

Browse the Book

Contracts solidify pricing and volumes with suppliers, as well as terms and conditions, making contracts a must-have for orderly procurement operations. ERP systems have traditionally focused upon the operational aspects of contracts, integrating the negotiated terms into transactions. SAP S/4HANA continues this tradition while adding some nuances on the integration side with SAP Ariba and embracing a robust contract creation with enterprise contract management. This chapter outlines contract functionality and usage in SAP S/4HANA Sourcing and Procurement, configuration, and integration with SAP Ariba Contracts.



Contracts Management



Contents



Index



The Author

Justin Ashlock

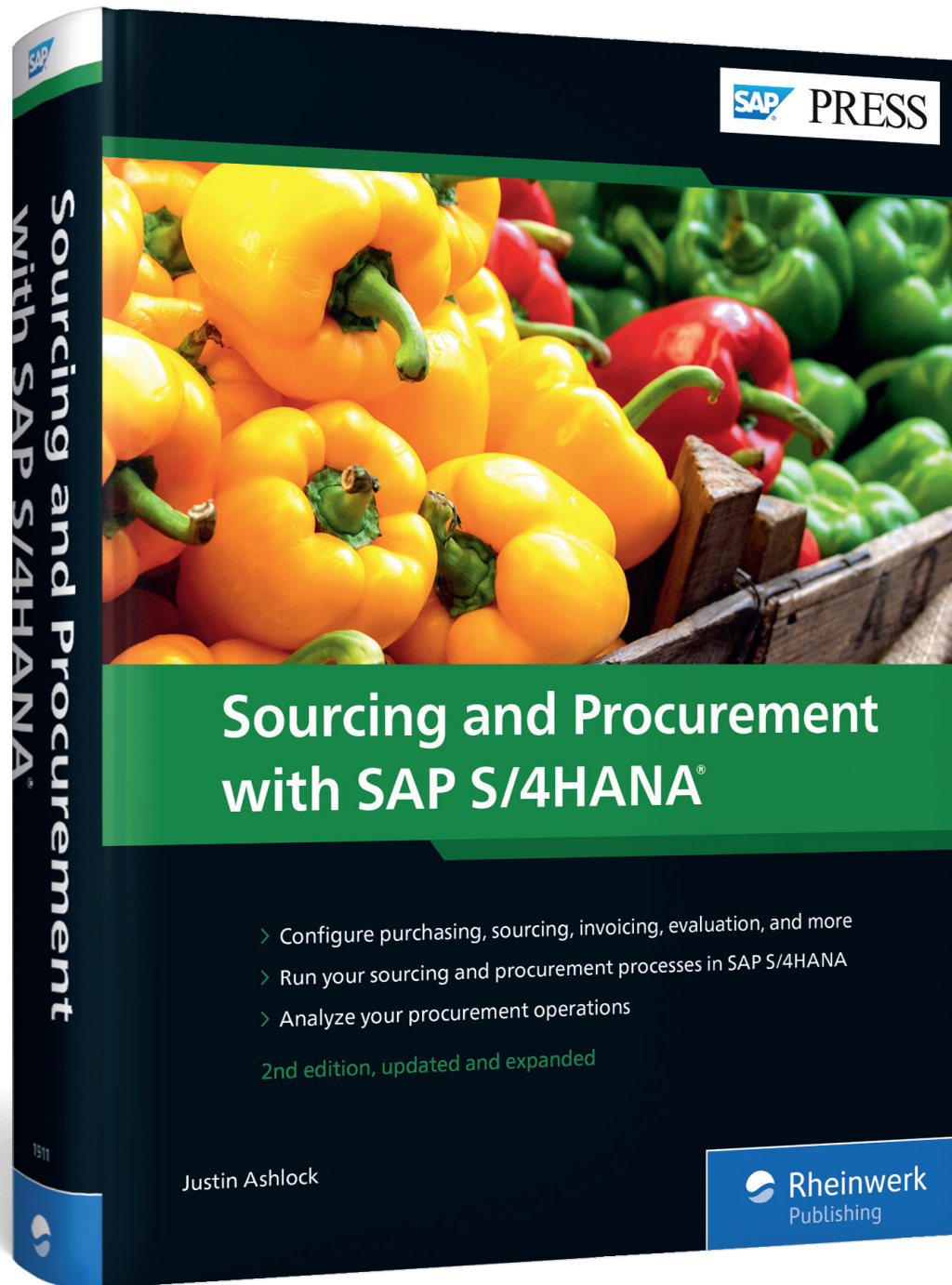
Sourcing and Procurement with SAP S/4HANA

716 Pages, 2020, \$79.95

ISBN 978-1-4932-1911-7



www.sap-press.com/5003



Chapter 8

Contracts Management

Purchasing contracts are agreements made by a buying organization with a supplier for supply of materials and services. Contract management in purchasing is the process of managing such contracts, which includes creation, execution, monitoring, analysis, and renewal of contracts in SAP S/4HANA.

This chapter explains the contract management process and the SAP Fiori apps relevant to contract management and related analytics. We've also provided the detailed configuration steps required in SAP S/4HANA to run contract management.

Businesses are becoming increasingly competitive and success-driven in today's digital economy. To be a successful organization, it's essential that the procurement process, which is one of the core lines of business for any industry, is run with high efficiency and low costs. Most companies use the concept of longer-term purchasing agreements with suppliers to achieve procurement process optimization and improved financial performance. Such agreements are defined as *outline purchase agreements*, which may be referred to as *blanket* or *umbrella agreements* outside SAP systems. Outline purchase agreements within SAP S/4HANA comprise contracts, centrally agreed upon contracts, distributed contracts, scheduling agreements, and scheduling agreements referencing a centrally agreed upon contract. The solution addressing these agreements is referred to as *purchase contract management* under the sourcing and contract management stream in SAP S/4HANA, as shown in Figure 8.1.

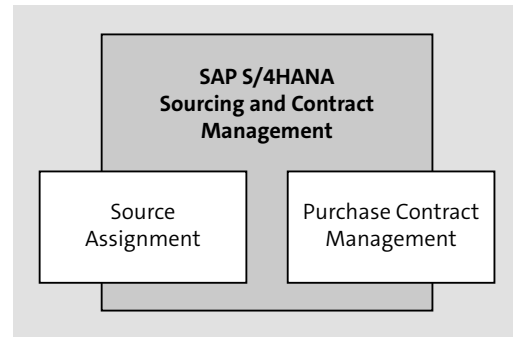


Figure 8.1 Sourcing and Contract Management

8.1 What Is Contract Management?

Contract management within SAP S/4HANA Sourcing and Procurement refers to the management of long-term purchasing arrangements with suppliers for supply of materials or performance of services. Purchases made with reference to these purchasing agreements help streamline the procurement process. Well-designed contract management can help reduce prices and guarantee on-time supply, which helps plan and optimize the business processes of both the purchasing organization and the supplying organization. The analytics capabilities and innovations offered by SAP S/4HANA enables contract management processes that are in real time and efficient.

8.1.1 Contract Creation

A contract is a document created and maintained in the SAP S/4HANA system. This document holds all the information relevant to the purchasing agreement between the organization and the supplier. Once the quantities, prices, terms, and conditions are finalized, the contract is created in the system. The different types of contracts and how they're created in the system are explained in this section.

8.1.2 Types of Contracts

A contract is a type of outline agreement with suppliers in SAP S/4HANA that allows for the issue of release orders (a.k.a., call-off orders) for the agreed-upon materials or

services of the contract. These purchase contracts in SAP S/4HANA consist of *items*, which are materials, material groups, or services. It's possible to create the following contracts, depending on the business requirements:

- **Quantity contract**

This type of contract stipulates the quantity, negotiated price, and conditions for purchase of materials or services from the supplier with whom the contract is established. This allows the purchaser to issue multiple release orders to the supplier with reference to the contract until the total quantity reaches the value defined in the contract.

- **Value contract**

These contracts are generally used for purchasing materials or services that belong to certain material groups defined in materials management. These contracts stipulate the total value of the contract—which is also known as the *target value*—and of the material groups and the supplier. Specific materials or services are not listed as line items in the contract, but the contract allows purchase of materials or services that belong to the material groups that are listed as line items in the contract. Purchasers can create release orders for materials or services that belong to the material groups identified in the contract.

- **Contract release order**

It's possible to create a release order, which is simply a PO referencing a contract, using SAP GUI Transaction ME21N. In this transaction, if you enter the contract number in the **Outline Agreement** field under the **Items** pane, the system will populate all the information from the contract and expect you to input the quantity and delivery date. After creating the release order, it's possible to edit and display the document using Transactions ME22N and ME23N, respectively. With the introduction of SAP Fiori apps in SAP S/4HANA, the UI has moved away from the old SAP GUI-based transactions to the new SAP Fiori UX, which is explained in the next section.

8.1.3 Manage Purchase Contracts

Contracts can be created either directly by entering all the data manually or by referencing purchase requisitions, RFQs/quotations, or existing contracts. The SAP GUI Transaction ME31K is used for creating a contract, and this transaction is also available from the SAP Fiori launchpad. With the introduction of SAP Fiori apps for

SAP S/4HANA, the Manage Purchase Contracts SAP Fiori app is used for creating or editing contracts, as follows:

1. Logon to the SAP Fiori launchpad and click the **Manage Purchase Contracts** tile to open the app.
2. Click the **Create** button to create a contract. The header screen, shown in Figure 8.2, is presented for entering header information.

Figure 8.2 Create Contract: Header

3. After entering the **Contract Type, Purchasing Organization, Purchasing Group, Supplier, and Valid From and To** dates in the **General Information** tab, navigate to the **Delivery and Payment Terms** tab and enter **Payment Terms, Incoterms, and Target Value** if applicable.
4. In the **Reference** tab, you can enter **Reference, Quotation, AND SALESPERSON** if available. In this tab, you can also enter the **Invoicing Party and Goods Supplier** if different from the **Supplier** entered in the **General Information** tab (as in Figure 8.3).

Figure 8.3 Create Contract — Reference

5. Then you can enter notes for the supplier if any in the **Notes** tab. It's also possible to add attachments.
6. Once you've entered all the header information, choose the **Item** tab and click the **Create** button to add item details for the contract. Input the **Material number, Plant, Item Category, and Storage Location** in the **General Information** tab, as shown in Figure 8.4.

Figure 8.4 Create Contract Item: General Information

7. On the **Item Detail** screen, enter **Target Quantity** and **Release Order Quantity** and **Price**. Then you can maintain handling information such as **Confirmation Control**, **Order Acknowledgement**, **Tracking Number**, and more, as shown in Figure 8.5.

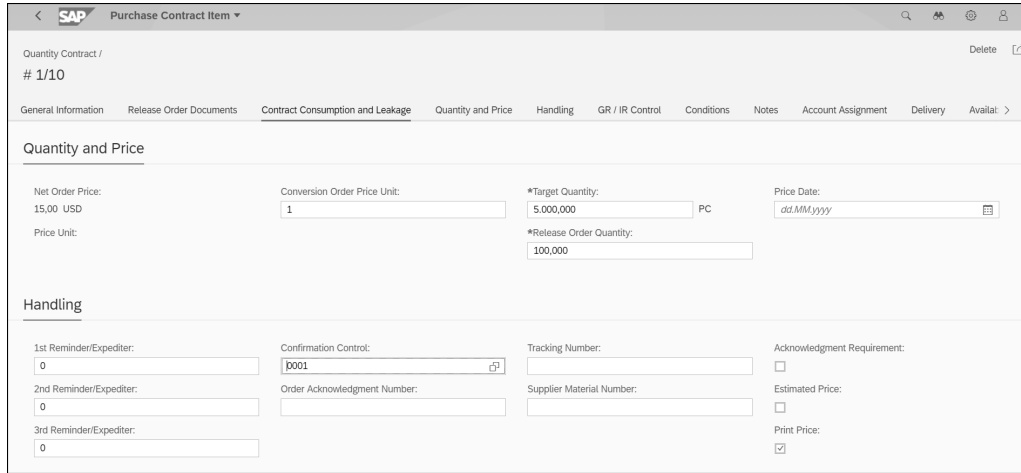


Figure 8.5 Create Contract Item: Quantity and Price

8. Go to the **GR/IR Control** tab and enter tolerance limits and stock type as applicable. Flags to indicate the requirement of GR, IR, GR-based invoice verification, and more can be added, as shown in Figure 8.6.

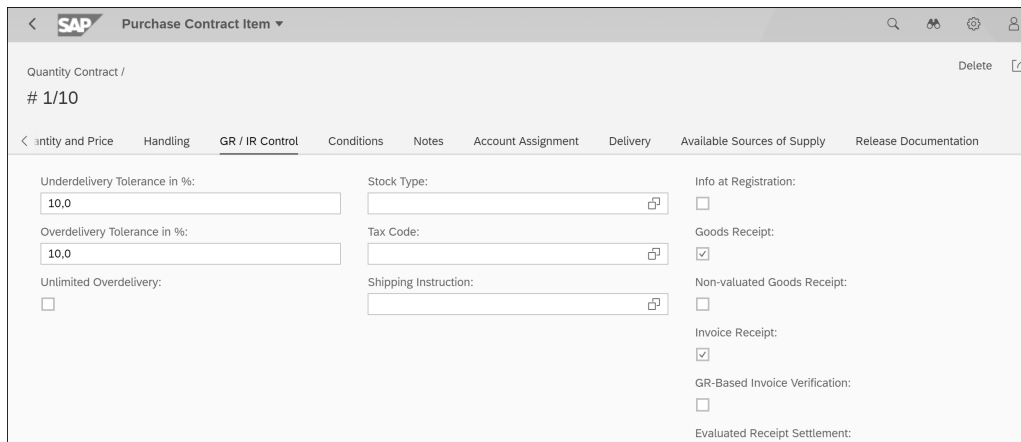


Figure 8.6 Create Contract Item: GR/IR Control

9. Go to the **Conditions** tab and add (+) conditions, as shown in Figure 8.7.

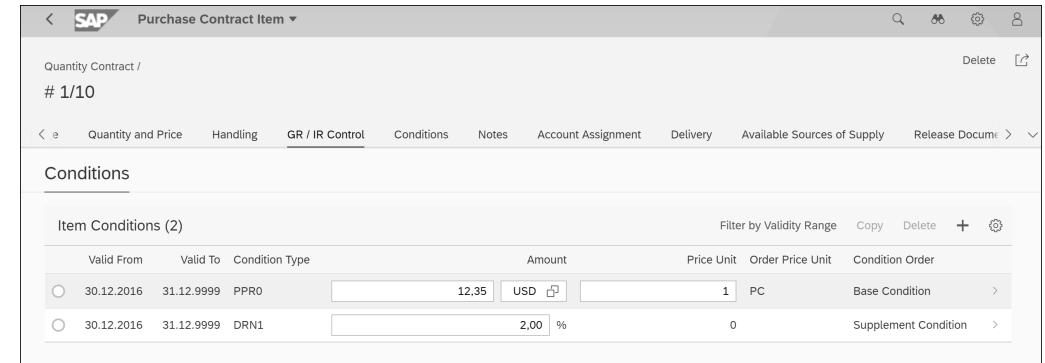


Figure 8.7 Create Contract Item: Conditions

10. Check all the entries and click the **Apply** button to apply the conditions; then save the contract. This completes the process of creating a contract.

This app also provides the capability to search for contracts based on a wide range of criteria, including supplier, purchasing organization, purchasing group, rating, creation date, validity status, and so on. As shown in Figure 8.8, it's also possible to navigate to the contract in display mode and edit it from there ①.

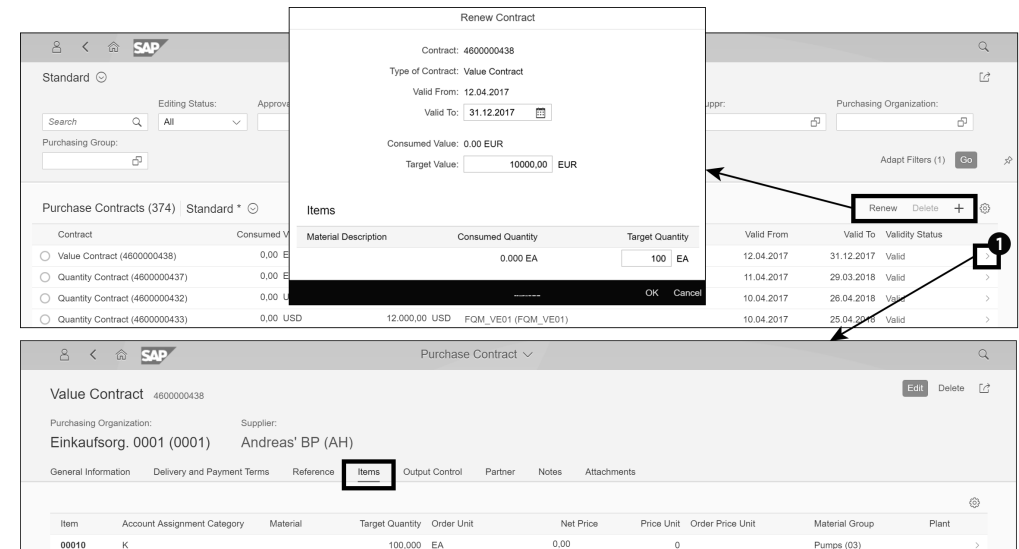


Figure 8.8 Manage Purchase Contract

Selecting a contract from the list and clicking the **Renew** button allows the user to extend the validity period, target quantity, or target value of the contract.

8.1.4 Mass Changes to Purchase Contract

This app enables the purchaser to change the fields of multiple purchase contracts at the same time (see Figure 8.9). It's possible to export the list of contracts from this app externally to a spreadsheet.

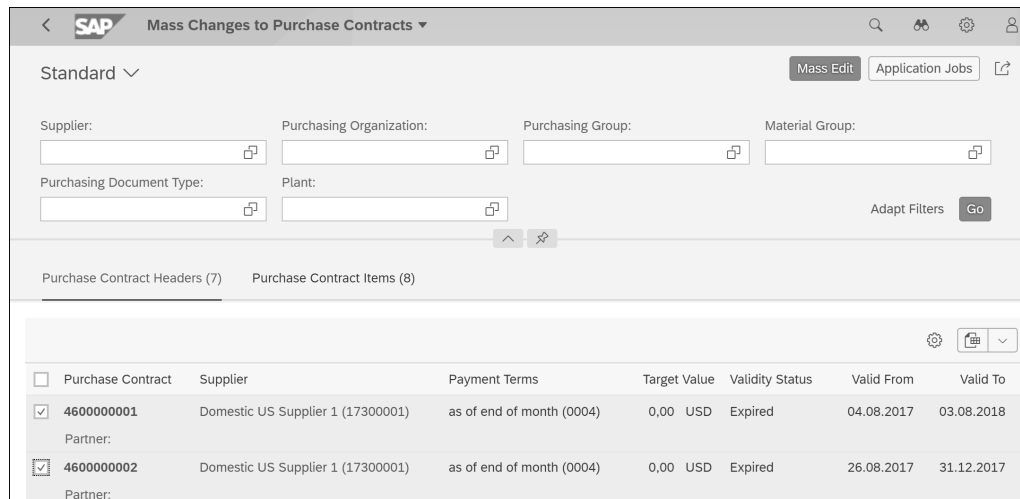


Figure 8.9 Mass Changes to Purchase Contracts

- The initial screen displays all the contracts based on the filters selected on the screen. To make changes to multiple contracts at the same time, select all the contracts you want to change and press the **Mass Edit** button. On the pop-up screen, you'll see three options for each header value:
 - **Keep Existing Value**
 - **Replace Field Value**
 - **Clear Field Value**
- When you choose the **Replace Field Value** option, you'll be presented with a blank field to enter the new value. Once you've completed the selections and entered the new values as needed, you can press the **Apply Mass Changes** button, as shown in Figure 8.10. The fields available for changes include **Terms of Payment**, **Purchasing**

Group, Exchange Rate, Fixed Exchange Rate, Target Value, and Purchasing Document Name. Similar actions can be performed for contract items as well by selecting the purchase contract items in the app.

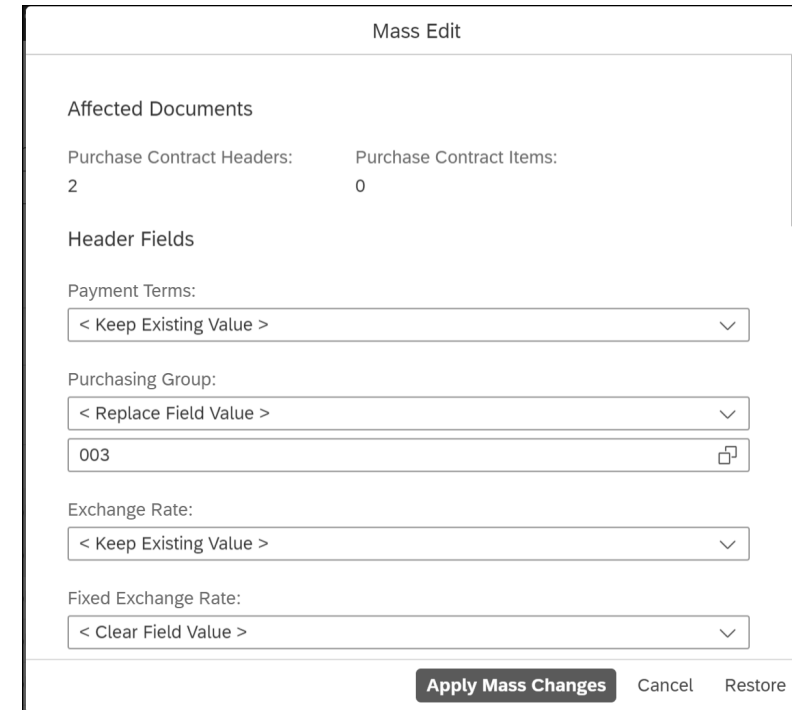


Figure 8.10 Purchase Contracts: Apply Mass Changes

The app allows the user to view the status of the changes made to the contract by pressing the **Application Jobs** button. From the list of contracts displayed, it's possible to navigate to the object pages for the purchase contract and supplier by clicking an object link to view the contextual information related to those objects.

8.2 Contract Consumption

Purchase managers and buyers want to monitor existing contracts in the system and analyze consumption patterns. They also want to obtain advance information about both planned and predicted expiry dates of contracts. This information helps

the purchasing organization regulate consumption and initiate contract renewal or the renegotiation process. This section describes the SAP Fiori apps available in SAP S/4HANA to both analyze and predict contract data.

8.2.1 Value Contract Consumption

Login to the SAP Fiori launchpad and navigate to the Value Contract Consumption SAP Fiori app, then click the tile to execute the app. This SAP Fiori app analyses the value contracts in the system and displays target and released amounts and the consumption percentage over the last 365 days. It's possible to display the KPIs by supplier, purchasing group, purchasing organization, document, and trend, as shown in Figure 8.11. The output can be filtered by **Purchase Contract**, **Document Type**, **Supplier**, **Calendar Week/Month/Quarter/Year**, **Purchasing Group/Organization**, **Supplier**, **Currency**, **Company Code**, and **Created By**, as shown in Figure 8.11 ❶.

Note that the table is coded by **Released Amount**, **Target Amount**, and **Consumption %** ❷.

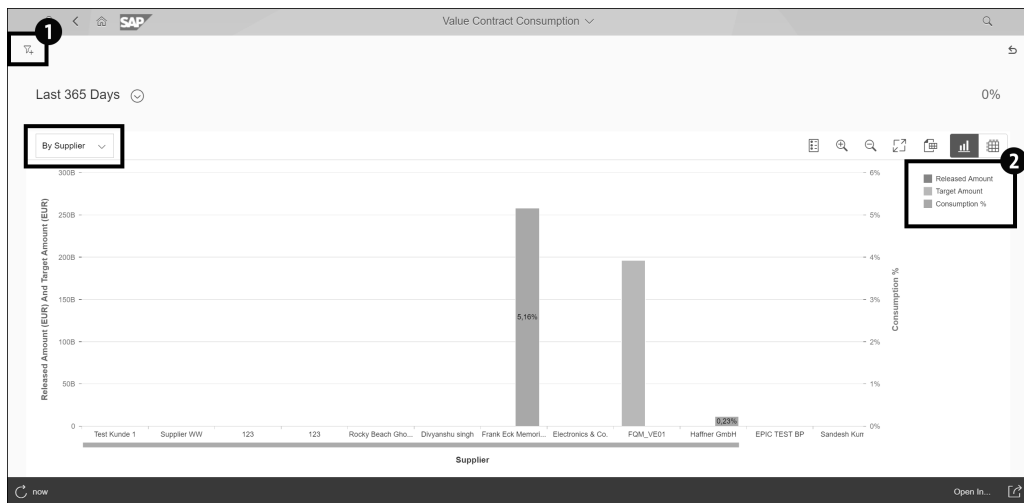


Figure 8.11 Value Contract Consumption

From the initial display—for example, **By Supplier**—it's possible to drill down by clicking on any bar (representing one supplier's data) and selecting one of the options, as shown in Figure 8.12, to go to the next level. Once you choose, for example, **Purchasing Group** from the options, you'll see the values for the selected supplier per purchasing group.

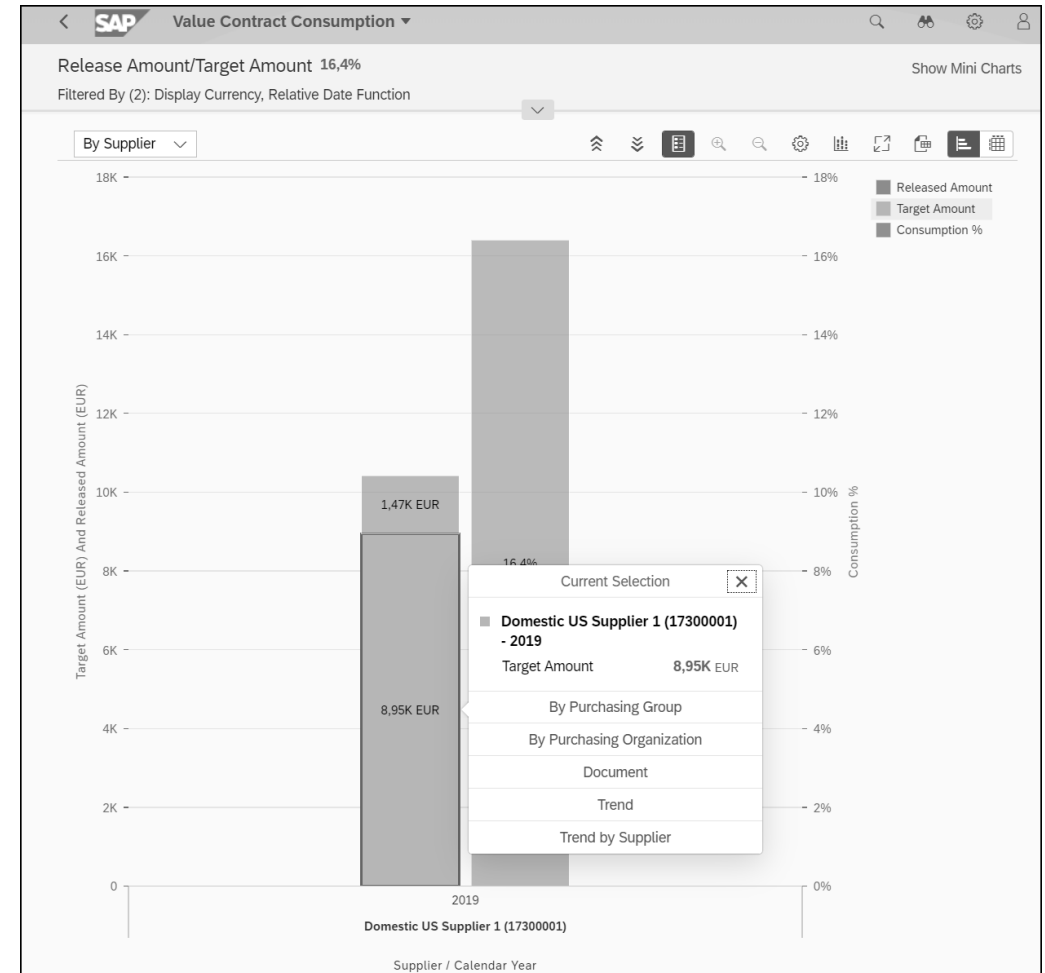


Figure 8.12 Value Contract Consumption: Drilldown

8.2.2 Quantity Contract Consumption

Login to the SAP Fiori launchpad and navigate to the Quantity Contract Consumption SAP Fiori app; click its tile to execute the app. This SAP Fiori app determines the percentage of consumption of quantity type contracts. It also displays the target and released quantities of contracts. The results can be viewed by supplier, purchasing group, purchasing organization, purchasing category, material group, cost center,

document, and trend. It's also possible to filter each view by **Purchase Contract**, **Calendar Week/Month/Quarter/Year**, **Purchasing Group/Organization**, **Supplier**, **Currency**, **Company Code**, **Created By**, **Cost Center**, **Purchasing Category**, **Material Group**, **Material**, **Plant**, **Purchase Order Unit** and more ❶.

The Quantity Contract Consumption app provides an additional measure for predicted contract consumption in the trend view, based on historical data from closed contracts.

Note that the table is coded by **Released Amount**, **Target Amount**, and **Consumption %** ❷.

In the document view, the predicted contract consumption and the predicted expiration date based on 100 percent consumption for individual contracts are provided (as in Figure 8.13).

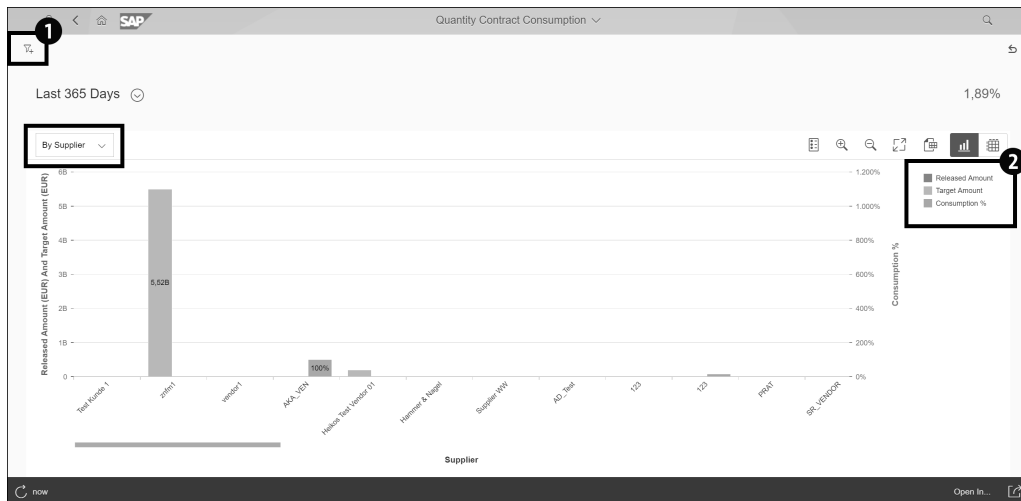


Figure 8.13 Quantity Contract Consumption

From the initial display—for example, **By Supplier**—it's possible to drill down by clicking on any bar (representing one supplier's data) and selecting one of the options, as shown in Figure 8.14, to go to the next level. Once you choose, for example, **Purchasing Group** from the options, you'll see the values for the selected supplier per purchasing group.

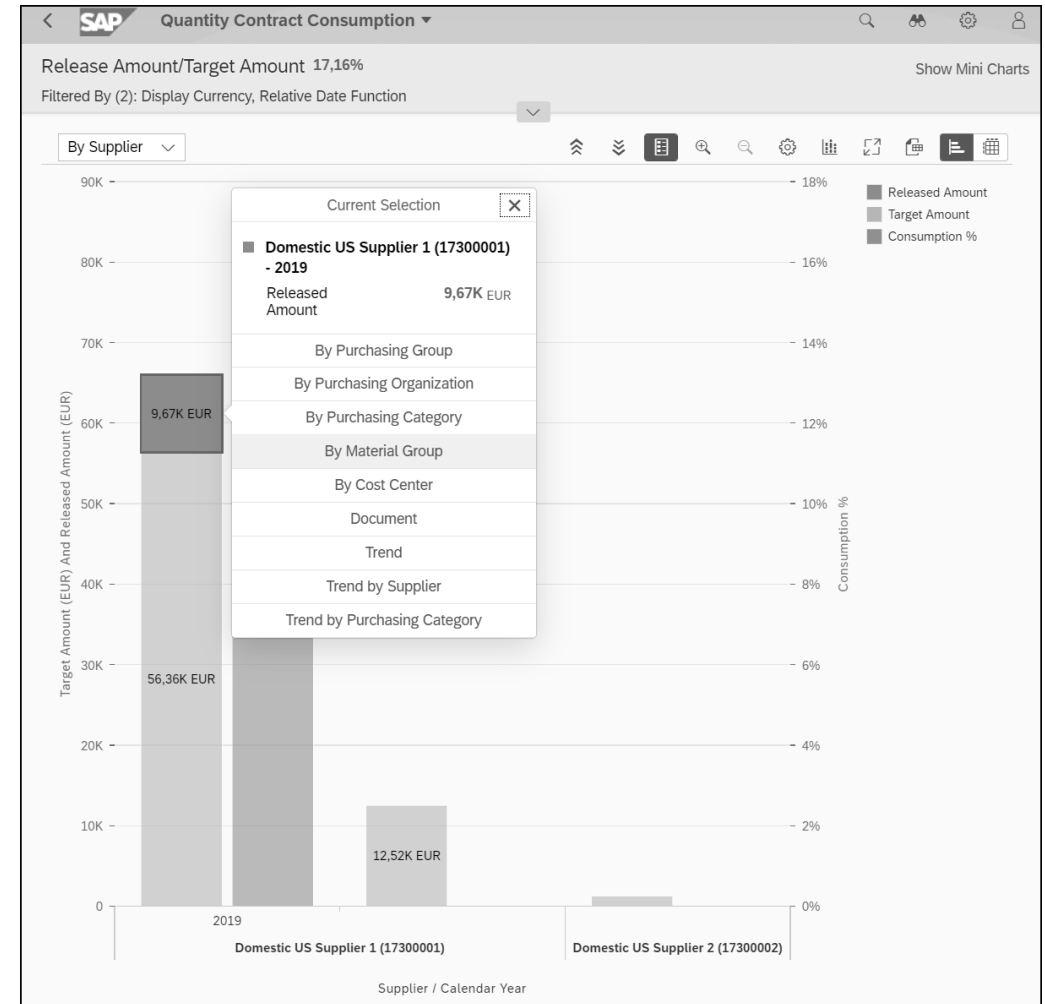


Figure 8.14 Quantity Contract Consumption: Drilldown

8.3 Contract Dashboard Reporting and Expiration Notification Setting

Reporting in contract management has undergone major changes in SAP S/4HANA. The capability that comes with the in-memory technology of SAP S/4HANA and the SAP Fiori UI has made it possible to offer a number of innovations in the areas of

reporting and analytics. This section provides a detailed explanation of all the SAP Fiori apps that come with SAP S/4HANA. It's also important to note that SAP has embarked on a new journey to introduce more innovative apps as part of every new release.

SAP Fiori provides its role-based, consumer-grade UX across all lines of business. SAP Fiori 3.0 is the latest evolution of the UX for SAP S/4HANA and provides consistency, intelligence, and integration. It provides a harmonized look and feel across products, enables embedded machine learning and automation of mundane tasks, and makes integration of content from different products simpler. SAP Fiori 3.0 enriches the UX with intuitive, easy-to-use apps that run on both mobile devices and computers. SAP Fiori apps help zero in on key functions, tasks, and activities for the user. SAP Fiori overview pages allow users to get live KPIs and action items, including lists of contracts that will expire in the near future. SAP Fiori apps are categorized as transactional, analytical, and object page types. Transactional apps run business transactions, and object page apps display master data and documents. Analytical apps, as the name suggests, are used to analyze live data for instant business insights. These apps also provide capability to act based on insights. Detailed information on all the apps is available at <http://s-prs.co/500303>.

SAP Fiori 3.0 design provides a harmonized user experience across all SAP applications including cloud solutions. The SAP Fiori visual theme known as Quartz comes in light and dark flavors. SAP Fiori apps are not developed yet for some SAP GUI transactions. However, these classic SAP GUI transactions are made available in the SAP Fiori theme to support a seamless user experience across the SAP Fiori launchpad. These apps run in the backend as SAP GUI applications but are presented via a harmonized user experience. This helps users access the system from a central SAP Fiori launchpad, enjoy the new UX, and avoid the need to log on to SAP GUI. It's worth mentioning that SAP is replacing additional SAP GUI transactions with SAP Fiori apps in each SAP S/4HANA release. The SAP Fiori apps discussed in the following sections are available within the contract management solution in SAP S/4HANA.

8.3.1 Unused Contracts

This app identifies all the contracts that haven't been used within the last 365 days from the current date and displays the target and released amounts (Figure 8.15). The output can be displayed by supplier, purchasing group, purchasing organization, purchasing document category, or document in tabular format or as a chart. You can drill

down to view the related documents by clicking any of the bars in the bar chart view and selecting the **Documents** navigation option.

Log in to SAP Fiori launchpad, navigate to the Unused Contracts SAP Fiori app, and click its tile to execute the app. This app provides insight into unused contracts and enables the buyer to analyze and take necessary action to better utilize the contract.

In Figure 8.15 ❶, you can filter by purchase contract, calendar year, purchasing group/organization, supplier, currency, company code, and who it was created by. You may select **By Supplier** to search by supplier, by purchasing group or organization, or document ❷. Note that the table is coded by **Target Amount**, **Released Amount**, and **Unused Contracts** ❸.

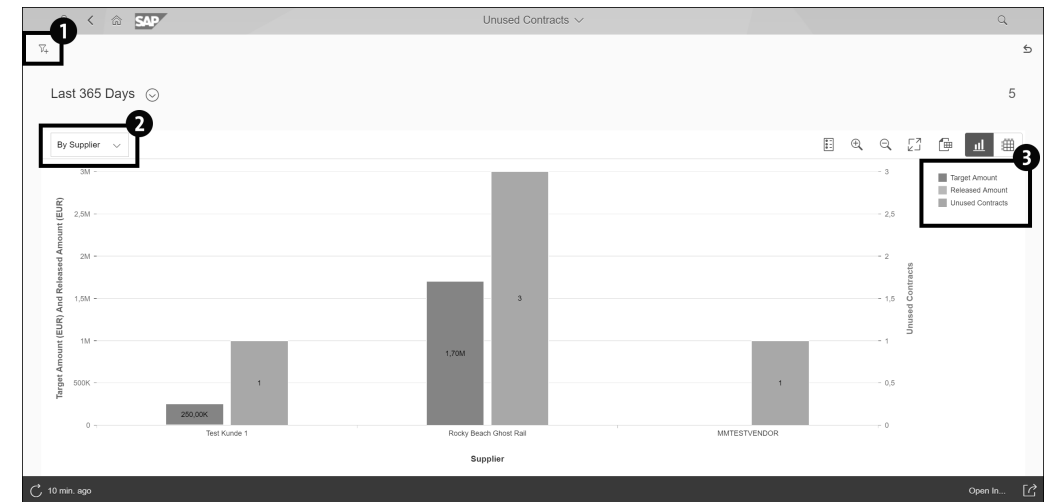


Figure 8.15 Unused Contracts

8.3.2 Off-Contract Spend

Often, purchases are made without a negotiated price for materials or services. Procurement managers always want to know how much or what percentage of materials are procured outside of negotiated contracts. Analyzing this information helps buyers determine the types of products and areas in need of further contracts and negotiated prices. The Off-Contract Spend app (Figure 8.16) enables the buyer to analyze and control such purchases, resulting in improved procurement processes and reduced costs.

Log in to the SAP Fiori launchpad, navigate to the Off-Contract Spend SAP Fiori app, and click its tile to execute the app. In this app, the total amount of purchase order items without any contract reference is expressed as a percentage of the total amount of all the purchase order items over a period of one year from the previous year to date. The app shows both the off-contract spend amount and the spend percentage.

In Figure 8.16 ❶, you can filter by calendar week/month/quarter/year, company code, supplier, supplier country, material, plant, purchasing group/organization, material group, purchasing category, purchasing order, currency, and who it was created by. You may select **By Supplier** to search by supplier, by purchasing category or material group, by purchasing group or organization, plant, cost center or WBS element, document, or trend ❷. Note that the table is coded by **Off Contr. Spend Amt** and **Off Contract Spend %** ❸.

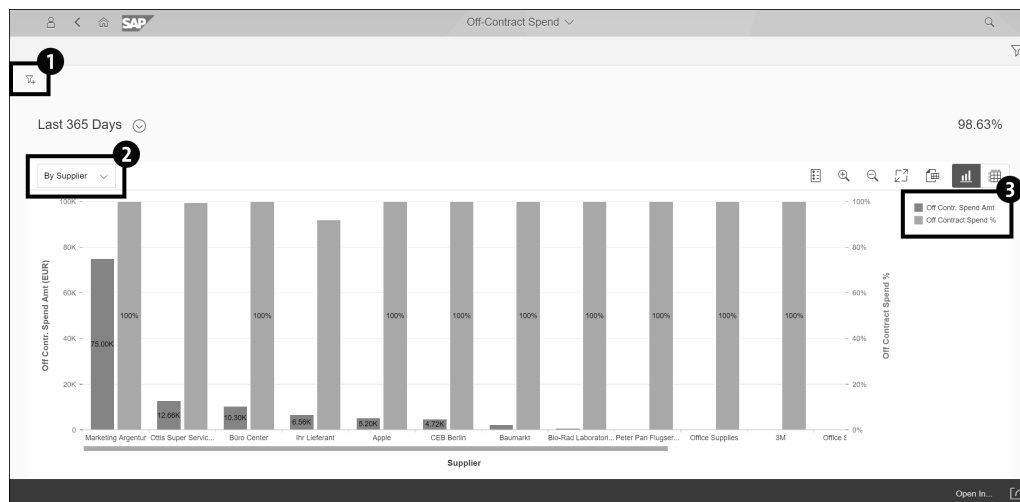


Figure 8.16 Off-Contract Spend

The values can be displayed by supplier, purchasing group, purchasing organization, purchasing category, or material group, plant, WBS element, cost center, and trend in tabular format or as a chart. The app can display all documents that contribute to the spend. It's also possible to analyze the trend of the spend by purchasing category or by supplier.

8.3.3 Contract Leakage

The Contract Leakage app (Figure 8.17) is used to identify purchase order spend on items procured without referencing an existing contract that could have been used. Such a buying pattern is likely to increase costs and decrease efficiency. The Contract Leakage app helps monitor such spending that happens outside contracts even though a contract is in place. For each view, the list of documents that contribute to the spend amount can be displayed as well. This app enables the buyer to analyze whether the leakage is increasing or decreasing and which supplier or purchasing category contributes to the leakage. You can drill down by supplier, purchasing group, purchasing organization, purchasing category, material group, and document in this app by clicking any of the bars in the bar chart view and selecting the appropriate navigation option.

Log in to the SAP Fiori Launchpad, navigate to the Contract Leakage SAP Fiori app, and click its tile to execute the app.

In Figure 8.17 ❶, you can filter by calendar week/month/quarter/year, material, plant, material group, purchasing category, purchasing order, supplier, supplier country, company code, currency, and accounting objects. You may select **By Supplier** to search by supplier, by purchasing category or material group, by purchasing group or organization, plant, cost center or WBS element, document, or trend ❷. Note that the table is coded by **Leakage Amount**, **Non-Leakage Amount**, and **Leakage %** ❸.

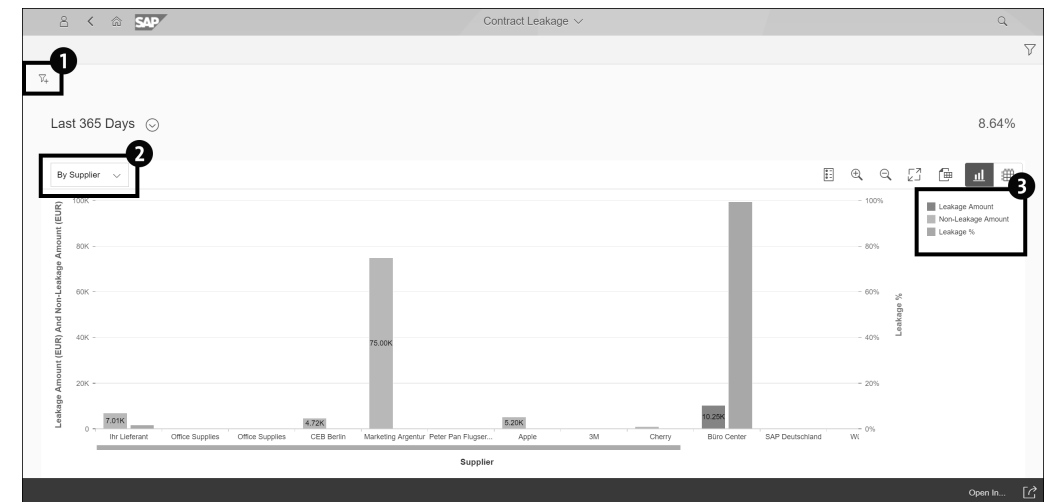
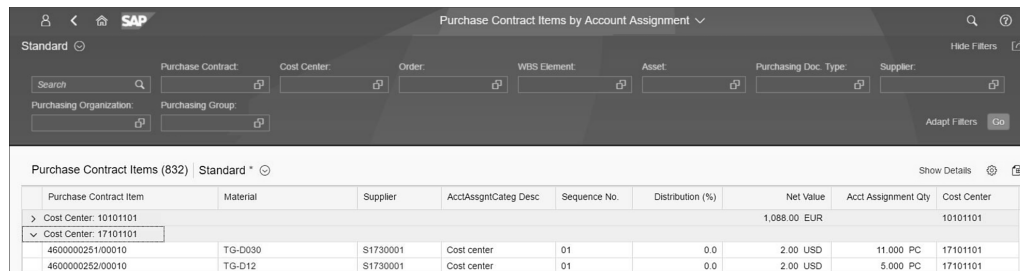


Figure 8.17 Contract Leakage

8.3.4 Purchase Contract Items by Account Assignment

This app displays purchase contract items grouped by their cost centers, using filter criteria such as **Purchase Contract**, **Cost Center**, **Order**, **WBS Element**, **Asset**, and so on. Clicking any cost center of the result output lets you view details such as material, supplier, account assignment category description, net value, and account assignment quantity for each purchase contract item assigned to that cost center. The app allows you to drill down further to view the corresponding purchase orders and general information. It also allows navigation to object pages for material and supplier.

Log in to the SAP Fiori launchpad, navigate to the Purchase Contract Items by Account Assignment SAP Fiori app, and click its tile to execute the app (seen in Figure 8.18).



Purchase Contract Item	Material	Supplier	AcctAssignCatg Desc	Sequence No.	Distribution (%)	Net Value	Acct Assignment Qty	Cost Center
Cost Center: 10101101								
Cost Center: 17101101								
460000025100010	TG-D030	S1730001	Cost center	01	0.0	2.00 USD	11,000 PC	17101101
460000025200010	TG-D12	S1730001	Cost center	01	0.0	2.00 USD	5,000 PC	17101101

Figure 8.18 Purchase Contract Items by Account Assignment

8.3.5 Monitor Purchase Contract Items

This app (Figure 8.19) initially displays a chart with aggregated values of purchase contract items per material group. The total value and released value of the purchase contract items are shown by two different bars in the chart. The page also displays a list of purchase contract items below the chart. When you click any of the bars in the chart, the list below shows only purchase contract items that are relevant to the selected bar.

Log in to the SAP Fiori launchpad, navigate to the Monitor Purchase Contract Items SAP Fiori app, and click its tile to execute the app.

Purchase contract items can be displayed based on filter criteria such as **Display Currency**, **Purchase Contract**, **Material Group**, **Material**, **Supplier**, **Cost Center**, and so on. It's possible to drill down further to view detailed information for any dimension. In the chart, the Y-axis represents the measure and the X-axis represents the dimension.

It's possible to click any purchase contract item and view the item details. This app allows you to navigate to contextual information related to a purchase contract and material from the items list.

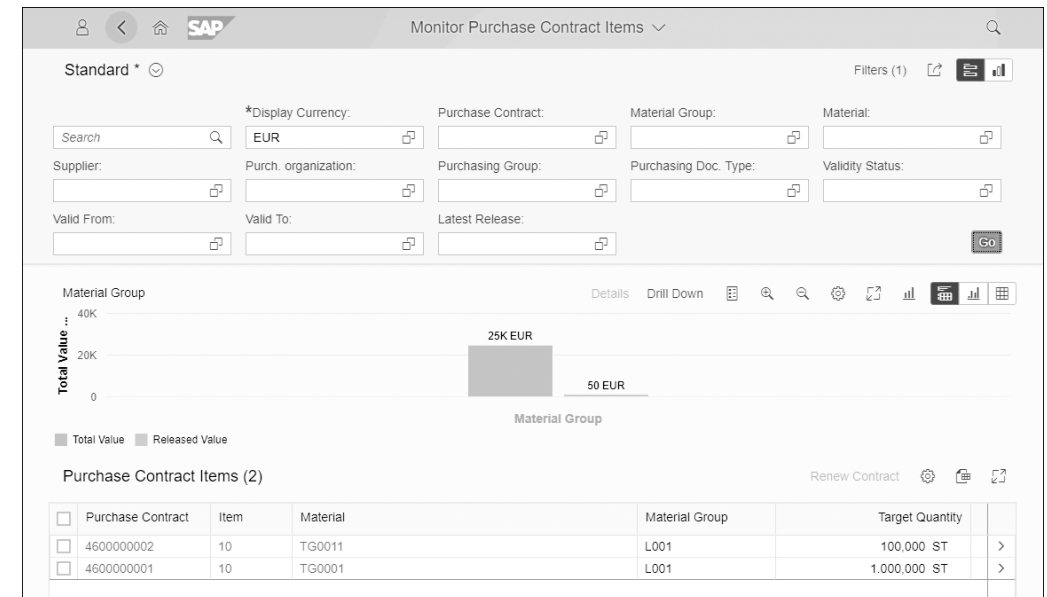


Figure 8.19 Monitor Purchase Contract Items

8.3.6 Contract Expiry

This app identifies contracts that are expiring within a certain time period and can display the number of expiring contracts, target amount, and released amount. The output can be displayed by supplier, purchasing group, purchasing organization, purchasing category, or material group, in tabular format or as a chart. As shown in Figure 8.20 ❶, it's also possible to filter the data by purchase contract, validity start/end, created by, currency, purchasing group/organization, supplier, and company code. You may select **By Supplier** to search by supplier, by purchasing group or organization, or by document ❷. Note that the table is coded by **Expiring Contracts**, **Released Amount**, and **Target Amount** ❸.

Log in to the SAP Fiori launchpad, navigate to the Contract Expiry SAP Fiori app, and click its tile to execute the app.

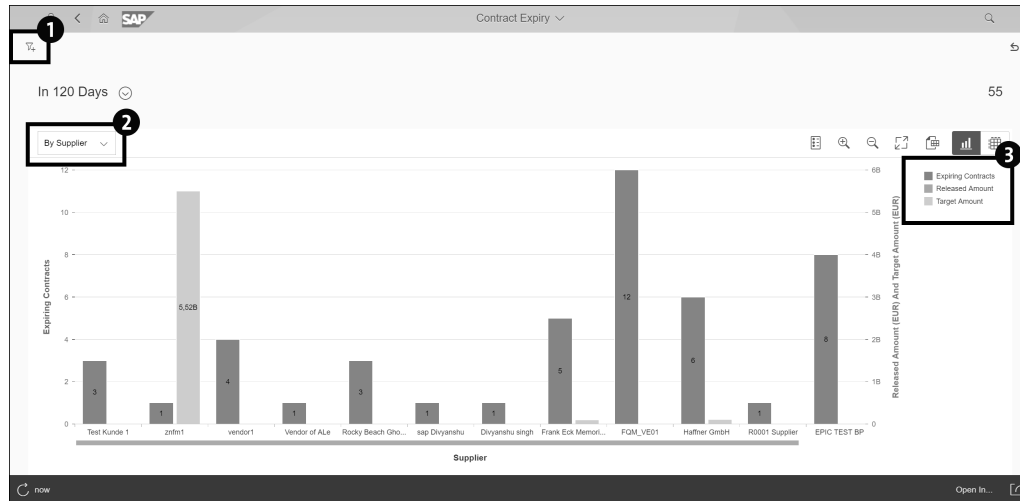


Figure 8.20 Contract Expiry

8.4 Configuration

To realize the features and functionalities of contract management, the system needs to be configured based on business requirements. This section provides the details of standard SAP-recommended configuration steps for contract management. These settings are made in the SAP S/4HANA system by following the customizing paths provided in the following sections for each step.

8.4.1 Configuring Contracts

With SAP S/4HANA, it's possible to take advantage of the SAP Best Practices activation approach for customizing, as explained in Chapter 2. However, if you use the traditional customizing approach, this section can help. This information also helps validate the SAP standard configuration.

Define Document Types

Contracts are managed in the system as documents. Document types, which act as a key to group contracts, are defined in configuration. To define document types, navigate to **IMG (SPRO) • Materials Management • Purchasing • Contract • Define Document Types**. Table 8.1 provides the SAP-standard settings; it's possible to define

additional contract document types depending on business requirements. Number ranges are assigned to each document type defined in the system. New number ranges may also be defined and used as required. The menu path to set number ranges is **IMG (SPRO) • Materials Management • Purchasing • Contract • Define Number Ranges** (see Figure 8.21).

Field Name	Value (First Entry)	Value (Second Entry)
Type	MK	WK
Doc. Type Description	Quantity Contract	Value Contract
Item Number Interval	10	10
Number Range—Internal	46	46
Number Range—External	44	44
Update Group Statistics	SAP	SAP
Field Selection Key	MKK	WKK

Table 8.1 Define Document Types

N.	From No.	To Number	NR Status	Ext
41	4100000000	4199999999	0	<input checked="" type="checkbox"/>
44	4400000000	4499999999	0	<input checked="" type="checkbox"/>
45	4500000000	4599999999	4500000021	<input type="checkbox"/>
46	4600000000	4699999999	4600000003	<input type="checkbox"/>
55	5500000000	5599999999	5500000000	<input type="checkbox"/>
56	5600000000	5699999999	0	<input checked="" type="checkbox"/>
60	6000000000	6099999999	0	<input type="checkbox"/>
61	6100000000	6199999999	0	<input checked="" type="checkbox"/>
70	7000000000	7099999999	7000000007	<input type="checkbox"/>
80	8000000000	8099999999	8000000002	<input type="checkbox"/>

Figure 8.21 Define Number Ranges: Contract

Allowed Item Categories

After defining the document types, select the line for the **Doc Type** defined in the previous step and double-click **Allowed Item Categories**. On the admissible item categories for the document type, the item categories listed in Table 8.2 can be configured depending on business requirements.

Item Category	Description	Use Case
Blank	Standard	N/A
M	Material unknown	Used when similar materials are negotiated for same price but with different material number
W	Material group	Only for value contract with material groups but without item price or quantity
D	Service	When contract is created for performance of services
K	Consignment	When contract is created for consignment materials
L	Subcontracting	When contract is created for subcontracting activities

Table 8.2 Item Categories in Contracts

Then, select the line for each **Item Category** and double-click **Link Purchase Requisition Document Type**. On the **Change View “Link Purchase Requisition-Document Type”**: **Overview** screen, define the allowed follow-on documents.

Release Procedure for Contracts

A *release procedure* is used for the contract approval process. If the value of a contract exceeds \$10,000, for example, it may have to be approved by a manager before the contract can be processed further. The approver in this process uses a predetermined release code to approve (release) the document. *Release* in this context refers to approving contracts in the system. The procedure is set up in a series of configuration steps:

1. Navigate to **IMG (SPRO) • Materials Management • Purchasing • Contract • Release Procedure for Contracts**, as shown in Figure 8.22.

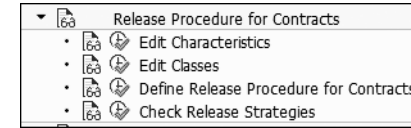


Figure 8.22 Release Procedure for Contracts

2. Create characteristics.
3. Create classes.
4. Set up the release procedure for contracts.
5. Create release group.
6. Create release code.
7. Create release indicator.
8. Create release strategy.
9. Check release strategies.

Texts for Contracts

Text types are used while creating contracts, and text maintained under each text type is generally used to provide additional information either at the header level or item level within the contract. For this functionality to work, text types must be defined. In this customizing step, it's possible to check the SAP defined standard text types and create new text types if needed. In addition, you can define copying rules for adopting texts from other objects, such as RFQ, quotation, contract, and so on:

1. To begin the configuration, navigate to **IMG (SPRO) • Materials Management • Purchasing • Contract • Texts for Contracts**, as shown in Figure 8.23.

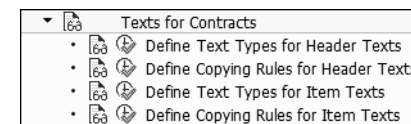


Figure 8.23 Texts for Contracts

- Then, you can check the available text types and define your own text types for header texts if needed.
2. After the text types are defined, open the **Define Copying Rules for Header Texts** node, select the text type for which copying rules need to be defined, and choose **Text Linkages**.

- On the **Maintain Text Linkages: Header Text Contract** screen, enter the source object and source text type from which the text can be copied to the contract text type (target text). For example, you can configure an RFQ as the source object and the header text of the RFQ as source text and configure the target as the header text of the contract. If this setting is done in the system, the system will copy the header text of the RFQ into the header text of the contract while creating a contract. It's possible to set the copying rule to any one of the following options:
 - Text automatically adopted in target object
 - User can have text adopted in target object
 - Text can't be adopted in target object

This customizing activity is repeated for item text types.

Set Up Authorization Check for General Ledger Accounts

In this step, you set the general ledger account authorization check to **Active** in contracts. Navigate to **IMG (SPRO) • Materials Management • Purchasing • Contract • Set Up Authorization Check for G/L Accounts** (as in Figure 8.24). This indicator is set at the company code level. Whenever a contract is created with an item requiring account assignment, the system checks whether the creator of the contract has the necessary authorization for the general ledger account entered. This setting is used as a control mechanism based on the business requirements per company code.

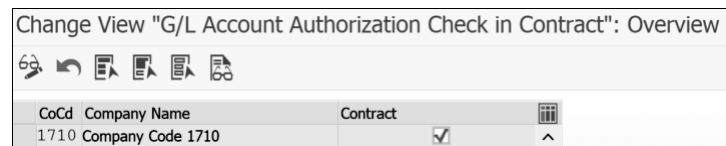


Figure 8.24 Authorization Check for General Ledger Accounts

8.4.2 Manage Workflows for Purchase Contracts

This SAP Fiori app is based on the flexible workflow, which is a general function available for purchasing documents. The Manage Workflow for Purchase Contracts app allows users to define one-step or multistep approval processes for purchase contracts according to the business requirements of the organization. Setting up a workflow using this app for purchase contract is simple and doesn't require any development skills:

- Login to the SAP Fiori launchpad, navigate to the Manage Workflows for Purchase Contracts app, and click its tile to execute the app.
- Click the **Add** button to create a new workflow. Enter a name and description if desired and the validity period for the workflow, as shown in Figure 8.25.

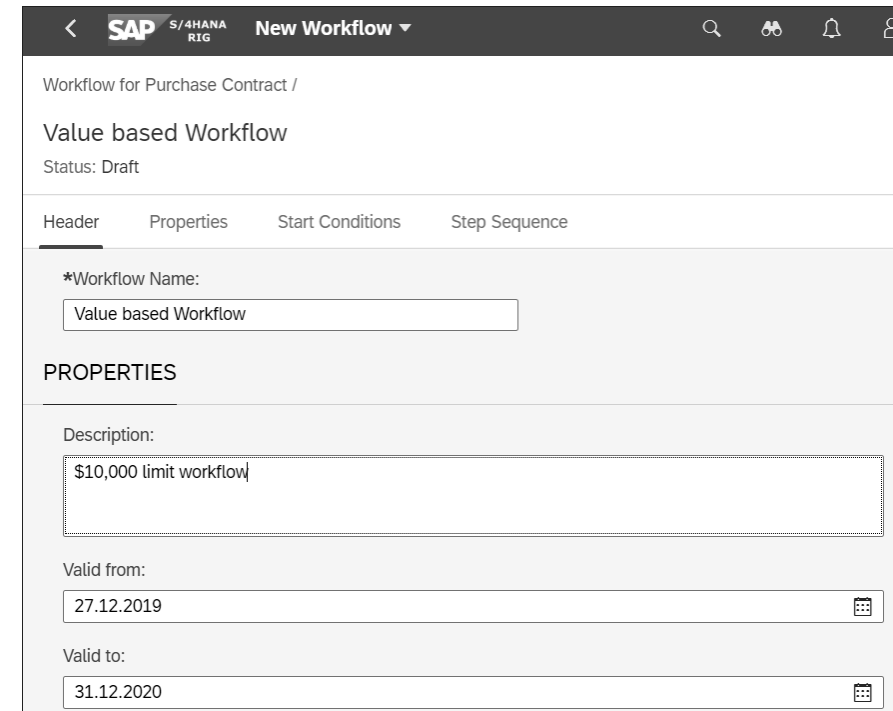


Figure 8.25 Value-Based Workflow Header

- Scroll down and add a start condition, as shown in Figure 8.26. The standard start conditions center on account assignment, company code, material group, purchasing group, target value, and others.
- Scroll down to the **Step Sequence** tab and click the **Add** button to add steps as shown in Figure 8.27. One or more steps can be defined here; for each step, enter recipients (approvers) and step conditions, if any.
- Save the workflow and activate for the workflow to take effect.

SAP S/4HANA RIG New Workflow

Workflow for Purchase Contract / Value based Workflow

Header Properties Start Conditions Step Sequence

START CONDITIONS

Only start the workflow if all of the following preconditions are met: ⊗

Target value of purchase contract is greater than 10.000,00 USD ⊗ +

Add Alternative Preconditions

Figure 8.26 Value-Based Workflow Start Conditions

SAP S/4HANA RIG New Step

Workflow for Purchase Contract / Value based Workflow /

Header Recipients Step Conditions Deadlines Exception Handling

Step Name:
Level 1

Step Type:
Release of Purchase Contract

RECIPIENTS

Assignment By:
Role

Role:
Manager of Workflow Initiator

Step to be completed by:
 One of the recipients
 All of the recipients

Figure 8.27 Step Sequence

8.5 Scheduling Agreement

Scheduling agreements are another form of outline purchase agreement in SAP S/4HANA. These agreements are used to procure materials over a specified period of time following a set schedule of delivery. The predetermined delivery schedules in the agreement indicate quantities of items and dates of delivery. Conditions can be maintained at the header level, which applies to all the items, or at the item level, which applies only to a specific item. These agreements have the account assignment function, which allows the buyer to allocate costs by maintaining details of controlling objects at the item level within the document at the time of creation.

The benefits of using scheduling agreements include the following:

- Shorten processing times and reduce the amount of paperwork required otherwise
- Delivery schedule can replace a large number of discrete purchase orders or contract release orders
- Reduced inventory
- Possible to run manufacturing operations on the just-in-time principle
- Suppliers require shorter lead times with smaller deliveries spread over a long period, resulting in better planning and efficient resource allocation for suppliers
- Scheduling agreement can work in conjunction with MRP, especially in repetitive manufacturing involving large quantities

8.5.1 Scheduling Agreement Types

Scheduling agreements types are determined by document types defined in customizing. The three document types that are predefined in the standard system are explained in the following sections. In addition to these three, it's possible to define your own custom document types depending on your business requirements. More details are provided in Section 8.6.

Scheduling Agreement with Release Document

This type of agreement is created by choosing scheduling agreement document type LPA. In this case, the schedule lines entered within the agreement aren't transmitted to the supplier at the time of creation of the agreement and are internal to the system. The schedule lines maintained in this agreement can be changed at any time during the life of the agreement, which allows some level of flexibility in scheduling procurement. Whenever a scheduling agreement release is created, the information stored in the schedule lines is used to create and transmit the releases to the supplier. Two types of releases available with this type of scheduling agreement (LPA) are the forecast delivery schedule (FRC) and the just-in-time delivery schedule. The release documentation generated in this process provides information about the releases transmitted to the supplier over a set period.

Scheduling Agreement without Release Document

This type of agreement is created by choosing scheduling agreement document type LP. The scheduling lines created in this type of agreement are external and official. This means that the scheduling lines are transmitted to the supplier as soon as they're created. Also, there is no release documentation associated with this agreement.

Stock Transport Scheduling Agreement

If a company is procuring materials internally from another plant on a regular basis, it's possible to set up a stock transport scheduling agreement by choosing document type LU at the time of creation. SAP standard uses item category U (Stock Transfer) for this type of agreement.

8.5.2 Creating Scheduling Agreements

Scheduling agreements can be created manually or by referencing purchasing documents such as purchase requisitions, RFQs/quotations, other scheduling agreements, or centrally agreed-upon contracts. It's possible to create a scheduling agreement by copying any one of the purchasing documents and then making changes before saving the agreement.

8.5.3 Manage Scheduling Agreement

The Manage Scheduling Agreement SAP Fiori app provides the capability to search and filter scheduling agreements by purchasing organization, agreement type, supplier, material, status, validity period, and more. It allows the user to display, copy, edit, create, and delete scheduling agreements. It's possible to maintain schedule lines within scheduling agreements. The app also highlights those scheduling agreements that are expiring soon and allows the user to renew them by clicking the **Renew Agreement** button, as shown in Figure 8.28.

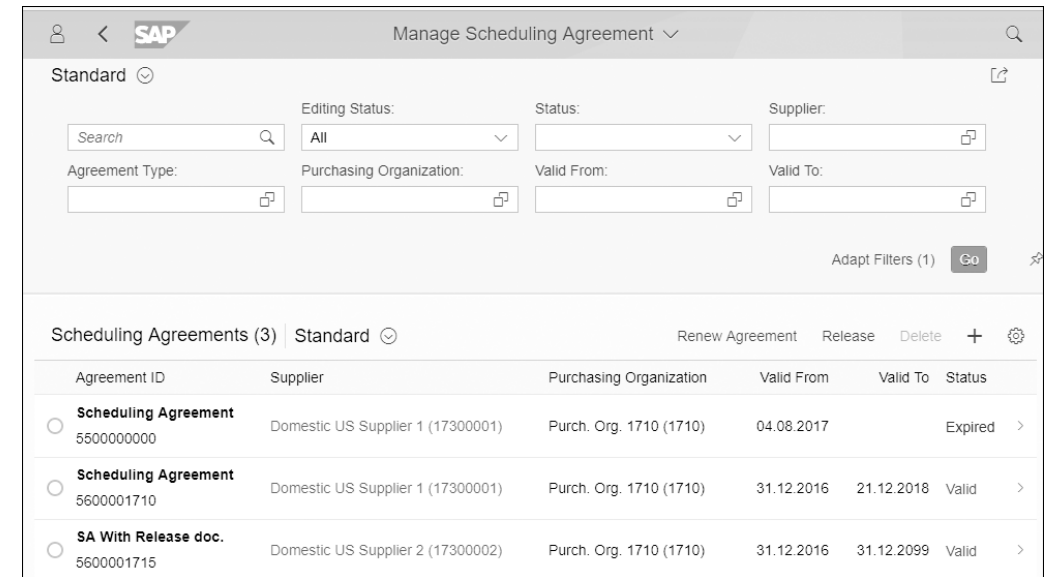


Figure 8.28 Manage Scheduling Agreement

To create a new scheduling agreement, proceed as follows:

1. Log on to the SAP Fiori launchpad and click the tile for the Manage Scheduling Agreement app.
2. Click the **Create** button to bring up the input screen for creating a new scheduling agreement.
3. Enter an agreement type, validity dates, a purchasing organization, and a supplier under the **General Information** tab, as shown in Figure 8.29.

The screenshot shows the 'Scheduling Agreement' header in SAP S/4HANA RIG. The 'General Information' tab is active. The form is titled 'New Scheduling Agreement # 1'. It contains several input fields for basic data, organization, and supplier information.

Basic Data	Organization	*Supplier:
*Agreement Type: SA With Release doc.	Purchasing Group:	17300002
Created on: 26.12.2019	*Purchasing Organization:	Approver:
*Valid From: 26.12.2019	1710	Approval Status:
*Valid To: 31.12.2020	Company Code: 1710	Document Status:

Figure 8.29 Scheduling Agreement Header General Information

4. Scroll down and enter payment terms, a target value, and incoterms under the **Delivery and Payment** tab, as shown in Figure 8.30.

The screenshot shows the 'Scheduling Agreement' header in SAP S/4HANA RIG, with the 'Delivery and Payment' tab active. The form is titled 'New Scheduling Agreement # 1'. It contains input fields for payment terms, target value, and incoterms.

Payment Terms:	Target Value:	Incoterms:
0004	100.000,00 USD	CIF
1. Payment in Days: 0	Fixed Exchange Rate: <input type="checkbox"/>	Incoterms Location 1: Houston
1. Payment in %: 0,000		Incoterms Location 2:
2. Payment in Days: 0		Incoterms Version: 2000
2. Payment in %: 0,000		
Net Payment Terms Period: 0		

Figure 8.30 Delivery and Payment

5. Enter reference information such as quotation info and salesperson, if applicable, under the **Reference** tab.
6. Scroll down to the **Items** tab and click the **Create** button to bring up the **Item Details** page. On this page, enter the material number, plant, and storage location under the **General Information** tab and the target quantity and price under the **Quantity And Price** tab, as shown in Figure 8.31.

The screenshot shows the 'Scheduling Agreement Item' details page in SAP S/4HANA RIG. The 'General Information' tab is active. The form is titled 'Scheduling Agreement / 10'. It contains input fields for basic data, material details, and quantity and price.

Basic Data	Material Details	*Plant:
Agreement Type: SA With Release doc. (LPA)	Material type: MAT	1710
Account Assignment Category:	Material: Trading Good for Consumption (TG0001)	Storage Location: 171A
	Material Description: Trading Good for Consumption	
	Material Group: Trading Materials (L001)	

Quantity and Price	*Target Quantity:	Info Record Update:
Net Order Price: 10,00 USD	10.000,000 PC	
Price Unit: 1 PC	Order Unit: PC	Conversion From: 1
Order Price Unit: PC		Conversion To: 1

Figure 8.31 Scheduling Agreement Item

7. Scroll down and enter the tolerance and GR/IR requirements under the **GR/IR Control** tab, as shown in Figure 8.32.

The screenshot shows the 'GR/IR Control' tab in the SAP S/4HANA RIG Scheduling Agreement Item interface. The page title is 'Scheduling Agreement / 10'. The tabs include General Information, Quantity and Price, Handling, GR/IR Control (selected), Incoterms, Conditions, and Scheduling Control. The GR/IR Control section contains the following fields:

- Underdelivery Tolerance in %: 10,0
- Overdelivery Tolerance in %: 10,0
- Unlimited Overdelivery:
- Stock Type: [empty]
- Tax Code: 11
- Shipping Instruction: [empty]
- Kanban Indicator: [empty]
- GR:
- GR Non-Valuated:
- IR:
- GR-Based IV:
- Evaluated Receipt Settlement:
- Rem. Shelf Life: 0
- Qm Control Key: [empty]
- Cert. Type: [empty]

Figure 8.32 GR/IR Control

Incoterms, Conditions, and Notes are additional tabs that can be used as necessary.

- Go to the **Schedule Lines** tab and click the **Create** button to bring up the **Schedule Lines** page, as shown in Figure 8.33.
- On this page, enter a delivery date and quantity and click the **Apply** button. This will apply the data entered and take you back to the **Items** page. Here, click the **Apply** button again to go back to the **Header** page. Check all the entries and click the **Save** button to create the scheduling agreement.

The screenshot shows the 'Manage Scheduling Agreements' interface in SAP S/4HANA RIG. The page title is 'Scheduling Agreement / 00010 /'. The tabs include General Information, Date and Time, and Quantity and Information. The Schedule Lines section contains the following fields:

- Creation Description: 1
- Fixed: Yes
- Number of Expeditors: 0
- Creation ID: R

The Date and Time section contains the following fields:

- Date Type: 1
- Delivery Date: 10.01.2020
- Statistical Delivery Date: 26.12.2019
- Delivery Time: 00:00:00

The Quantity and Information section contains the following fields:

- *Scheduled Quantity: 100,000
- Previous Quantity: 0,000
- GR Quantity: 0,000
- Cumulative Scheduled Quantity: 0,000
- Previous Cumulative Quantity: 0,000
- Open Quantity: 0,000

At the bottom right, there is a 'Draft saved' status and an 'Apply' button.

Figure 8.33 Schedule Lines

Note

The following is a list of GUI transactions for which apps are available in SAP Fiori:

- Display Scheduling Agreement (Transaction ME33L)
- Create Scheduling Agreement (Transaction ME31L)
- Display Scheduling Agreement Schedule (Transaction ME39)
- Change Scheduling Agreement (Transaction ME32L)

- Print Scheduling Agreement (Transaction ME9L)
- Print Scheduling Agreement Releases (Transaction ME9E)
- Create Scheduling Agreement Releases (Transaction ME84)
- Create Transport Scheduling Agreement (Transaction ME37)
- Release Scheduling Agreement (Transaction ME35L)

8.6 Customizing Scheduling Agreements

With SAP S/4HANA, it's possible to take advantage of the SAP Best Practices activation approach for customizing, as explained in Chapter 2. However, if you use the traditional customizing approach, this section can help. This information also helps validate the SAP standard configuration.

8.6.1 Define Document Types

Scheduling agreements are defined and managed as documents in the system. It's possible to group these documents under different document types based on business requirements. First, you need to define document types and their attributes in customizing.

Table 8.3 provides the SAP-standard settings; it's possible to define additional scheduling agreement document types depending on business requirements, via **IMG (SPRO) • Materials Management • Purchasing • Scheduling Agreement • Define Document Types**.

Field Name	Value (First Entry)	Value (Second Entry)	Value (Third Entry)
Type	LPA	LP	LU
Doc. Type Description	SA With Release Doc.	Scheduling Agreement	Stock Trans. Sch. Agreement
Item Number Interval	10	10	10
Number Range—Internal	55	55	55

Table 8.3 Define Document Types

Field Name	Value (First Entry)	Value (Second Entry)	Value (Third Entry)
Number Range—External	56	56	56
Update Group Statistics	SAP	Blank	SAP
Field Selection Key	LPL	Blank	LUL
Control	Blank	Blank	T
Time-Dependent Conditions	Checked	Unchecked	Checked
Release Document	Checked	Unchecked	Unchecked

Table 8.3 Define Document Types (Cont.)

New number ranges may also be defined and used as required. This step generally is required if new document types are defined in the previous step. The menu path for creating number ranges is **IMG (SPRO) • Materials Management • Purchasing • Scheduling Agreement • Define Number Ranges**.

8.6.2 Allowed Item Categories

After defining the document types for scheduling agreements, select the line for the **Doc Type** and double-click **Allowed Item Categories**. On the **Admissible Item Categories for Document Type** screen, maintain the item categories as needed from the list in Table 8.4. These item categories can be configured depending on business requirements. This configuration determines what item categories can be selected for a given document type by the business user while creating the scheduling agreement.

Item Category	Description	Use Case
Blank	Standard	Default
K	Consignment	When scheduling agreement is created for consignment materials
L	Subcontracting	When scheduling agreement is created for subcontracting activities

Table 8.4 Item Categories in Scheduling Agreements

Item Category	Description	Use Case
U	Stock transfer	Can be used only with document type LU (Stock Transfer Scheduling Agreement)

Table 8.4 Item Categories in Scheduling Agreements (Cont.)

Now, select the line for each **Item Category** and double-click **Link Purchase Requisition-Document Type**. On the **Change View “Link Purchase Requisition-Document Type”**: **Overview** screen, define the allowed follow on documents.

8.6.3 Maintain Release Creation Profile

A *release creation profile* is used to determine the period in which releases (types of delivery schedule) are generated against a scheduling agreement and transmitted to the vendor. This also controls the creation periodicity of the releases; the aggregation of scheduled quantities, starting from the day after release creation; and the implementation of a tolerance check. In this step, a release creation profile is maintained for scheduling agreements with a release document. This profile determines the release creation strategy and how backlog and immediate requirements are considered in the release creation. To maintain the release creation profile, navigate to **IMG (SPRO) • Materials Management • Purchasing • Scheduling Agreement • Maintain Release Creation Profile for SA with Release Document**.

The following criteria also can be set up in the profile:

- **Aggregation and release horizon**
If and how delivery schedules are to be aggregated with the release creation
- **Release creation periodicity**
The frequency with which scheduling agreement releases are generated
- **Tolerance profile**
For releases that need to be generated because of changed delivery schedules, a tolerance check is carried out
- **Last goods receipts**
If and how last inbound deliveries and goods receipts are determined and outputted during the release creation

- **Internet release**

If, during the release creation, internet releases are to be generated

- **Printing with Smart Forms**

Which additional information in scheduling agreement releases is outputted if you use the ISAUTO_ESCR_FRC_JIT print form, based on Smart Forms

- **Criteria for dynamic stopping**

On the basis of which criteria scheduling agreement releases are subject to dynamic stopping

Note

For more customizing steps, such as the following, Section 8.4. The explanation provided for contracts apply to scheduling agreements as well:

- Release procedure for scheduling agreements
- Define screen layout at document level
- Texts for scheduling agreements
- Set up authorization check for general ledger accounts

8.7 Summary

Contract management is a core area for procurement organizations. Without an existing agreement in place, it's difficult to drive disciplined pricing and terms. Contracts can be tied to catalog items to underpin a clear ordering process and UX, representing a model way to conduct corporate purchasing. SAP S/4HANA updates many older transaction codes and screens with SAP Fiori apps, but much of the setup and configuration remains the same. However, there are now shortcuts in the form of SAP Best Practices activation, which automatically sets up standard functionality in the system.

Having the functionality to craft agreements with suppliers is half of the equation. The other half is finding the right supplier for each these agreements. The next chapter will focus on enterprise contract management and assembly.

Contents

Foreword	21
Preface	23

1 Introduction to Sourcing and Procurement 31

1.1 Sourcing and Procurement Basics	31
1.1.1 Sourcing	32
1.1.2 Operational Procurement	33
1.2 Sourcing and Procurement from End to End	35
1.2.1 Ideal Procurement	36
1.2.2 Source-to-Pay and Procure-to-Pay	37
1.2.3 Key Process Areas	37
1.3 Procurement with SAP S/4HANA	40
1.3.1 Cloud versus On-Premise ERP Systems	41
1.3.2 Strategic Sourcing	44
1.3.3 Procurement	45
1.3.4 Accounts Payable and Invoicing	46
1.3.5 SAP Fiori Roles and Applications	47
1.4 Summary	48

2 Implementation Options 51

2.1 Implementation Overview	51
2.1.1 Deployment Options	52
2.1.2 Cloud	53
2.1.3 On-Premise	57
2.1.4 New Implementation versus System Conversion	58
2.2 On-Premise SAP S/4HANA	62
2.2.1 Complete Functional Scope	63

2.2.2	Installation	64
2.2.3	Activated Appliance	65
2.2.4	Information Technology Considerations	66
2.2.5	Integration Options	68
2.2.6	SAP S/4HANA System Conversion	69
2.3	SAP S/4HANA Cloud	74
2.3.1	SAP Best Practices Scope	74
2.3.2	Information Technology Considerations	75
2.3.3	Standard Integration and Customization	76
2.4	SAP S/4HANA for Central Procurement	77
2.5	Quick Start Approaches and Materials for SAP S/4HANA	79
2.5.1	Prebuilt Content and Templates	80
2.5.2	SAP Best Practices	80
2.5.3	SAP Model Company	81
2.5.4	SAP Activate	81
2.5.5	SAP Activate Roles	88
2.6	Summary	89
3	Organizational Structure	91
3.1	SAP S/4HANA Enterprise Management Organization Objects	91
3.2	SAP S/4HANA Sourcing and Procurement-Specific Organization Structure Objects	95
3.3	Company Code	96
3.4	Plants	98
3.5	Storage Locations and Warehouses	100
3.5.1	Storage Location and Warehouse Creation	102
3.5.2	Warehouse Creation	104
3.6	Purchasing Organizations	105
3.7	Purchasing Group Creation	108
3.8	Summary	109

4	Master Data	111
4.1	Material Masters and Material Groups	112
4.1.1	Activating a Material Master Field	113
4.1.2	Creating a Material Master	116
4.1.3	Creating a Material Group	119
4.1.4	Creating a New Product Services Type (SERV)	120
4.1.5	Select Material Master Configuration Options	121
4.1.6	Material Master Field Character Expansion in SAP S/4HANA	121
4.2	Batch Management and Serialization	122
4.2.1	Configuring Batch Numbers	123
4.2.2	Configuring Serial Numbers	124
4.3	SAP S/4HANA Business Partner Model	125
4.3.1	Suppliers as Business Partners	126
4.3.2	Loading Supplier Records in SAP S/4HANA	129
4.3.3	Setting Up the Supplier Master	129
4.3.4	Performing Customer/Vendor Integration	131
4.4	Summary	146
5	Operational Procurement	147
5.1	What Is Operational Procurement?	147
5.2	Self-Service Procurement	151
5.2.1	Creating a Requisition or Shopping Cart in SAP S/4HANA	152
5.2.2	Confirmation and Return Delivery	154
5.2.3	Shopping Cart versus Requisition-to-Pay and Migrating SAP SRM Shopping Carts	159
5.2.4	Migrating SAP SRM Shopping Carts to SAP S/4HANA	159
5.2.5	Workflow	160
5.2.6	Machine Learning-Based Purchasing Functionality via SAP Cloud Platform and SAP Leonardo	162
5.3	Requirements Processing in SAP S/4HANA Sourcing and Procurement	163
5.4	Purchase Order Processing	166

5.5	Service Purchasing and Service Confirmation	168
5.6	Purchase Order Collaboration	169
5.7	Configuring Operational Procurement	170
5.7.1	Self-Service Procurement Requisitioning	170
5.7.2	Machine Learning-Based Procurement Functionality	182
5.7.3	Requirements Processing	190
5.7.4	Purchase Order Processing	191
5.7.5	Service Order Processing	192
5.7.6	Purchase Order Collaboration	193
5.7.7	SAP SuccessFactors	195
5.8	Summary	198
6	Automated and Direct Procurement	199
6.1	What Is Automated and Direct Procurement?	199
6.2	Materials Requirements Planning	202
6.2.1	MRP in SAP ERP versus SAP S/4HANA	204
6.2.2	SAP Fiori Apps for MRP	207
6.3	Forecasting and Planning	214
6.3.1	Forecast Planning	214
6.3.2	Reorder Point Planning	218
6.3.3	Time-Phased Planning	219
6.3.4	Forecast Collaboration	220
6.4	Contract and Source Determination	222
6.4.1	Purchasing Information Record	224
6.4.2	Source List	225
6.4.3	Quota Arrangement	226
6.4.4	Scheduling Agreement	227
6.4.5	Scheduling Agreement Release Collaboration	230
6.4.6	Blanket Purchase Order	231
6.4.7	Purchase Orders and Multitier Purchase Orders	233
6.4.8	Subcontracting	234
6.4.9	Consignment Stock	239
6.4.10	Consignment Orders	240

6.4.11	Quality Management Collaboration in SAP Ariba Supply Chain Collaboration for Buyers	241
6.4.12	SAP Supply Base Optimization	242
6.5	Configuring Automated and Direct Procurement	245
6.5.1	Master Data	245
6.5.2	Document Types	246
6.5.3	Forecast Planning	251
6.5.4	Purchase Info Records	251
6.5.5	Source Lists	252
6.5.6	Quota Arrangements	252
6.6	Integration with SAP Ariba	253
6.7	Summary	254
7	Inventory Management	255
7.1	What Is Inventory Management?	256
7.2	Stock Management in SAP S/4HANA	259
7.2.1	Material Identification	260
7.2.2	Location	260
7.2.3	Usability	260
7.2.4	Ownership	262
7.2.5	Batch Identification	262
7.2.6	Serialization	263
7.2.7	Goods Movements	263
7.3	Goods Receipts	264
7.3.1	Posting Goods Receipts	265
7.3.2	Processing Goods Receipts via Inbound Deliveries	271
7.4	Goods Issues	277
7.4.1	My Purchase Orders—Due for Delivery	278
7.4.2	Manage Outbound Deliveries	280
7.5	Stock Transfers	280
7.5.1	One-Step and Two-Step Stock Transfers	281
7.5.2	Stock Transfer Execution Using Shipping Integration	284
7.5.3	Stock Transfer Reporting	284

7.6	Transfer Postings	286
7.6.1	Stock Identity	286
7.6.2	Stock Usability	286
7.6.3	Stock Ownership	287
7.7	Physical Inventory	287
7.7.1	Physical Inventory Execution	289
7.7.2	Physical Inventory Monitoring and Reporting	300
7.8	Reporting in Inventory Management	305
7.8.1	Inventory Overview Pages	305
7.8.2	Goods Movement Reporting	309
7.8.3	Stock Balances Reporting Apps	310
7.8.4	Apps for Monitoring Financial Inventory Values	316
7.8.5	Inventory Management Object Pages	318
7.8.6	Inventory Management Analytics	327
7.9	Configuring Inventory Management	332
7.9.1	General Configuration Elements	334
7.9.2	Goods Receipts and Goods Issues	338
7.9.3	Movement Types	344
7.9.4	Physical Inventory	350
7.10	Summary	354

8 Contracts Management 355

8.1	What Is Contract Management?	356
8.1.1	Contract Creation	356
8.1.2	Types of Contracts	356
8.1.3	Manage Purchase Contracts	357
8.1.4	Mass Changes to Purchase Contract	362
8.2	Contract Consumption	363
8.2.1	Value Contract Consumption	364
8.2.2	Quantity Contract Consumption	365
8.3	Contract Dashboard Reporting and Expiration Notification Setting	367
8.3.1	Unused Contracts	368
8.3.2	Off-Contract Spend	369

8.3.3	Contract Leakage	371
8.3.4	Purchase Contract Items by Account Assignment	372
8.3.5	Monitor Purchase Contract Items	372
8.3.6	Contract Expiry	373
8.4	Configuration	374
8.4.1	Configuring Contracts	374
8.4.2	Manage Workflows for Purchase Contracts	378
8.5	Scheduling Agreement	381
8.5.1	Scheduling Agreement Types	381
8.5.2	Creating Scheduling Agreements	382
8.5.3	Manage Scheduling Agreement	383
8.6	Customizing Scheduling Agreements	388
8.6.1	Define Document Types	388
8.6.2	Allowed Item Categories	389
8.6.3	Maintain Release Creation Profile	390
8.7	Summary	391

9 Enterprise Contract Management and Assembly 393

9.1	What Is Enterprise Contract Management and Assembly?	393
9.2	Enterprise Contract Management Overview App	395
9.2.1	Manage Contexts	398
9.2.2	Categories for Legal Content	401
9.2.3	Request Legal Content	401
9.2.4	Manage Legal Documents	404
9.2.5	Manage Legal Tasks	404
9.2.6	Manage Legal Transactions	405
9.2.7	SAP S/4HANA Cloud for Enterprise Contract Assembly	406
9.3	Customizing Enterprise Contract Management	407
9.3.1	Number Ranges	408
9.3.2	Reminder Types	408
9.3.3	Date Types	409
9.3.4	Internal Contacts	409

9.3.5	Entity Types	410
9.3.6	External Contacts	411
9.3.7	Technical Types for Linked Object Types	412
9.3.8	Linked Object Types	413
9.3.9	Content Types	413
9.3.10	Document Stamps	414
9.3.11	Profiles	414
9.3.12	Document Types	418
9.3.13	Background Job Definitions	422
9.4	Summary	423

10 External Sourcing 425

10.1	Sourcing Strategies	426
10.1.1	Sourcing Process Flow	426
10.1.2	Sourcing Optimization	426
10.2	Request for Quotation	428
10.2.1	Sourcing with SAP Ariba Sourcing	428
10.2.2	Quote Automation for Procurement	429
10.2.3	Request for Price	429
10.2.4	Manage Request for Quotation	430
10.2.5	Create Request for Quotation	432
10.2.6	Monitor Request for Quotation Items	433
10.2.7	Compare Supplier Quotations	434
10.2.8	Manage Supplier Quotation	435
10.2.9	Manage Workflows for RFQs	436
10.2.10	Manage Workflows for Supplier Quotation	437
10.2.11	My Inbox	438
10.3	Configuring Request for Quotation	439
10.3.1	Number Ranges	439
10.3.2	Document Types for RFQ	439
10.3.3	Document Types for Supplier Quotation	441
10.3.4	External Processing for Supplier Quotation Process	443
10.3.5	Activate cXML Message Types	443
10.3.6	Credentials and Endpoints	443

10.3.7	Assign Network ID to Company Code	444
10.3.8	Schedule Job	445
10.3.9	Output Parameter Determination and Use	445
10.4	Configuring Flexible Workflow	446
10.4.1	Scenario Activation	447
10.4.2	Register Event for Subsequent Workflow	447
10.4.3	Maintain Task Names and Decision Options	449
10.4.4	Visualization of SAP Business Workflow	450
10.4.5	Scenario Definition	451
10.4.6	Maintain Attribute for Workflow Task	452
10.5	Integration with SAP Ariba	454
10.6	Summary	454

11 Invoice and Payables Management 455

11.1	What Are Invoice and Payables Management?	455
11.2	Invoice Processing	456
11.2.1	Supplier Invoice Documents	457
11.2.2	Results of Invoice Processing	459
11.2.3	Types of Supplier Invoice Verification	459
11.2.4	Entry of Invoice Documents	461
11.2.5	Invoice Processing	465
11.2.6	Reporting in Invoice Processing	477
11.2.7	Object Pages	480
11.3	Accounts Payable	483
11.3.1	Supplier Payment Processing	484
11.3.2	Supplier Account Management	495
11.4	Invoice and Payables Management Analytics and Reporting	499
11.4.1	Accounts Payable Overview	500
11.4.2	Aging Analysis	503
11.4.3	Overdue Payables	504
11.4.4	Future Payables	505
11.4.5	Cash Discount Forecast	506

11.4.6	Cash Discount Utilization	507
11.4.7	Days Payable Outstanding	509
11.4.8	Days Payable Outstanding—Indirect Method	510
11.4.9	Invoice Processing Analysis	511
11.4.10	Supplier Payment Analysis (Manual and Automatic Payments)	512
11.4.11	Supplier Payment Analysis (Open Payments)	513
11.5	Configuring Invoice and Payables Management	513
11.5.1	Configuration Elements for Managing Incoming Invoices	514
11.5.2	Configuration Elements for Managing Invoice Blocks	521
11.6	Summary	528

12 Supplier Management 529

12.1	What Is Supplier Management?	529
12.1.1	Supplier Discovery, Qualification, and Onboarding	530
12.1.2	Classification and Segmentation	534
12.1.3	Evaluation	534
12.2	Classification and Segmentation	535
12.2.1	Purchasing Categories	535
12.2.2	Supplier Activities and Tasks	539
12.3	Supplier Evaluation	542
12.3.1	Supplier Evaluation Scorecard	544
12.3.2	Individual Supplier Evaluation	544
12.3.3	Supplier Evaluation by Time	545
12.3.4	Supplier Evaluation by Price	546
12.3.5	Supplier Evaluation by Questionnaire	546
12.3.6	Combined Scorecard	548
12.3.7	Operational Supplier Evaluation	548
12.4	Configuration	549
12.4.1	Supplier and Category Management Configuration	550
12.4.2	Classification and Segmentation	552
12.4.3	Supplier Evaluation Configuration	552
12.5	Summary	555

13 Centralized Procurement 557

13.1	What Is Centralized Procurement?	557
13.2	Central Requisitioning	562
13.3	Central Purchasing	564
13.4	Central Purchasing Contracts	566
13.5	Central Analytics	567
13.6	SAP S/4HANA for Central Procurement with SAP Ariba	571
13.7	Configuring SAP S/4HANA for Central Procurement	574
13.7.1	Establishing Connectivity to ERP Systems	576
13.7.2	Validating Data and Identifying Gaps	583
13.7.3	Configuring SAP S/4HANA for Central Procurement Scenarios	585
13.7.4	Integrating SAP Ariba Guided Buying with Central Procurement	596
13.8	Summary	597

14 Sourcing and Procurement Analytics 599

14.1	Spend Visibility	600
14.1.1	Multidimensional Spend Reporting in SAP S/4HANA Cloud	601
14.1.2	Navigation and Procurement Overview Page	601
14.2	Contract Expiration	602
14.3	Sourcing	604
14.4	Supplier Performance	606
14.4.1	Purchasing Document Reports and Embedded Analytics	607
14.4.2	Predictive Analytics	609
14.5	Reporting	609
14.6	Machine Learning	611
14.7	Configuration	612
14.7.1	Creating a Key Performance Indicator	613
14.7.2	Configuring Real-Time Reporting/Queries	613

14.7.3	Exploring Virtual Data Model and Core Data Services in SAP S/4HANA	614
14.7.4	Integration of SAP S/4HANA with SAP Analytics Tools	615
14.7.5	Integration with Cloud Applications	617
14.8	Summary	618

15 Integrating SAP S/4HANA with SAP Ariba and SAP Fieldglass 619

15.1	SAP Ariba Integration Projects and Connectivity Options	619
15.2	SAP Ariba	623
15.2.1	Key Integration Technologies	624
15.3	SAP Ariba Cloud Integration Gateway	625
15.3.1	SAP Cloud Platform Integration and the SAP Ariba Cloud Integration Gateway	625
15.3.2	Configuring the SAP Ariba Cloud Integration Gateway	627
15.3.3	SAP Ariba Strategic Sourcing Integration	628
15.3.4	SAP Ariba Buying and Invoicing Integration	639
15.4	SAP Ariba Supply Chain Collaboration	650
15.5	SAP Ariba Supply Chain Collaboration Configuration	658
15.6	SAP Fieldglass	660
15.6.1	Key Technologies	661
15.6.2	Integrating SAP Fieldglass Contingent Workforce Management	661
15.6.3	SAP SuccessFactors	664
15.7	Summary	666

16 Customizing the UI 669

16.1	User Interface Options in SAP S/4HANA	669
16.1.1	SAP Fiori	669
16.1.2	SAP General User Interface	680

16.2	Configuring SAP Fiori	681
16.2.1	Installing SAP Fiori	681
16.2.2	Embedded and Central Hub Deployment for SAP Fiori	682
16.2.3	SAP Fiori App Library	683
16.3	Customizing SAP Fiori	688
16.3.1	SAP Fiori Edit Mode	688
16.3.2	SAP Fiori User Settings	689
16.3.3	SAP CoPilot	692
16.4	Summary	694

17 Conclusion 695

17.1	Future State of Procurement Solutions	698
17.2	Future State of the Procurement Supply Chain	699

The Author	701
Index	703

Index

A

ABAP	673
ABC Analysis for Cycle Counting app	299
Accounting data	129
Accounts payable	483
<i>analytics</i>	499
<i>reporting</i>	499, 609
Accounts payable and invoicing	46
Activate flexible workflow	520
Activated appliance	64
Activity types	94
Advanced shipping notifications	149
Agile methodology	79
Aging Analysis app	500, 503
Ajax	673
Allocation quota arrangements	227
Analytical cards	601
Analytics	88, 599
Analyze PIR Quality app	212
Approve Bank Payments app	493
Ariba Network	40, 45, 67, 170, 193–194, 479, 530, 532, 561, 572, 620, 622, 642
Assign and Process Purchase Requisition app	163
Attribute value mapping	137
Authorization check	378
Automated and direct procurement	199
<i>configure</i>	245
Automated procurement	200
Automatic Creation of Purchase Orders from Requisition app	163
Automatic PO	587
Automatic settlements	459

B

Background job definitions	422
BAdI	
<i>BD_MMPUR_REQ_APPR_PRV</i>	182
<i>MM_PUR_CTLG_BDI_SRH</i>	182
<i>MMPUR_CAT_CLL_ENRICH</i>	182
<i>MMPUR_CAT_PROXY_INFO</i>	182
<i>MMPUR_CATALOG_ENRICH_DATA</i>	182

Bank information	129
Batch Information Cockpit app	313
Batch management	122, 262
Batch number	123
<i>assignment</i>	123
Batch Overview app	312
Best practices	74
Big data	698
Bill of materials	149
Blanket agreement	355
Blanket purchase orders	231
Business area	93
Business partner	126
<i>creation</i>	127
<i>SAP S/4HANA</i>	128
Business Rule Framework	92

C

Cash Discount Forecast app	506
Cash Discount Utilization app	507
Catalog via web service	180
Categories for Legal Content app	401
Central analytics	567
<i>configure</i>	595
Central contracts	566
Central hub deployment	682
Central procurement	77, 557, 566
<i>architecture</i>	583
<i>configure</i>	574
<i>extraction</i>	584
Central Purchase Contract	
Consumption app	568–569
Central Purchase Requisition Item	
Types app	595
Central purchasing	564
<i>BADIs</i>	588
<i>configure</i>	587
Central purchasing contracts	
<i>configure</i>	592
Central requisitioning	562
<i>configure</i>	586
Change Inbound Delivery app	275

- Change management lead 88
- Change Physical Inventory Count app 293
- Change Physical Inventory Document app 292
- Change pointers 582
- Chart of accounts 94
- Check report
 - 1623677 137
 - 2216176 137
 - 2399368 138
 - 974504 138
 - CVI_FS_CHECK_CUSTOMIZING* 137
 - PRECHECK_UPGRADATION_REPORT* 137
- Classification and Segmentation app 534
- Clear GR/IR Clearing Account app 472
- Clear Outgoing Payments (Manual Clearing) app 486
- Client 93
- Cloud computing 53
- Cloud procurement 42
- Collaborative sourcing 37, 428
- Collaborative sourcing and contract management 355
- Combined Scorecard app 548
- Company 93
- Company code 96
 - create* 96
- Component consumption (backflush) message 657
- Component consumption (real-time) message 658
- Component inventory message 658
- Component receipt 657
- Component ship notice 657
- Concur 43, 68, 561
- Confirmation and return delivery 154
- Consignment orders 240
- Consignment stock 239
- Constant model 215
- Consumable item 150
- Consumer-level UX 698
- Consumption-based planning 201
- Contact person 137
- Content type 413
- Contingent labor management 561
- Contract
 - quantity contract* 357
- Contract and source determination 222
- Contract consumption 363
- Contract creation 356
- Contract dashboard reporting 367
- Contract expiration 602
- Contract Expiry app 373, 603
- Contract Leakage app 371
- Contract management 37
 - configuration* 374
- Contract workflow 378
- Contracts
 - apps* 368
 - contract release order* 357
 - release procedure* 376
 - texts* 377
 - value contract* 357
- Contracts management 355, 393
- Controlling area 93
- Conversion phase 145
- Core data services 614
- Cost center 94
- Cost element 94
- Country-specific chart of accounts 94
- Create Balance Confirmations app 498
- Create Consignment and Pipeline Settlement app 474
- Create Correspondence app 498
- Create Dunning Notices app 498
- Create Evaluated Receipt Settlement app 476
- Create Inbound Delivery app 274
- Create Material app 116
- Create Periodic Account Statements app 498
- Create Physical Inventory Document app 290–291
- Create Physical Inventory Documents—
 - Regular Stock app 298
- Create Purchase Order app 167
- Create Purchase Order via Purchase Requisition app 163
- Create Purchasing Info Record app 224
- Create Questionnaire app 547
- Create Single Payment app 492
- Create Standard Letters app 498
- Create Supplier Invoice app 465
- Create Supplier Invoice—Advanced app 467

- Create Supplier Invoices 235
 - Create Template app 407
 - Create Text Block app 407
 - Credit control 93
 - Credit management 133
 - Credit memo 458
 - Cross-catalog search 175, 178, 584
 - preparing data* 179
 - Currencies 94
 - Custom code 71
 - Customer
 - object page* 323
 - Customer attributes 137
 - Customer/vendor integration 131
 - BADIs* 141
 - conversion steps* 134
 - mapping checks* 144
 - preparation phase* 134
 - CXML 656
 - Cycle counting 354
- D**
- Data hierarchy 92
 - Database lead 88
 - Date types 409
 - Days Payable Outstanding app 509–510
 - Dead Stock Analysis app 328, 331
 - Define object links 422
 - Delete Correspondence Requests app 498
 - Delta design 86
 - Deployment 52
 - Development lead 88
 - Digital core 41
 - Direct procurement 39, 149
 - Display Inbound Delivery app 276
 - Display MRP Key Figures app 210
 - Display MRP Material Issues app 210
 - Display Physical Inventory Progress app 303
 - Display PI Document Items for Materials app 304
 - Display Stock in Transit app 285
 - Display Stock Overview app 314
 - Display Supplier Balances app 497
 - Display Supplier Invoice—Advanced app 479
 - Display Warehouse Stock app 315
 - Display/Cancel Account Maintenance app 473
 - Document holding 462
 - Document life 337, 520
 - Document parking 462
 - Document stamps 414
 - Document types 418
 - configuration* 246
 - definition* 374
 - LP* 228
 - LPA* 228
 - Document types for purchase order 248
 - Document types for requisition 246
 - Document types for scheduling
 - agreement 250
 - Dun & Bradstreet 552
 - Duplicate invoices 519
- E**
- Electronic data interchange (EDI) 148
 - Embedded deployment 682
 - Embedded search 177
 - End users 88
 - Enhancement spot
 - ENRICH_ITEM_DATA* 182
 - ES_MMPUR_REQ_APPR_PRV* 182
 - MM_PUR_CAT_PROXY_INFO* 182
 - MMPUR_CAT_CLL_ENRICH* 182
 - MMPUR_CATALOG_TRANSFER* 182
 - Enter and Post PI Count w/o Document app 294
 - Enter Inventory Count app 292
 - Enter PI Count w/o Document app 294
 - Enterprise Contract Management
 - Overview app 395
 - Entity types 410
 - Evaluated receipt settlement 239
 - Evaluation 534
 - Expiration date check 341
 - Expiry notification setting 367
 - External contacts 411
 - External quotation 437
 - External sourcing 425

F

Fact sheet apps	671
FD02	128
FD03	128
FD05	128
FD06	128
Federal Supply Class	120
Final reports	142
Fiscal year	94
FK01	128
FK02	128
FK03	128
FK05	128
FK06	128
Flexible workflow	446
<i>configuring</i>	446
Forecast collaboration	220
Forecast commit	221
Forecast delivery schedule	382
Forecast planning	214, 251
Forecast review	221
Forecast-based planning	201
Forecasting	214
Freeze balances	352
Freeze book	352
Full conversion	61
Functional expert	88
Future Payables app	505

G

General ledger	92
Goods issue	256
Goods issues	277
<i>shipping integration</i>	278
Goods Movement Analysis app	328
Goods Movement Reporting app	309
Goods movements	263
Goods receipt	156, 256, 264–265
<i>creation</i>	156
Goods receipt with reference to purchase	
order/production order	265
Goods receipt-based invoice verification	460
Goods/service receipts	149
Group chart of accounts	94
Guided buying	77

H

Hook URL	173
HTML	673
Hybrid cloud	54

I

Ideal procurement	36
IDocs	132
Image-based buying	162
Imageloader	180
Implementation	51
Import PO	589
Importing catalog data	178
Importing images	178
Inbound Deliveries for Purchase Orders	
app	273
Inbound Delivery object page	324
Incoterms	167
Indirect procurement	200
Individual supplier evaluation	544
Industrial Internet of Things	699
Infotypes	171
Infrastructure as a service (IaaS)	53
Initial stock entry for blocked stock	265
Initial stock entry for quality inspection	
stock	265
Initial stock entry for unrestricted use	
stock	265
Insert Text Block	407
Integrated object model	127
Integration	68
Integration add-on	575
Integration platform as a service	53
Integration projects	619
Intelligent approval workflow	162
Internal catalog	173
Internal contacts	409
Internet of Things (IoT)	699
Inventory KPI Analysis app	328, 332
Inventory management	101, 255–256
<i>analytics</i>	327
<i>configure</i>	332
<i>data model</i>	257
<i>object pages</i>	318
<i>reporting</i>	305

Inventory overview pages	305
Inventory Turnover Analysis app	212, 329
Invoice and payables management	38, 455
Invoice documents	461
<i>number range interval</i>	515
Invoice entry	
<i>using EDI</i>	463
<i>via the Ariba Network</i>	463
Invoice postings	
<i>simulation</i>	465
Invoice processing	455–456, 465
<i>reporting</i>	477
<i>results</i>	459
Invoice Processing Analysis app	511
Invoice reduction	464
Invoices	149
Item amount check	525–526
Item categories	376

J

Job repository	422
Job scheduling	579
JSON	175
<i>import</i>	180

K

Key performance indicator (KPI)	613
---------------------------------	-----

L

Landscape transformation	52
Lean catalog	172, 174
Lean procurement	664
Legacy system migration workbench	129
Legal content	393
Legal content management	
<i>customizing</i>	407
Linked object types	412–413
Live update	399
Local procurement	574
Logical systems	578

M

Machine learning	162, 182
Maintain MRP Controllers app	209–210
Maintain task names	449
Maintenance planner	69
Manage Activities app	535, 539–540, 552
Manage Automatic Payments app	488
Manage catalog items	173
Manage Central Contracts app	567
Manage Change Requests app	210
Manage Context for Legal Content app	398
Manage Contexts app	395
Manage External Requirements app	209
Manage Internal Requirements app	210
Manage Legal Documents app	395, 404
Manage Legal Tasks app	395, 404
Manage Legal Transactions app	395, 405
Manage Material Coverage app	210
Manage Outbound Deliveries app	280
Manage Payment Blocks app	487
Manage Payment Media app	492
Manage PIRs app	210
Manage POs app	210, 565
Manage Production Orders or Process Orders	
app	210
Manage Purchase Categories app	539
Manage Purchase Contracts app	210, 567
Manage Purchase Orders app	235
Manage Purchase Orders Centrally app	565
Manage purchase requisitions	165
Manage Purchase Requisitions app	210
Manage Purchase Requisitions	
Centrally app	563–564
Manage Purchase Requisitions Centrally	
app	565
Manage Purchase Requisitions—Professional	
app	163
Manage Purchasing Category app	535, 552
Manage Purchasing Info Records	
app	211, 224
Manage Questionnaires app	542
Manage Questions app	542
Manage Quota Arrangements app	226
Manage Request for Quotation app	430
Manage Requisitions Centrally app	565

Manage Scheduling Agreement app ... 228, 383
 Manage Scorecards app 544
 Manage Source Lists app 211
 Manage Sources of Supply app 210, 604
 Manage Stock app 210, 268
 Manage Supplier Down Payment Requests
 app 490–491
 Manage Supplier Line Items app 496
 Manage Supplier Quotation app 211
 Manage Templates app 406, 542
 Manage Workflow for Purchase
 Requisitions app 563
 Manage Workflows app 446
 Manage Workflows for RFQs app 436
 Manage Workflows for Scheduling
 Agreements app 228
 MAP1 128
 MAP3 128
 Mass Change to Purchase Contract app 362
 Mass Change to Purchasing Info
 Records app 224
 Mass Changes to Scheduling Agreements
 app 228
 Master data 111–112
 definition 245
 Material
 object page 320
 Material document 319
 Material Document app 211
 Material Documents Overview app 269
 Material group 112
 creation 119
 Material Inventory Values—Balance
 Summary app 211, 316
 Material Inventory Values—Line Items
 app 211, 317
 Material master 112
 configuration 121
 creation 116
 field 121
 record 112
 Material master record tabs 117
 Material masters 203
 Material Shortage Profile app 212
 Materials requirements planning 202
 MATNR field 122
 Migrating SAP SRM shopping carts 159
 MK01 128
 MK02 128
 MK03 128
 MK05 128
 MK06 128
 MK12 128
 MK18 128
 MK19 128
 MMPUR_CATALOG_ENRICH_DATA 182
 Monitor Batches and Payments app 494
 Monitor Central Purchase Contract
 Items app 568
 Monitor External Requirements app 209
 Monitor Internal Requirements app 210
 Monitor Material Coverage app 209, 213
 Monitor Production Orders app 207
 Monitor Production Orders or Process
 Orders app 210
 Monitor Purchase Contract Items app 372
 Monitor Purchase Order Items app 611
 Monitor Purchase Requisition
 Centrally app 595
 Monitor Purchasing Info Records Price
 History 224
 Monitor Request for Quotation Items
 app 433
 Monitor Responses app 542
 Monitor Tasks app 535, 540, 552
 Monitoring financial inventory values 316
 Movement types 155, 265, 344
 101 265
 201 278
 261 278
 301 281
 303 281
 305 281
 311 281
 313 281
 333 278
 551 278
 561 265
 563 265
 601 278
 641 278
 643 278
 change 346
 copy 346

MRO 43
 MRP Cockpit Reuse Component app 210
 MRP Live 204
 Multidimensional spend reporting 601
 Multipurpose Internet Mail Extensions
 (MIME) 551
 Multitenant environment 76
 Multitier purchase orders 233
 My Inbound Delivery Monitor app 276
 My Inbox 438, 567
 My Inbox—Approve POs app 210
 My Purchase Orders—Due for Delivery
 app 278
 My Purchasing Document Items app 210
N
 Negative stocks 342
 New catalog item 173
 New implementation 52, 58, 60
 Number assignments 335
 Number ranges 439
O
 OAuth client 2.0 184
 Object link descriptions 421
 Object pages 480
 OData connection 581
 OData service
 catalog data extraction services 581
 *hub service for delivery address and general
 ledger account* 581
 material value help service 581
 *odata service for purchase requisition
 check* 581
 purchase requisition history 581
 search help 581
 service for return delivery 581
 *SSP requisition goods receipt hub backend
 services* 581
 *sync business procentral procurement admin
 monitor backend status for SSP* 582
 *sync business processes completed and
 deleted PR from connected system* 581
 Off-Contract Spend app 369
 Online invoice entry 461
 Open catalog interface-compliant 179
 Operating chart of accounts 94
 Operating concern 93
 Operational database system 41
 Operational procurement 34, 147
 configure 170
 Operational purchasing 37
 Operational Supplier Evaluation Last 365 Days
 app 604
 Ordered requisition 642
 Org structure 578
 Organizational structure 91
 Outbound delivery
 object page 326
 Outline purchase agreements 355
 Output Material Documents app 271
 Overall Supplier Evaluation Last 365 Days
 app 604
 Overdue Materials—Stock in Transit
 app 284
 Overdue Payables app 504
 Overview Inventory Management
 app 307–308
 Overview Inventory Processing app 306
 Overview page 601
 Ownership 262
P
 Payables management 456
 Payment blocks 521
 Physical count 289
 Physical inventory 287, 350
 reporting 300
 settings 351
 Physical Inventory Analysis app 302
 Physical Inventory Document Overview
 app 300
 Picking Components for Process Orders
 app 207
 Planned order 202
 Planning 214
 Plant
 definition 99
 Plant parameters 334
 Plants 98
 Platform as a service 53

- PO processing 149
 - Post Goods Movement app 270
 - Post Goods Receipt for Delivery app 272
 - Post Goods Receipt for Purchase Order app 266
 - Post Outgoing Payments app 485
 - Postprocessing orders 139
 - Postprocessing phase 145
 - PPO request 138
 - Prechecks 69–70
 - Predictive analytics 162, 187, 609
 - Preupgrade checks 144
 - Print Correspondence Requests app 498
 - Print Physical Inventory Documents app 297
 - Print Supplier Invoices app 470
 - Private cloud 54
 - Process Physical Inventory Count Results app 296
 - Process Tasks app 535, 541, 552
 - Procurement 35, 40, 45
 - Procurement analytics 38
 - Procurement Overview Page app 211, 601
 - Procure-to-pay 37
 - Product type 120
 - Profile sets 415
 - Profiles 414
 - Profit center 94
 - Program
 - LSMW 132
 - MM_PUR_CTLG_EXT_COM_CUR_UPD 176
 - Project management 88
 - Public cloud 54
 - Punchout catalog 172
 - setup 172
 - Purchase Contract app 211
 - Purchase Contract Item app 211
 - Purchase Contract Items by Account
 - Assignment app 372
 - Purchase contracts 357
 - Purchase info record 251
 - Purchase order 147
 - Purchase Order app 211
 - Purchase order collaboration 149, 169, 193
 - Purchase Order Item Changes app 602
 - Purchase order number ranges 248
 - Purchase order processing 166, 191
 - Purchase order-based invoice verification 459
 - Purchase orders 233
 - Purchase Requisition app 152, 211
 - Purchasing categories 535
 - Purchasing category 535, 537
 - Purchasing data 129
 - Purchasing groups creation 108
 - Purchasing Info Record app 211, 224
 - Purchasing information record 224
 - Purchasing organization 105–106
 - distributed 106
- ## Q
- Quality gates 87
 - Quality management 261
 - Quality management collaboration 241
 - Quantity contract consumption 187
 - Quantity Contract Consumption app 365, 602
 - Quota arrangements 226, 252
 - Quote automation for procurement 429
- ## R
- Real-time reporting 613
 - Record reason 344
 - Release Blocked Invoices app 468–469
 - Release creation profile 390
 - Release Reminder Purchase Requisition app 163
 - Reminder emails 408
 - Remote function call 183
 - Reoccurrence pattern 589
 - Reorder point planning 201, 218
 - Replenishment 653
 - Report
 - BBP_MIGRATE_SCEN 160
 - BBP_SC_MIGRATE_TO_PR 160
 - CVI_PRECHECK_UPGRADE 144
 - FSBP_IND_SECTOR_MAPPING_CHECK 142
 - MDS_LOAD_COCKPIT 144–145

- Report (Cont.)
 - MMPUR_MIGR_EBAN 160
 - NOTE_2324208_DDIC 132
 - NOTE_2331298 132
 - PPH_SETUP_MRPRECORDS 207
 - PPH_SETUP_MRPRECORDS_SIMU 207
 - PRECHECK_UPGRADATION_REPORT 142, 144
 - R_S4_PRE_TRANSITION_CHECKS 71
 - RMMDVMI0 207
 - RMMDVMI20 207
 - Reporting and monitoring 599
 - Request for price 429
 - Request for quotation 425, 428, 430, 432
 - configuration 439
 - document 428
 - document types 439
 - Request Legal Content app 395, 401
 - Request Physical Inventory Recount app 295
 - Requirement processing 149
 - Requirements processing 163
 - Requisition creation 152
 - Requisition number range 246
 - Requisitioning 147, 245
 - Requisitions 151
 - Reschedule delta indicators 181
 - Return delivery 157
 - Revise Payment Proposals app 489
 - RFQ 428
 - create 432
 - manage 431
 - RFQ monitor 433
 - RFQ workflow 436
- ## S
- SAP Activate 51, 80–81
 - deploy phase 82
 - discover phase 81
 - explore phase 82
 - prepare phase 82
 - realize phase 82
 - roles 88
 - run phase 82
 - workflows 84
 - SAP Analysis for Microsoft Office 616–617
 - SAP Analytics Cloud 77, 566, 572
 - SAP Appliance 65
 - SAP Ariba 33, 39–40, 68, 423, 557, 561, 617
 - connectivity options 619
 - integration 253, 623
 - supplier bidding 634
 - SAP Ariba Buying 67, 148
 - SAP Ariba Buying and Invoicing 622
 - integration 639
 - SAP Ariba Catalog 40, 43, 45, 572, 622, 641
 - item selection 640
 - search 640
 - SAP Ariba Cloud Integration Gateway 454, 622, 625
 - configure 627
 - SAP Ariba Contract Management 572
 - SAP Ariba Contracts 77, 573
 - SAP Ariba Discount Collaboration 620
 - SAP Ariba Discovery 530
 - SAP Ariba guided buying 559, 562, 620, 622
 - integration 596
 - SAP Ariba Payables 572
 - SAP Ariba Payment 620
 - SAP Ariba Sourcing 572
 - requests 630
 - search 630
 - tasks 630
 - SAP Ariba Sourcing for Direct 606
 - SAP Ariba Spend Management 617
 - SAP Ariba Strategic Sourcing 253, 606, 620, 622
 - integration 628
 - SAP Ariba Supplier Lifecycle and Performance 530–533
 - SAP Ariba Supplier Lifecycle and Performance 532
 - SAP Ariba Supplier Lifecycle Performance 572
 - SAP Ariba Supplier Risk Management for supplier management 572
 - SAP Ariba Supply Chain Collaboration 479, 572, 622
 - SAP Ariba Supply Chain Collaboration for Buyers 44–45, 220, 658
 - SAP Basis 64, 177
 - SAP Best Practices 64, 80

SAP Business Client	676
SAP Business Suite	41
SAP Business Suite in SAP ERP	607
SAP Business Suite powered by SAP	
HANA	257
SAP Business Workflow	450
SAP BusinessObjects	615–616
SAP BusinessObjects Explorer	616
SAP Cloud	44
SAP Cloud for Customer	68
SAP Cloud Platform	68, 162, 182, 673
SAP Cloud Platform Integration	454
SAP CoPilot	692
SAP Crystal Reports	616
SAP Delivery	172, 174
SAP ERP	33, 42, 147–148, 561
<i>materials requirements planning</i>	204
SAP Extended Warehouse Management	95
SAP Fieldglass	42, 68, 168, 561, 617, 622, 660
<i>contingent workforce management</i>	661
SAP Fiori	74, 206, 669
<i>app library</i>	687
<i>architecture</i>	674
<i>configuration</i>	681
<i>customize</i>	688
<i>edit mode</i>	688
<i>frontend server</i>	674
<i>installation</i>	681
<i>user settings</i>	689
SAP Fiori Apps reference library	683
SAP Fiori launchpad	671, 688
SAP Fiori UI	669
SAP Fiori UX	607
SAP Gateway	677, 681
SAP Gateway Foundation	582
SAP GUI	428, 680
SAP GUI for HTML	672
SAP GUI for Windows	673
SAP HANA Enterprise Cloud	52
SAP Human Capital Management for	
SAP S/4HANA	171
SAP Human Capital Management for	
SAP S/4HANA, on-premise	68
SAP Leonardo	162, 182, 188
SAP Lumira	616
SAP Lumira, designer edition	614, 616
SAP Marketing	68
SAP Marketing Cloud	52
SAP Master Data Governance	531
SAP MaxDB	681
SAP Mobile Platform	674
SAP Model Company	80–81
SAP Multi-Bank Connectivity	68
SAP NetWeaver	72, 673
SAP NetWeaver Application Server	177
SAP NetWeaver AS ABAP	673
SAP NetWeaver Enterprise Search	177
SAP Note	
1164979	177
1454441	138
1623677	142
1623809	138
2214409	71
2224251	120
2224371	120
2240359	71
225146	160
2287723	129
2309153	138
2312529	132
2324208	132
2331298	132
2333236	71
2340095	133
2346269	132
2376996	176
2383051	134
2405714	132
2502552	71
974504	145
SAP Pay	47
SAP Portal Content Management by	
OpenText	673
SAP Process Integration	620
SAP Process Orchestration	454, 620
SAP Product Lifecycle Management	253
SAP S/4HANA	52, 168–169, 257, 542,
561–562, 566, 620, 622	
<i>central procurement</i>	77
<i>installation</i>	64
<i>materials requirements planning</i>	204
<i>quick start approaches</i>	79
<i>workflows</i>	160

SAP S/4HANA Cloud	41, 52, 68, 74, 170, 566,
582, 596, 601, 604, 674	
<i>integration</i>	76
SAP S/4HANA Cloud for enterprise contract	
<i>assembly</i>	393, 406
SAP S/4HANA Enterprise Management	40,
51, 62, 91, 95	
SAP S/4HANA for central procurement	52,
557, 574	
<i>configure</i>	585
SAP S/4HANA integration	620
SAP S/4HANA Sourcing and	
Procurement	177, 531, 602, 619
SAP S/4HANA Sourcing and Procurement roles	
<i>Accounts payable accountant—</i>	
R0005-12	48
<i>Employee procurement—R0056-12</i>	47
<i>Manager procurement—R0091</i>	48
<i>Operational purchaser—R0128</i>	48
<i>Strategic buyer—R0153</i>	48
SAP S/4HANA sourcing and procurement	
roles	47
SAP Smart Business analytical apps	671
SAP SRM	106, 159, 558, 561
<i>procurement</i>	559
SAP SRM deployment	159
SAP SuccessFactors	195, 664
SAP SuccessFactors Employee Central	68,
195, 664	
SAP Supplier Lifecycle and Performance	530
SAP Supplier Lifecycle Management	530,
533, 542	
SAP Supplier Relationship Management	148,
425, 530	
SAP Supply Base Optimization	242
SAP Supply Network Collaboration	654
SAPUI5	672–673
Scenario activation	447
Scenario definition	451
Schedule MRP Runs app	210
Schedule Order Conversion Runs app	211
Schedule Purchasing Jobs app	210
Scheduling agreement	227, 381
<i>creation</i>	382
<i>document types</i>	388
<i>with release document</i>	382
<i>without release document</i>	382
Scheduling agreement number ranges	250
Scheduling agreement release	
collaboration	230, 657
Scheduling agreement releases	655
Scheduling agreements	566
<i>customizing</i>	388
Search templates	178
Seasonal model	215
Seasonal trend model	216
Self-service procurement	67, 151
Self-service procurement requisitioning	170
Self-service requisitioning	149, 151
Serial number	124
Serialization	122, 125, 263
SERV record	120
Service confirmation	169
Service entry sheet	169
Service order processing	192
Service purchasing	168
Service purchasing and entry	149
Shopping cart creation	152
Shopping cart processes	159
Slow or Non-Moving Materials app	328, 330
Software as a service (SaaS)	53
Solution validation	86
Source list	225, 252
Source-to-pay	37
Sourcing	604
Sourcing and procurement	31
Sourcing optimization	426
Sourcing process flow	426
Sourcing strategies	426
Spend analysis	600
Spend visibility	599
Splitting arrangements	227
Stochastic block	527
<i>check</i>	527
Stock balances reporting	310
Stock identity	286
Stock management	259
<i>location</i>	260
<i>material</i>	260
<i>usability</i>	260
Stock ownership	287
Stock quantity	157

Stock transfers	256, 280	Supplier Evaluation by Time Last 365 Days	
<i>one-step</i>	281	app	604
<i>reporting</i>	284	Supplier Evaluation Score History	608
<i>shipping integration</i>	284	Supplier evaluation scorecard	544
Stock transport scheduling agreement	382	Supplier Evaluation/Operational Supplier	
Stock type		Evaluation app	548
<i>blocked</i>	261	Supplier invoice	458
<i>customer returns</i>	261	Supplier invoice documents	457
<i>quality inspection</i>	261	Supplier invoice object page	481
<i>unrestricted use</i>	261	Supplier invoice verification	459
Stock usability	286	Supplier Invoices List app	477–478
Stock—Multiple Materials app	212, 312	Supplier management	38, 529
Stock—Single Material app	211, 310	<i>configuration</i>	549
Storage locations	99–100, 338	Supplier master	129
<i>assign to a warehouse</i>	102	Supplier onboarding	530
Strategic procurement	32	Supplier Payment Analysis (Manual and	
Strategic sourcing	44, 425	Automatic Payments) app	512
Subcontracting	234–235	Supplier Payment Analysis (Open Payments)	
<i>in SAP S/4HANA</i>	236	app	513
<i>order collaboration</i>	237	Supplier payment processing	484
Subcontracting MRP	237	Supplier performance	606
Subcontracting purchase order	657	Supplier qualification	530
Subsequent credit	458	Supplier quotation	435, 437
Subsequent debit	458	Supplier Quotation app	446
Supplier		Supplier quotations	434
<i>object page</i>	322	Supplier self-service	425
Supplier account management	495	Supplier self-services	169
Supplier accounting document object		Synchronization	143
page	483	System administration	67
Supplier and category management		System conversion	52, 58–59, 69
configuration	550	<i>preparation</i>	69
Supplier app	211	<i>realization</i>	69
Supplier collaboration	33		
Supplier discovery	530	T	
Supplier evaluation	542	Table	
<i>configuration</i>	552	<i>MATDOC</i>	258
Supplier Evaluation app	542	<i>MCHB</i>	258
Supplier Evaluation by Price app	546	<i>MKOL</i>	258
Supplier Evaluation by Price Last 365 Days		Tax codes	516
app	604	Technical architect	88
Supplier Evaluation by Quantity app	544	Test phase	145
Supplier Evaluation by Quantity Last		Time-phased planning	201, 219
365 Days app	604	Tolerance limit	522
Supplier Evaluation by Questionnaire app	546	Tolerances	524
Supplier Evaluation by Questionnaire Last		<i>supplier-specific</i>	524
365 Days app	604		
Supplier Evaluation by Time app	545		

Transaction		Transaction (Cont.)	
ANZE	225	MIO1	291
BD50	591	MIO2	292
BD52	591	MIO4	292
BD61	582	MIO9	294
BMBC	314	MI10	295
BNK_MONI	495	MI11	295
BP	132	MI20	296
CVI_FS_CHECK_CUST	142	MI21	297
CVI_PRECHECK_UPGRADE	142	MI22	304
ESH_COCKPIT	178	MI31	298
F.18	498	MIBC	299
F.27	498	MIDO	303
F.61	498	MIR4	479
F.62	498	MIRO	468
F.63	498	MMO1	113, 116
F.66	498	MMO2	113, 116
FI10	512	MMO3	113, 116
FI50	498	MMBE	314
FI8P	498	MMPUR_CAT_EXT	180
FDO1	128	MP30	215
FLETS	122	MR11	473
MASS	132	MRIISHOW	473
MB51	309	MR90	470
MB52	316	MRBR	469
MB5T	285	MRKO	475
MB80	216	MRRL	476
MB90	271	OA2C_CONFIG	184
MDO1	204	OBY6	97
MDO1N	205, 214	OIS2	124–125
MDAB	207	OMCZ	123
MDRE	207	OMS9	113
ME11	224–225	OMSF	119
ME12	225	OX01	107
ME13	225	OX02	96
ME21N	693	OX08	107
ME31K	357	OX09	102
ME31L	387	OX10	99
ME32L	387	OX15	96
ME33L	387	OX17	108
ME35L	388	OX18	100
ME37	388	PA30	171
ME39	387	PPOMA	171
ME84	388	SE38	585, 594
ME9L	388	SE38/SA38	71
MEQ6	227	SFW5	138

Transaction (Cont.)

<i>SICF</i>	176
<i>SM30</i>	579, 587
<i>SM59</i>	183
<i>SPRO</i>	586
<i>SW05</i>	138
<i>VL06I</i>	277
<i>VL10B</i>	279
<i>VL31N</i>	274
<i>VL32N</i>	276
<i>VL33N</i>	276
<i>VL34</i>	274
<i>XD99</i>	132
<i>XK99</i>	132
Transactional apps	671
Transfer postings	256, 286
Translate Purchasing Categories app	535, 539
Translate Purchasing Category app	552
Translate Questions app	542
Trend model	215
Turnover	329

U

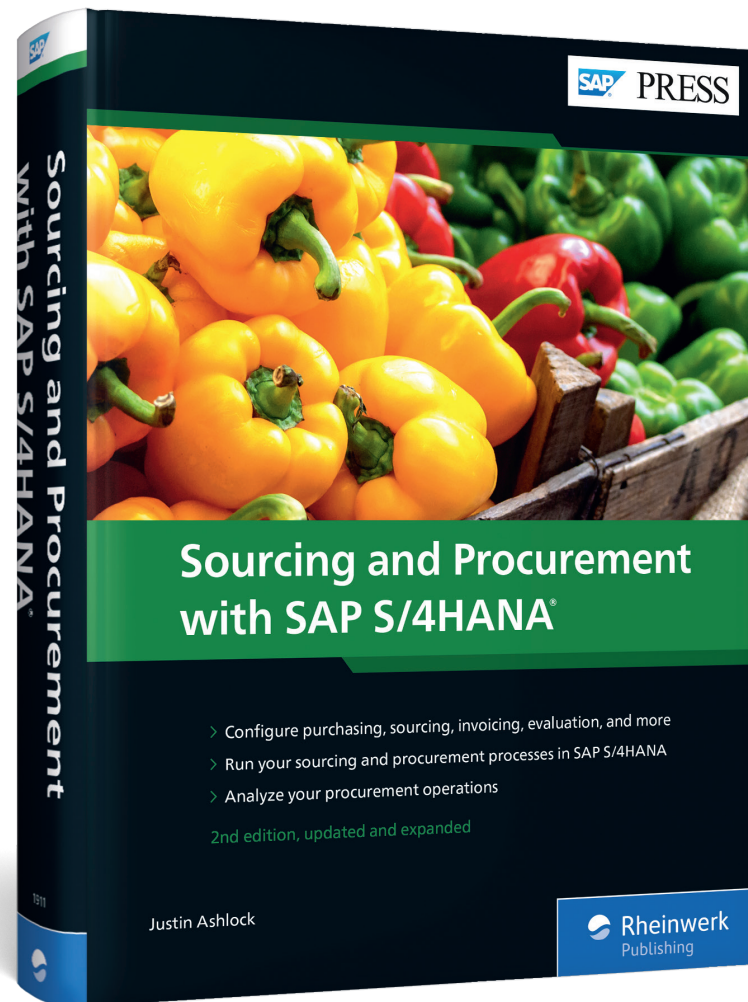
Umbrella agreements	355
United Nations Standard Product and Service Codes	120
Unused Contracts app	368
User Defaults	563
User interface	669

V

Valuated goods receipts	156
Value Contract Consumption app	364
Virtual data model	614

W

Warehouse	102
<i>creation</i>	104
Web Dynpro	540, 673
WebClient UIF	673
Webservice configuration values	172
Work order	653
Workflow inbox	163
WRICEF objects	171



Justin Ashlock

Sourcing and Procurement with SAP S/4HANA

716 Pages, 2020, \$79.95

ISBN 978-1-4932-1911-7

 www.sap-press.com/5003



Justin Ashlock has spent over half of his 20-year-plus career in technology at SAP America, serving as the lead consultant for hundreds of global SAP customer projects and engagements supporting over \$100 billion in procurement and logistics activities worldwide. Justin is a vice president of procurement services delivery within SAP's CX success and services organization. In this role, he provides general management for the North American procurement services practice, while also providing global delivery strategy and consistency to MEE and CIS regions. Justin holds a bachelor's degree from the University of California, Berkeley, and a master's degree in business administration from the University of Notre Dame.

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.