAP in the standard system, while the five standard roles (or their copies) in bold will be covered in this book to show SAP S/4HANA Finance/materials management and SAP S/4HANA Finance/SAP S/4HANA Sales integration in a procure-to-pay and order-to-cash business processes, respectively.

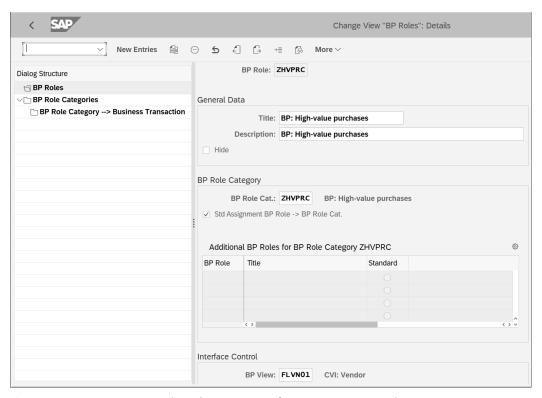


Figure 2.11 Business Partner Role and Assignment of a Business Partner Role Category

| Business Partner Role | Business Partner Role Description |
|-----------------------|-----------------------------------|
| 000000                | Business Partner (Gen.)           |
| BAM001                | Bank contact                      |
| BBP000                | Vendor                            |
| BBP001                | Bidder                            |
| BBP002                | Portal Provider                   |
| BBP003                | Plant                             |
| BBP004                | Purchasing Firm                   |
| BBP005                | Service Provider                  |
| BBP006                | Invoicing Party                   |
| BBP010                | Freelance                         |
| BKK010                | Account Holder                    |

Table 2.1 Standard Business Partner Roles Available

| BKK030 C    | Authorized Drawer Correspondence Recipient Acct Maintenance Officer |
|-------------|---|
|             |   |
| BKK200 ^    | Acet Maintenance Officer  |
| DIRIZOU A   | ACCL Maintenance Officer  |
| BPSITE R    | Retail site   |
| BUP001 C    | Contact Person  |
| BUP002 P    | Prospect  |
| BUP003 E    | mployee   |
| BUP004 C    | Organizational Unit   |
| RTP010 B    | Beneficiary   |
| RTP050      | DeceasedRel.PlanHolder  |
| TXS001 Ir   | nvestor   |
| UDM000 C    | Collections Management  |
| UKM000SAP C | Credit Management   |
| VLC001 E    | nd Customer   |
| RCFAGY      | Agency  |
| RCFBRA B    | Branch Role   |
| BUP005 In   | nternet User  |
| CACSA1 C    | Commission Contract Part.   |
| CACSA2 C    | Commission Clerk  |
| CACSA3 A    | Agents  |
| CBIH10 E    | external Person   |
| CBIH20 A    | Authority   |
| CBIH30 A    | Authority   |
| CLERK1 F    | irst Processor  |
| CLERK2 S    | econd Processor   |
| CMS001 C    | Collateral Partner  |
| CRM000 S    | old-To Party  |

 Table 2.1 Standard Business Partner Roles Available (Cont.)

| Business Partner Role | Business Partner Role Description |
|-----------------------|-----------------------------------|
| CRM002                | Goods Recipient                   |
| CRM003                | Payer                             |
| CRM004                | Bill-To Party                     |
| CRM007                | Supplier                          |
| CRM010                | Carrier                           |
| CRM012                | Consolidator                      |
| CRM013                | Remanufacturer                    |
| FLCU00                | Customer (Financial Accounting)   |
| FLCU01                | Customer                          |
| FLVNOO                | Supplier (Financial Accounting)   |
| FLVN01                | Supplier                          |
| FS0000                | Financial Services BP             |
| FS0003                | BP Differentiation                |
| FSOKNE                | Borrower Entity                   |
| LM0001                | Warehouse Worker                  |
| PSSP01                | Sponsor                           |

 Table 2.1 Standard Business Partner Roles Available (Cont.)

It's important to note that many of these roles are set up as "shells" or empty without a business partner view and thus have no further significant distinction from similar roles apart from the named one. For example, the roles BBP001 (Bidder), BBP002 (Portal Provider), and BBP003 (Plant) are identical and only differ in the description. An overview of the roles delivered by SAP in the standard system can be found in Appendix A, including which roles have their own views and which business partner categories are permitted.

For some roles, it's not even immediately clear which specific business function SAP has planned. In addition, SAP doesn't provide an exact description of the use of these roles. If these roles can't or don't need to be assigned in your business processes, then we recommend ignoring them.

SAP also provides various roles for certain components. These can be identified by the role abbreviation, for example:

HEXXXX
 Roles from the health area.

# ■ TRxxxx Roles from the treasury area.

Several roles can be assigned to a business partner, depending on the business interactions with a company. SAP has delivered the role 000000 (Business Partner (General)) as an undefined or basic role. Among the available roles, 000000 Business Partner (General) contains the higher-level master data (address data) that can be used in any other role. It's therefore recommended to assign this role as a *basic role* first.

In Chapter 6, we'll take a closer look at the following central roles (or a copy of them) from the areas of finance and logistics, including how they fit in the business processes of materials management and SAP S/4HANA Sales (see Figure 2.12):

- 000000 General
- FLVN00 Supplier (Financial Accounting)
- FLVN01 Supplier
- FLCU00 Customer (Financial Accounting)
- FLCU01 Customer

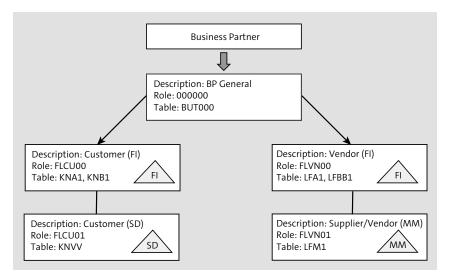


Figure 2.12 Business Partner Role in Logistics and Finance

Several business partner roles can be assigned to a business partner role category (i.e., a business partner role category can have several business partner roles assigned to it); therefore, selecting the **Std Assignment BP Role**  $\rightarrow$  **BP Role Cat.** checkbox will ensure one standard business partner role is read while creating business partner master data. Assign the *standard* **BP View FLVN01** in the lower half of the screen to ensure standard screens and layouts are available while creating a new business partner of the newly

customized business partner role category. (Recall that this business partner category role was created by copying the standard business partner role category FLVNO1.)

In the Interface Control section shown earlier in Figure 2.11, choose one of the predefined CVI views. If no view is assigned, the settings for the business partner view 000000 (General BP) will be used in the dialog box, and it won't be possible to access the customer-specific/vendor-specific fields from the business partner transaction.

Referring to Figure 2.11 again, scroll down so that the **Position** field appears (not shown). This is a control function to determine the order in which the selected business partner role should appear in the selection mask. For example, the role **FLVN00** - **Supplier** (**Financial Accounting** may displayed at position 2, right after the first role **00000** – **General**.

Finally, select BP Role Category --> Business Transaction on the left-hand side of the screen. Enter the BP Role Category "ZHVPRC" in the popup that appears, and click Continue. Figure 2.13 shows the control function that either allows or disallows business partner transactions for a business partner role category.

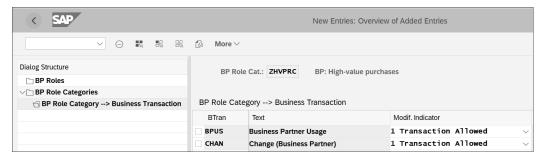


Figure 2.13 Business Transactions Control for a Business Partner Role Category

#### Note

In customization, you can also define application transactions to which you assign business partner roles or business partner role groupings and determine how the access to business partner processing takes place. If desired, self-defined transactions, such as create, change, or display, can be defined for a very specific business partner role. To set up or define the corresponding transaction, follow menu path SAP IMG • Cross-Application Components • SAP Business Partners • Business Partner • Basic Settings • Business Partner Roles • Define Application Transactions.

#### 2.2.3 Field Attributes for a Business Partner Role Category

It's possible to control fields and their behaviors by choosing which fields are mandatory or optional, display only, or hidden. To control the field attributes of the business partner role category just customized in the previous step, follow menu path SAP IMG •

Cross-Application Components • SAP Business Partner • Field Groupings • Customize Field Attributes per BP Role • Customize Field Attributes for Each Role Category. In Figure 2.14, choose the BP Role ZHVPRC, and then choose Field Grouping. Figure 2.15 appears.



Figure 2.14 Field Group of the Business Partner Role

Figure 2.15 shows a large number of data sets in the **Data Set** area on the left-hand side. Choosing the relevant set will bring up the field group (**Fld Groups** area) where the fields' attributes can be controlled. This customization screen allows making certain fields suppressed (**Hide**), required (**Req.entry**), optional (**Opt. entry**), or display only (**Display**). This customization is specific to the business partner role that is entered when a vendor is created as a business partner.

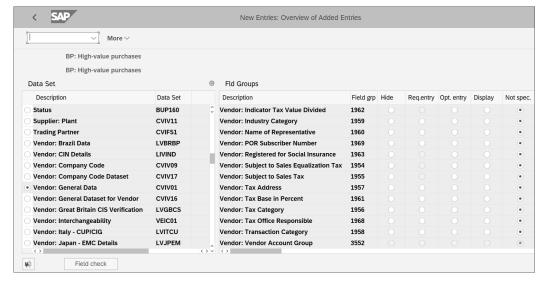


Figure 2.15 Available Controls of the Business Partner Role Category

## 2.3 Customer-Vendor Integration

Setting up CVI is a mandatory prerequisite for using business partners in SAP S/4HANA. The vendor master (now, business partner) will be used. The business partner is the single point of entry to create, edit, and display master data for suppliers.

The following sections cover the integration between customizations of the vendor account group with that of the business partner that were covered in previous sections. In addition, we'll discuss the steps involved in setting up CVI with a focus on business partner integration with the previously created business partner and vendor account groups in SAP S/4HANA Finance and materials management.

#### 2.3.1 Business Partner Role Categories

In this step, you define business partner role categories that enable vendor integration from the vendor to the business partner. This step also determines how the system creates the corresponding vendor while processing a business partner.

The business partner role categories entered are vendor-based, which means that the system considers vendor integration when it processes business partners with a corresponding business partner role. In this customization activity, you define whether the business partner role assigned to the business partner role category is mandatory or optional for the vendor business partner role. With mandatory vendor business partner roles, the system automatically creates corresponding vendors. With optional vendor business partner roles, it's possible to determine whether a corresponding vendor is also created during business partner processing.

#### Note

The terms "vendor" or "SAP S/4HANA Finance vendor" are synonymous and used interchangeably in the documentation for master data synchronization. The difference between SAP S/4HANA Finance vendor and materials management vendor is that for an SAP S/4HANA Finance vendor, only financial transactions can be recorded, but for a materials management vendor, the entire procure-to-pay business process is required. For example, a company that pays its utility bills (electricity, rent, or water bills) will only need to create an SAP S/4HANA Finance vendor in the system to process the bills and make timely payments. But to buy products and services from various suppliers/vendors, which is basically the procure-to-pay business process, the company not only needs to create an SAP S/4HANA Finance vendor but also ensure this vendor role is extended as a materials management vendor.

To set up the business partner role category from business partner to vendor integration in CVI, follow menu path SAP IMG • Cross-Application Components • Master Data Synchronization • Customer/Vendor Integration • Business Partner Settings • Settings for Vendor Integration • Set BP Role Category for Direction BP to Vendor.

Figure 2.16 shows the **BP Role Cat. ZHVPRC**. Selecting the **Vendor-Based** radio button will make creating a vendor mandatory when creating a business partner with the business partner role category ZHVPRC.

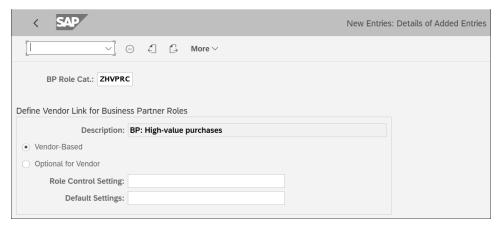


Figure 2.16 Business Partner Role Category for Business Partner to Vendor Integration

#### 2.3.2 Business Partner Roles

In this customization step, assign the business partner roles to the account group for the vendor master record in which the business partner is to be created when processing the vendor. When a vendor is processed as part of business partner—vendor integration, the system will create a business partner with the relevant account group in the business partner roles that are assigned to this account group.

To group together different business partner roles into a business partner group, follow menu path SAP IMG • Cross-Application Components • Master Data Synchronization • Customer/Vendor Integration • Business Partner Settings • Settings for Vendor Integration • Define BP Role for Direction Vendor to BP.

Figure 2.17 shows the single business partner group (**Group**) **HVPV** has been assigned to a business partner role (**BP Role**) **ZHVPRC**. Multiple business partner roles such as **FLVN00**, **FLVN01**, and even **ZHVPRC** can also be assigned to a single business partner group as can be seen here.



Figure 2.17 Business Partner Role Vendor to Business Partner Integration

#### 2.3.3 Vendor Account Groups for Business Partner Groupings

In this step, a vendor account group for the vendor to the business partner grouping is assigned to ensure that the system updates the vendor at the same time during business partner processing. When making this assignment, it's possible to choose whether the vendor master record should be created with either an internal or an external account number or be created with identical numbers as the business partner numbers.

To assign a business partner grouping to a vendor account group in CVI for number range assignment in the direction from business partner to vendor, follow menu path SAP IMG • Cross-Application Components • Master Data Synchronization • Customer/Vendor Integration • Business Partner Settings • Settings for Vendor Integration • Field Assignment for Vendor Integration • Assign Keys • Define Number Assignment for Direction BP to Vendor.

Figure 2.18 shows that the business partner grouping (**Grp.**) **HVPV** has been assigned the vendor account group (**Group**) **HVPV**. To enable the system to assign the same number to the vendor when a business partner is being processed, set the **Same Nos.** indicator. The following two prerequisites need to be met for using the same numbers option:

- Number ranges for the business partner and the vendor have the same area and have the External Number checkbox selected.
- External number assignment is also set for the number range in SAP S/4HANA Finance.

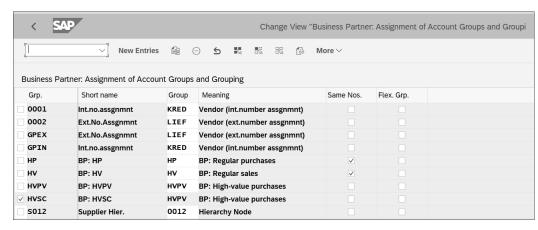


Figure 2.18 Number Assignment of Account Groups and Grouping

Now that we've discussed defining and assigning number ranges, let's move on to discuss business scenarios in the following section, wherein the number ranges need to be the same or different for some or all of the key elements (business partners, vendors, customers).

#### 2.3.4 Number Range Assignments Scenarios

Following are the four possible number ranges scenarios:

- Business partner, customer, and vendor all have the same number.
- Business partner and customer have the same number; vendor has a different number.
- Business partner and vendor have the same number; customer has a different number.
- Business partner, customer, and vendor each have their own number.

Let's discuss them one by one, including the settings that need to be in place.

#### Business Partner/Customer/Vendor: Identical Number

Let's consider the case where all three master data objects (customer, vendor, and business partner) are assigned the same number. To do this, number ranges and account groups must be defined accordingly. This scenario is helpful if a company wants to create the master data completely from scratch in a greenfield implementation approach, and there are no requirements from the user departments for the numbers from the legacy ERP system (either SAP ERP or an external ERP system) to be transferred into SAP S/4HANA. As a result, all three master data objects (business partner, vendor, and customer) can have an identical number to maintain uniformity across all three master data objects.

Follow these steps to achieve this:

- Create a new account group via menu path SAP IMG Financial Accounting Account
  Receivable and Account Payable Customer Numbers Master Data Preparation
  for Creating Customer Master Data Define Account Groups with Screen Layouts
  (Customers).
- 2. Define a new number range with the External number assignment checkbox checked via menu path SAP IMG Financial Accounting Accounts Receivables and Accounts Payables Customers Accounts Master Data Preparation for Creating Customer Master Data Create Number Ranges for Customer Accounts. Ensure that this number range isn't already assigned to vendors and business partners groups.
- 3. Assign the new number range to the new customer account group via menu path SAP IMG Financial Accounting Accounts Receivables and Accounts Payables Customers Accounts Master Data Preparation for Creating Customer Master Data Assign Number Ranges To Customer Account Groups.
- 4. Proceed in the same way for vendors by creating a new account group via menu path SAP IMG • Financial Accounting • Accounts Receivables and Accounts Payables • Vendor Accounts • Master Data • Preparation for Creating Vendor Master Data • Define Account Groups with Screen Layouts (Vendors).

- 5. Subsequently, also create a new number range with the External number assignment via menu path SAP IMG Financial Accounting Accounts Receivables and Accounts Payables Vendor Accounts Master Data Preparation for Creating Vendor Master Data Define Account Groups with Screen Layouts (Vendors) Create Number Ranges for Vendor Accounts, which corresponds to that of the customer's number range.
- 6. This vendor number range is now assigned to the new vendor account group via menu path SAP IMG Financial Accounting Accounts Receivables and Accounts Payables Vendor Accounts Master Data Preparation for Creating Vendor Master Data Define Account Groups with Screen Layouts (Vendors) Assign Number Ranges for Vendor Account Groups.
- 7. Set up a new number range for the business partner but, this time, with internal number assignment. This number range is then assigned to a new grouping that has also been created. This is done via menu path SAP IMG Cross-Application Components SAP Business Partner Business Partner Basic Settings Number Ranges and Groupings Define Number Ranges.
- 8. After defining the number range for the business partner, assign the same via menu path SAP IMG Cross-Application Components SAP Business Partner Business Partner Basic Settings Number Ranges and Groupings Define Groupings and Assign Number Ranges. Ensure that at least one grouping with internal number assignment and one with external number assignment exist within the number range assignment to the groupings (via selecting the Int. Std. Grping and Ex.StdGrping radio buttons, respectively). These groupings are used by the system as default groupings and can be changed when setting up business partners in the system.
- 9. In a final step, the master data synchronization, also known as CVI, is set up. This ensures that the data remains reconciled during integration between the tables for the business partner and the tables for customers and vendors. Data records that exist in both tables, such as the name and description, are transferred from the "leading" business partner table (BUT000) to the customer and vendor tables. So that customer and vendor integration can take place, the "direction" of number assignment must be defined from the business partner to the customer and/or vendor, as follows:

For customers, the number assignment takes place via menu path SAP IMG • Cross-Application Components • Master Data Synchronization • Customer/Vendor Integration • Business Partner Settings • Settings for Customer Integration • Field Assignment for Customer Integration • Assign Keys • Define Number Assignment for Direction BP to Customer. Verify that the Same Nos. checkbox is checked to ensure that a business partner and a customer are assigned the same number.

For vendors, the assignment is made via menu path SAP IMG · Cross-Application Components · Master Data Synchronization · Customer/Vendor Integration · Business

Partner Settings • Settings for Vendor Integration • Field Assignment for Vendor Integration • Assign Keys • Define Number Assignment for Direction BP to Vendor. Again, the Same Nos. checkbox must be checked to ensure that business partner and vendor are assigned the same number.

Figure 2.19 shows the results of the preceding setting, wherein all three master data objects—Business Partner, Customer, and Vendor—are assigned the same number 700001.

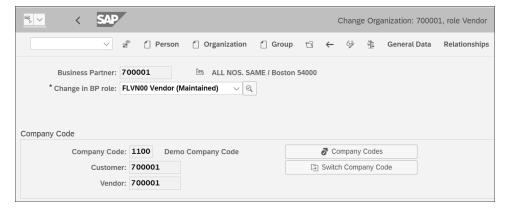


Figure 2.19 All Three Master Data Objects with the Same Numbers

#### Note

Don't worry if you can't perform the preceding steps in the SAP S/4HANA system at this time and validate the results shown in Figure 2.19. Chapter 6 will cover all these steps in detail. The purpose here is to show the logical connections among customization  $\rightarrow$  master data  $\rightarrow$  transactions  $\rightarrow$  reports.

#### Business Partners/Customers with Matching Number: Vendor with Different Number

In this business scenario, the business partners and customers are created in the SAP S/4HANA system, and the vendor (with a unique/different vendor number) is supplied from an external system or is subject to a different internal number assignment for varied reasons, for example. To achieve these results via the required settings, follow these steps:

- 1. Define and assign number ranges for the business partner and customer as described in the previous section.
- 2. For the vendor, however, an account group with a different account interval must be selected in the customization for CVI via menu path SAP IMG Cross-Application Components Master Data Synchronization Customer/Vendor Integration Business Partner Settings Settings for Vendor Integration Field Assignment for Vendor

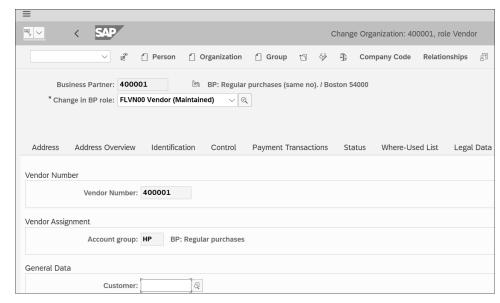
Integration • Assign Keys • Define Number Assignment for Direction BP to Vendor. In this case, the Same Numbers checkbox *must not* be checked as the vendor is to receive a different number.

#### Business Partner/Vendor with Identical Number: Customer with Different Number

In this business scenario, both the business partner and the vendor are created in the SAP S/4HANA system. The customer number is either supplied from another system or is subject to internal number assignment for other reasons. To achieve these results via the required settings, follow these steps:

- 1. Define and assign number ranges for the business partner and vendor as described in the earlier "Business Partner/Customer/Vendor: Identical Number" section.
- 2. In this case, a different account group with a different account interval must be selected for the customer in the customization for the CVI via menu path SAP IMG · Cross-Application Components · Master Data Synchronization · Customer/Vendor Integration · Business Partner Settings · Settings for Customer Integration · Field Assignment for Customer Integration · Assign Keys · Define Number Assignment for Direction BP to Customer. Because the customer is assigned a different number, don't select the Same Nos. checkbox here.

If relevant settings are correctly made, Figure 2.20 shows the **Business Partner 400001** with the same **Vendor Number 400001**.



**Figure 2.20** Same Number for Business Partner and Vendor But Different Number for Customer

#### **Customer/Vendor/Business Partners: Different Numbers**

This business scenario can occur if the user departments have their own number ranges for customers and vendors from the history and don't want to give up or adjust these number ranges when converting to the business partner in SAP S/4HANA. Two use cases can be distinguished here:

- A separate business partner is created for each customer and vendor. In this case, the business partner can adopt the number of the customer or vendor.
- A separate account group/grouping is assigned to each master data object (business partner/customer/vendor) and thus a separate number range.

In other words, the **External** number checkbox must be selected in any of the customization settings for vendor and customer but not for business partner. If relevant settings are made correctly, Figure 2.21 shows the three objects—**Business Partner**, **Customer**, and **Vendor**—each with a different number assigned.

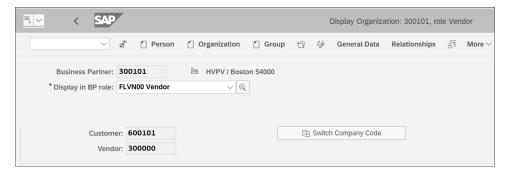


Figure 2.21 Different Number Assignment for Business Partner, Vendor, and Customer

#### 2.4 Additional Business Partner Customizations

The following sections cover the additional business partner customization required to ensure that master data creation and business processes run smoothly. We'll cover more customization steps required for setting up business partners in SAP S/4HANA, including partner functions in materials management, which is a necessary customization step to enable the system to automatically assign partner functions while creating a vendor or a supplier as a business partner.

#### 2.4.1 Business Partner Types

A business partner type to group business partners can be customized according to a company's defined criteria. It's also possible to control fields for data entry, depending on the requirements of the relevant business partner type. In addition to the business partner category, which is defined directly when a business partner is created, the

business partner type provides another means of classifying or grouping business partners at a later date. For example, it enables the system to display certain master data fields.

To customize a business partner type, follow menu path SAP IMG • Cross-Application Components • SAP Business Partner • Business Partner • Basic Settings • Business Partner Types • Define Business Partner Types.

Figure 2.22 shows a newly customized **Partner Type ZHPV**, which will be assigned in the **Control** tab while creating a business partner in Chapter 6. Numbering can be carried out according to an arbitrarily chosen alphanumeric logic, whereby the description should be as meaningful as possible to distinguish between the partner types.



Figure 2.22 Business Partner Types

#### 2.4.2 Partner Functions in Materials Management

The screen shown in Figure 2.23 allows a purchasing user to define the relationships between vendors of particular account groups and partner functions. A vendor can vary in size from a sole proprietor to a large multinational company. To best state a vendor's various operations, partner functions can be described. Partner functions can be used for both vendors and customers.

A partner function allows the purchasing department to determine what functions a vendor performs within a larger vendor organization. For example, a multinational auto parts manufacturer may supply material to a company, so a vendor number (VN) as a partner function is created. However, the address to which the company sends the purchase orders may be a separate address in a separate division of the manufacturer's business. Therefore, a vendor number for the ordering address (OA) is created, and that record will be entered into the Partner function screen for the VN Vendor. Further, there may be a need to manage a separate contact address (CA) for a vendor that supplies the invoices (PI) and an alternative payee (AZ). All of these can be created and entered into the Partner functions screen of the VN partner.

To define permissible partner function roles for an account group in materials management, follow menu path SAP IMG • Materials Management • Purchasing • Partner Determination • Partner Roles • Define Permissible Partner Roles per Account Group.

Along with other partner functions, Figure 2.23 shows the partner function (Funct) VN assigned to the vendor account Group HVPV.

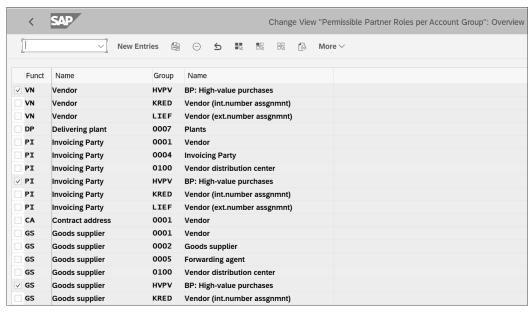


Figure 2.23 Permissible Partner Roles for Account Groups

Table 2.2 provides a selection of available vendor partner functions with their associated partner function codes.

| Partner Code | Description                   |
|--------------|-------------------------------|
| AZ           | Alternative payment recipient |
| CA           | Contact address               |
| СР           | Contact person                |
| ER           | Employee responsible          |
| GS           | Goods supplier                |
| OA           | Ordering address              |
| PI           | Invoice presented by          |
| VN           | Vendor                        |

Table 2.2 Partner Functions

#### 2.4.3 Vendor Subrange Functionality

The vendor subrange functionality can be used to subdivide a vendor's products into different ranges. For example, a vendor could be an office supply company, and subranges could be divided into computer media, paper products, and ink products.

The vendor subrange functionality can be entered into the purchasing information record of a particular vendor/material combination. The allocation of a material to a certain vendor subrange allows the vendor to see items sorted on its purchase order in subrange order.

Customization is required to enable vendor subranges. Transaction OMSG allows for editing vendor account groups. The indicator can be set to enable vendor subranges for that vendor account group.

To set up vendor subranges, use Transaction OMSG, or follow menu path SAP IMG • Logistics – General • Business Partner • Suppliers • Control • Define Account Groups and Field Selection (Supplier) (see Figure 2.24).

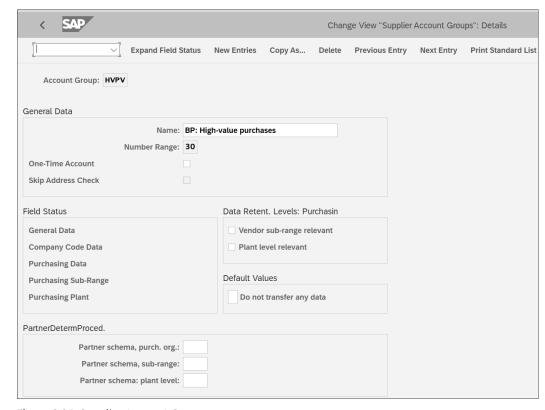


Figure 2.24 Supplier Account Group

This ends the customization steps involved in setting up a business partner as a vendor. In Chapter 6, we'll maintain a business partner as a vendor and in various business partner roles.

## 2.5 Summary

This chapter started by covering the SAP S/4HANA Finance customization required to set up business partners in SAP S/4HANA. This was then followed by undertaking the necessary business partner customization in materials management and finally also the associated customization of CVI wherein the business partner is the leading object. Further, we also discussed varied number range assignment scenarios for all three master data objects: vendor, customer, and business partner.

The next chapter covers similar customization for customers as business partners.

## Contents

| Ackn  | owledgn    | nents   | 1  |
|-------|------------|---|----|
| Fore  | word       |   | 1! |
| Prefa | ice        |   | 1  |
|       |            |   |    |
| 1     | l sa de se | a decati a c  |    |
| 1_    | intro      | oduction  | 2: |
| 1.1   | Conce      | pt of a Business Partner                              | 2  |
| 1.2   |            | ·<br>its of a Business Partner Approach               |    |
| 1.3   |            | ess Partner in SAP S/4HANA                            |    |
| 1.4   |            | ure of a Business Partner                             |    |
| 1.7   | 1.4.1      | Business Partner Category                             |    |
|       | 1.4.1      | Business Partner Grouping                             |    |
|       | 1.4.2      | Business Partner Role                                 |    |
| 1.5   |            | ess Partner and Customer-Vendor Integration           |    |
| 1.5   |            | ·   |    |
| 1.6   | Summ       | nary  | 36 |
|       |            |   |    |
|       |            |   |    |
| 2     | Ven        | dors  | 37 |
| 2.1   | Custo      | mizing Vendor Account Groups                          | 3  |
| 2.1   | 2.1.1      | Vendor Account Groups                                 |    |
|       | 2.1.1      | Number Ranges for Vendor Account Groups               |    |
|       |            | ·   |    |
| 2.2   |            | mizing a Business Partner                             |    |
|       | 2.2.1      | Number Ranges for Business Partners                   |    |
|       | 2.2.2      | Business Partner Role Categories                      |    |
|       | 2.2.3      | Field Attributes for a Business Partner Role Category | 53 |
| 2.3   | Custo      | mer-Vendor Integration                                | 52 |
|       | 2.3.1      | Business Partner Role Categories                      | 53 |
|       | 2.3.2      | Business Partner Roles                                | 54 |
|       | 2.3.3      | Vendor Account Groups for Business Partner Groupings  | 5  |
|       | 2.3.4      | Number Range Assignments Scenarios                    |    |
| 2.4   | Additi     | onal Business Partner Customizations                  | 60 |
|       | 2.4.1      | Business Partner Types                                | 60 |

|     | 2.4.2                               | Partner Functions in Materials Management              | 61 |  |
|-----|-------------------------------------|--|----|--|
|     | 2.4.3                               | Vendor Subrange Functionality                          | 62 |  |
| 2.5 | Summ                                | nary   | 64 |  |
|     |                                     |  |    |  |
|     |                                     |  |    |  |
| 3   | Cust                                | comers   | 65 |  |
| 3.1 | Customizing Customer Account Groups |  |    |  |
|     | 3.1.1                               | Customer Account Groups                                | 66 |  |
|     | 3.1.2                               | Number Range for Customer Account Groups               | 70 |  |
| 3.2 | Custo                               | mizing a Business Partner                              | 71 |  |
|     | 3.2.1                               | Number Ranges for Business Partners                    | 72 |  |
|     | 3.2.2                               | Business Partner Role Categories                       | 73 |  |
|     | 3.2.3                               | Field Attributes for Business Partner Role Category    | 79 |  |
| 3.3 | Custo                               | mer-Vendor Integration                                 | 80 |  |
|     | 3.3.1                               | Business Partner Role Categories                       | 8  |  |
|     | 3.3.2                               | Business Partner Roles                                 | 8  |  |
|     | 3.3.3                               | Customer Account Groups for Business Partner Groupings | 8  |  |
|     | 3.3.4                               | Number Range Assignments Scenarios                     | 8  |  |
| 3.4 | Additi                              | onal Business Partner Customizations                   | 8  |  |
|     | 3.4.1                               | Business Partner Types                                 | 8  |  |
|     | 3.4.2                               | Partner Functions in SAP S/4HANA Sales                 | 89 |  |
| 3.5 | Summ                                | nary   | 9: |  |
| 5.5 | <b>J</b>                            | ,  |    |  |
|     |                                     |  |    |  |
| 4   | Cuci                                | comizing for Customor Vandor Integration               | 0. |  |
| 4   | Cusi                                | comizing for Customer-Vendor Integration               | 93 |  |
| 4.1 | Gener                               | al Checks  | 94 |  |
|     | 4.1.1                               | Synchronization Direction                              | 9, |  |
|     | 4.1.2                               | Connection to Post-Processing Office                   | 9  |  |
|     | 4.1.3                               | Registered Function Modules                            | 9  |  |
|     | 4.1.4                               | Tax Classification                                     | 9  |  |
|     | 4.1.5                               | Address Number Range Validity Check                    | 9  |  |
|     | 4.1.6                               | Select Industry System                                 | 9  |  |
| 4.2 | Busine                              | ess Partner Customer Checks                            | 9  |  |
|     | 4.2.1                               | Setting for Business Partner Roles                     | 9  |  |
|     |                                     |  |    |  |
|     | 4.2.2                               | Setting for Business Partner Groupings                 | 10 |  |

|      | 4.2.4   | Missing Payment Cards                                   | 103 |
|------|---------|---|-----|
|      | 4.2.5   | Missing Industry Keys – Outgoing                        | 104 |
| 4.3  | Contac  | t Person  | 105 |
|      | 4.3.1   | Missing Department Numbers                              | 105 |
|      | 4.3.2   | Missing Functions                                       | 106 |
|      | 4.3.3   | Missing Authority                                       | 107 |
|      | 4.3.4   | Missing VIP Indicator                                   | 108 |
|      | 4.3.5   | Missing Marital Status                                  | 109 |
| 4.4  | Busine  | ss Partner Supplier Checks                              | 111 |
|      | 4.4.1   | Setting for Business Partner Roles                      | 111 |
|      | 4.4.2   | Setting for Business Partner Groupings                  | 112 |
| 4.5  | Summ    | ary   | 112 |
|      |         |   |     |
|      |         |   |     |
| 5    | Conv    | version from SAP ERP to SAP S/4HANA                     | 113 |
|      |         | •   |     |
| 5.1  | Busine  | ss Partner Approach                                     | 114 |
| 5.2  | Custon  | ner-Vendor Integration Implementation Approach          | 115 |
| 5.3  | Basic C | ustomer-Vendor Integration Customizing                  | 117 |
| 5.4  | CVI Co  | ckpit Overview  | 121 |
| 5.5  | Prepar  | ation   | 128 |
|      | 5.5.1   | Number Ranges Evaluation                                | 128 |
|      | 5.5.2   | Master Data Consistency                                 | 141 |
|      | 5.5.3   | Automated Customizing                                   | 147 |
|      | 5.5.4   | Suppress Checks   | 168 |
| 5.6  | Custon  | ner-Vendor Integration Load                             | 172 |
|      | 5.6.1   | Pre Load Activities                                     | 173 |
|      | 5.6.2   | Real Load Activities                                    | 175 |
|      | 5.6.3   | Synchronization Errors and Their Resolutions            | 190 |
|      | 5.6.4   | Post Load Activities                                    | 206 |
| 5.7  | Upgrad  | de Preparation  | 206 |
| 5.8  | Post-C  | onversion   | 208 |
| 5.9  | Custon  | ner-Vendor Integration Reports                          | 216 |
|      | 5.9.1   | Report CVI_FS_CHECK_CUSTOMIZING                         | 216 |
|      | 5.9.2   | Report CVI_UPGRADE_CHECK_RESOLVE                        | 218 |
|      | 5.9.3   | Report PRECHECK_UPGRADATION_REPORT                      | 220 |
| 5.10 | Additio | onal Tips and Tricks                                    | 222 |
|      | 5.10.1  | Field Modifications of Business Partners in SAP S/4HANA | 222 |

|      | F 10 2  |   |   |
|------|---|---|---|
|      | 5.10.2  | Impact on Custom Code   | 223   |
|      | 5.10.3  | Archiving Customer/Vendor Data with the Deletion Flag   | 224   |
|      | 5.10.4  | Contact Person mapping  | 224   |
|      | 5.10.5  | Check and Integrate Customer/Vendor Enhancements  | 224   |
|      | 5.10.6  | Deleting Business Partners  | 225   |
|      | 5.10.7  | Authorizations  | 225   |
|      | 5.10.8  | Data Migration  | 226   |
|      | 5.10.9  | Linking a Customer and a Vendor to a Single Business Partner  | 227   |
|      | 5.10.10   | SEPA Mandate for Vendor   | 228   |
|      | 5.10.11   | Linking Customers and Vendors in a Conversion Project   | 229   |
|      | 5.10.12   | Road Map to a Successful Conversion   | 230   |
|      | 5.10.13   | Lessons Learned from Conversion Projects  | 231   |
| 5.11 | Summa   | ıry   | 232   |
|      |   | ,   |   |
|      |   |   |   |
| _    | A A   | Animin a Descision and Descision and  |   |
| 6    | Main  | taining Business Partners   | 233   |
|      |   |   |   |
| 5.1  | Naviga  | ting the Business Partner   | 233   |
| 5.2  | Mainta  | ining Vendors   | 237   |
|      |   |   |   |
|      | 6.2.1   | Business Partner General Data   | 237   |
|      | 6.2.1<br>6.2.2  | Business Partner General Data  Extending a Business Partner as a Financial Accounting Vendor  |   |
|      |   |   | 237   |
|      | 6.2.2   | Extending a Business Partner as a Financial Accounting Vendor   | 237<br>245  |
|      | 6.2.2<br>6.2.3  | Extending a Business Partner as a Financial Accounting Vendor<br>Extending Business Partners for Purchasing   | 237<br>245<br>255   |
|      | 6.2.2<br>6.2.3<br>6.2.4   | Extending a Business Partner as a Financial Accounting Vendor  Extending Business Partners for Purchasing   | 237<br>245<br>255<br>262  |
|      | 6.2.2<br>6.2.3<br>6.2.4<br>6.2.5  | Extending a Business Partner as a Financial Accounting Vendor  Extending Business Partners for Purchasing  Maintaining a Business Partner Relationship  Business Partner Role Exclusion Group | 237<br>245<br>255<br>262<br>263   |
| 6.3  | 6.2.2<br>6.2.3<br>6.2.4<br>6.2.5<br>6.2.6<br>6.2.7  | Extending a Business Partner as a Financial Accounting Vendor  Extending Business Partners for Purchasing   | 237<br>245<br>255<br>262<br>263<br>264  |
| 5.3  | 6.2.2<br>6.2.3<br>6.2.4<br>6.2.5<br>6.2.6<br>6.2.7  | Extending a Business Partner as a Financial Accounting Vendor   | 237<br>245<br>255<br>262<br>263<br>264<br>267   |
| 6.3  | 6.2.2<br>6.2.3<br>6.2.4<br>6.2.5<br>6.2.6<br>6.2.7<br>Mainta  | Extending a Business Partner as a Financial Accounting Vendor  Extending Business Partners for Purchasing   | 237<br>245<br>255<br>262<br>263<br>264<br>267<br>270                                    |
| 5.3  | 6.2.2<br>6.2.3<br>6.2.4<br>6.2.5<br>6.2.6<br>6.2.7<br><b>Mainta</b><br>6.3.1  | Extending a Business Partner as a Financial Accounting Vendor  Extending Business Partners for Purchasing   | 237<br>245<br>255<br>262<br>263<br>264<br>267<br>270<br>271                             |
| 6.3  | 6.2.2<br>6.2.3<br>6.2.4<br>6.2.5<br>6.2.6<br>6.2.7<br><b>Mainta</b><br>6.3.1<br>6.3.2                                     | Extending a Business Partner as a Financial Accounting Vendor  Extending Business Partners for Purchasing   | 237<br>245<br>255<br>262<br>263<br>264<br>267<br>270<br>271<br>276                      |
| 5.3  | 6.2.2<br>6.2.3<br>6.2.4<br>6.2.5<br>6.2.6<br>6.2.7<br><b>Mainta</b><br>6.3.1<br>6.3.2<br>6.3.3                            | Extending a Business Partner as a Financial Accounting Vendor   | 237<br>245<br>255<br>262<br>263<br>264<br>267<br>270<br>271<br>276<br>286               |
| 5.3  | 6.2.2<br>6.2.3<br>6.2.4<br>6.2.5<br>6.2.6<br>6.2.7<br><b>Mainta</b><br>6.3.1<br>6.3.2<br>6.3.3<br>6.3.4                   | Extending a Business Partner as a Financial Accounting Vendor   | 237<br>245<br>255<br>262<br>263<br>264<br>267<br>270<br>271<br>276<br>286<br>297        |
| 5.3  | 6.2.2<br>6.2.3<br>6.2.4<br>6.2.5<br>6.2.6<br>6.2.7<br><b>Mainta</b><br>6.3.1<br>6.3.2<br>6.3.3<br>6.3.4<br>6.3.5          | Extending a Business Partner as a Financial Accounting Vendor   | 237<br>245<br>255<br>262<br>263<br>264<br>267<br>271<br>276<br>286<br>297<br>299        |
| 5.3  | 6.2.2<br>6.2.3<br>6.2.4<br>6.2.5<br>6.2.6<br>6.2.7<br><b>Mainta</b><br>6.3.1<br>6.3.2<br>6.3.3<br>6.3.4<br>6.3.5<br>6.3.6 | Extending a Business Partner as a Financial Accounting Vendor   | 237<br>245<br>255<br>262<br>263<br>264<br>267<br>270<br>271<br>276<br>286<br>297<br>299 |

| 4рр  | Appendices  |     |
|------|---|-----|
|      |   |     |
| 4    | Transaction Codes, Tables, and Roles              | 313 |
| 3    | SAP Notes and Additional Resources                | 319 |
| 2    | Migrating Additional SAP Solutions to SAP S/4HANA | 333 |
| )    | The Author  | 345 |
|      |   |     |
|      |   |     |
| ndex |   | 347 |

10

# Index

| A   | Business partners (Cont.)                                      |
|---|--|
| ARC in director                                 | delete         225           extend as FI customer         276 |
| ABC indicator                                   | extend as FI customer  |
| Account groups 38, 40, 41, 56, 68, 70, 84, 132, | extend for purchasing255                                       |
| - ·   | extend to sales area   |
| 154, 247, 251, 266, 279, 283                    |  |
| Account statement indicator                     | general data   |
| Accounting                                      | maintain   |
| Address checks                                  | maintain relationships262, 297                                 |
|   | mapped to vendor   |
| Advance ship notification (ASN) 254, 286        | navigating   |
| Alternative payee                               | new  |
| Approved batch record                           | settings   |
| Archiving customer/vendor data                  | structure  |
| Asset account                                   | transactions   |
| Authorization group 226, 247, 279               | types  |
| Authorization objects                           | validating setup   |
| Authorizations                                  | Business partner-vendor integration 54                         |
| Automatic payment243                            |  |
| Automatic purchase order258                     | C  |
| Availability check 296                          |  |
|   | Calculation schema   |
| B   | Cash Management 249, 281                                       |
|   | Cash outflow   |
| Balance sheet account                           | Certification  |
| Bank  | Check cashing time249, 281                                     |
| account 241, 274                                | Check digit  |
| identification241, 274                          | Collection strategies 304                                      |
| routing number241, 274                          | Commission group 295   |
| sort code 241, 274                              | Communication field 239, 273                                   |
| Best practice 249, 258, 281                     | Company 39, 238, 240, 248, 254, 255, 272,                      |
| Bill of exchange250                             | 281, 285   |
| limit250  | Company code 41, 68, 245, 276, 277                             |
| Billing document 301                            | Completeness check 127   |
| Block maintenance transactions 173              | Concept phase  |
| Brownfield (conversion)34                       | Conditions   |
| Business Add-Ins (BAdIs)169                     | Confirmation control key 260                                   |
| CVI_CUSTOM_MAPPER 170, 227                      | Consistency checks 143   |
| Business Data Toolset (BDT)33                   | error records146   |
| Business partner grouping 32, 44, 130           | mass populate146   |
| mapping214                                      | rerun145   |
| settings 101, 112                               | status 145   |
| Business partners23                             | vendor errors145   |
| benefits28                                      | Consolidation240   |
| category31                                      | Contact address 61   |
| configuration 43, 60, 71, 88                    | Contact person 105, 117, 135                                   |
| customer integration82                          | activate160  |
| data model26                                    | authority107, 162  |
|   | -  |

| Contact person (Cont.)               |          |
|--------------------------------------|----------|
| functions1                           | .06, 161 |
| mapping                              |          |
| marital status1                      | .09, 164 |
| VIP indicator1                       |          |
| Contract                             | 250      |
| Core Interface (CIF)                 | 338      |
| Corporate Group                      | 240      |
| Country 2                            | 39, 273  |
| Country code 239, 241, 2             | 72, 274  |
| Credit control area                  | 292      |
| Credit limit                         | 304      |
| Cross-border account number 2        | 42, 275  |
| Cross-border payment 2               | 42, 274  |
| Cross-distribution chain             |          |
| Custom code                          |          |
| Customer (SD)                        |          |
| Customer account groups 66, 71, 1    |          |
| business partner groupings           |          |
| create new                           |          |
| number ranges                        |          |
| Customer field                       |          |
| Customer master 68, 134, 272, 275, 2 |          |
| Customers 41, 43, 65, 70, 71, 89, 2  |          |
| 250, 279, 282                        | 10, 217  |
| account                              | 279      |
| account management                   |          |
| addresses                            |          |
| bank details                         |          |
| checks                               |          |
| control                              |          |
| correspondence                       |          |
| maintain                             |          |
| master record2                       |          |
| name                                 |          |
| number70,                            |          |
| number range                         |          |
| one-time                             |          |
| partner code                         |          |
|                                      |          |
| payment transactions                 |          |
| price group                          | 200      |
| statistics group                     |          |
| status                               |          |
| sunchronization without issues       |          |
| sync to business partner             |          |
| withholding tax                      |          |
| Customer-specific customer/vendor    |          |
| Customer-vendor integration (CVI)    | 23, 52   |
| 57, 80, 85, 93                       |          |
| business checks                      |          |
| customizing                          |          |
| function modules                     | 96       |

| Customer-vendor integration (CVI) (Cont.)                        |
|--|
| general checks94   |
| implementation approach115                                       |
| integration direction and sequence 34                            |
| interface control77  |
| interface diagram114   |
| quality checks116  |
| queue registration119  |
| roles100   |
| synchronization options118                                       |
| Customizing errors log218  |
| CVI cockpit 121  |
| automated customizing147   |
| completeness check205  |
| conntect to PPO149   |
| CVI load127, 172   |
| edit mode124   |
| master data consistency checks142                                |
| out of scope 126   |
| post-load activities206  |
| post-processing desktop184                                       |
| pre-load activities173   |
| preparation128   |
| preupgrade customizing checks207                                 |
| read me123   |
| real load activities175  |
| registered function modules151                                   |
| run history144   |
| statuses   |
| structure  |
| supress field checks168  |
| synchronization direction148                                     |
| tabs122  |
| tax classification   |
| updating statuses125   |
| upgrade preparation206   |
| apgrade preparation200   |
| D  |
| Data Browser213  |
| Data cleansing and validation phase                              |
| Data medium exchange (DME)243                                    |
| Data migration   |
| Deactivation of interfaces                                       |
| DEBMAS and CREMAS  |
|  |
| Deletion flag         224           Delivering plant         290 |
|  |
| Delivery unit 290  |
| Delivery unit  |
| Department numbers   |
| Differentiation type 45, 78                                      |

| Discount   |          |  |  |                            |     |            |          |
|--|----------|--|--|----------------------------|-----|------------|----------|
| in kind  | 260      |  |  |                            |     |            |          |
| Distribution profile   | 297      |  |  |                            |     |            |          |
| Document flow  | 301      |  |  |                            |     |            |          |
| Document index       259         Double invoice       249         Dunning       250, 251, 282         block       250, 282 |          |  |  |                            |     |            |          |
|  |          |  |  |                            |     | clerk      | 251, 283 |
|  |          |  |  |                            |     | notice     | 250, 282 |
|  |          |  |  |                            |     | procedure2 |          |
| run  | 250, 282 |  |  |                            |     |            |          |
| E  |          |  |  |                            |     |            |          |
| Electronic data interchange (EDI)<br>258, 281, 285, 286  |          |  |  |                            |     |            |          |
| Email address  |          |  |  |                            |     |            |          |
| Employer Identification Number (El   |          |  |  |                            |     |            |          |
| European Article Number (EAN)260   |          |  |  |                            |     |            |          |
| Evaluated receipt settlement (ERS)   | 258      |  |  |                            |     |            |          |
| automatic258   |          |  |  |                            |     |            |          |
| Exclusion groups   |          |  |  |                            |     |            |          |
| Exemption certificate252, 284Export to Microsoft Excel206External number55, 60   |          |  |  |                            |     |            |          |
|  |          |  |  | External standard grouping |     |            |          |
|  |          |  |  | External tax system        | 239 |            |          |
| F  |          |  |  |                            |     |            |          |
| Fax number   |          |  |  |                            |     |            |          |
| FI customer  | 33, 81   |  |  |                            |     |            |          |
| FI vendor  | 53       |  |  |                            |     |            |          |
| Field modifications  | 222      |  |  |                            |     |            |          |
| Field status   | 40, 68   |  |  |                            |     |            |          |
| Foreign trade  |          |  |  |                            |     |            |          |
| Foreign vendor   |          |  |  |                            |     |            |          |
| Forwarding agent   | 254, 255 |  |  |                            |     |            |          |
| Free of charge   |          |  |  |                            |     |            |          |
| Freight cost   |          |  |  |                            |     |            |          |
| Function modules   |          |  |  |                            |     |            |          |
| G  |          |  |  |                            |     |            |          |
| General ledger   | 247, 279 |  |  |                            |     |            |          |
| account  |          |  |  |                            |     |            |          |
| Generally Approved Accounting  | , -      |  |  |                            |     |            |          |
| Principles (GAAP)  | 288      |  |  |                            |     |            |          |
| Global location number (GLN)   | 254, 285 |  |  |                            |     |            |          |
| bar code   |          |  |  |                            |     |            |          |
| Go-live and support phase  |          |  |  |                            |     |            |          |

| 31                         |
|----------------------------|
|                            |
|                            |
| 139                        |
| os 166                     |
| 140                        |
| 156                        |
| 167                        |
| 155                        |
|                            |
| 247, 279                   |
| 250                        |
|                            |
| 201                        |
| 250                        |
| 36                         |
| ., 252, 283, 284           |
| 257, 288                   |
| 105, 158                   |
| 159                        |
| 159                        |
| 105                        |
| 98, 152                    |
| 98, 132<br>. 104, 254, 285 |
| . 104, 234, 283<br>158     |
| 138<br>168                 |
| 248, 279                   |
| 246, 279<br>130            |
|                            |
| 72                         |
| ber                        |
| 242, 274                   |
| erce 257                   |
| ., 258, 281, 283<br>292    |
|                            |
| 266                        |
| 258                        |
| 243, 275                   |
|                            |
| 251, 282                   |
| 102, 157                   |
| 102, 157                   |
| le                         |
| 227                        |
| 229                        |
|                            |

| Loading group                        | 296     | Number ranges (Cont.)          |             |
|--------------------------------------|---------|--------------------------------|-------------|
| Loading point                        | 288     | assignment scenarios           | 56, 83      |
|                                      |         | assignments to account groups  |             |
| M                                    |         | create new                     |             |
|                                      |         | customer with different number | 59, 87      |
| Manage Business Partner Master Data  |         | define                         | 43          |
| app                                  | 269     | different numbers              | 60, 87      |
| Manage Customer Master Data app      | 305     | edit intervals                 | 138         |
| сору                                 | 307     | evaluation                     | 128, 132    |
| partner functions                    | 308     | guidelines                     | 131         |
| roles                                | 307     | identical number               | 56, 84      |
| sales area                           | 308     | intervals                      | 70, 134     |
| Manage Supplier Master Data app      | 267     | merging                        | 131         |
| check data                           |         | relationships                  | 141         |
| copy data                            | 268     | scenarios                      | 129         |
| supplier details                     |         | transport message              |             |
| Marital statuses                     |         | unique identifier              |             |
| Mass synchronization                 |         | validity check                 |             |
| Master data                          |         | vendor with different number   |             |
| clean up                             | 35      | venor account groups           |             |
| consistency                          |         |                                |             |
| objects                              |         | 0                              |             |
| synchronization57,                   |         | 0                              |             |
| synchronization objects              |         | Object                         | 247 259 279 |
| Master Data Consistency Check report |         | Office of entry                |             |
| Master data synchronization          |         | One-time customers             |             |
| Matchcode                            |         | Order                          |             |
| Material 61, 243, 250, 2             |         | Order currency                 |             |
| Material groups                      |         | Order probability              |             |
| Material master                      |         | Organization                   |             |
| Material number                      |         | fields                         |             |
| Material pricing groups              |         | menu path                      |             |
| Material statistics groups           |         | Overdelivery                   |             |
| Materials management                 |         | Overdenvery                    | 291         |
| Minimum delivery quantity            |         | P                              |             |
| Minimum order quantity               |         | Ρ                              |             |
| Minority vendor                      |         | Partial deliveries             | 201         |
| Minority-owned business              |         | Partner bank type              |             |
| indicator                            |         | Partner functions              |             |
| MM vendor                            |         | assign                         |             |
| Mode of transport                    |         | define                         |             |
| wode of transport                    | 200     | Payment                        | 90          |
| NI                                   |         | block                          | 240         |
| N                                    |         | block keys                     |             |
| National assessment mumbers 2        | 42.275  | -                              |             |
| National Actor Freight Traffic       | 44, 4/0 | cards                          |             |
| National Motor Freight Traffic       | E4 20E  | guarantee                      |             |
| Association                          |         | method                         |             |
| Negative stock in plant              |         | period                         |             |
| Number ranges 38, 41, 43, 44, 56, 70 | -/2,84, | slip                           |             |
| 134, 212, 213                        | 00      | term                           |             |
| address                              |         | transactions                   | 240, 2/3    |
| assignment                           | 5 /     |                                |             |

| Person                          | 21       | Report (Cont.)                            |       |
|---------------------------------|----------|---|-------|
| fields                          |          | CVI UPGRADE CHECK RESOLVE                 | 210   |
| menu path                       |          | CVI_MIGRATION_PRECHK                      |       |
| Personnel number                |          | FSBP_IND_SECTOR_MAPPING_CHECK             |       |
| Planning group                  |          | MDS_LOAD_COCKPIT                          |       |
| Post office box                 |          | PRECHECK_UPGRADATION_REPORT               |       |
| Postal code                     |          | RFKREDEB_SYNC                             |       |
| Postprocessing                  |          | Reporting                                 |       |
| desktop                         |          | Role categories 45, 46, 51, 53, 73, 78–80 |       |
| Postprocessing office           |          | assign                                    |       |
| activate                        |          | data set                                  |       |
| connect to                      |          | define5                                   |       |
| Postprocessing office orders    |          |   |       |
|                                 |          | field attributes5                         |       |
| activate creation               |          | set up                                    |       |
| Price determination             |          | Roles                                     |       |
| Price list type                 |          | assign5                                   |       |
| Price marking agreement         | 261      | assign to category                        |       |
| Pricing                         | 250      | assign to vendor account groups           |       |
| date control                    |          | assign to vendor accoutn groups           |       |
| procedure                       |          | central5                                  |       |
| Processing time/base quantity . |          | checks                                    |       |
| Product attribute               |          | descriptions4                             |       |
| Profit center                   |          | exclusion group263                        |       |
| Proof of delivery               |          | for customers                             |       |
| Purchase order 243, 250, 25     |          | group                                     |       |
| Purchase requisition            |          | mandatory                                 |       |
| Purchasing 61, 78, 23           |          | map account groups                        |       |
| Purchasing document             | 257, 259 | SAP-provided49, 76                        | , 154 |
| Purchasing group                | 260      | set up                                    | 82    |
| Purchasing information record   | 63       | settings 99, 111, 153                     | , 165 |
| Purchasing organization         | 39, 244  | vs. account groups                        | 154   |
|                                 |          | vs. customer/vendor account groups        | 100   |
| Q                               |          | Rounding profile261                       | , 294 |
|                                 |          | Route determination                       | 290   |
| Quality management              | 255      |   |       |
| Quantity stipulations           | 293      | S   |       |
|                                 |          |   |       |
| R                               |          | Sales management                          |       |
|                                 |          | Sales office                              |       |
| Rack-jobbing service agreement  |          | Sales order                               |       |
| Reconciliation                  | 247, 279 | Sales unit                                | 293   |
| account                         |          | SAP Business Warehouse (SAP BW)           | 338   |
| Region                          | 239, 273 | SAP Collections and Dispute               |       |
| Relationship categories         | 263, 299 | Management                                | 304   |
| Release group                   | 247      | SAP Credit Management 303                 | , 336 |
| Reminder letter                 | 250, 282 | SAP Customer Relationship                 |       |
| Replacement part                | 296      | Management (SAP CRM)                      | 339   |
| Report                          |          | SAP ERP Human Capital Management          |       |
| CVI_COMPLETENESS_CHECK          | 206      | SAP for Retail                            | 337   |
| CVI_FS_CHECK_CUSTOMIZING        |          | SAP for Utilities                         |       |
| CVI MIGRATE CUST LINKS .        |          | SAP Master Data Governance (SAP MDG)      |       |
| CVI_MIGRATE_VEND_LINKS          | 229      | SAP Notes                                 | 170   |
|                                 |          |   |       |

350

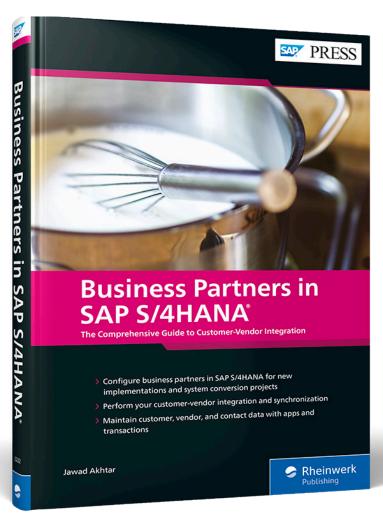
| SAP S/4HANA Finance                | 25       | Synchronization errors (Cont.) |         |
|------------------------------------|----------|--------------------------------|---------|
| SAP S/4HANA migration project      | 35       | example                        | 187     |
| SAP S/4HANA Sales                  | 25       | incorrect credit card number   | s201    |
| SAP Sales Cloud                    | 337      | invalid email                  | 197     |
| SAP Service Cloud                  | 337      | list of common issues          | 190     |
| SCAC code                          | 254      | master data issues             |         |
| Schema group                       | 257      | missing web address            | 201     |
| Scrap                              |          | no geocode for country         |         |
| SD customer                        |          | non-existant customers/ven     |         |
| Search                             | 236, 239 | postal code                    |         |
| help                               | 235      | resolutions                    |         |
| term                               |          | tax code                       |         |
| SEPA mandate                       | 228      | tax jurisdiction               |         |
| Serial number                      |          | tax number                     |         |
| profile                            |          | tax number category            |         |
| Service                            |          | trading partner                |         |
| Service-agent procedure group      |          | transport zone                 |         |
| Service-based invoice verification |          | truncated fields               |         |
| Setup time                         |          | types                          |         |
| Shipping conditions                |          | update termination error       |         |
| Shipping point determination       |          | validity periods               |         |
| Shipping points                    |          | wrong number range             |         |
| Simple algorithm                   |          | System conversion              |         |
| Simplification list                |          | post-conversion                |         |
| Single legal entity                |          | preparation                    |         |
|                                    |          |                                |         |
| Social Security number             |          | roadmap                        |         |
| Software Update Manager (SUM)      |          | roadmap for success            |         |
| Sole proprietor                    |          | tips and tricks                | 231     |
| Standard Corrier Alpha Code        |          | _                              |         |
| Standard Carrier Alpha Code        |          | T                              |         |
| Street address                     |          | T-l-l- MDCU CTDL ODT           | 110     |
| Subledger                          |          | Table MDSV_CTRL_OPT            |         |
| Subsequent settlement              |          | Tax                            |         |
| Suppliers                          |          | identification number          |         |
| checks                             |          | jurisdiction code2             |         |
| SWIFT                              |          | type                           |         |
| Synchronization cockpit            |          | Tax classification             | ,       |
| control parameters                 |          | Taxware                        |         |
| monitor                            |          | Technical creation date        |         |
| process                            |          | Terms of payment               |         |
| scope                              |          | Testing and training phase     |         |
| selection criteria                 |          | Tolerance                      |         |
| synchronization run                |          | group                          |         |
| test run                           |          | Trade definition               |         |
| Synchronization direction          |          | Trading goods partner          | 240     |
| Synchronization errors             |          | Transaction                    |         |
| address form                       |          | /N/SAPPO/ORDER                 |         |
| bank account key                   |          | /N/SAPPO/PPO3                  |         |
| bank key                           |          | BP                             |         |
| correct source                     | 187      | BP_CVI_IMG_CHK                 |         |
| country undefined                  | 202      | BP_CVI_SAP_IMG_CHK             | 93, 209 |
| Customizing issues                 | 196      | BUCF                           | 44, 134 |
|                                    |          |                                |         |

| ransaction (Cont.)       |                  | US Department of Transportation | on 254, 286    |
|--------------------------|------------------|---------------------------------|----------------|
| CVI CHECK VISIBILITY     | 223              | Use-tax responsibility          |                |
| CVI_COCKPIT              | 121, 173         | •                               |                |
| CVI_cockpit              |                  | V                               |                |
| CVI COMPL CHK            | 206              | _                               |                |
| CVI_LEDH                 | 170              | Validating Customization        | 264, 300       |
| CVI_PRECHK               | 142, 216         | Validation                      |                |
| CVI_prechk               | 147              | Value-added tax (VAT)           | 253, 285       |
| deprecated from SAP ERP  |                  | Variable sales unit             | 293            |
| FBMP                     | 250, 282         | VAT registration number         | 143            |
| FK08                     | 244              | Vendor (MM)                     | 33             |
| MASS                     | 30               | Vendor account groups           |                |
| MDS Links                | 180–182          | business partner grouping       |                |
| MDS_LOAD_COCKPIT 175     | 5, 177, 183, 206 | create                          |                |
| MDS PPO2                 |                  | Vendor accounts                 |                |
| ME23N                    |                  | Vendor master 38–40, 23         |                |
| MIGO                     | 265, 300         | 252, 253, 273, 284, 285         |                |
| MIRO                     | 265              | renumber                        | 252, 284       |
| MK02                     | 188              | Vendors                         |                |
| MK05                     | 244              | account group                   | *              |
| MKVZ                     | 266              | account management              |                |
| OB27                     | 249              | address                         |                |
| OBA3                     |                  | bank details                    |                |
| OMSG                     | ,                | control                         |                |
| SE16N 134                |                  | correspondence                  |                |
| SFW1                     |                  | maintain                        |                |
| SFW5                     |                  | name                            |                |
| SNUM                     | 141              | number                          |                |
| VA01                     | 300              | number ranges                   |                |
| VAO2                     | 300              | one-time                        |                |
| VA03                     | 300              | partner code                    |                |
| VF01                     | 301              | payment transactions            |                |
| VFO3                     | 300              | recipient type                  |                |
| XD02/XK02                | 204              | service level                   |                |
| XD99                     |                  | status                          |                |
| XDN1                     | 132              | subrange                        | 62, 260        |
| XK99                     | 30               | witholding tax                  |                |
| XKN1                     | 42. 212          | Verification                    |                |
| ransportation department |                  | level                           |                |
| ransportation group      |                  | Vertex                          |                |
| wo-way match             |                  | Volume rebate group             |                |
| ,                        |                  |                                 |                |
| J                        |                  | W                               |                |
| nderdelivery             | 201              | Withholding toy                 | 51 252 202 204 |
| nit of measure group     |                  | Withholding tax25               |                |
| int of measure group     | 409              | VV OI KIISt                     | 235            |

352







Jawad Akhtar

# Business Partners in SAP S/4HANA: The Comprehensive Guide to Customer-Vendor Integration

353 pages, 2022, \$89.95 ISBN 978-1-4932-2222-3



www.sap-press.com/5468



**Jawad Akhtar** is an SAP logistics and supply chain management expert with a focus on business sales and delivery. He earned his chemical engineering degree from the Missouri University of Science and Technology in the United States. He has more than 20 years of professional experience, 16 of which have been spent working with

SAP systems. He has experience working on several large-scale, end-to-end SAP implementation project lifecycles, including rollouts. He works with SAP clients to help them identify the root causes of business issues and address those issues with the appropriate SAP products and change management strategies. He now focuses on next-generation SAP products such as SAP S/4HANA, SAP Integrated Business Planning, SAP Ariba, and SAP Customer Experience.

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.