User Guide

SAP Business One 9.3, version for SAP HANA

Document Version: 1.010 – 2018-10-31

PUBLIC

SAP Business One… To Go 9.3

Typographic Conventions

Type Style	Description
Example	Words or characters quoted from the screen. These include field names, screen titles, pushbuttons labels, menu names, menu paths, and menu options. Textual cross-references to other documents.
Example	Emphasized words or expressions.
`EXAMPLE`	Technical names of system objects. These include report names, program names, transaction codes, table names, and key concepts of a programming language when they are surrounded by body text, for example, SELECT and INCLUDE.
`Example`	Output on the screen. This includes file and directory names and their paths, messages, names of variables and parameters, source text, and names of installation, upgrade and database tools.
`Example`	Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.
`<Example>`	Variable user entry. Angle brackets indicate that you replace these words and characters with appropriate entries to make entries in the system.
`EXAMPLE`	Keys on the keyboard, for example, `F2` or `ENTER`.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Document History

Version	Date	Change
1.0	2017-02-17	Final version
3.0	2018-10-31	Final version 9.3

PUBLIC
© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Table of Contents

1 The Essence of SAP Business One 10
1.1 What Is SAP Business One? 10
1.1.1 More Than a Point Solution 10
1.1.2 Information at Your Finger Tips, Any Time, Anywhere 10
1.1.3 An Application for Everyone 11
1.1.4 The Challenges Facing Small and Midsize Businesses 11
1.1.5 Information Gap 11
1.1.6 Process Gap 11
1.1.7 Multiple Point Solutions 12
1.1.8 How SAP Business One Addresses the Challenges 13
1.2 A Unique Approach 13
1.2.1 Streamlined Business Processes 13
1.2.2 Instant Access to Information 13
1.2.3 Customizable and Adaptable 14
1.2.4 Designed Exclusively for Small and Midsize Businesses and Backed by SAP 14
1.3 What This Book Will Do for You 14

2 The Personality of SAP Business One 15
2.1 Getting Started 15
2.2 Understanding the Personality of SAP Business One 17
2.3 Building Documents from Reusable Parts 17
2.3.1 Opening Documents Using the Main Menu 18
2.4 The Transactional and Process Structure of Information in SAP Business One 20
2.5 Questions for Increasing Your Understanding 20
2.6 Knowing Where You Are 20
2.6.1 The Main Window 21
2.7 Finding What You Are Looking For Within a Document 33
2.7.1 Looking Up Business Partners and Items 33
2.7.2 Using Toolbar Arrows to Find Documents 34
2.8 Getting Where You Want To Go 34
2.8.1 Orange Arrow Navigation 35
2.8.2 Drag & Relate 35
2.8.3 Lookup Menu Items 36
2.8.4 My Shortcuts 36
2.8.5 Display Settings 37
2.8.6 Form Settings 37
2.8.7 User Groups 38
2.8.8 UI Configuration Template 39
2.8.9 Customizing Field Names 41
2.8.10 Adding User-Defined Fields and Tables 42
2.8.11 Filling in Fields with User Defined Values 42
2.9 Finding Answers to Your Questions 43
2.9.1 Online Help 43
2.9.2 SAP Business One Community 44

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

2.9.3 SAP Business One on the SAP Learning Hub ... 44

3 The Basics of Financial Accounting ... 45
3.1 Overview of Financial Accounting ... 45
3.2 Setting up Financial Accounting ... 47
3.2.1 Step 1: Setting up Your Posting Periods ... 47
3.2.2 Step 2: Defining Your Account Segments ... 48
3.2.3 Step 3: Creating Your Chart of Accounts ... 49
3.2.4 Step 4: Making Your G/L Account Determinations ... 51
3.2.5 Step 5: Migrating Your Legacy Data ... 55
3.3 Performing Daily Procedures ... 57
3.3.1 Posting Manual Journal Entries ... 57
3.3.2 Making Recurring Postings ... 58
3.3.3 Using Posting Templates ... 58
3.3.4 Using Journal Vouchers ... 59
3.4 Maintaining Records ... 59
3.4.1 Reversing Transactions ... 59
3.4.2 Editing G/L Accounts ... 60
3.4.3 Editing 1099s (United States) ... 60
3.4.4 Reviewing Changes to Data: Audit Trail ... 61
3.5 Period-End Procedures ... 61
3.5.1 Period-End Closing Checklist ... 61
3.5.2 Year-End Closing Checklist ... 62
3.5.3 Data Archiving ... 62
3.6 Incoming and Outgoing Payments ... 64
3.6.1 Incoming Payments ... 64
3.6.2 Outgoing Payments ... 66
3.6.3 Special Scenarios ... 66
3.6.4 Payment Wizard ... 67
3.6.5 Printing Checks ... 68
3.7 Internal Reconciliation ... 68
3.8 External Reconciliation ... 70
3.9 Cost Accounting ... 71
3.9.1 Using Dimensions to Group Cost Centers ... 71
3.9.2 How Are Distribution Rules Used? ... 73
3.9.3 Cost Center Transfer ... 75
3.9.4 Cost Accounting Reports ... 75
3.10 Budgeting ... 76
3.10.1 Budget Scenarios ... 77
3.10.2 Budget Distribution Methods ... 77
3.11 Cashflow ... 78
3.11.1 Cashflow Forecast ... 78
3.12 Inquiries and Reports ... 80

4 Entering and Managing Master Data ... 82
4.1 How Master Data Is Used in SAP Business One ... 82
4.1.1 Different Types of Master Data Records ... 83
4.1.2 Predefined Values and Defaults ... 85
4.1.3 Master Data and Documents ... 85
4.1.4 Master Data and General Ledger Account Determination ... 85

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

4.1.5 How Master Data Is Used in Reporting 86
4.2 Master Data Creation and Management 86
4.3 Setting up Predefined Values and Defaults for Master Data 88
4.4 Creating Business Partner Master Data 89
4.4.1 Business Partner Master Data Window 89
4.4.2 Lead Master Data 91
4.5 Creating Item Master Data 91
4.5.1 Units of Measure 93

5 Sales Documents and Accounts Receivable 96
5.1 Overview of Sales-A/R Process 96
5.2 Getting Started 97
5.2.1 Common Document Structure 98
5.2.2 Key Data 99
5.3 Key Calculations: Gross Profit and Weight and Volume 101
5.3.1 Calculating Gross Profit 102
5.3.2 Calculating Volume and Weight 103
5.3.3 Key Reminders: Adding an Activity to a Sales Document 103
5.4 Taking It Step by Step 103
5.4.1 Step 1: Sales Quotation 103
5.4.2 Step 2: Sales Order 104
5.4.3 Step 3: Delivery 110
5.4.4 Optional Step: Return Request 112
5.4.5 Optional Step: Return 113
5.4.6 Step 4: A/R Invoice 113
5.5 Building One Document from Another 120
5.6 Processing Groups of Documents 121
5.6.1 The Document Generation Wizard 121
5.6.2 The Dunning Wizard 122
5.6.3 Recurring Transactions 123
5.7 Sales Mobile app 124
5.8 Accounting and Inventory Impact 125

6 Purchasing Documents and Accounts Payable 127
6.1 Overview of Purchasing-A/P Process 127
6.2 Getting Started: Common Structure and Key Data 129
6.2.1 Common Document Structure 129
6.2.2 Key Data 130
6.3 Taking It Step by Step 134
6.3.1 Step 1: Purchase Order 134
6.3.2 Step 2: Goods Receipt PO 138
6.3.3 Step 3: A/P Invoice 141
6.4 Building One Document from Another 144
6.4.1 Locating Base Documents 145
6.5 Accounting and Inventory Impact 145

7 The ABCs of MRP 147
7.1 Material Requirements Planning Defined 147
7.2 Preparing for an MRP Run 149
7.2.1 An Overview of the MRP Process 149

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

7.2.2 Key Master Data Settings Related to MRP ... 149
7.3 Using the Wizard to Execute an MRP Run ... 151
7.3.1 MRP Example 1: Multilevel Bill of Materials ... 152
7.3.2 MRP Example 2: Consuming Forecasts ... 157
7.3.3 MRP Example 3: Order Consolidation ... 159
7.3.4 Intelligent Forecast ... 159
7.4 MRP Checklist ... 160

8 Opportunities ... 162
8.1 Getting Started with Opportunities ... 162
8.1.1 Sales Opportunities Process Overview ... 163
8.1.2 Setting Up Sales-Related Information ... 164
8.2 Managing Opportunities in SAP Business One ... 165
8.2.1 Entering an Opportunity ... 166
8.2.2 Managing Activities ... 168
8.3 Managing Opportunities in Microsoft Outlook ... 169
8.3.1 What Does Microsoft Outlook Integration Look Like? ... 171
8.3.2 Synchronizing SAP Business One and Microsoft Outlook ... 171
8.3.3 Saving E-Mail as an Activity ... 173
8.3.4 Working with Quotations in Microsoft Outlook ... 174
8.3.5 Generating Snapshots of Business Partner Activity ... 175
8.4 Reporting on Opportunities ... 177
8.4.1 Running the Opportunities Pipeline Report ... 178
8.5 Campaign Management ... 179

9 The Service Module ... 182
9.1 Getting Started with Service ... 182
9.1.1 Service Contracts ... 182
9.1.2 Setting Up Automatic Creation of Equipment Cards ... 184
9.2 Equipment Cards ... 185
9.3 Creating Service Calls ... 186
9.4 Using Service on Your Mobile Device ... 188
9.5 Service Reports ... 189

10 Document Creation, Authorizations, and Approvals ... 191
10.1 Overview of Document Creation Features ... 191
10.2 Authorizations, Approval Procedures, and Document Drafts ... 192
10.2.1 User Authorizations ... 193
10.2.2 Password Administration ... 194
10.2.3 Data Ownership ... 194
10.2.4 Approval Procedures ... 196
10.2.5 Creating Document Drafts Manually ... 199
10.3 Accelerating Document Creation through Wizards ... 201
10.3.1 Draw Document Wizard ... 201
10.3.2 Document Generation Wizard ... 203
10.3.3 Procurement Confirmation Wizard ... 205

11 Printing Documents and Reports ... 208
11.1 Document Layouts and Reports ... 208
11.2 Initial Setup ... 209

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

11.2.1 Report and Layout Manager 211
11.3 Print Layout Designer 214
11.4 SAP Crystal Reports 216
11.4.1 Creating a Basic Report using SAP Crystal Reports 216
11.5 Setting Default Layout Templates 219
11.6 Emailing Documents and Reports 220
11.6.1 E-Mail Settings 221
11.6.2 E-Mail Groups 221

12 Inventory 223
12.1 Valuation Methods 223
12.1.1 Moving Average 224
12.1.2 FIFO 224
12.1.3 Standard Cost 225
12.1.4 Serial/Batch Valuation Method Cost 225
12.2 Warehouse Setup 226
12.2.1 Multi-Bin Functionality 226
12.3 Cycle Count and Inventory Tracking 230
12.4 Pick and Pack 233
12.5 Pricing 234
12.6 Gross Price Mode 236

13 Production 238
13.1 Bill of Material Types 238
13.2 Production BOM 238
13.2.1 Production Standard Cost 239
13.3 Update Parent Prices Globally. 240
13.4 Bill of Materials – Component Management. 240
13.5 Resources 240
13.5.1 Setting Daily capacity 241
13.6 Production Order 243

14 Project Management Module 246
14.1 Project Hierarchy 246
14.2 Project Management in SAP Business One 247
14.3 Billing Wizard 249
14.4 Project Overview 250
14.5 Gantt Chart 250
14.6 Reports 251

15 Analytics 252
15.1 Overview of SAP HANA Analytics 252
15.1.1 What’s Behind SAP HANA’s Analytic Power? 252
15.2 Using the Pervasive Analytics Designer 253
15.2.1 Creating a Pervasive Dashboard 254
15.2.2 Creating a Key Performance Indicator (KPI) 258
15.2.3 Creating Advanced Dashboards 263
15.3 Interactive Analysis 265
15.4 Excel Reports 267
15.5 Analytics Portal 268

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

15.6 SAP Analytics Cloud 270

16 Appendix: Selected Keyboard Shortcuts 271
16.1 General Shortcuts 271
16.2 Table Shortcuts 272
16.3 Shortcuts in Sales and Purchasing Documents 272

PUBLIC
© 2018 SAP SE or an SAP affiliate company. All rights reserved.

1 The Essence of SAP Business One

In This Chapter

- What Is SAP Business One?
- Breaking Ground for Small and Midsize Businesses
- A Unique Approach
- What This Book Will Do for You

SAP Business One is an integrated business management application designed from the ground up for small and midsize businesses like yours. This book provides a complete overview of how you can work with SAP Business One and how it can help your company grow by automating its operations, such as management, business intelligence, sales, purchasing, production, logistics, and financial processes.

1.1 What Is SAP Business One?

Unlike most other software applications that focus on a specific area of business, such as accounting or customer relationship management (CRM), SAP Business One is an integrated business management application. It offers a complete set of core functions, including financials, customer relationship management, inventory management, sales, purchasing, operations, and logistics, which address the business management needs of your entire company.

1.1.1 More Than a Point Solution

SAP Business One is more than the typical financials software that was born out of accounting and bookkeeping, or a standalone customer relationship management solution. It helps businesses like yours manage the entire process of selling and servicing clients, and once orders are taken, they flow directly into automated fulfillment. As a comprehensive and integrated system, SAP Business One gives you full visibility into your business, through on-demand analytics in a personalized cockpit, live alerts and approval procedures, and end-to-end business processes.

1.1.2 Information at Your Finger Tips, Any Time, Anywhere

With SAP Business One’s flexible delivery model, you can choose where and when to receive information. If you are in the office, use your personal computer to access the company data directly, if you are on the go, use your mobile device access the full stack of features through a browser, or use one of the free mobile applications available for all SAP Business One customers for sales and service personnel,

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

1.1.3 An Application for Everyone

The easiest way to understand SAP Business One is to think of all of the people who are involved in a business:

- There are people in sales that gather leads, go on sales calls, and make sales.
- There are people who account for what has been bought and sold and who make sure the money flows properly in and out of the company to and from suppliers, customers, and employees.
- There are people who take customers' orders and fulfill them, either by sending goods or by providing services.
- There are people who manage operations such as inventory control or service delivery.
- There are managers who monitor and manage the entire business.

Now imagine that one application can help all of these people do their jobs, and that all of them work with the same set of information using the same application that can do the following:

- Integrate all parts of your business so everyone operates on the same core business information
- Supply users with personalized interfaces specially designed to support the way they work
- Process data in real time so you never have to wait for nightly or weekly postings, which means that the financial data of your business is always up to date and available
- Issue warnings and trigger corrective actions to take place automatically when certain limits set by managers and other users are exceeded
- Simplify reporting and analysis with "easy to create and run" reports delivered to you on demand.

1.1.4 The Challenges Facing Small and Midsize Businesses

Small and midsize businesses focus first on increasing sales and profitability. Getting orders from customers and fulfilling them at a profit is always job one, and software can be a tool to increase efficiency and productivity. But at some point, especially if growth has been rapid, most businesses find that the process of increasing sales is being slowed down because information is not flowing smoothly from one part of the business to the other. This can happen for many different reasons.

1.1.5 Information Gap

The information gap refers to the lack of timely business information needed to run the business efficiently. For example, if a large order comes in that is time sensitive, the key question is: When can we fulfill this order? In the face of an information gap, the right information must be assembled from a variety of sources, if it has been properly captured in the first place. In the face of a persistent information gap, business decisions are made without sufficient information, resulting in mistakes, rework, or missed opportunities.

1.1.6 Process Gap

A process gap exists when manual business tasks are not automated, or automation stops in one application and must be manually transferred to another. Process gaps are resolved by duplicate reentry of information from one application into

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

another or by constructing brittle, special-purpose software to do the transfer. Process gaps slow a company down, retard change, and reduce the possibilities for automation. Effective and complete integration, in which information flows from one step to the next, bridges the process gap, as shown in Figure 1-1.

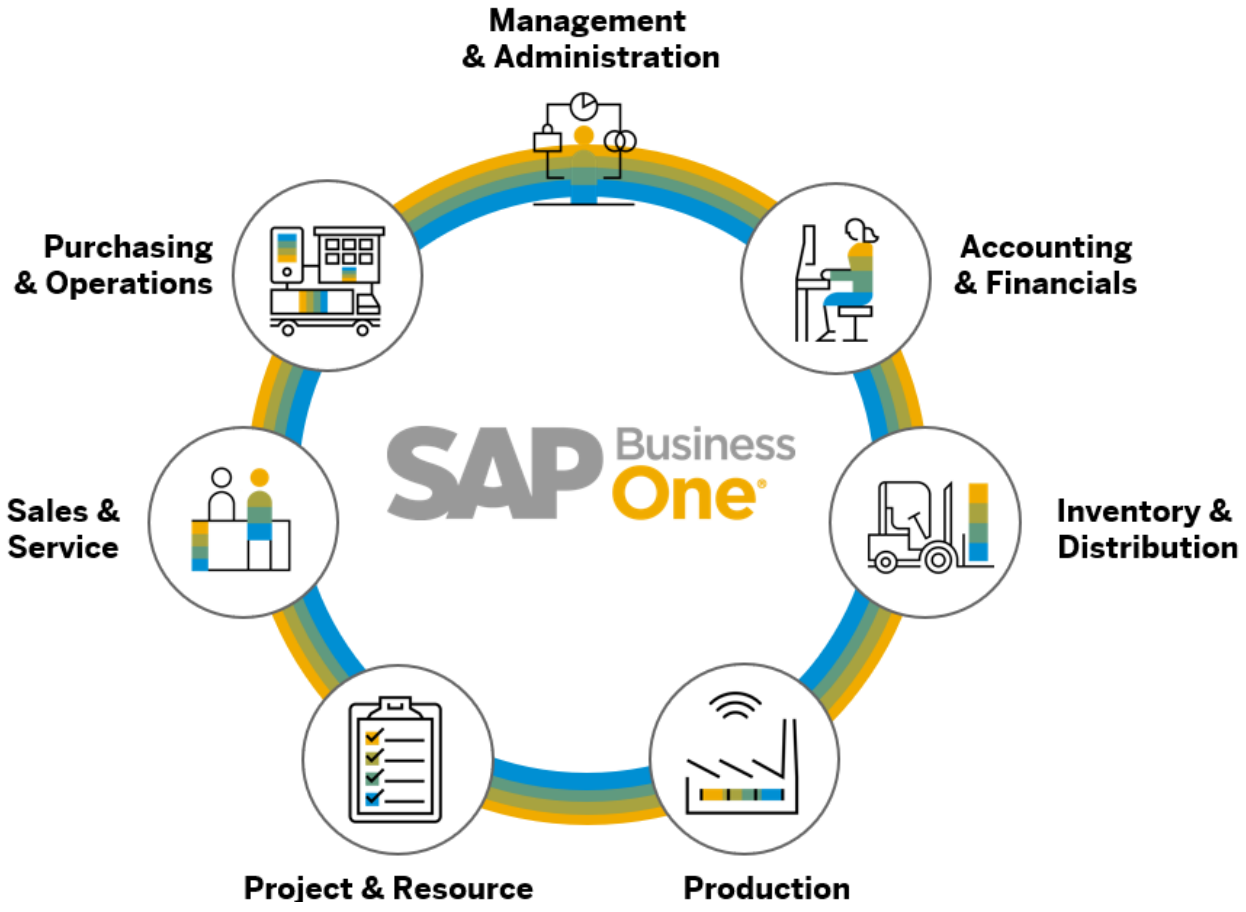


Figure 1-1: SAP Business One provides comprehensive integration

1.1.7 Multiple Point Solutions

Companies often acquire multiple point solutions to meet specific needs as business expands, for example, an accounting application to manage general ledgers and invoices, or a warehouse management solution to keep track of inventory. Keeping this combination of applications up to date, integrated, and running smoothly can be a challenge. To get a picture of what is happening in every part of the business takes a lot of work and requires information to be extracted and reconciled across many systems. While such applications may serve for a time, ultimately your business needs a more flexible and integrated solution.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

1.1.8 How SAP Business One Addresses the Challenges

SAP Business One meets the challenges of small and midsize businesses because it is designed to do so, as shown in Figure 1-2.

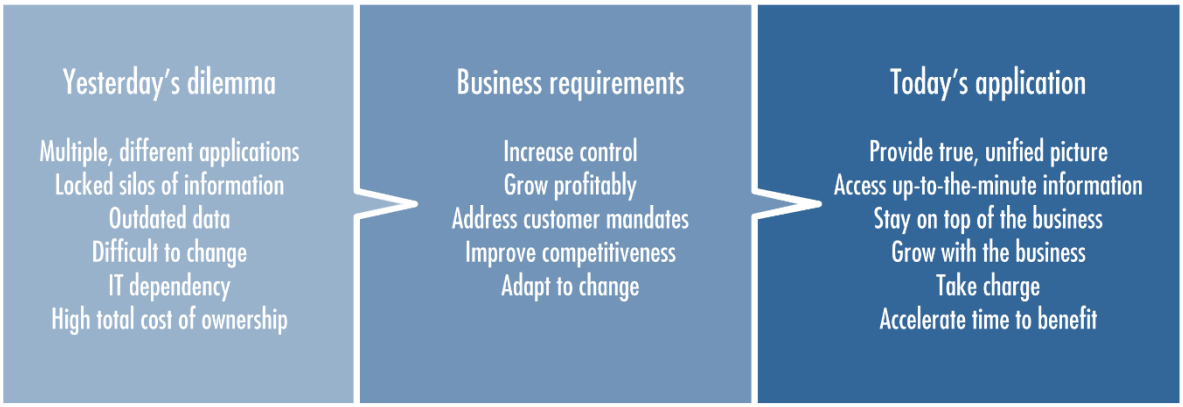


Figure 1-2: SAP Business One meets the challenges of small and midsize businesses

1.2 A Unique Approach

While most business software is focused on automation, few software companies, if any, approach the challenge of creating software in the same way as SAP. Most of the time, a software vendor picks one area, such as accounting or CRM, and builds a product to support the particular processes related to that area. How these processes work with the other fundamental processes of other areas is a question left unanswered. SAP Business One is the answer to that question.

1.2.1 Streamlined Business Processes

The broad scope of SAP Business One helps you streamline and automate your entire business from end to end, including CRM, accounting, warehouse management, and production. Furthermore, when an important business event occurs, automatic responses can be executed as needed. This management-by-exception paradigm increases productivity by reducing information overload and inappropriate actions, allowing you to be proactive in managing your business, rather than reactive.

1.2.2 Instant Access to Information

Having all business data stored in a single integrated application like SAP Business One means critical business information is simply a few clicks away in a configurable dashboard or through intuitive drill-down reports. Since SAP Business One works primarily in real time, changes are recorded instantly, without delay. You can get the state of the business whenever and wherever you need it through a variety of different reporting mechanisms, including Microsoft Office applications, mobile devices, Crystal Reports, SAP Lumira and dashboards.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

1.2.3 Customizable and Adaptable

SAP Business One is designed to be easily configured, integrated, and extended. Through its integration capabilities, SAP Business One unifies business applications and desktop productivity applications. Through SAP's global network of certified solution partners, SAP Business One can be adapted to meet the specific needs of local markets and vertical industries. Through the integration framework, SAP Business One can be run by subsidiaries of large accounts that require full transparency into the ecosystem. Through built-in configuration tools requiring no prior skills, the application can be adapted to your unique needs, allowing you to modify fields, forms and menus easily.

The adaptability of SAP Business One means that the software grows with your business and can be modified easily to meet your changing business needs.

1.2.4 Designed Exclusively for Small and Midsize Businesses and Backed by SAP

SAP Business One is a new breed of business management software built from the ground up exclusively for small and midsize businesses like yours. It draws on SAP's more than 40 years of experience in creating business applications that serve the needs of millions of users worldwide.

SAP Business One is available in 44 country localizations that support country-specific legal requirements. Countries which are not directly localized, may still use SAP Business One, using a similar localization, or use a local partner to customize the system for the local requirements. Furthermore, even within a given localization, users can choose from 28 languages in which to do their work. This means that if your company has employees who speak different languages, you can accommodate them.

As the worldwide leader in business management software, SAP is committed to bringing comprehensive business management solutions to meet your current and future business needs. Helping you run your business smoothly is one of the most important jobs of SAP and its global network of certified SAP Business One partners.

Note

Internationalization note: SAP Business One, like all SAP software applications, is designed for companies around the world. SAP Business One …To Go is mainly aimed at a U.S. audience, and includes information that is relevant only to U.S. companies, such as 1099 reporting. However, for the most part, all users of SAP Business One will find this book helpful and relevant to their work.

1.3 What This Book Will Do for You

This book is intended to create a framework for further learning. First, we introduce SAP Business One and explain its general approach. Next, we cover the basics and explain the core functionality for keeping track of accounts and business partners, as well as the fundamental processes for purchasing and sales. Then we review the powerful functionality SAP Business One offers for managing inventory and production, sales and service using CRM, and related analytics, as well as introducing ways to automate your business processes.

At times, this book provides step-by-step instructions for getting things done. But most of all, it explains the way to think about SAP Business One so that inspiring ideas about how to put the product to work in your business will follow quickly.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

2 The Personality of SAP Business One

In This Chapter

- Getting Started
- Understanding the Personality of SAP Business One
- Knowing Where You Are
- Finding What You Are Looking For
- Getting Where You Want to Go
- Finding Answers to Your Questions

Getting acquainted with a new software application is like trying to find your way around a city you have never visited before. In New York City, for example, once you understand the grid of numbered streets and the way avenues are numbered, named, and lettered, you can figure out pretty quickly where any address is. In Paris, you need to know that the arrondissements go clockwise starting from the center of the city so that you can use your Plan du Paris to consult a map to find the street and the closest metro stop.

But the geography of a city is only a start. An enjoyable day in the city starts with a visit to one destination, then moves from one spot to the next: from breakfast at the hotel, to a museum, to a nightclub.

This chapter is all about helping you get your bearings so that when you look at an SAP Business One screen, you know what you are looking at. Getting to know the SAP Business One application means understanding the map of the different types of information stored (the geography) and also knowing how a business transaction is recorded and tracked (the enjoyable trip).

Features such as the personalized cockpit, the drill down to underlying data, Drag&Relate™, Enterprise Search, multiple concurrent windows and the ability to build one document from another will quickly give you control over your business processes and real-time insight into your company performances. We are sure that you'll find SAP Business One easy to use with its intuitive navigation and familiar look and feel. And soon you'll learn just how flexible and integrated it is.

2.1 Getting Started

To start SAP Business One, double-click the icon shown in Figure 2-1.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

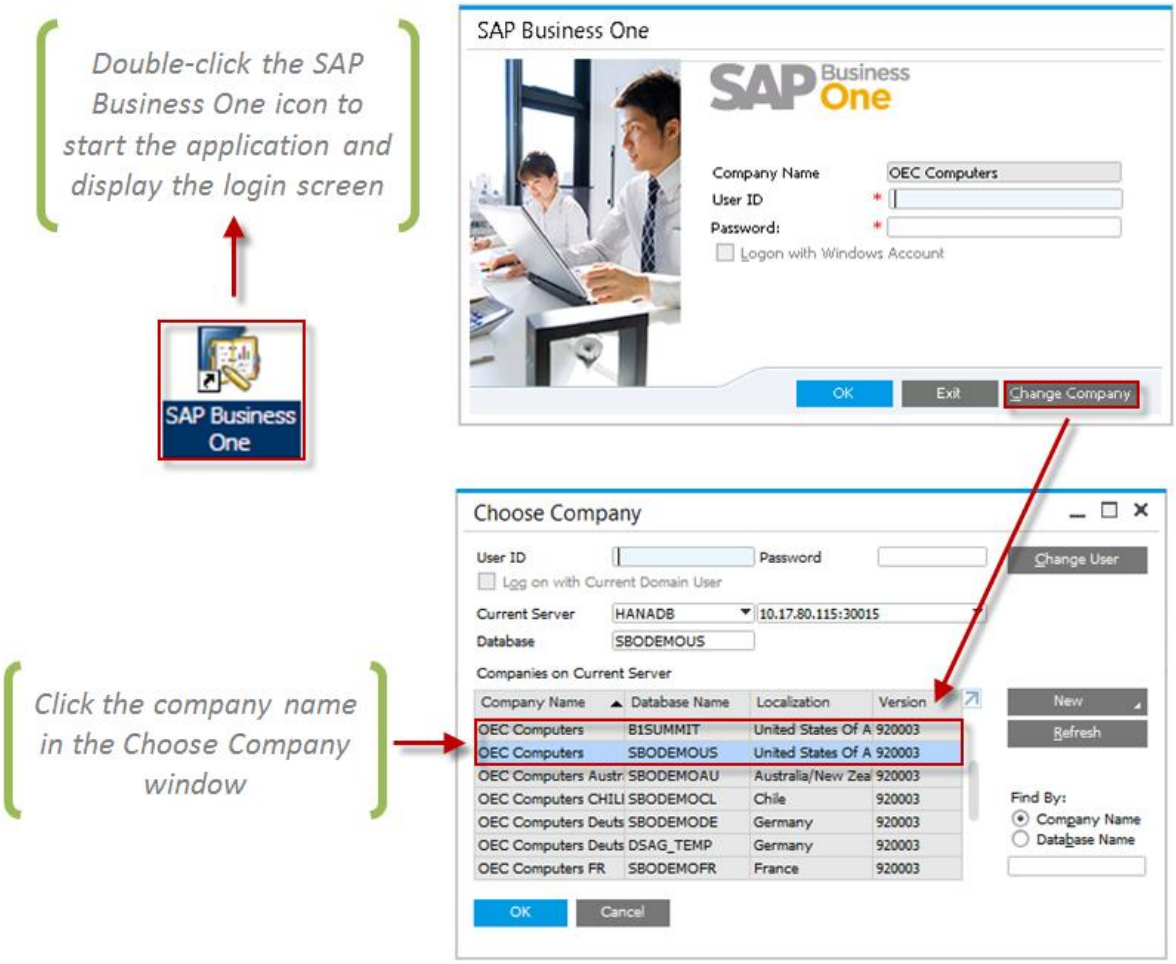


Figure 2-1: Starting SAP Business One, logging in, and choosing a company

The first screen that you see is the login window where you enter your user name and password. After the first login, the last company that you logged into is automatically selected.

At the bottom right of the login window, you can click the Change Company button to select a different company to work with. Some organizations use multiple SAP Business One companies, keeping track of different legal entities, divisions, or business activities as separate companies.

The first time you log in, you will need to select your database server as well. Consult your system administration to retrieve this information.

A user name and a password must be entered in order to log into the company database. For audit purposes, user information is recorded in every new record or modification to an existing record that a user performs.

> **Note**
>
> User setup: During the implementation, user names are created for the employees that will log into SAP Business One. Each user must be assigned a valid license and the user's activities are restricted based on the license type. Users can be set up for single sign-on as well. See the security guide for more information.

SAP Business One comes with a sample company that is fully populated with data. This company can be used as a training ground for accelerating learning or testing new ways of using SAP Business One. Once you have successfully logged in, the learning process can begin.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

2.2 Understanding the Personality of SAP Business One

Before we move into a detailed explanation of the user interface, we want to give you a sense of the style, or personality, of SAP Business One. The first time someone shows you the SAP Business One main window and the main menu, it all looks pretty simple. Then you ask a question: How can we find purchase orders related to a given supplier? Without hesitating a second, whoever is showing you the program clicks on the main menu a couple of times, brings up a blank purchase order window, enters the name of the supplier, and, quick as a flash, there is a purchase order for that supplier.

> **Note**
>
> Shortcuts: There is nothing better than using shortcuts! There are many ways to create shortcuts to your frequently used documents and reports. Later in the guide, you will see how you can use the workbench widget to quickly access all forms that may be relevant to sales, purchasing and more, with one click of a button, as well as creating key-board shortcuts to popular windows.

You can now scroll through and see all of the purchase orders for that supplier. Let's say you want to see the items on a purchase order. You simply click on the Contents tab to review the ordered items. You want to see the details for one item? One click, and you have the item window. Which warehouse is that item stored in? Another click and you're looking at it. Before you realize it, you've accessed a number of windows. The most common reaction at this point is, well, that was fast. But where am I? And what can I do next?

Once you read this chapter, you'll know where you were, and where you need to go next. And once you work with SAP Business One for just a bit, you won't want to work with any application that isn't as convenient and easy to use. But to get to this destination—the place where it all makes sense—you need to spend some time with a guide.

> **Note**
>
> SAP Business One Version notification: SAP Business One is available in two platforms: Microsoft SQL Server and SAP Business One version for SAP HANA. In this guide, we are using the SAP Business One version for SAP HANA, which includes certain features that are not part of the MS SQL version. We will indicated if a certain feature is only available in the SAP Business One version for SAP HANA.

What happens in the moment when SAP Business One makes sense is that you see how the screens that you are looking at are connected to both the top-down way of finding information through the main menu and the transactional, process-oriented connections between each document in the application. You start to understand how each document in SAP Business One is constructed from reusable parts. Once you get all of this, SAP Business One is a snap. Our tour of the personality of SAP Business One starts by describing these structures.

2.3 Building Documents from Reusable Parts

SAP Business One tracks business activities using documents such as purchase orders, invoices, production orders, sales quotations, and so on. Each of these documents is constructed from smaller reusable chunks of data called master data. Master data, a topic covered in detail in Chapter 4, refers to the key information that describes your customers, vendors, and leads as well as items that your company buys and sells. Figure 2-2 shows how a document—a purchase order—is constructed from master data.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

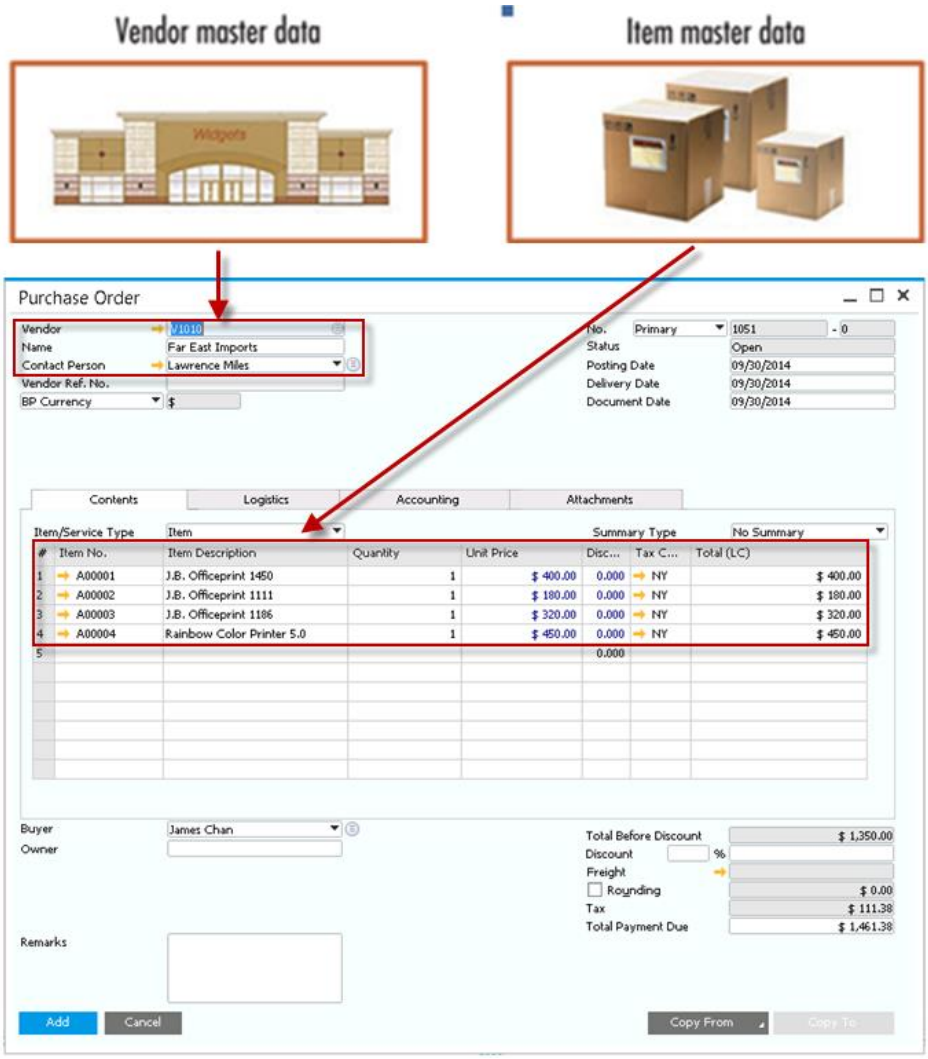


Figure 2-2: How SAP Business One documents are built from reusable master data

Creating documents from master data increases productivity, ensures data consistency, and reduces errors. As you learn more about SAP Business One, you will come to appreciate the benefits of building documents from reusable master data.

2.3.1 Opening Documents Using the Main Menu

The second key thing to learn about SAP Business One is how to use the main menu to find documents or master data records. When you first start SAP Business One, the Main Menu is shown. Using the Main Menu, as shown in Figure 2-3, you can open links leading to windows from which you can search for a particular document or scroll through all the documents of a particular type.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

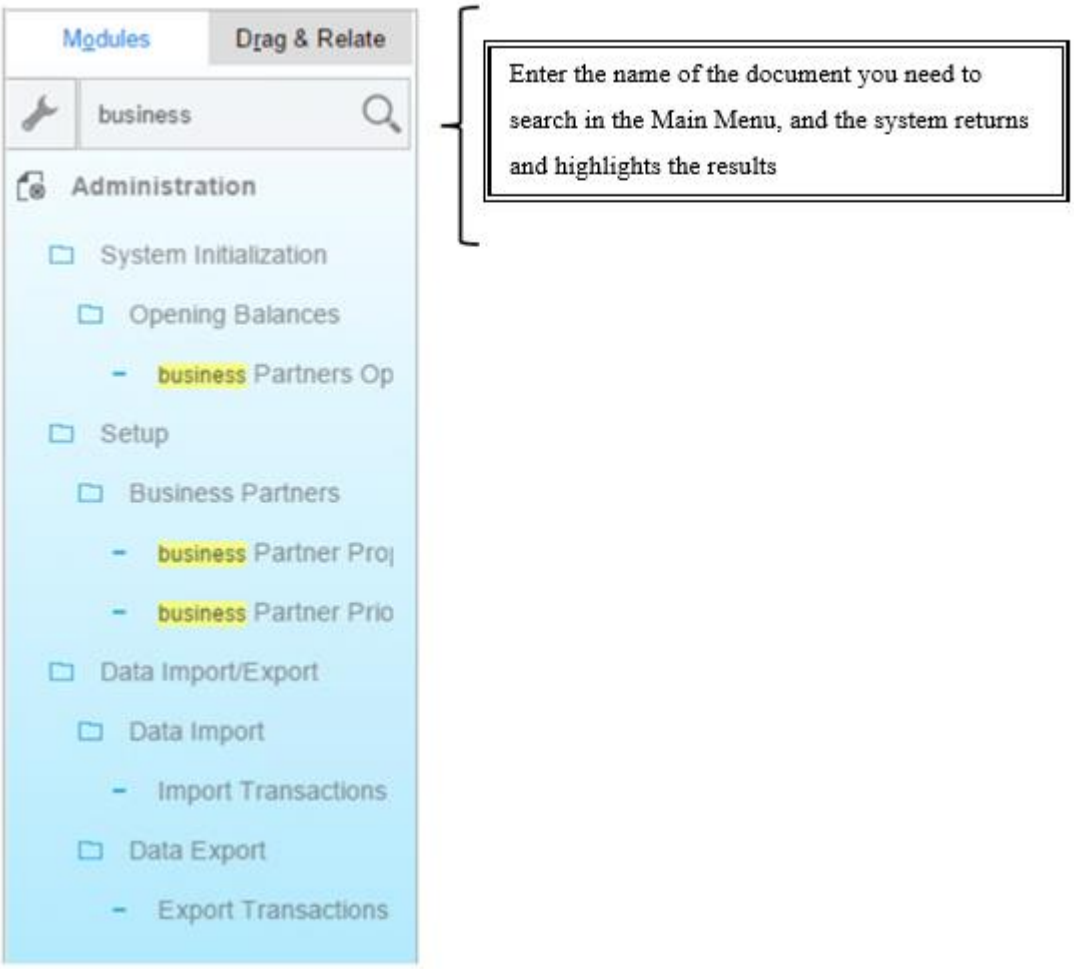


Figure 2-3: Navigation from the Main Menu

Note

Main Menu search: the option to search the main menu as shown is only available when the Fiori style cockpit is enabled. Otherwise, a menu search is available using the search function located at the top right of the screen.

You can customize the menu item names and add aliases to help with the search. Go to Administration→ System Initialization→ Document Numbering to modify the default menu item names. Go to Administration→ System Initialization→ Menu Alias for Searching

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

2.4 The Transactional and Process Structure of Information in SAP Business One

To record all the relevant activity related to a business process, a sequence of documents can be used and the links between them must be recorded. Let's look at the sales process. First, a lead is recorded as master data, followed by sales activities such as calls and meetings. Eventually a sales quotation is issued, which may lead to a sales order and then an invoice. When a payment comes in, it must be reconciled with the invoice. So, there is a stream of activity from document to document in which each step in the business process is recorded.

Each step is an individual business transaction in the most general sense of the word. A business process for selling or ordering supplies may require many transactions in sequence. One of the application's strongest features is that it allows you to copy one document to create the next in a sequence, while maintaining identical structure between documents, for ease of use. SAP Business One also keeps track of the connections between the documents so that you can move through the sequence of documents related to a particular transaction. The transactional connections between documents are maintained in a variety of ways that are explained in this chapter and in later chapters.

2.5 Questions for Increasing Your Understanding

The moment of clarity, the moment that the personality of SAP Business One becomes crystal clear happens after you have used it for a little while, and the concepts we have presented are confirmed and made concrete by actual experience. So far, this chapter has prepared you to ask the following questions any time you view a new screen:

- Is this a document? Is this master data? Is this window something else and, if so, how does it relate to documents and master data?
- How does this screen fit in the top-down structure or in the transactional and process-oriented structure of SAP Business One?
- How can I get to this screen from the main menu?
- What process-oriented navigation allows me to find related documents and master data from this screen?
- Does this screen display data, allow me to search for data, or allow me to add data?

One of the innovations of SAP Business One is the way that the design naturally incorporates both top-down navigation through the main menu and process-oriented relationships through workbenches, as well as navigation, search, and document creation mechanisms based on those relationships. In other words, you can personalize the way you get to the data you need. The rest of this chapter explains all of these mechanisms in detail so that whenever you look at a screen you understand exactly what you are looking at.

2.6 Knowing Where You Are

One powerful aspect of SAP Business One is that it is possible to have many windows open at once, each of which may show a different document or master data record. The main window provides a context for all your work in SAP Business One.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

2.6.1 The Main Window

The main window opens automatically upon launching SAP Business One and is the central place where you can initiate any task. Only the main window has a menu bar along the top. It also has a toolbar with icons that provide easy access to commonly used functions. When working with the Fiori Style cockpit, sometimes you may choose to close the main menu, and work off shortcuts you setup for yourself.

2.6.1.1 The SAP Business One Main Menu

As shown in Figure 2-4, the Main Menu has two tabs:

- The Modules tab shows the top of the SAP Business One hierarchy. It lists all the modules in SAP Business One. Inside each module is a list of functions. Click on a function to launch it or to expand it and see more selections.
- The Drag & Relate tab is used for an innovative method of finding transactions linked to master data, as explained later in this chapter.

If you don't see the Main Menu, you can get to it from the menu bar by choosing Window → Main Menu or by using the keyboard shortcut `Ctrl` + `0` (zero, not the letter O).

Figure 2-4: SAP Business One Main Menu

Note

SAP Business One version for SAP HANA note: as noted before, the look and feel can be different based on the version of SAP Business One that you are running. Figure 2-3 is a representation of the main menu in the HANA version.

2.6.1.2 The Menu Bar and Toolbar

The SAP Business One menu bar is displayed across the top of the main window. Clicking on each menu item displays a pull-down menu that leads to more choices. Shortcuts using the `Alt` and `Ctrl` keys work the same way they do in many desktop applications.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Figure 2-5: SAP Business One menu bar and toolbar

The menu bar includes the following menus:

- File: Primary commands, such as Close, Print Preview, Export to, and Launch Application
- Edit: General editing commands, such as Undo, Redo, Cut, Copy, Paste, and Delete
- View: Commands that change the view of the data in the window, such as User-Defined Fields, Picker Display, System Information, Restore Column Width, and Legend
- Data: Commands that manipulate application data as well as commands for moving between records, manipulating rows in a table, and other editing commands pertinent to data
- Go To: Dynamic menu that changes according to the currently selected window
- Modules: Modules shown in the Main Menu
- Tools: Commands such as Print Layout Designer, Form Settings, My Menu and Customization tools
- Window: Commands associated with managing windows, including access to Main Menu, Messages/Alert Overview, and Calendar
- Help: Commands that provide access to online help and the support desk

2.6.1.3 The Toolbar

The toolbar is just below the menu bar. It is a collection of icons that provide easy access to commonly used functions. The same functions are also available as menu options from the menu bar.

Active functions display in color while inactive or unauthorized functions appear in gray. To hide or display a toolbar icon group, place your cursor on the toolbar, right-click, and then check or uncheck the appropriate boxes. Toolbar icons are context sensitive, that is, they change depending on what you are doing.

If you forget what a particular icon does, simply move the cursor over the button to display a tooltip.

2.6.1.4 The Status Bar

The status bar extends along the entire lower edge of the SAP Business One main window and contains various fields.

- The bottom-left area of the status bar displays the following types of messages:
  - An error message appears over a red background and informs you that the procedure cannot continue until corrective action is taken.
  - An information message appears over a blue background and informs you about an issue that does not prevent the procedure from continuing.
  - A confirmation message appears over a green background and informs you about the successful execution of a procedure.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

- The bottom-left area also displays system information when you click into a field, or roll your mouse over a field in the active window. The system information will indicate the database table name for the field, the field name, index number and form ID. System information is only active when you enable View→ System Information from the menu bar. This is valuable information for creating reports because it helps you understand the database schema.
- The middle of the status bar contains the current date and time as defined in the server.
- The top-left area displays important information about the active window. For example, when you move your cursor over an input field, text describing the input format and length appears.
- The four boxes on the right-hand side of the status bar allow you to show data from up to four specific fields that you can select. The data is based on the reusable master data you selected and is updated depending on the active window. For example, to display the business partner balance in the status bar, open the customer master data window and drag the balance field using the left mouse click onto one of the boxes in the status bar. For drop down list fields, hold down the CTRL key first. Now, whenever you create a transaction for any business partner, the corresponding balance will appear in the status bar. To remove this selection, hold down the ALT key and click the status bar box. These four boxes need to be set up every time the user logs in SAP Business One, as the selection is not saved and stored after logging out from the system.

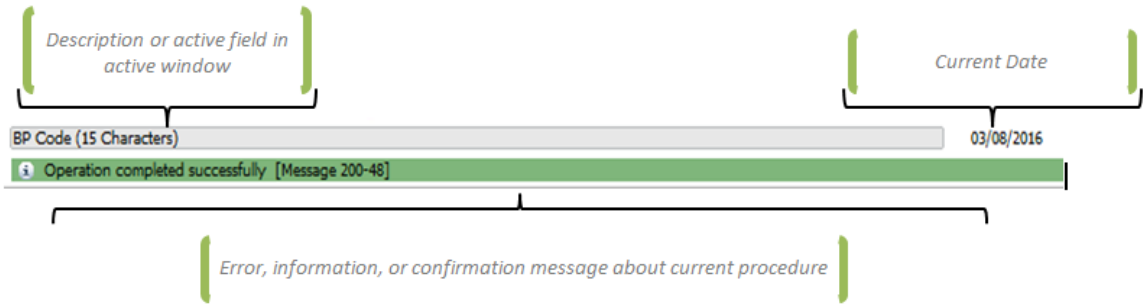


Figure 2-6: Anatomy of the status bar

2.6.1.5 The System Messages Log

The system messages log records all messages that appear on the status bar as you work. It includes errors, warning and information messages. Every time you log out of the application, the messages log clears. This is especially useful to track errors that occur while you enter data into the system. You can go back to the error at time to analyze it and find a resolution. Often an error message includes a link to the appropriate help files to assist you in resolving the error.

To open the system messages log use the Window→ System Messages Log from the menu bar. You can now minimize it or close it completely.

2.6.1.6 Enterprise Search

The enterprise search is a comprehensive search engine, not only looking into your data, but also giving you the option to filter and narrow down your search. In addition, it includes many links to corresponding documents and master data. You can save your search to templates, for repeat usage. You can also decide which user-defined fields and objects are included and

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

displayed in the search results. And, all this is powered by the lightning fast in-memory technology of the SAP HANA database platform.

Figure 2-7 shows how you search for a customer named Earthshaker, and how to narrow the data down to the individual credit memo document that you were looking for:

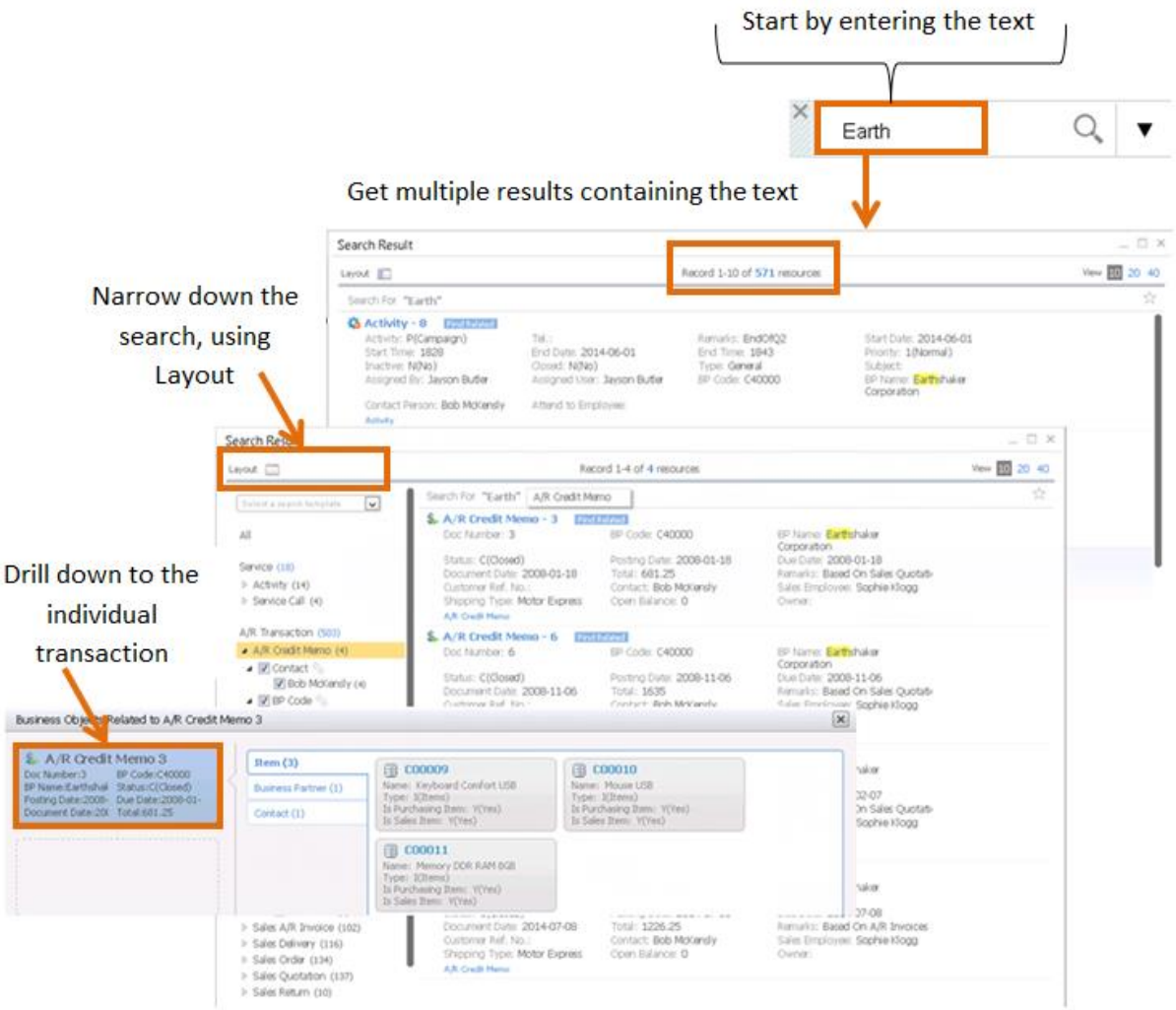


Figure 2-7: Enterprise Search

2.6.1.7 Using the Cockpit Instead of the Main Menu

The cockpit is a major part of SAP Business One's personality. The cockpit sits in the main window and is one of the first things you see after you log in.

We can call it a control center. This is where you start your morning, with full control and visibility into your business, by viewing open documents and major reports, using links to frequently used windows, evaluating the company status in terms of revenue, expenses and inventory, and having the ability to do a complete database search with a click on a button.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

You can choose whether to use the cockpit and what appears in it. You can easily add different widgets into the cockpit.

With the SAP Business One version for SAP HANA, the cockpit is displayed in a HTML5 user-interface, called Fiori-style, and has some additional functions that appear in the main window.

In figure 2-8 you can see an example of a configured cockpit containing the following widgets.

1. Key performance indicator (KPI) widgets that allow you to quickly spot whether you have reached business targets
2. Dashboards that graphically depict business performance for purchasing, sales, inventory and financial activity in your company.
3. A Workbench containing links to common functions for each business process
4. A Recent Updates widget that displays your most recent transactions
5. Count widget that shows the number of items returned for query

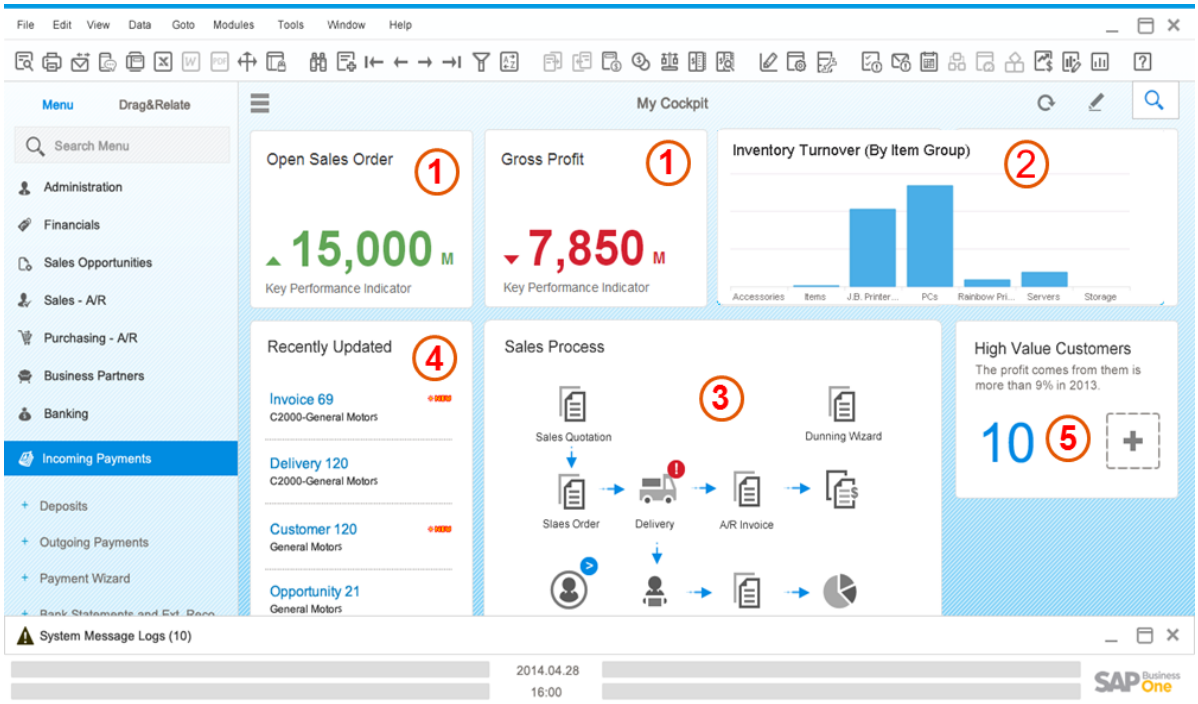


Figure 2-8: My Cockpit Window

Note

Activating the Cockpit: the cockpit is automatically activated in the SAP Business One, version for SAP HANA. However, with the MS SQL Server, the cockpit is an optional component and needs to be activated. You can choose to activate for certain users. Go to Administration → System Initialization →General Settings → Cockpit. Then go to Tools → Cockpit → Enable my Cockpit.

Let's discuss each type of widget in more detail.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

2.6.1.8 Key Performance Indicators

This exciting widget allows you to create KPIs that describe different aspects of your company, and its status. For example, you can compare gross profit of this month to last month, or expenses of this month, compare to the same month last year. The options are limitless. KPIs are based on queries you create, so flor any area that is interesting for you, you can create a KPI to evaluate it.

The KPIs show the overall amount, the target for the selected period and the trend compared to a previous period.

Figure 2-9 KPI for Overdue Receivables

2.6.1.9 Dashboards

Dashboards are visualized reports that grab a large amount of data and present it in a way that is easy to read. There are two types of dashboards in SAP Business One version for SAP HANA: pervasive dashboards and advanced dashboards. SAP delivers a large number of pervasive dashboards and you can easily create your own.

For example, you can use a pervasive dashboard that displays the 5 top customers or a dashboard showing expenses versus budget. You can have as many dashboards as you wish in your cockpit based on what interests you.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

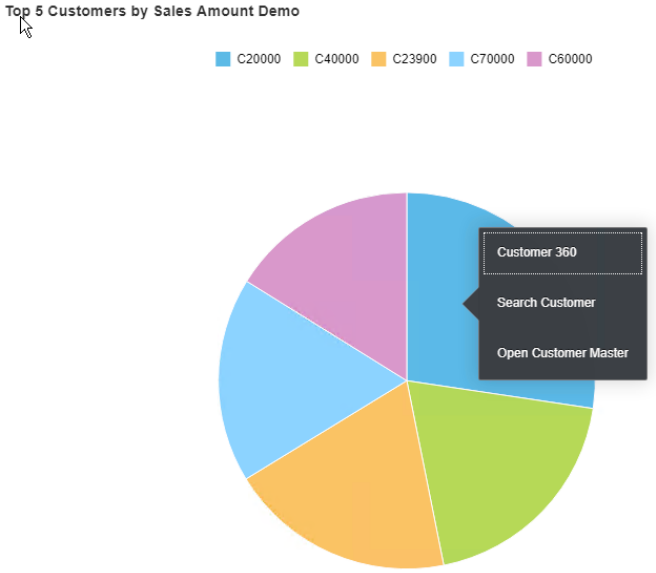


Figure 2-10: Pervasive Dashboard

One nice feature of pervasive dashboards is that they can have context menus that launch additional actions. In Figure 2-10, we see a dashboard that can open an advanced dashboard for sales statistics, open a master data window for customer information, or use the Enterprise Search to find customer information. We call this ability “Insight to Action” – you start from a simple dashboard, and are easily able to retrieve all possible information you may need about this item.

You can also include a pervasive dashboard as an extension to a master data window or document.

Advanced dashboards are another innovation in SAP Business One version for SAP HANA. Advanced dashboards act like supplementary cockpits that can open from your pervasive dashboards. For example, you want to know all your customer's information involving sales, order fulfillments, receivables and more.

An advanced dashboard can have multiple pages. In Figure 2-11, we see a pre-delivered dashboard with four pages: Users can toggle between the pages. Note that the advance dashboard is filtered for a specific customer. If needed, you can replace the customer account using the filter icon on the top right area.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

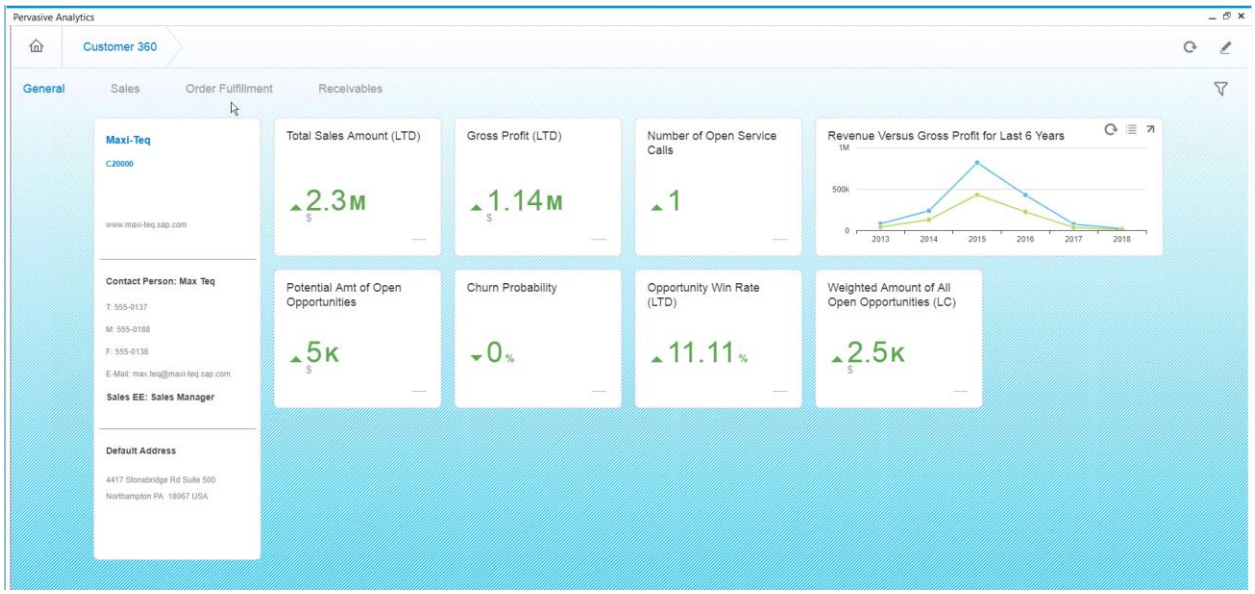


Figure 2-11: Advanced Dashboard

2.6.1.10 Workbench

A workbench is composed of all documents and reports relating to a business process. This widget gives you quick and clear access to windows without the need to use the main menu. SAP Business One provides 4 workbenches: sales, purchasing, inventory and financials. By clicking the dropdown indicator, you can launch a report related to that business step.

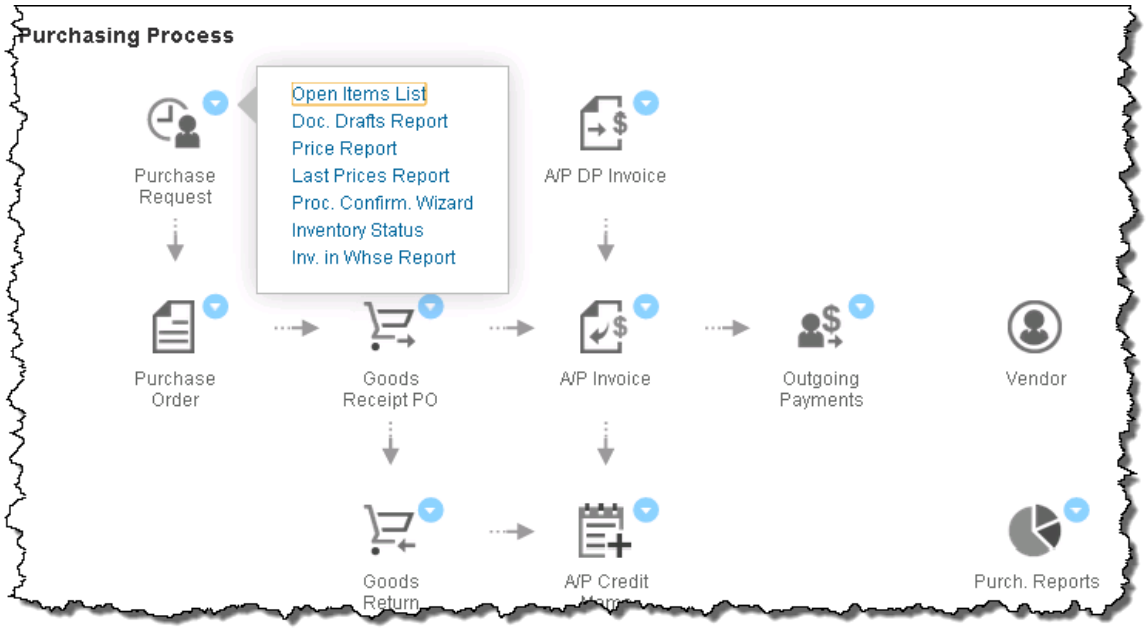


Figure 2-12 Purchasing Workbench

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

2.6.1.11 Others

There are four additional types of widgets: My Recent Updates, Common Functions, Messages and Alerts and Browser (Figure 2-13). My Recent Updates contains information on your newly added or updated objects. The Common Functions widget allows you to organize your frequently used transactions and access them with one click. The Messages and Alerts widget clearly displays urgent info in an easy-to-read way. You can add a browser window to a website or an app from Tools → Cockpit → Browser Widget Setup

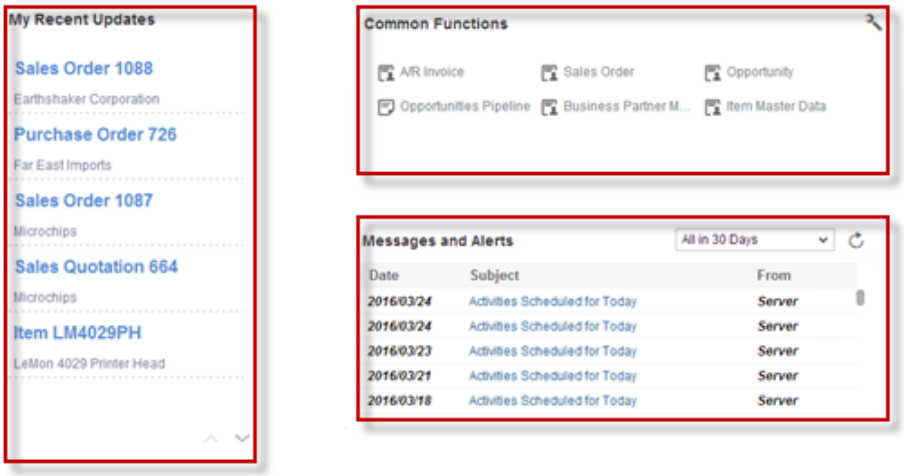
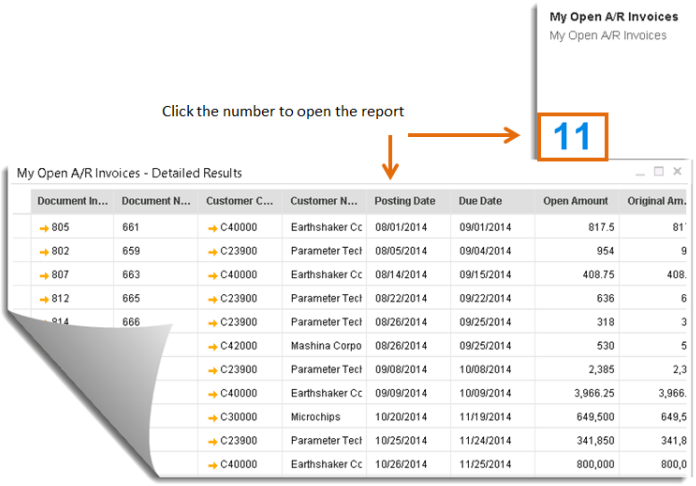


Figure 2-13 My Recent Updates, Common Functions and Message and Alerts

2.6.1.12 Business Object Count Widget

This widget shows you the result of a query as a number. It can count the number of activities that you created or are assigned to. For example, it could display the number of all your open sales quotations or invoices. From the widget, you can drill down on the number to get a list of the documents that are included in the total. To create new count widget go to ….



© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Figure 2-14 My Open A/R Invoices

Note

Customizing your cockpit: you can change the arrangement of the widgets or choose additional widgets for your cockpit.

Use the pencil icon to edit the cockpit. Click the plus sign, to add widgets. To remove a widget, click it, hold down the mouse and drag it to the trash can located in the bottom right. To create new KPI's, dashboards and advanced dashboards, use the Pervasive Analytics icon located in the tool bar . You can save different flavors of the cockpit, as templates. Once you are done with the changes, click the pencil icon, and choose to save it for yourself, overwrite an existing template, or save as a new template.

2.6.1.13 Document Windows

Now that you have the big picture of the main window, it's time to explain some of the general rules of the SAP Business One user interface.

2.6.1.14 Window Operation Modes

There are four possible window operation modes in SAP Business One:

- Add: Add a new record or document
- Find: Search for existing records or documents
- View: View an existing record or document
- Update: Modify the data of an existing record or document

Windows in SAP Business One have a default mode, which can be either "add" or "find," depending on the context of what you're doing. For example, when you choose the Business Partner Master Data or the Item Master Data window, it opens automatically in find mode because you will most often want to display information that has already been entered. When you want to process a sales order or purchase order, on the other hand, the window opens automatically in add mode because you usually want to add a new purchase order.

How do you know what mode you're in? The button in the bottom-left corner of the window changes to Add, Find, OK (for view mode), or Update according to the current mode of the window.

You can switch between operation modes in several ways:

- To add a new object (such as a document or master data record), use the add function. There are several ways to activate the add function, such as the following:
  - From the menu bar, choose Data → Add
  - Press Ctrl + A on the keyboard
  - From the toolbar, choose the add icon

  To find an existing object (such as a document or master data record), use the find function. SAP Business One displays the object in find mode, with the Find button at the bottom-left corner of the window. There are several ways to activate the find function, including the following:
  - From the menu bar, choose Data → Find

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

- Press Ctrl + F on the keyboard
- From the toolbar, choose the find icon

- When you enter or change data in an existing object, SAP Business One automatically switches to update mode, causing the Update button to appear at the bottom-left corner of the window. Click on the Update button to save data you entered or changed; click on the Cancel button if you don't want to save or update data.

  Note

  Switching operation modes alert. You cannot always change data in a document or a master data record once it has been added. At certain points, documents become read-only if the business process related to the document has progressed beyond a certain stage or when one document has been copied to another. Data that cannot be changed is usually grayed out.

2.6.1.15 Context Menu

When you are working in any window, you can click the right mouse button to open a context menu that provides access to the most commonly used functions for that section of the window. Because these functions are context-sensitive, the options change depending on the area of the screen you click on.

2.6.1.16 Row Details

Sales and purchasing documents include tables that provide information about quantities, prices, and descriptions. To work with these tables easily and extend the view available on the screen, you can open the Row Details window. This window allows you to view or edit rows in a table, such as that found in the Contents tab of a sales document.

The Row Details window shown in Figure 2-15 can be opened by right-clicking the row number of the required item, by double clicking the row number, pressing Ctrl + L, or by selecting Row Details from the menu bar's Goto menu. Some fields are "read only" and appear in gray. If a field is editable, once you enter the new data, the field updates automatically—that is, there is no OK or Update button in this window.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

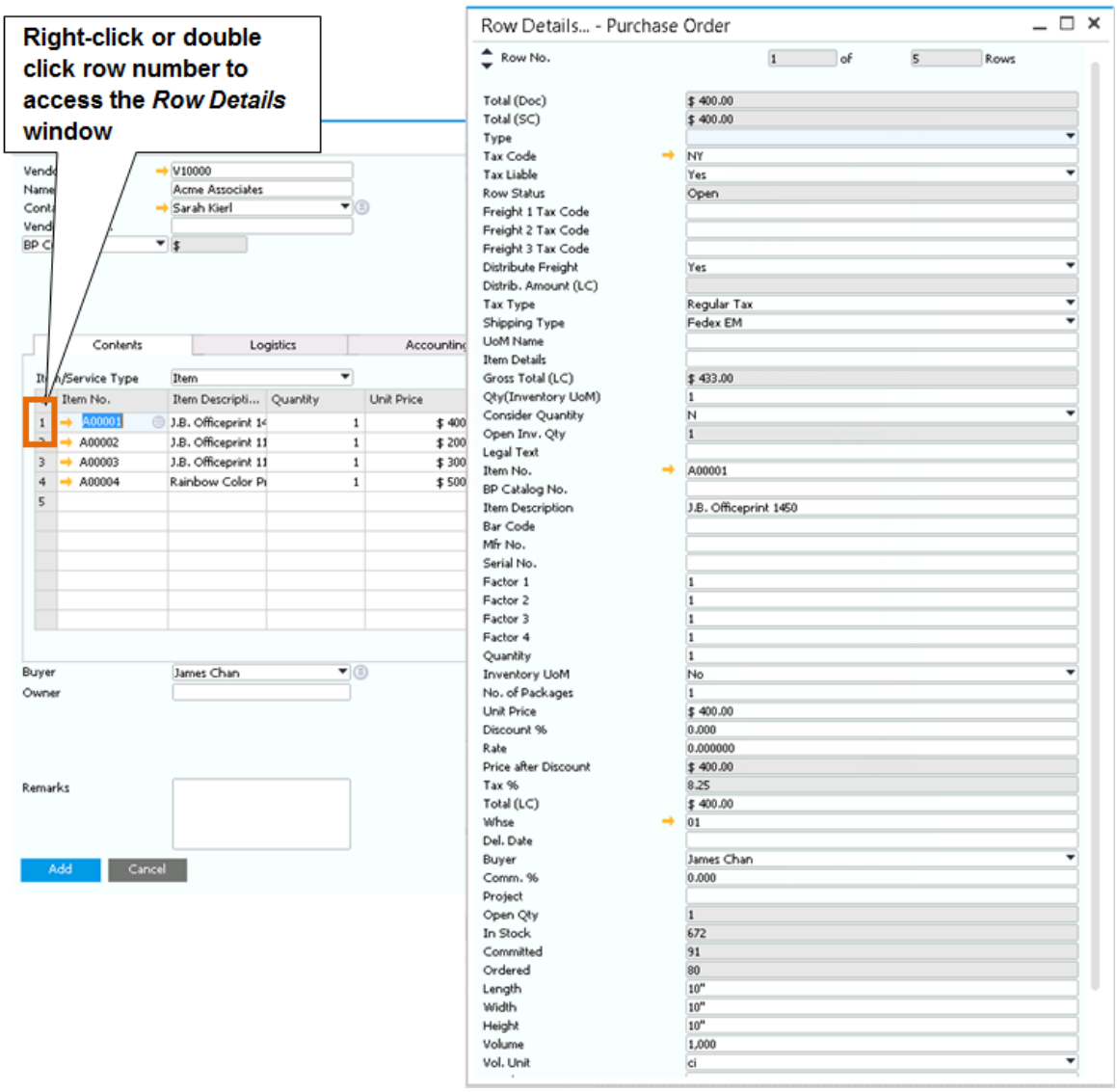


Figure 2-15: Accessing the Row Details window

2.6.1.17 Maximizing the Grid

If you have a large number of items to enter into a document, you can enlarge the grid on the Contents tab. Select Maximize/Restore Grid from the context menu to enlarge the Contents table area. This allows you to focus on the items, while you enter them. Once you are done, right click again to select the same option to restore the grid to its original size.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

2.7 Finding What You Are Looking For Within a Document

SAP Business One provides you with extensive support for searching for objects (sales and purchasing documents, and business partner and item master records in documents). The two main methods are discussed below: looking up business partners and items from a Choose from List and using the toolbar arrows to scroll through documents or master data records of a certain type.

2.7.1 Looking Up Business Partners and Items

SAP Business One makes it easy to look up business partner and item information while you are entering sales and purchasing documents. Figure 2-16 demonstrates how to use the selection lists.

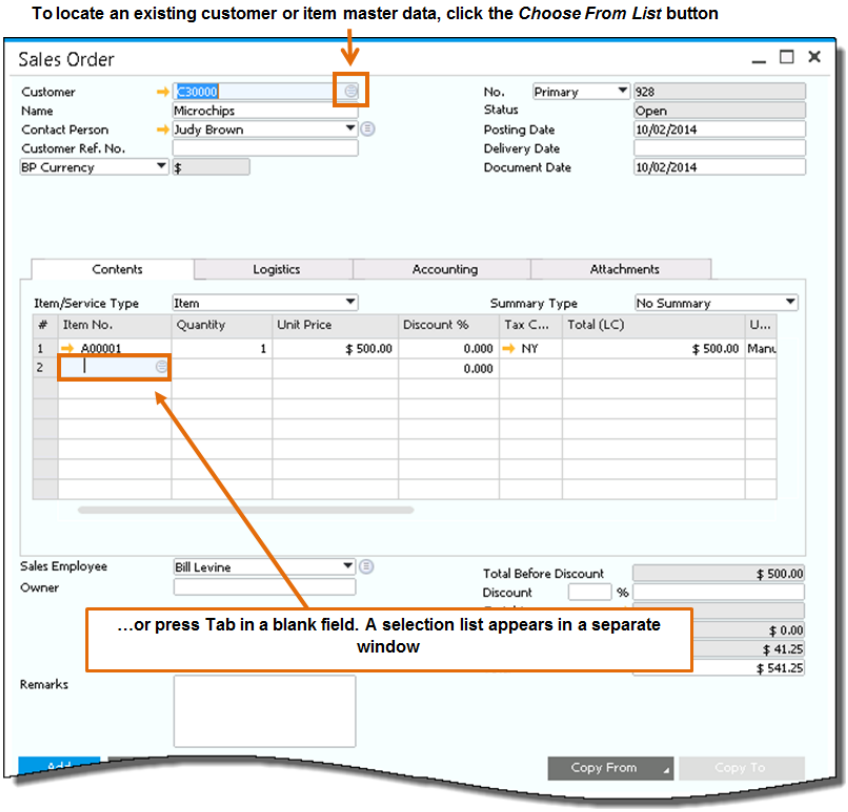


Figure 2-16: How to look up customers and items in a sales order

After you press the selection list icon, a selection list appears in a separate window. You can move through the list quickly by typing the first character of the business partner code or item number; the selection list scrolls as you type. You can sort the selection list, by double clicking the column header. Now you can type in the beginning of the value you are looking for, and the system will search in the sorted column.

If you are more familiar with customer names and item descriptions than with their codes, you can use a “wildcard” to search. For example, to display a selection list of customers whose names begin with “Ch,” go to the Name field, type `Ch`, and then press `Tab` to display the list. If you know that the name contain `Ch`, type the wildcard character “`*`”first (`*Ch`)

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

If you know that only one customer name starts with “E,” for example, simply type E in the Name field and press Tab. SAP Business One fills in the information for that customer in the sales order. The Item Description field works the same way for finding item information.

If you have already enabled SAP Business One Suggest (General Settings, Display tab), start typing the Business Partner code in the document header, or the Item code in the document rows, and SAP Business One will display a list like you’d find in a search engine to help you more quickly find what you’re looking for.

The same search methods are available in the master data windows as well. The only difference is that instead of pressing the Tab key, you press Enter or the Find button at the bottom of the window.

2.7.2 Using Toolbar Arrows to Find Documents

One easy way to scroll through documents or master data of a particular type is to use the arrows on the SAP Business One toolbar (see Figure 2-17). If you display a purchase order (by selecting Purchase Order from the SAP Business One Main Menu), you can use the arrow icons to scroll quickly through all the purchase orders you have. This works for any type of document in SAP Business One, such as sales orders, A/R invoices, as well as item and business partner master data records.

Click the double arrows to move to the first or last document; click the single arrows to move to the next or previous document. Next and previous are determined by document number. To see the last few purchase orders you entered, for example, in the Purchase Order window, click the right double arrow to go to the last purchase order and then click the left single arrow to move to previous ones.

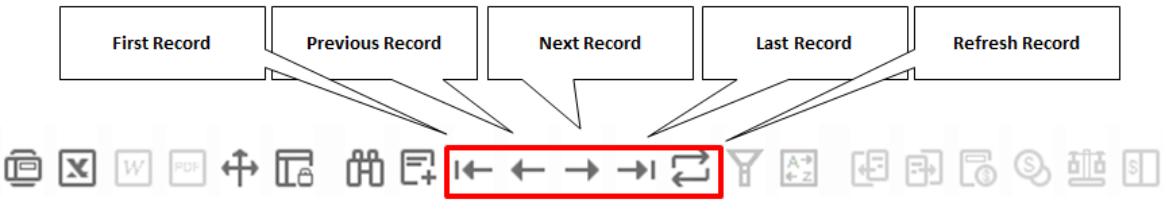


Figure 2-17: Using the SAP Business One toolbar arrow buttons

Note

Refresh Record: Whenever you make a change in a certain record and want to see the result instantaneously, press Refresh Record to display the changes in a sales or purchasing document. Refresh Record is also available for master data (Business Partners, Items, etc.).

2.8 Getting Where You Want To Go

SAP Business One has unique features that allow you to navigate quickly and successfully locate the information you need. This section explains some of these navigational features.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

2.8.1 Orange Arrow Navigation

The orange link arrow that appears in almost every window is perhaps the most powerful tool in the application's user interface. Wherever you see it, you can click on it to display a master data record (as shown in Figure 2-18) or the details of master data settings, such as tax codes or payment terms. Sometimes the arrows lead to linked documents, such as a base document or a journal entry. Link arrows enable you to drill down to more detail about a transaction without having to perform a search or traverse a top-down menu structure.

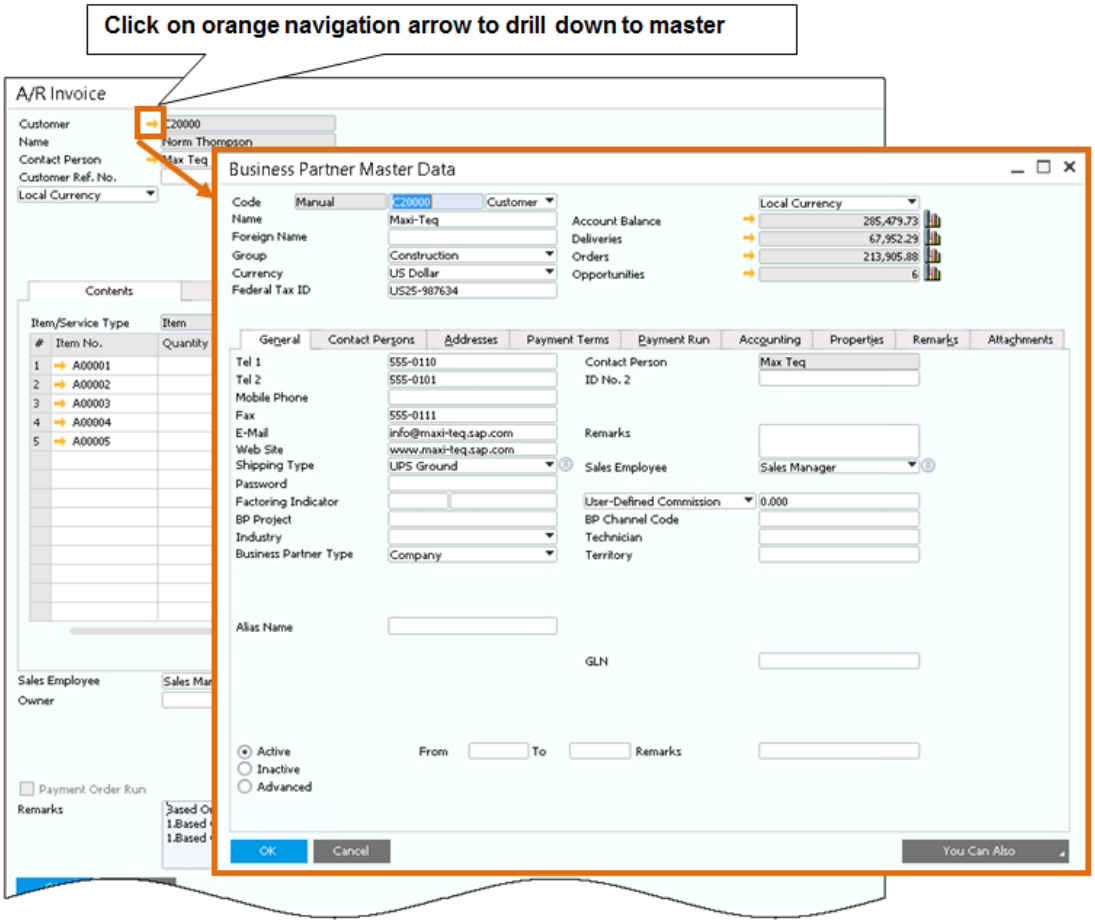


Figure 2-18: Using the link arrow to navigate from an invoice to master data

2.8.2 Drag & Relate

The Drag & Relate feature is an interactive tool that allows you to display a wide array of real-time information about your business quickly and easily. Drag & Relate generates ad hoc views of data by linking master data elements to transactions. The feature searches transactions as well as master data, such as G/L accounts and business partners.

You can compare just about any two objects within SAP Business One. For example, you can link a customer code to the sales order object and get a list of all sales orders for a particular customer. By dragging a master data object onto the list of

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

transaction types on the Drag & Relate tab, you can gain an excellent overview of your company's performance in certain areas. In addition, you can further refine the resulting list by using the filter function

Figure 2-19 illustrates how you can use the Drag & Relate feature to get a list of A/P invoices for a particular item.

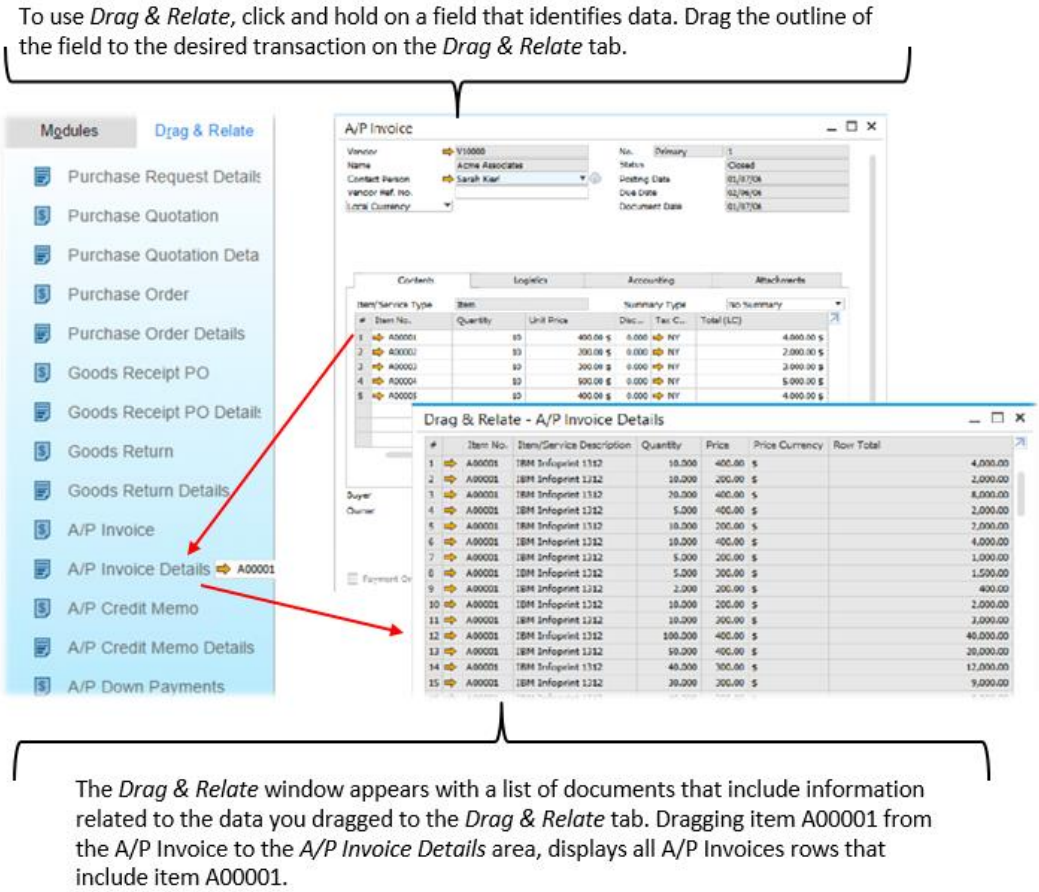


Figure 2-19: Using Drag & Relate to find A/P invoices for a particular item

2.8.3 Lookup Menu Items

Use the look up menu items box, located at the top of the main menu, by typing the name of the object you are looking for. Note this is available when using the Fiori Style cockpit option.

2.8.4 My Shortcuts

You can assign specific keys, such as F1, F2, and so on, to be used as shortcuts in SAP Business One. So, if you are a very busy purchasing agent for a manufacturing company and even two clicks are too far away for a purchase order, My Shortcut is the perfect solution for your busy schedule.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

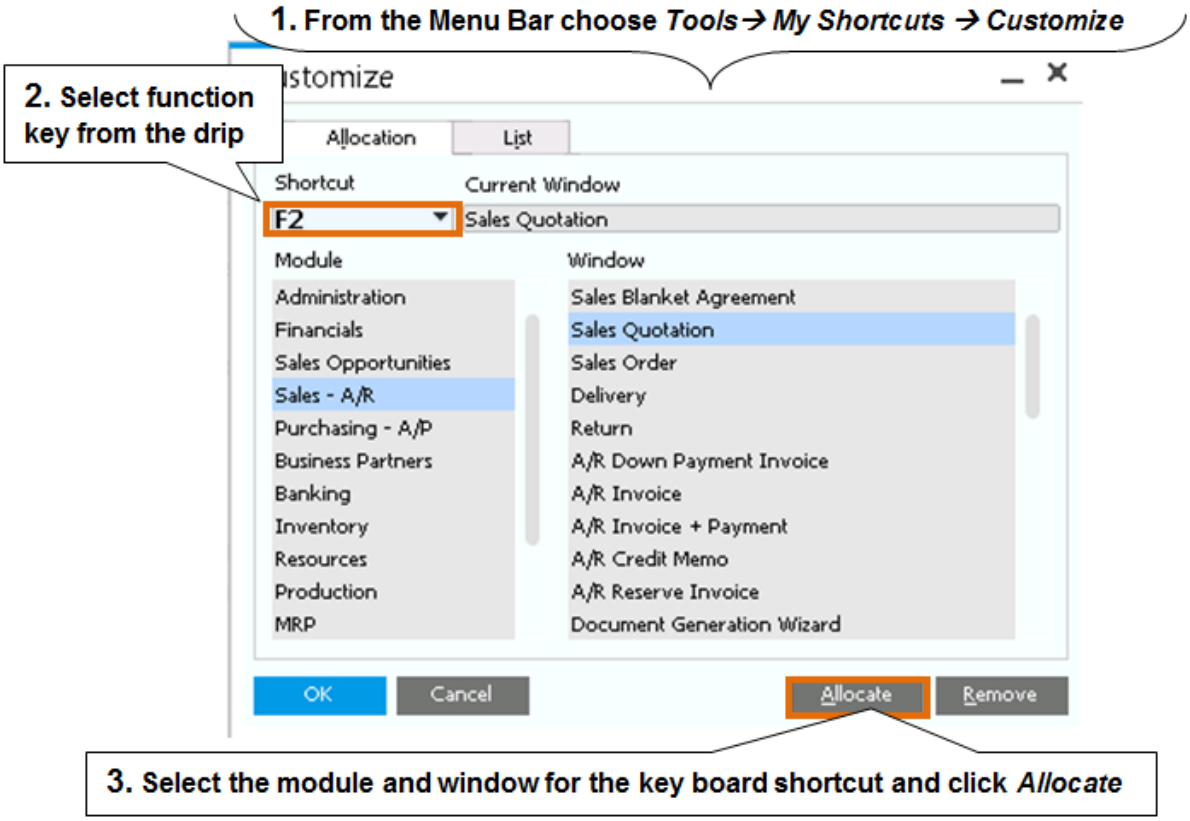


Figure 2-20: Creating user-defined keyboard shortcuts

2.8.5 Display Settings

You can change several display settings to personalize your SAP Business One workplace. You can add a company logo or staff photo to the desktop. Other settings include user interface language, font size, color, and date and time formats. Choose Administration → System Initialization → General Settings to make those changes.

2.8.6 Form Settings

In SAP Business One, each user can easily customize the content and behavior of most windows using the Form Settings function.

To activate Form Settings, make sure the window you want to customize is open and active, then click on in the toolbar or choose Tools → Form Settings (CRTL+Shift+S).

Although the Form Settings window varies depending on the content of window you are customizing, the typical Form Settings window is divided into four tabs:

- Table Format: Customize how columns appear in the table (for those windows that contain a table)

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

- Row Format: Determine how fields appear in the Row Details window associated with the table in the window you are customizing
- Document: Make changes to the general settings related to the window and the table that you are customizing—but you should note that the changes you make in this tab affect only the current document, and not all documents of this type
- UI Elements: lists the fields and tabs that appear in the current form, allowing you to hide, or make fields invisible. This includes fields in all areas of the document. See more in the UI Configuration Template section

The Form Settings function is a very powerful feature. SAP Business One has many fields that are not shown by default. Using Form Settings, you can select which fields are visible and which can be changed (the term for this is “active”). You can rearrange the order of fields by clicking on a field name and dragging it up or down. One common customization is to display the warehouse from which an item will ship on the Sales Order window. In Figure 2-21, we used the Table Format tab to make the Whse field both visible and active, and we repositioned the field so that it displays without the need to scroll to the right or open the Row Details window.

> **Note**
>
> The form settings are saved by user. To save time, you can create Form Settings User Groups. Log in using a user from each role and make all the settings you need. Once you are done, log in as a super user, open the user setup, located on the Administration → Setup → General → Users, find each user and press the Copy Form settings. You can copy that user's settings either to specified users, or to a User Group as explained in the following section..

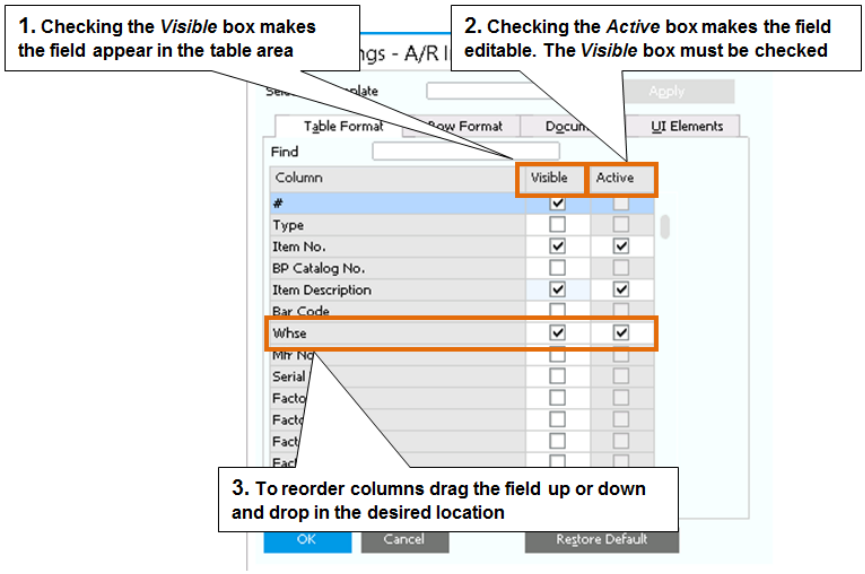


Figure 2-21: Form Settings in Marketing Documents

2.8.7 User Groups

You can easily maintain your users and their different preferences in the company, by setting up user groups. The groups can be assigned authorizations, alerts, form settings or UI Configuration templates. As well you can define groups that cross all types, meaning you can apply any of the settings to these types or groups.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

To create and maintain user's groups, go to Administration → Setup → General → User Groups.

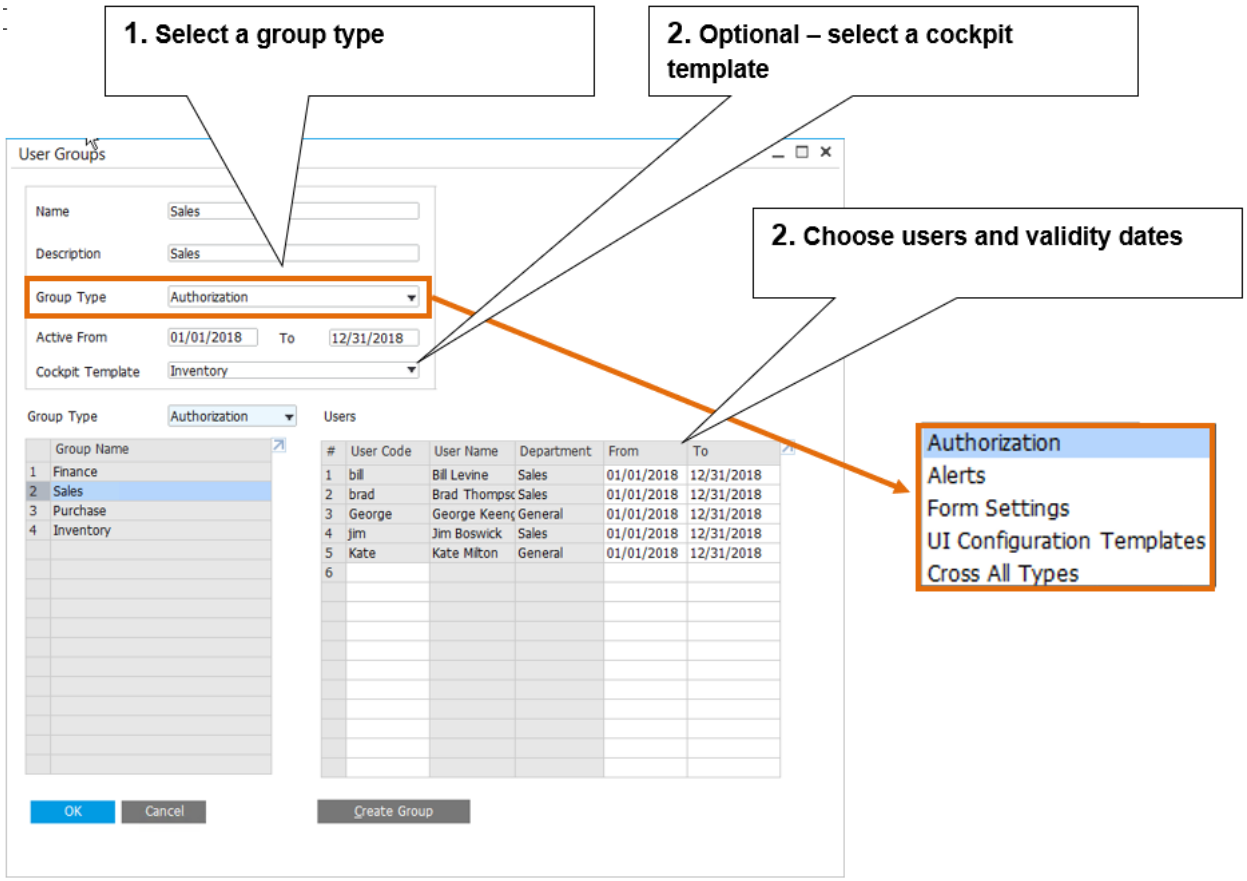


Figure 2-22: Creating User Groups

When you define authorizations, alerts and UI configuration templates, you will see an open to apply the changes to a group, in addition to individual users.

Note

User Defaults. You can determine additional different settings by user using the User Defaults, Go to Administration →Setup → General → Users. On the Default field, press TAB, and choose New to create a new user default. If a user would like to make specific change to his setting, use the icon.

2.8.8 UI Configuration Template

You would like to make SAP Business One even easier to use by simplifying the user interface and by removing information that your company doesn't use. You can completely redesign your documents and master data, without any need for special development skills.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

The UI Configuration Template lets you modify forms to remove, deactivate and reposition fields to meet your company's needs. You make the changes in a template, and then you can apply them to multiple users, or as a single user, you can modify the form just for your own convenience.

Figure 2-22 shows the template screen. This example shows where you can create a template for sales employees so that each sales employee sees a simplified version of their sales documents.

To create a template, go to Administration → Utilities → UI Configuration Template.

Then you select the form you wish to edit, and click the Edit Form UI. Now you are in edit mode, and can start moving fields around, simply by clicking them. You can right click a field and choose to hide or disable it. You can move fields from one tab to the other and even change the table size and location.

You can also use the UI Elements tab in the Form Settings window to make fields visible and active, and from here, you can also hide an entire tab if you have no need for it. Figure 2-23 shows a simplified sales quotation form, with enlarged table area, less visible fields, and fields that were moved from one area to the other.

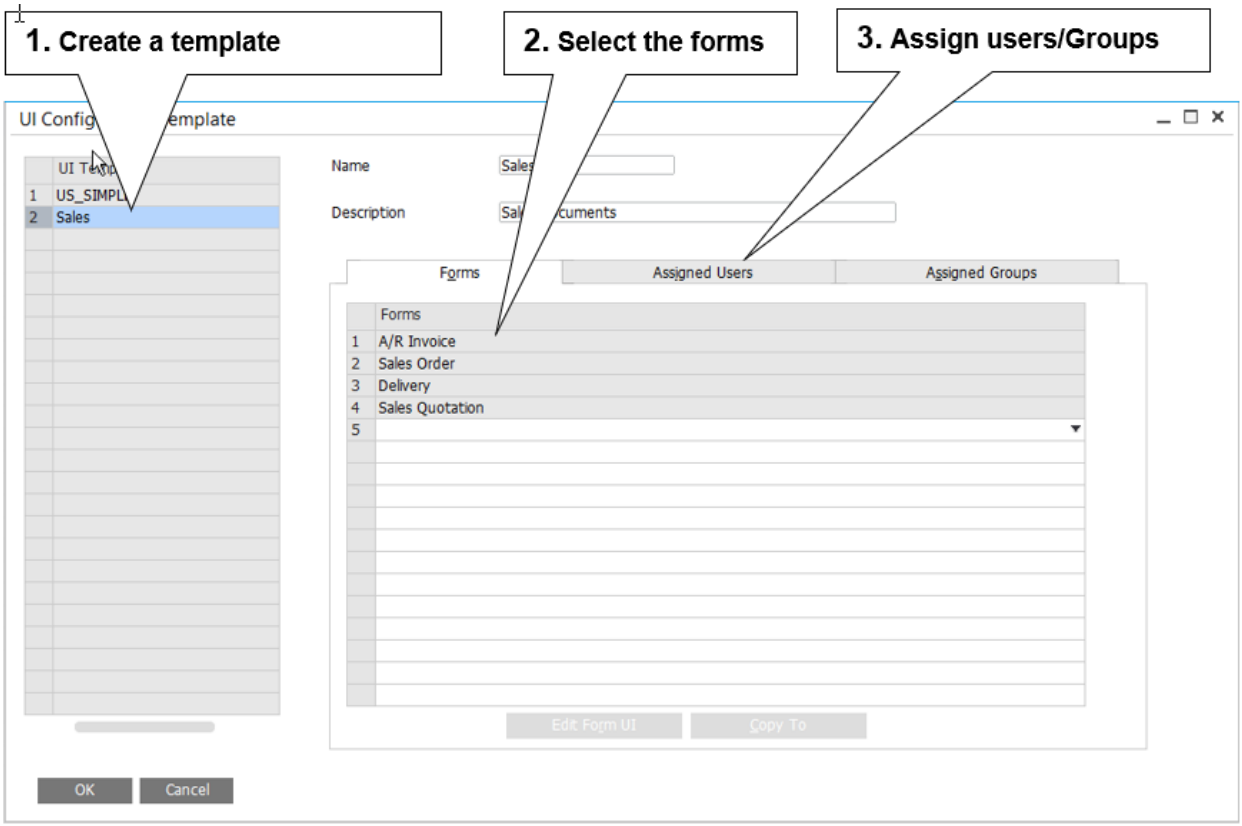


Figure 2-23: Creating UI Configuration Template

To make UI modifications just for your own use, open the desired form, and use the Tools →Edit Form UI menu.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

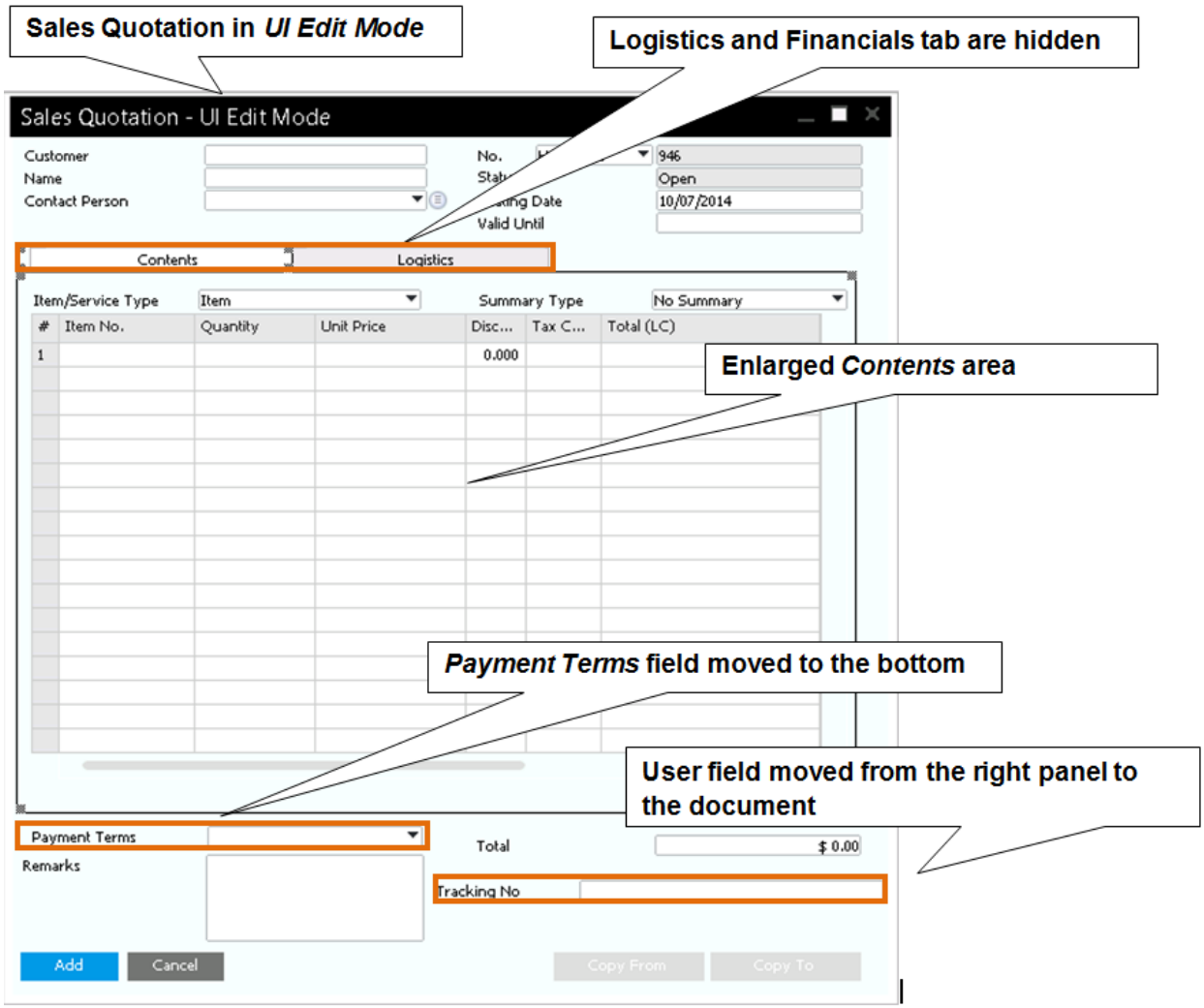


Figure 2-24: Simplified quotation form

2.8.9 Customizing Field Names

Changing the names of fields in SAP Business One is remarkably easy. One of the most common customizations of the Purchase Order window is to change the Vendor Ref. No. field to Vendor Invoice No. Changing this or any field can be accomplished by holding down the `Ctrl` key and double-clicking the field name. A window then pops up that allows the field name to be changed or the original name to be restored. This change applies to all users. Only users with the appropriate general authorization can modify field names.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

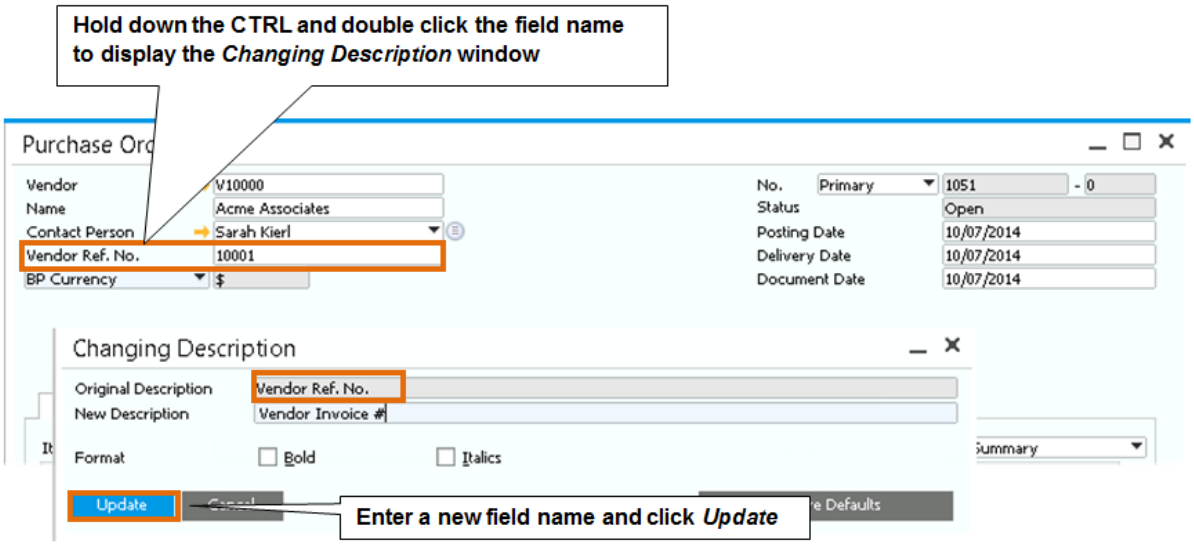


Figure 2-24. Changing field names

2.8.10 Adding User-Defined Fields and Tables

While SAP Business One provides a comprehensive set of fields in each of its modules, your company may need additional fields to pursue day-to-day work or to conform to particular business practices. The User-Defined Fields and User-Defined Tables setup (found on the Tools→ Customization Tools menu) lets you create your own fields in existing SAP Business One master data or transaction tables.

2.8.11 Filling in Fields with User Defined Values

Another example of the robust flexibility of SAP Business One is its User-Defined Values functionality. This feature can be used to calculate values or to display defaults for both SAP Business One fields and user-defined fields.

For example, you might want a sales order to display the name of the delivery driver. In this case, you would use the User-Defined Fields function to add a field to the sales order, and add user defined values to that field. The user-defined values can be a static list of available drivers, one of which can be selected for the order. Alternately, the user-defined values can be a query that automatically fills in the name of the delivery driver based on the location of the customer or other criteria. Because user-defined values setup is an advanced feature, you may want to perform these types of customizations with the help of your implementation partner.

Note

Link to System Objects: The User-Defined Fields and System Tables have been enhanced to allow users to link UDFs to system objects. The benefits are: data integrity, greater visibility and ability to model flexible business scenarios. Figure 2-25 shows the enhancement.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

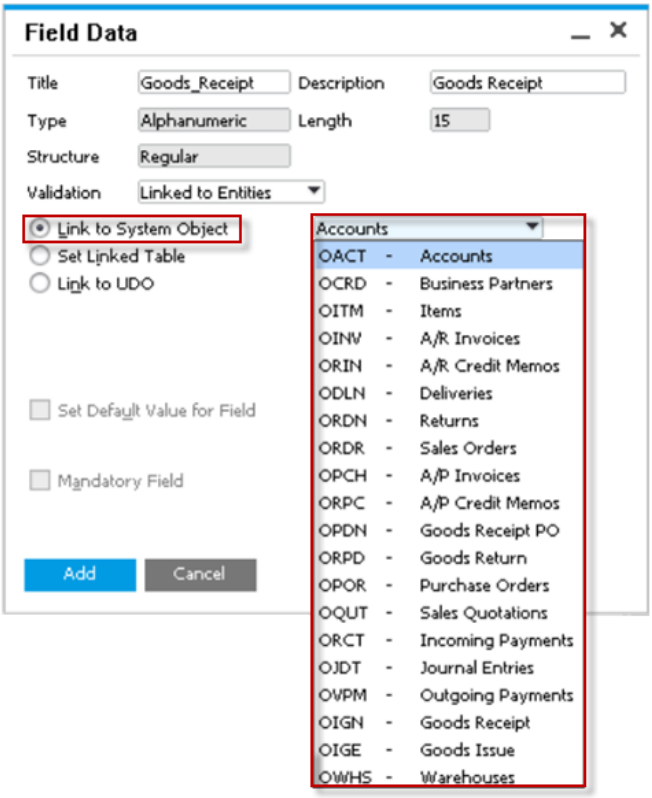


Figure 2-25. Link to System Object enhancement.

2.9 Finding Answers to Your Questions

In addition to the support and training that your implementation partner can provide, a wealth of information about SAP Business One features and functions is available through online help as well as on the customer portal.

2.9.1 Online Help

The online help provides details about many aspects of working with SAP Business One. If you are working with an unfamiliar screen and want to gain an understanding of its contents, you can find definitions of every field on the screen in the online help.

You can use SAP Business One online help in several ways. If you press `F1`, you get context-sensitive help; that is, help about the particular screen you are on. Use `Shift` + `F1` to get a field context help.

Selecting Help → Support Desk → Support Launchpad and Note Search from the main window menu bar displays a Support Launchpad window, which allows you to search for a solution by key words. If you select Help→ Welcome Screen, a new window opens with links to different guides, end user training by role and additional documentation.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

2.9.2 SAP Business One Community

Another excellent source for information is the SAP Community Network. When you log into https://www.sap.com/community/ you can find a community for each SAP solution, including SAP Business One. In the SAP Business One community pages, you can find the latest news, post questions on a forum, and take training on SAP Business One in the SAP Business One Academy. This is a public forum so it is accessible without an S-user.

2.9.3 SAP Business One on the SAP Learning Hub

You can access SAP Business One training on the SAP Learning Hub. Available course materials include presentations, demonstrations and simulations on a wide range of SAP Business One topics. The training is available to public by registering at https://training.sap.com/businessone. Once you are registered, you can easily and quickly go directly to the training you need by using our SAP Business One Learning Journey: https://training.sap.com/shop/learning/journey/sap-business-one-implementation.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

3 The Basics of Financial Accounting

In This Chapter

- Overview of Financial Accounting
- Setting Up Financial Accounting
- Performing Daily Procedures
- Maintaining Records
- Period-End Procedures
- Incoming and Outgoing Payments
- Cost Accounting
- Budgeting
- Cashflow
- Inquiries and Reports

SAP Business One delivers the tools and reporting capacity you need to manage your company's finances effectively and according to Generally Accepted Accounting Principles (GAAP). SAP Business One can bring your financial accounting to a new level of automation:

- Real-time, really. Every time you add (or post) a transaction, your general ledger is updated. No need to batch journal entries for later posting—unless that's what you want to do.
- Automatic journal entries. Perhaps the largest productivity boost in SAP Business One is its ability to create various journal entries automatically—greatly reducing the need to make journal entries or corrections manually.
- Drill-down functionality. SAP Business One gives you the ability to drill down using the orange navigation arrows, not only to the general ledger but all the way to the source documents of a transaction—another powerful labor- and time-saving feature.
- Task automation. You can automate redundant tasks by using recurring postings and avoid posting mistakes by using posting templates.
- Data integrity. To prevent users from posting manual journal entries to certain accounts, you can set up confidential accounts. In addition, alerts help you manage expenses by informing you when expenses reach their budget threshold.
- Automatic and manual reconciliation. Transactions are automatically reconciled allowing you to save time and get accurate reporting. In addition, you can conduct a manual reconciliation to close outstanding activity.
- Audit trail. SAP Business One provides a complete audit trail, allowing you to track who made changes to all data or documents—and when.

3.1 Overview of Financial Accounting

The key to making the most of the finance and accounting features in SAP Business One is careful design and implementation to make sure that every part of the application precisely describes and tracks the way your business works. Of course, most companies come to SAP Business One with a well-established chart of accounts (and other financial accounting methods) as well as legacy databases of customers, vendors, and transactions. Working with your implementation partner, you translate

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

and migrate the way your business works into SAP Business One. The five-step process of setting up financial accounting is shown in Figure 3-1.

These steps represent general guidelines. In any given implementation, the order of these steps may be changed or new steps may be added to reflect the unique needs and circumstances of your company.

> **Note**
>
> Setup tip. When setting up your chart of accounts and financial accounting processes, discuss with your implementation partner the types of financial reporting you require. Financial reporting requirements drive most of the initial settings and configuration decisions. Your implementation partner knows the software and you know your business; together you can make SAP Business One work for you.

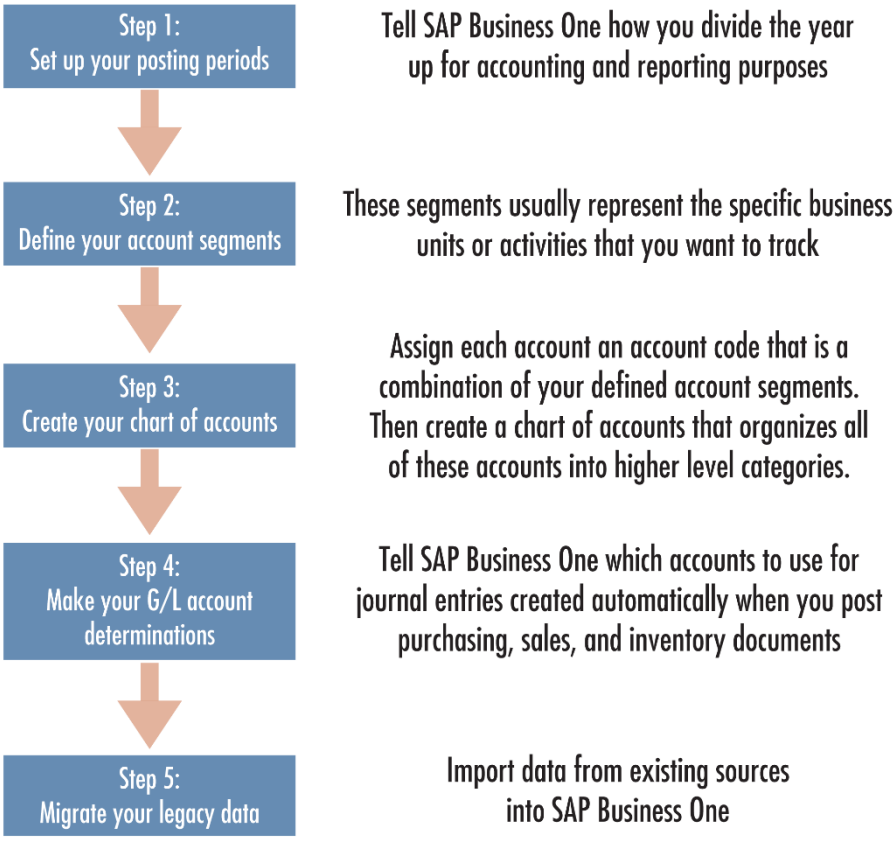


Figure 3-1: Accounting setup step-by-step

Terminologies	Definitions
Account	Formal record of a type of asset, liability, equity, revenue, or expense that shows its beginning balance, increases and decreases (transactions), and resulting ending balance for a specified period.
Control account	Control accounts are linked to business partners. When a document is posted to the business partner, the journal entry includes also the control account. Each customer has one default A/R control account, and each vendor has one default A/P control account, however it is possible to replace the control account in any document. A control account holds the total

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Terminologies	Definitions
	A/R or A/P balance for all linked business partners. Control accounts are included in the balance sheet report, so their balance reflects your total balances for customers and vendors. Manual journal entries cannot be posted to a control account.
Clearing account	An account to which postings are recorded temporarily because of a time gap between accounting transactions, organizational task distribution, or accounting transactions requiring clarifications.
Active account	An account in the chart of accounts to which journal entries are posted.
Account segmentation	A bookkeeping method of creating account codes based on the hierarchical structure of a business. The individual segments correspond to different business units, such as company, division, region, department, group, and so forth, and to different categories, such as travel expense, box office revenue, product line, and so forth.
Natural account segment	The first segment of an account code that identifies the type of account, such as fixed asset, liability, revenue, expense, and so forth. Account codes can consist of numeric values only when using account segmentation, or be alphanumeric in a company that is not using account segmentation
Chart of accounts	The index or coded listing of the accounts in a general ledger.
General ledger (G/L)	The main accounting record of a business. The G/L uses double-entry bookkeeping; it usually contains the accounts for all of a business's assets, liabilities, profit, loss, income, expenditure items, funds, and reserves.
Journal entry	A record of a transaction that usually includes transaction date, titles of affected accounts, amount of each debit and credit, and transaction description
Posting	The process of recording journal entries (credits and debits) in the G/L
Transaction	A business activity or event that debits one G/L account and credits another

3.2 Setting up Financial Accounting

Proper setup of financial and accounting functionality is the foundation on which much of the automation of SAP Business One rests. With the right chart of accounts, posting periods, and account determination for automated journal entries, SAP Business One takes care of many tasks that are usually performed manually. That is why we spend much of this chapter on issues related to initial setup of financial accounting.

3.2.1 Step 1: Setting up Your Posting Periods

The first step, which you may have already taken with your implementation partner, is to establish your posting periods: Will you have monthly posting periods? Daily? Somewhere in between? Will your fiscal year correspond to the calendar year or will it cross calendar years?

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

The first posting period must be defined at the time the company database is created. Afterwards, to set up new posting periods, go to Administration → System Initialization → Posting Periods. From here, you can update the generated periods (such as date ranges) and create new ones. You can also set or change the start of the fiscal year.

While SAP Business One is very flexible when it comes to setting periods and fiscal years, you and your implementation partner should bear in mind the following important caveats:

- The beginning of the fiscal year can only be the first of the month
- It is recommended to create the posting periods from the oldest and up. Consider the oldest data you would like to migrate to determine the first period
- You cannot have overlapping posting periods
- G/L account determination is saved by period and is copied from the previous period to the next. So make sure you define your primary G/L accounts before you create additional posting periods
- The system determines which posting period the transaction belongs to using the transaction's posting date
- Once you have created a posting period you cannot remove it from the system; however you can change the posting date range

Posting periods have one of five period statuses:

- Unlocked. This is the default status for new period creation. This status allows all users to post any type of transaction.
- Unlocked Except Sales. This status allows authorized users to post all types of transactions except for sales documents. This period status is often used at month- end time.
- Closing period. This status allows authorized users to post all types of transactions. Users that are not authorized for this period status cannot post any activity to this period status. In the posting period setup screen, you can determine the number of days, after the period has expired, to automatically change the period status to this status. This is commonly used at month-end or year-end time.
- Locked. This status prevents all users from posting any activity to this period status.
- Archived. This status is assigned automatically by the data archive wizard and no transactions or documents can be posted.

The period status can be changed back and forth any time (apart from the Archived status).

> **Note**
>
> Period Status Authorization. You can determine the authorized users for the different period statuses in the Administration → System Initialization → Authorizations → General Authorizations. Select the user, and expand the General module

3.2.2 Step 2: Defining Your Account Segments

If you plan to use a segmented chart of accounts, the next step for your implementation partner and you is to decide on and define the account segments you need.

To define account segments, go to Administration → Setup → Financials → Account Segmentation. You must have at least the first, natural account segment, but you can rename it or change its length, as you can with all other segments. Usually, companies determine their account segments based on their business processes and financial reporting needs. They can represent divisions, departments, regions, lines of business, entities, branches, and so forth. Figure 3-2 shows how account segments are merged to create an account code.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

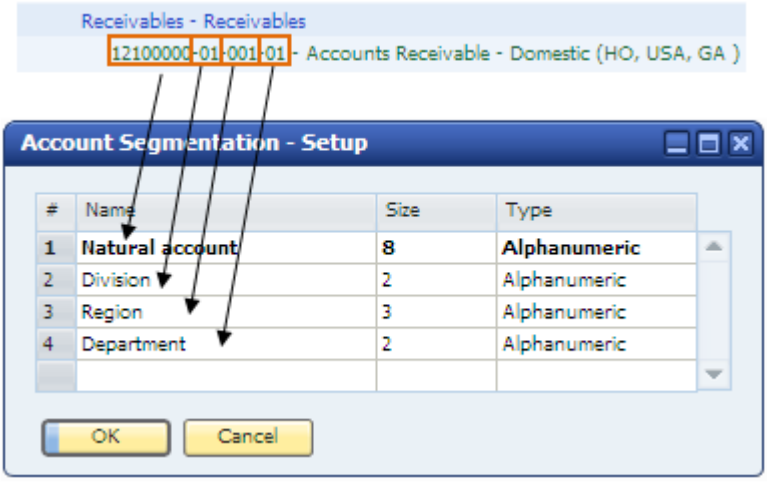


Figure 3-2: A segmented account code

SAP Business One provides four default account segments and allows up to 10. During setup you can change the size and name of any segment, as well as delete the entire segment, but the first segment must always be the natural account segment. To delete segments, right-click the last segment row and choose Delete Row.

> **Note**
>
> Account segment alert. It is important that your implementation partner and you plan your use of account segments very carefully because although you can add a segment, existing segments cannot be deleted once the very first G/L account is created; and you cannot change the length or the type of a segment later on.

Once you have defined all your account segments in SAP Business One, you have created the foundation for a fully qualified chart of accounts, which, in other words, is the concatenation of all account segments. A fully qualified account code, as shown in Figure 3-2, includes all account segments. For example, a travel expense account code used by your company's marketing department looks exactly like the travel expense account code used by your sales department, except for the segment of the account code representing the department.

Note that account segmentation is not mandatory. Depending of the company, and the county localization, segmentation may not be necessary.

3.2.3 Step 3: Creating Your Chart of Accounts

Once you have determined your financial or posting periods and account segments, you are ready to create your chart of accounts in SAP Business One. The organization of the chart of accounts follows GAAP in which there is a separate "drawer" for accounts representing assets, liabilities, equity, revenues, cost of sales, expenses, financing, and other revenues and expenses. These drawers, which have been defined by SAP, organize your accounts by level in a logical fashion appropriate to your financial accounting and reporting processes. The drawers can be renamed to provide great flexibility to your business.

> **Note**
>
> Chart of accounts reminder. The chart of accounts is an index of all G/L accounts used by your business. Every G/L account has an account code, an account description, and other properties that determine the functions of the G/L account. To access the chart of accounts, select Financials → Chart of Accounts.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

In the Chart of Accounts window, SAP Business One asks you to characterize every G/L account as either a title account or an active account and identify its level. Because only active accounts can be posted to in SAP Business One, it is a good practice to have all your active accounts at the same level. In reports, a title account summarizes all the balances of each active account below it. In the account segmentation shown in Figure 3-3 all active accounts are in level 4. You can maintain up to 10 levels, thus it is not mandatory to use all levels.

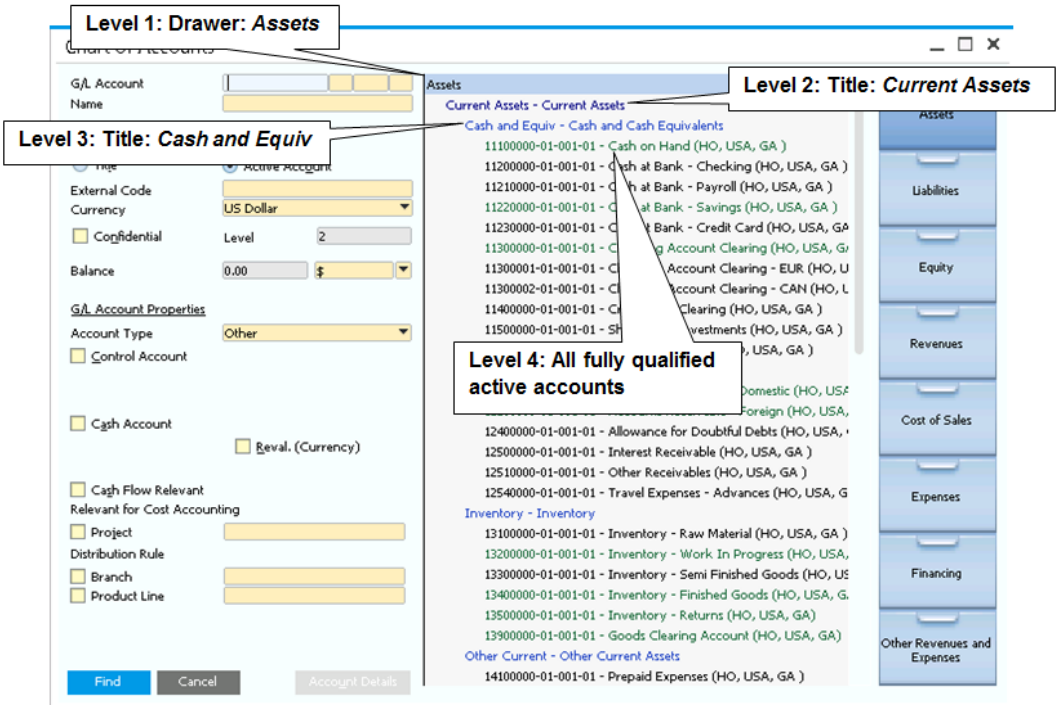


Figure 3-3: Chart of accounts organized by drawers and levels

Note

Account activity alert. You cannot delete an account with activity against it. You can only make it inactive. When using segmentation accounts you can modify the account code at any point in time

To add an account or a title, click the drawer or title that you want to add the new account under. Choose Data → Add from the menu bar, and enter the complete account code, name, and other properties.

To rearrange your chart of accounts structure, use the Edit Chart of Accounts screen. Here you choose the account level and location in the chart of account.

Note

Setup Tip. It is possible to import your legacy chart of accounts from a text file using the Data Transfer Workbench (DTW) tool provided by SAP. You must define the corresponding account segmentation setup as well as the segments code prior to the import

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

3.2.3.1 Foreign Currency Management

Foreign currency management is available for companies that use multiple currencies. In SAP Business One, you can specify G/L accounts and business partners as local currency, specific foreign currency or as All Currencies. Defining an account as All Currencies allows you to post documents and journal transactions to the G/L accounts or business partner in any currency, as long as the currency is defined in the SAP Business One company. Reconciliations, reports, and balances of G/L accounts and business partners with All Currencies are performed, calculated, and displayed in the local currency. In the Administration → System Initialization → Company Details → Basic Initialization tab, you can determine whether a new G/L account is created by default in local or all currencies. Once transactions have been posted, it is not possible to change the account from an All Currencies or a specific foreign currency account, however, it is always possible to change to All Currencies.

You can define an additional currency in the system for maintaining accounts. This is called the System Currency. If your company is required to report to a parent company which is located overseas, you will define the parent company's local currency as the system currency.

All the system reports can be displayed in system currency, saving you the need to re-valuate your financials and other reports.

To define your local and system currency go to Administration → System Initialization → Company Details → Basic Initialization tab.

> **Note**
>
> Foreign Currency maintenance. When working with foreign currencies, you must manually maintain the exchange rates in the Exchange Rate and Indexes table located in the Administration module. If there is no rate available for the current date, the system will automatically open the table for you to enter the exchange rate.

In certain cases, the system posts exchange rate differences automatically. This can occur for example when you pay an invoice using a foreign currency. If the payment rate varies from the invoice rate the difference is posted to an exchange rate differences account defined in your G/L account determination. Periodically you should run the Exchange Rate Differences utility to identify and post additional exchange rate differences.

3.2.4 Step 4: Making Your G/L Account Determinations

One of the key advantages of SAP Business One is its ability to create various journal entries automatically, particularly those involving sales, purchasing, and inventory transactions. In SAP Business One, when an invoice is created, the accounting entries are created at the same time. But how does the application know how to create those accounting entries? G/L account determination is the process of telling SAP Business One in which accounts to put various sorts of automatically created accounting entries.

To take full advantage of the application's robust automation, you must take special care to provide SAP Business One with the correct information in the G/L Account Determination window.

To specify G/L accounts, go to Administration → Setup → Financials → G/L Account Determination.

> **Note**
>
> G/L account determination tip. Your company's controller or accountant should provide final approval of your G/L account determination settings.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

3.2.4.1 Basic Procedure

Determining your G/L accounts thoroughly and accurately is crucial to the automatic creation of journal entries in SAP Business One.

Figure 3-4 shows the G/L account determination setup window. Some accounts are mandatory, for example, the revenue account under the Sales tab. The revenue account is the default revenue account used for any A/R invoice. It is overridden if another revenue account is specified in item or warehouse master data.

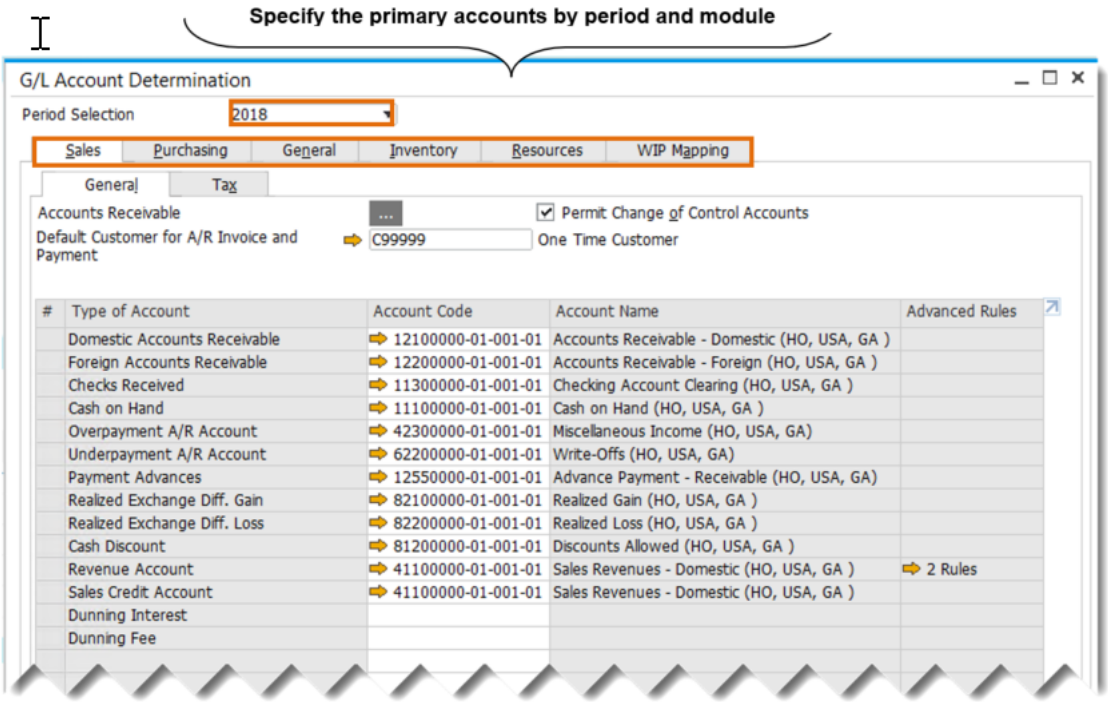


Figure 3-4: Mandatory fields for G/L Account Determination: Sales tab

Note

Inventory alert. The Inventory tab is active only if the Use Perpetual Inventory checkbox is selected on the Basic Initialization tab. Go to Main Menu → Administration → System Initialization → Company Details.

Note

Setup tip. Your implementation partner will make sure additional primary accounts are defined, such as tax accounts, credit card clearing accounts and house banks. Use the corresponding setup menu to define these accounts.

3.2.4.2 Advanced G/L Account Determination

Once the primary accounts are defined, you have the ability to define more complex rules for determining the appropriate G/L accounts to be used. Let's look at an example. If you sell an item that belongs to the accessories item group, from warehouse

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

number 01, you want the posting to go to a designated revenues account, as well as a COGS account. However if you sell an accessory from warehouse number 02, different accounts are to be used.

So first you set the determination criteria, for inventory and resources, to identity which criteria you which to take into account: figure 3-5 shows 3 active determination criteria for inventory, however you have up to 10 that can be activated as well 5 user defined fields located in the documents or the business partner objects.

You can activate this feature in the Administration → System Initialization → Company Details → Basic Initialization

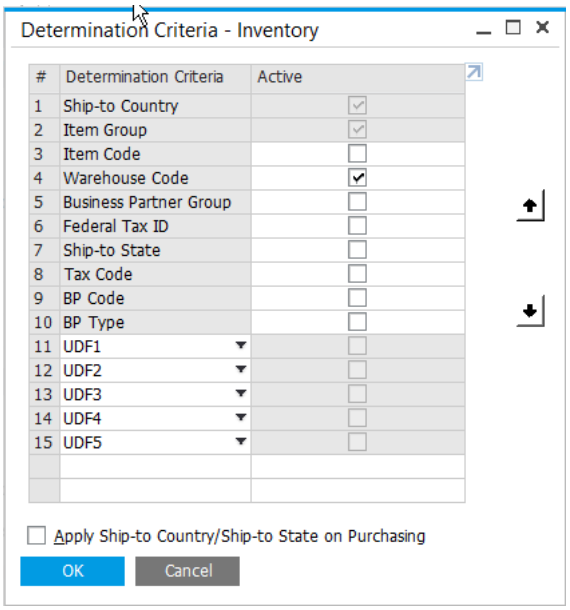


Figure 3-5: Determination Criteria

Next, you specify the rules for determining the appropriate accounts. From the G/L account determination window, press the Advanced button. Figure 3-6 shows how you can set up different revenues and COGS account by item group and warehouse.

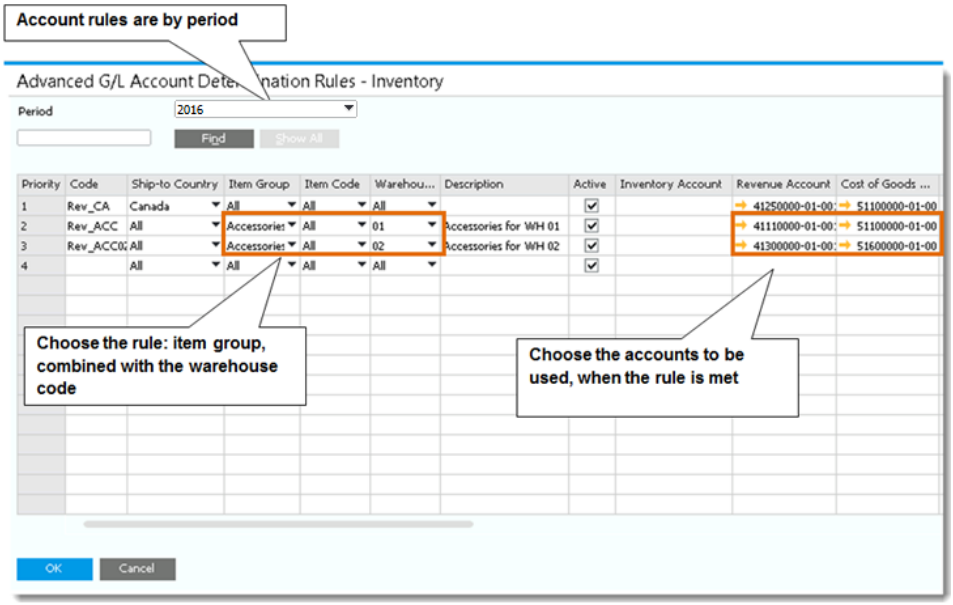


Figure 3-6: Advanced G/L Account Determination Rules

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Note

Setup Rules: you can have an unlimited number of rules, using different criteria. When the system posts a transaction, it looks up the list of rules, by priority, and once the rule is met, these are the accounts that will be used.

For accounts that remain blank in this window, the system looks them up in the G/L account determination window.

Note

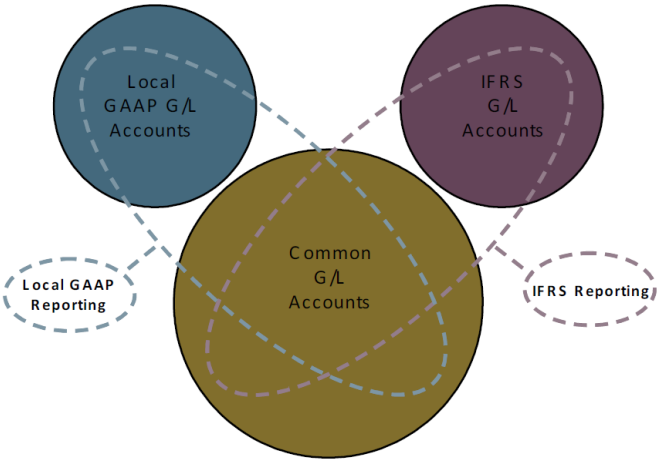
Journal Entry Preview: to ensure the system picks up the right accounts, based on the G/L account determination and rules, you can preview the Journal Entry for any document, before it's actually posted. Simply right click in the document window, and select Journal Entry Preview

Note

Align Postings with Documents: to avoid ambiguity, you can choose to Split Journal Entry Posting by Document Lines in the preview of a journal entry only, or to split in the actual posting. This will generate one row in journal entry, per row in the document where a G/L account is used. This setting be defined in the Administration → System Initialization → Document Settings → General tab.

3.2.4.3 IFRS: International Financial Reporting Standards

International Financial Reporting standards (IFRS) provides standards, interpretations and the framework for the Preparation and Presentation of Financial Statements (in absence of a Standard or an Interpretation) adopted by the International Accounting Standards Board (IASB). SAP Business One allows you to meet these standards, in addition to GAAP and local standards by enabling the parallel account model.



Accurate reporting in SAP Business One depends not only on functionality, but also on correct setup and handling. Additionally, SAP Business One localizations vary according to different local GAAP requirements. Therefore we strongly recommend that you consult with your SAP partner and your company accountant when identifying what your IFRS requirements are, how to implement them, and which authorizations to define for them. You are responsible for carrying out all the appropriate operations and providing the appropriate documentation to ensure the accuracy and completeness of your financial reports.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

This can be achieved via different tools embedded such as the ability to change drawers name, 10 levels of COA, activation of the matching principle, assign transaction types and reference field links.

In addition, use the Chart of Account Templates to create multiple versions of your chart of accounts to be used in your financial reporting.

Check the on-line help for additional information

3.2.4.4 Multi Branch

You can activate the multi branch feature to enable you to work across branches on one company database, but only with authorized data. For example, a company with several stores could use a single company database to manage all their stores as branches. Although the data is centralized in one database, the data for each individual store can also be manipulated and reported separately.

Major functions of this feature include:

- Documents are created for specific branches and only with master data, such as warehouses and business partners that are assigned to the branches.
- Business Partners are filtered based on the connected user and its assigned branches.
- Different branches can share some common data and settings, for example, items, business partners, users and document settings.
- You can create purchasing documents from one branch based on sales documents from another branch.
- You can run reports for specific branches, as well as compare branches.
- You can activate data ownership by branch
- Dedicated authorizations to users to access one or more branches in SAP Business One.

You can enable multi branches on the Basic Initialization tab of the Company Details window. Additional settings are done in the Setup menu for Financials.

3.2.5 Step 5: Migrating Your Legacy Data

When making the change from your legacy financial accounting system to SAP Business One, you are faced with the challenge of having to keep historic data online for audit and research purposes as well as for ongoing day-to-day business activities.

The data transfer workbench for SAP Business One is a migration tool that enables you to transfer data from your legacy system into SAP Business One. It transfers master data, such as business partner and item records, as well as transaction data, such as orders, invoices, and balances, since both types of data need to be available in SAP Business One.

> **Note**
>
> How does the data transfer workbench work? Legacy data is exported into Microsoft Excel spreadsheet templates and then imported into SAP Business One. Legacy data migration is a process that is best done collaboratively with your SAP implementation partner. It is not recommended to import past activity that was already closed. Only import your master data, open documents, and opening balances for items and G/L accounts.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Another useful tool that you can access inside SAP Business One is the Import from Excel. Since this is not used for financial data, we will discuss it later on when we discuss master data.

3.2.5.1 Setting Up 1099 Vendors (United States)

In the United States, certain vendors are subject to 1099 reporting, meaning that payments to them must be tracked and reported to the United States Internal Revenue Service (IRS). With a little setup, SAP Business One automates the tracking of payments that are subject to 1099 reporting and automatically creates 1099 forms at tax time.

When importing any existing vendor master data into SAP Business One, you should designate your 1099 vendors as such. This saves you from having to change business partner master data manually.

For setting up new vendors, you should know that the process of tracking 1099 payments starts in the Business Partner Master Data window. The Accounting tab has two sub-tabs, General and Tax. In the A/P invoice window, you can override the default form and box if needed. Figure 3-7 shows two boxes on the lower right of the General tab that allow you to specify which 1099 form will be used to track payments to this vendor and the category for payments. With these boxes set, the payments to this vendor are tracked so that a 1099 form can be created and sent to the IRS as required.

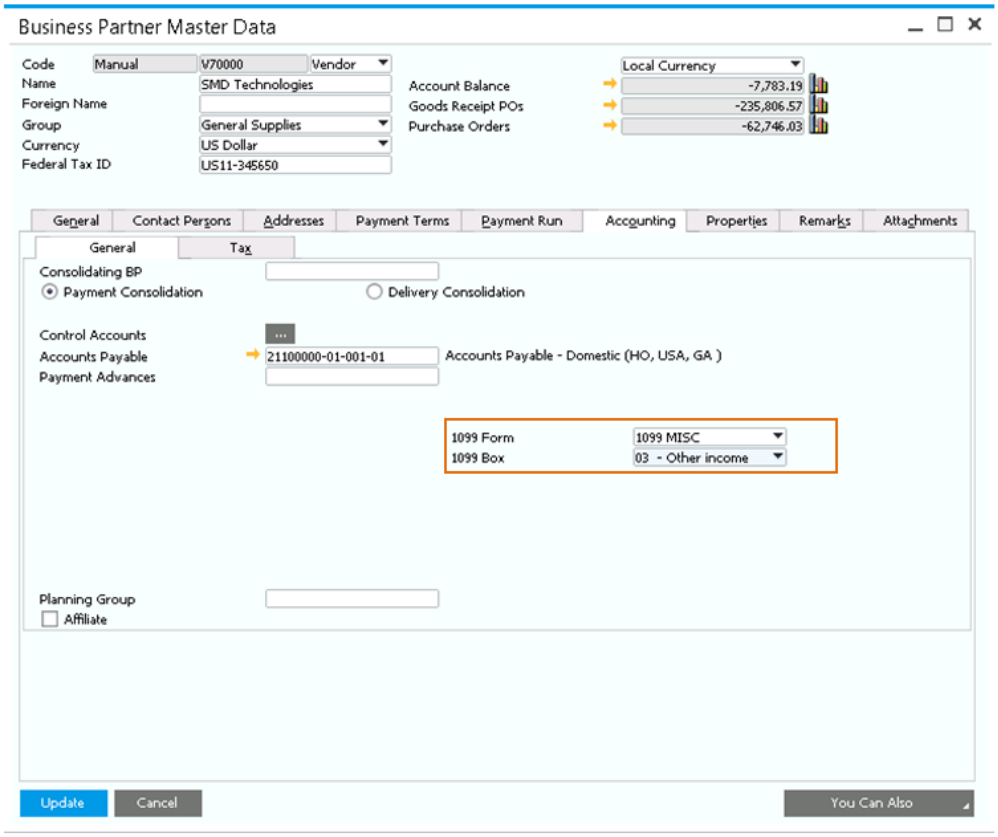


Figure 3-7: Setting the 1099 Form and 1099 Box

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

> **Note**
>
> Setup Tip. If you started working with the system in the middle of the year, you have the option to enter 1099 opening balances for your vendors. Go to Main Menu → Administration → System Initialization → Opening Balances → 1099 Opening Balances.

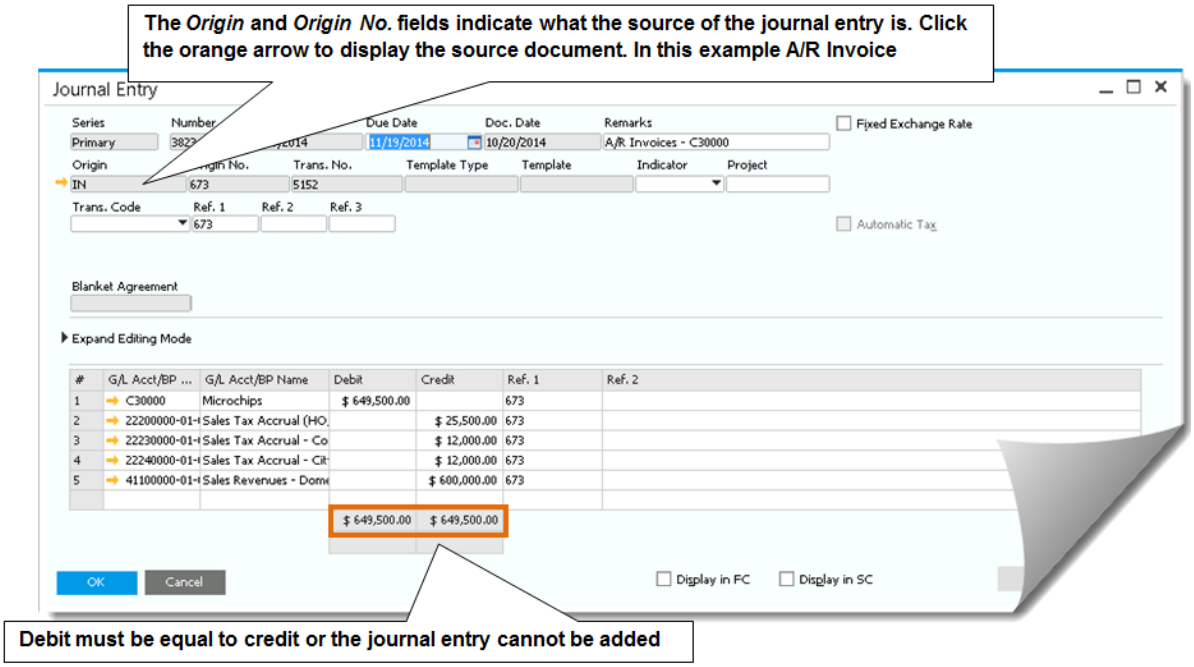
3.3 Performing Daily Procedures

Once you have set up your chart of accounts and your G/L account determination, you are ready to use SAP Business One for day-to-day activities as well as for period- and year-end closing tasks.

3.3.1 Posting Manual Journal Entries

The majority of journal entries in SAP Business One come from one of the other modules; sales, purchasing, payment, and inventory documents post transactions automatically to the G/L. However, in GAAP accrual-based accounting, you sometimes need to make manual journal entries in the G/L, such as depreciation entries, accrual entries, correcting entries, and the like—anything, in other words, that would not come from one of the other SAP Business One modules. When a journal entry is added manually, it is recorded immediately and cannot be deleted—only reversed. (To do so, see Reversing Transactions later in this chapter.)

Using the Journal Entry window shown in Figure 3-8, you can create journal entries manually. The purpose of manual journal entries is to record transactions that are not automatically initiated from a sub ledger or from another process within SAP Business One. For example, a manual journal entry might be used to record a finance charge to a customer account or a service fee to a bank account.



© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Figure 3-8: Entering a manual journal entry in the Journal Entry window

To create a manual journal entry, go to Main Menu → Financials → Journal Entry. A journal entry can be displayed and created in an expanded editing mode or reduced editing mode.

To enter amounts in foreign currency for an account defined as All Currencies, or to enter a specific foreign currency account, check the Display FC box.

In some cases, you may receive a large journal entry from your accountant, for example for payroll, in an Excel worksheet. All you need to do is copy the rows in Excel, and paste them into a journal entry window. Make sure the columns in Excel match the columns shown in the SAP Business One journal entry to make this operation successful.

> **Note**
>
> Journal Entry tip. Normally from the Journal Entry screen, you make postings to G/L accounts. To display a list of G/L accounts from the G/L Acct/BP Code field, press Tab. You can also use a journal entry to book an entry to a business partner code (for example, when posting a finance charge to a business partner account). To display a list of business partners instead of a list of G/L accounts, press Control + Tab in the G/L Acct/BP Name field.

> **Note**
>
> Setup tip. You can define default settings for manual journal entries, such as whether to block posing of an unbalanced journal entry in a foreign currency, or whether the row posting date can be edited. Go to Main Menu → Administration → System Initialization → Document Settings → Per Document tab and select Journal Entry from the drop down list. Some of these defaults can be overwritten in the journal entry window, using Form Settings.

3.3.2 Making Recurring Postings

Some transactions recur monthly or weekly. The transaction amounts may not be the same each time and the percentages may not necessarily be fixed (although they recur on dates that are known in advance and are usually made up of the same G/L accounts).

You use recurring journal entries for expenses such as depreciation, equipment lease payments, payroll, and office rent and utility costs.

To access recurring postings, go to Main Menu → Financials → Recurring Postings.

When you define a recurring posting you must specify all the accounts or business partners, as well as actual amounts. You will determine the frequency and the expiration of the recurring posting. The system will duplicate the original posting each time the date arrives and will allow you to either add the posting as is, or modify it before the final posting to the general ledger.

Another way to work with a recurring posting is to set the frequency to Template, and then use the recurring posting as a template each time you post a manual journal entry.

3.3.3 Using Posting Templates

Posting templates help streamline the posting of individual journal entries that repeat from period to period but where the actual amounts are not known in advance. You create a posting template with percentages defined in the rows, instead of amounts. When you post a journal entry based on a posting template, you enter an amount on one of the rows and the system allocates the amounts in the other rows according to the percentages defined in the template

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

You can use the posting template function to allocate an expense, for example, marketing costs, as a percentage over two or more departments. With a posting template, you can take 100% of one account and allocate it automatically to the other relevant accounts based on fixed percentages.

It is also possible to leave certain rows without an account selection and instead provide a description for the type of account or business partner that should be selected when the journal entry is posted.

To access the posting template function, go to Main Menu → Financials → Posting Templates.

3.3.4 Using Journal Vouchers

You can use journal vouchers to review a batch of financial transactions before posting them. Before you post the entries as journal vouchers, you have the opportunity to edit, change, or delete entries, as required. Let's consider a couple of situations in which you would use journal vouchers. Perhaps you're training a new employee, and rather than risking that some or all of the new employee's journal entries might have to be reversed, you can allow the new employee to create journal vouchers that you can review. This eliminates the risk that the new employee could post incorrect journal entries that would have to be reversed later. You can also use journal vouchers to perform what-if analyses. You can run the cash flow report and include open journal vouchers to determine the effect of the postings before you actually post them.

Another advantage is that a journal voucher can be saved temporarily even when unbalanced. If you have a very large journal entry that you are working on and wish to come back to it later, the voucher allows you to save your work before the entry is complete.

In other systems, a journal voucher sometimes is used for a single journal entry. In SAP Business One, a journal voucher is always used for a batch of transactions, meaning that you enter multiple journal entries in one voucher. When you post the voucher to the general ledger, all the journal entries contained in the voucher are posted together.

To create a journal voucher, go to Main Menu → Financials → Journal Vouchers.

3.4 Maintaining Records

A variety of tasks come under the category of maintaining records, including reversing transactions, editing G/L accounts, and editing 1099s. This section covers these maintenance topics.

3.4.1 Reversing Transactions

You have the ability to cancel a manual journal entry by locating it, right click and select Cancel. A new journal entry opens, with the amounts reversed, and all you need to do is add.

Alternatively, you can schedule a reversal of a journal entry by date. Automatic reversal of manual journal entries is usually set up to occur on the first day of the following month. For a list of manual journal entries scheduled for reversal, go to Main Menu → Financials → Reverse Transactions. Note that this option is used primarily during month- and year-end closings.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

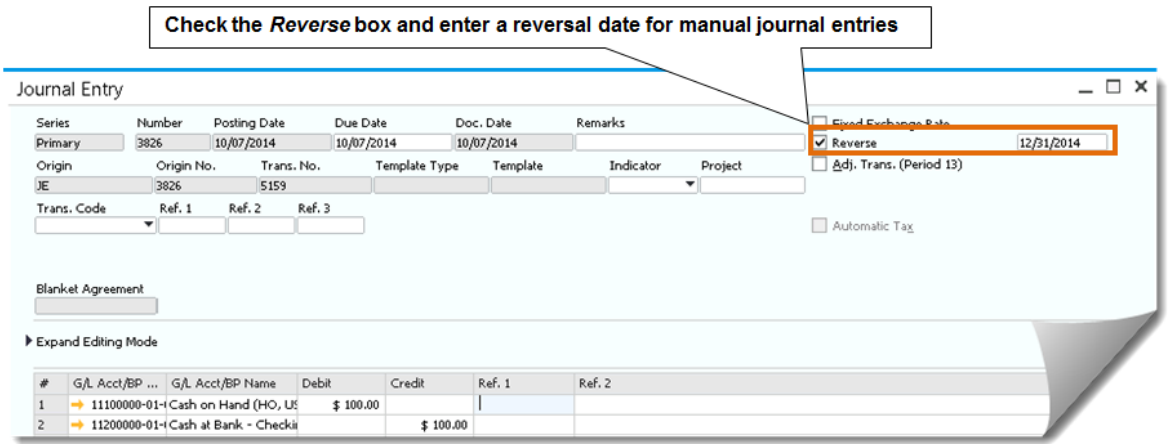


Figure 3-9: Automatic reversal of manual journal entries

Note

Setup tip. The reversal transaction can either post negative amounts on the same side, or post a debit to reverse a credit and a credit to reverse a debit. To determine the reversal method, go to Main Menu → Administration → System Initialization → Company Details → Basic initialization tab.

3.4.2 Editing G/L Accounts

In the normal course of business, you may have to adjust the chart of accounts from time to time. Using the Edit Chart of Accounts window, you can make changes to the chart of accounts, create new accounts, rearrange groupings, and change and edit existing accounts.

To display the Edit Chart of Accounts window, go to Main Menu → Financials → Edit Chart of Accounts, or Administration → Setup → Financials → Edit Chart of Accounts.

Creating codes for a set of newly created accounts is a common task when adding new accounts. The account code generator is a tool that enables you to assign codes to newly created account segments at the click of a button. In addition, you can insert a new G/L account in a number of different account segments (for example, departments) simultaneously. To access the account code generator, select Financials → Account Code Generator.

3.4.3 Editing 1099s (United States)

Vendors that are assigned a 1099 form within business partner master data will have A/P invoices and credit memos that accumulate 1099 amounts for year-end reporting to federal authorities. If a document is incorrectly posted with the wrong 1099 amount, form, or box, you can use the 1099 editing function to modify the data. To access 1099 editing, go to Main Menu → Financials → 1099 Editing.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

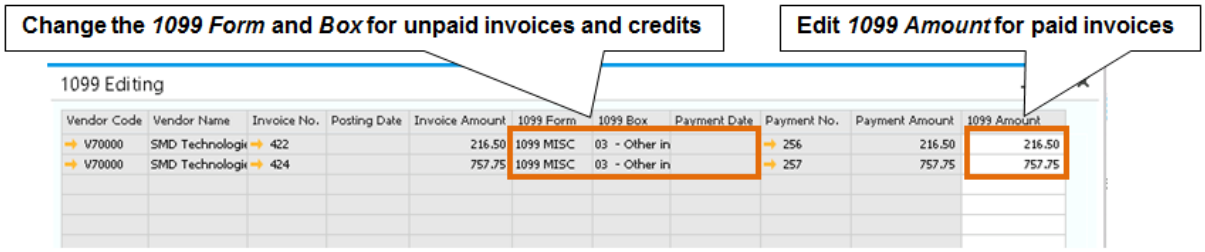


Figure 3-10: The 1099 Editing window

3.4.4 Reviewing Changes to Data: Audit Trail

When a change is made to a document, master data record, or setup element, an audit trail is created. To view these changes, select Tools → Change Log from the SAP Business One menu bar to display a Change Log window that lists changes, including user, date, and time, that have been made to that particular document or master data record. You can then click on an entry to see the change that was made. If there are multiple changes, hold down `Ctrl` and click on two or more lines, then click on Show Differences in the lower right of the Change Log window to see what has changed between iterations of the document.

Use the Change Log Cleanup wizard, located in the administration module, to delete old log entries you no longer require.

For audit purposes, SAP Business One allows you to view the Access Log from the Tools menu. The access log shows a list of users, and their login information. You can track which user logged onto the system, the times they logged on and off, and whether there was a failed attempt to log in with a certain user ID.

In the Administration → System Initialization → General Setting →Services tab you can identify the maximum number of records for your history per record. Any additional changes above that number, will be saved, but older ones will be deleted.

Using the Administration → Utilities →Change Log Cleanup you can delete log records for specific objects; for example, you wish to keep the pricing history, but not the customer's.

3.5 Period-End Procedures

Much of the work of financial accounting takes place at the end of each period and at the end of the year when transactions are examined and any corrections or adjustments are made. SAP Business One supports such activities in a variety of ways.

3.5.1 Period-End Closing Checklist

Period-end activities take place at the end of the month or the end of the quarter, or both, depending on how your financial accounting processes work. In either case, the checklist at the end of the period is much the same.

- Make sure that all transactions for the period were posted properly, including adjustments and accruals
- Print trial balance (a balance of each account and a current status)

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

- Print vendor liabilities aging and customer receivables aging reports to reconcile receivable accounts with the G/L
- Print inventory audit report to reconcile inventory with the G/L
- Print financial statements
- Make a backup of your database and put it in an off-site storage location
- Close or inactivate the fiscal period by locking it using the posting period window

3.5.2 Year-End Closing Checklist

Year-end closing is a big event that affects many aspects of how SAP Business One operates. For example, a year-end close will zero all profit and loss account balances to the retained earnings account. Balance sheet accounts are summarized, bringing the balances forward as the beginning balances in the new fiscal year. All of this activity takes time, of course. The year can remain open until all adjusting entries are received from accountants and other reporting entities.

Here is a general year-end checklist:

- Post final transactions for the period in all modules
- Complete the period-end procedures
- Post any final adjusting entries in the G/L
- Close the last period of the fiscal year
- Make a backup of your database and put it in an off-site storage location
- Print 1099s
- Print a final detailed trial balance
- Print financial statements
- Set up a new fiscal year
- Run the period-end closing routine to close the fiscal year

> **Note**
>
> Year-end closing alert. It is strongly recommended that you consider your year-end closing processes during setup and implementation. Soon after going live with SAP Business One, perform the first-month or first-quarter closing together with your implementation consultant. Download the “Tips for Year-End Closing” guide from SAP Business One Customer Portal at http://service.sap.com/smb/sbocustomer.

3.5.3 Data Archiving

As part of the period end procedure, you may consider using the Data Archiving wizard. If your company database is over two years old, you can optionally delete old activity such as sales and purchasing documents, inventory documents, sales opportunities, and more. Archiving old data helps you to reduce your database size, increase performance, reduce hard disk space needed for backups, and even allow faster upgrades when a new version is available. Once you remove the old transactions you can also manually delete master data that is no longer is use, such as customer, vendors and items.

As you already learned, in SAP Business One you build one document from another, and journal entries are posted automatically with the document. For example, a sales quotation was copied to an order that was copied to two deliveries. The deliveries were copied to one A/R invoice which was fully paid. This is called a closed cluster. It means that all the transactions that are involved in a particular workflow are closed. The data archiving only removes closed clusters. In our example, if the

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

invoice was partially paid, that means that the cluster is open, and none of these transactions will be removed. These prerequisites are important to keep the data integrity and consistency.

3.5.3.1 The Data Archiving Wizard

To open the wizard, go to Administration → Utilities → Data Archive Wizard. Figure 3-11 describes the main steps of the wizard.

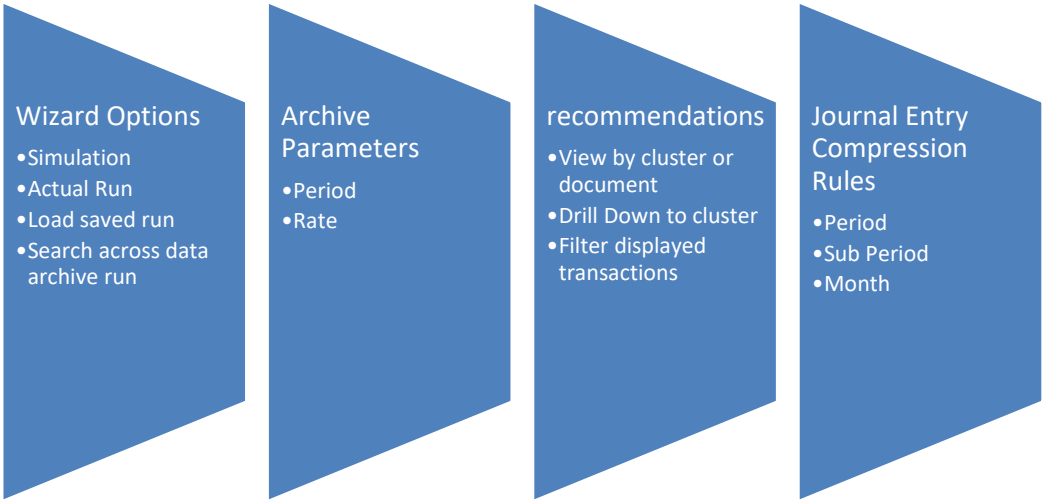


Figure 3-11: Data Archive Wizard's Main Steps

The wizard options consist of:

- Simulation. This will provide you with the information of what data will be archived, indicate non-removable clusters, and show expected results regarding the total number of transactions that are removed, and database size at the end of the process.
- The actual run will complete the process by removing the appropriate transactions and shrink the database size. You must conduct a backup prior to the actual run. Note that there is no roll back option other than to manually restore the company backup.
- Loading a saved wizard run lets you view previous archiving runs in case you wish to search for a particular transaction or cluster.
- You can search for certain transactions across multiple data archive runs, in case you do not know in which run the transaction was removed. You can search by date and transaction type.

In the archive parameters, you select the posting period range you would like to archive. The start date of the archived period is always the first period of the company. You can only archive periods that are 2 years or older then the system date. Additionally, the period must be locked, and a period end closing process applied to it.

In the recommendation step you can view all the transactions included in the date range. The wizard displays both removable and non-removable transactions grouped by cluster, or without grouping. You can drill down to a specific cluster to view all the transactions belonging to it. The archiving wizard removes transactions such as sales and purchasing documents, sales opportunities, activities, payments and inventory revaluation. The wizard does not remove master data, such as customer and items. These will have to be removed manually by the user, after the wizard completed the transactional information.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Since journal entries are removed from the system, the accounts balances must remain intact. Thus during the archiving process consolidated journal entries are created to reflect those balances. You can choose to consolidate by period, sub period or by month.

3.5.3.2 Data Archiving Checklist:

- Run a simulation to find open clustered that can be closed
- Close open clusters
- Create a backup of the company database
- Run the data archive wizard

> **Note**
>
> Audit trail. The data archive wizard creates a read only database backup that can be restored later on. This database consists of all the data before the deletion. For audit purposes, you can restore this back to view old transactions.

3.5.3.3 Master Data Cleanup

After you have completed the data archiving, you can run the Master Data Cleanup Wizard. This is also located under the Administration →Utilities.

Here you can delete any bulk master data that is no longer needed. You can remove: items, business partners, G/L accounts, projects, distribution rules, tax codes and employees that have no activity.

3.6 Incoming and Outgoing Payments

In SAP Business One, the functionality and reporting associated with processing payments are accessed through the Banking module. This section provides only the basic information you need to get started. When processing payments you should select the transactions to be closed by the payment, either fully or partially. If there is no prior transaction to select, or you are unsure which transaction applies, you can enter a Payment on Account.

3.6.1 Incoming Payments

Incoming payments can be received in four ways: cash, checks, credit cards, and bank transfers. SAP Business One handles all of them in basically the same way—either by making a payment against a specific A/R invoice or by making a payment to a customer against two or more A/R invoices.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

3.6.1.1 Creating Incoming Payments for Specific Invoices

The following steps explain how to create an incoming payment against specific invoices:

1. Go to the Banking → Incoming Payments → Incoming Payments window shown in Figure 3-12
2. Click the selection list button to the right of the Code field and then select a customer
3. Review the Documents for Payment table that displays all the open invoices for the customer
4. Select the invoices for which you want to apply a payment (check the selection box next to the row number); the cumulative amount is displayed in the Total Amount Due field in the footer of the window
5. Change the Total Payment amount field to do a partial payment
6. Select the payment means icon from the SAP Business One toolbar to open the Payment Means window. Select the tab for the desired payment means, fill in the relevant details, and click OK, which brings you back to the Incoming Payments window.
7. Click Add to post the document

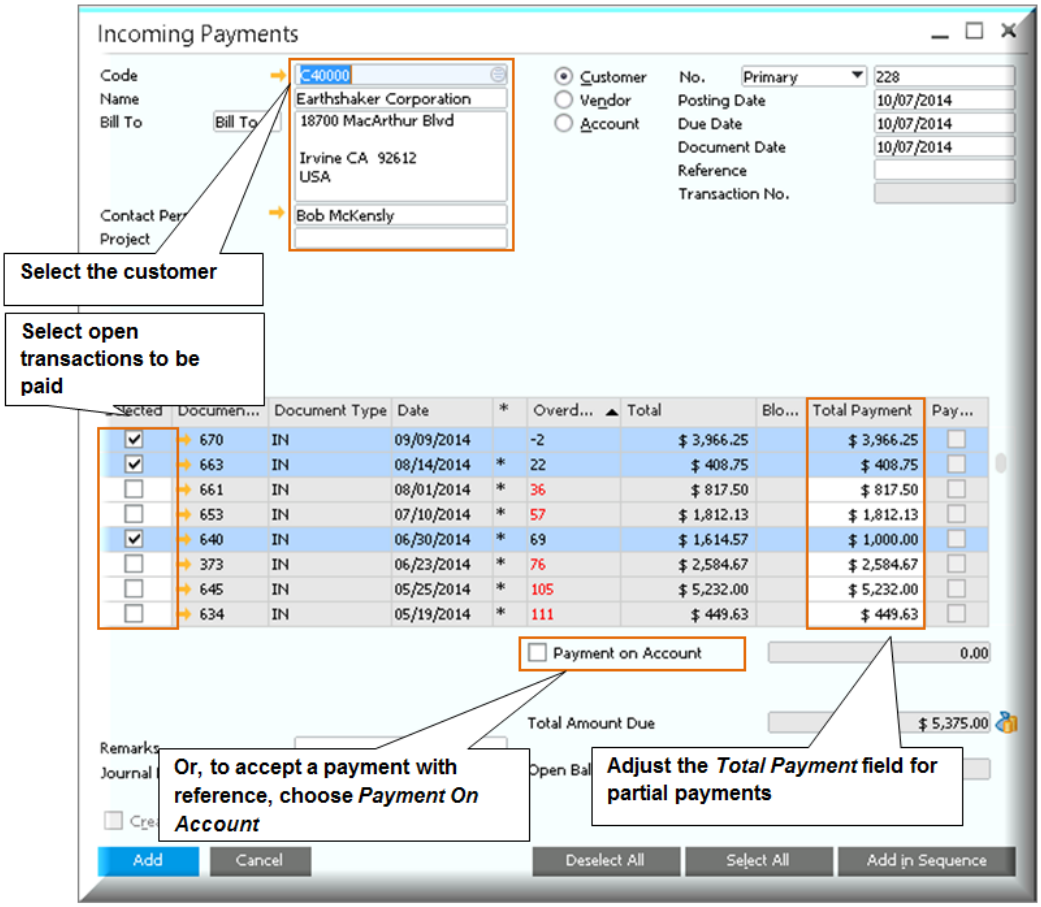


Figure 3-12: Incoming Payments window

Once the incoming payment document is added, the following actions are taken:

- Journal entries credit the customer's accounts receivable control account and debit the bank account or a clearing account.
- The payment is applied to the invoice.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

- The paid invoices are closed and no longer appear in the Open Items List, Documents for Payment table and in the customer's receivable aging report.
- When a partial payment is processed, the selected invoice remains open for the balance due amount
- When a full payment is processed, the invoice and the payment are internally reconciled and closed.
- If the payment is made by check, cash or credit card, the payment is posted to a clearing account, and a deposit document must be processed in order to transfer the funds from the clearing account to the house bank account

3.6.1.2 Creating Incoming Payments on Account

You can accept incoming payments without reference to specific invoice(s)—for example, a one-time point-of-sale purchase. To do this, you check the Payment on Account checkbox of the Incoming Payments window and fill in the required information. Once the incoming payment document has been posted, the appropriate journal entry is created.

3.6.2 Outgoing Payments

Just as with incoming payments, there are, generally speaking, four ways of sending outgoing payments: cash, checks, credit cards, and bank transfers. You can perform the following activities:

- Create outgoing payments for business partners and accounts using various payment means;
- Print and void checks for a payment for various purposes, including employee bonuses;
- Create, trace, and process drafts of outgoing payment documents and drafts of checks for payment; and
- Generate a Check Register Report

The main difference between incoming and outgoing payments is the need to define an account for the different payment means. For example if you create an outgoing payment with cash, you must select the outgoing cash account for the transaction. In this case, it can be your house bank account or a petty cash account.

For more information about managing outgoing payments with SAP Business One, consult the online help.

3.6.3 Special Scenarios

You can define a maximum amount for over and under payment situations. One situation might be if your customers always round the invoice amount, which may result in up to $1 difference between the invoice and the payment. To define the allowed over or under payment maximum amount, go to Administration → System Initialization → Document Settings → Per Document tab and select Incoming/Outgoing Payment from the drop down list.

When you process the payment, and if the payment difference is within the amount defined as an under or over payment, the system processes the payment as a payment in full. A posting is made to the business partner for the payment amount, and the small difference is posted to a dedicated G/L account you define in the G/L Account Determination.

Cash discount is a special discount given when your customer pays before the invoice due date, or when you pay your vendor ahead of time. The cash discount percentage is defined in the invoice's payment terms, and the discount amount is automatically calculated when the payment document is entered. The discount amount is posted to a dedicated G/L account. You can also adjust the cash discount percentage, or change the amount to include a cash discount, by modifying the appropriate fields on the invoice row in the payment document.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Payments made in a foreign currency often produce exchange rate variances. When you close an invoice with a payment, and the exchange rate varies between the payment and the invoice, the system automatically calculates the exchange rate gain or loss amount and posts it to a dedicated G/L account.

3.6.4 Payment Wizard

SAP Business One provides a payment wizard that allows you to create outgoing payments in batches for checks and bank transfers, and to batch process incoming payments by bank transfers. The payments are created according to your selection criteria and payment methods. Using the payment wizard requires the following steps to properly prepare the relevant master data:

1. Create a payment method by going to Administration → Setup → Banking → Payment Method
2. Define default payment methods for customers and vendors by going to Administration → System Initialization → General Settings → BP tab
3. Assign the payment method to the business partner on the Payment System tab of the Business Partner Master Data window if it differs from the default
4. Select the payment methods you want to include in the payment wizard by going to Administration → Setup → Banking → Payment Run Defaults

The payment wizard then steps you through the process of creating payments, deciding who you want to pay, how, and when.

To access the payment wizard, go to Banking → Payment Wizard.

The payment wizard consists of several steps:

1. Payment Run Selection. Choose whether to load a previous created payment run or create a new one
2. General Parameters. Determine the payment posting date and the payment type – outgoing or/and incoming, as well as the payment means – checks or/and bank transfer
3. Business Partner Selection Criteria. Select the customers and vendors to participate in the run. Business partners with a balance of zero are automatically excluded from the list.
4. Document Parameters. Determine the maximum due date of open transactions to include in the run. In addition you can filter by posting date, amount and document numbers.
5. Payment Methods Selection Criteria. Based on the payment type you selected, active payment methods appear. Select the payment methods you want to include, as well as the maximum balance for the entire run. The default balance is that of the G/L account linked to the payment method. In case you have open transactions to be paid, with a total higher than the balance, some transactions will not be included.
6. Recommendation Report. Based on the selection you made, open transactions appear here. Choose which transactions you would like to include. You can modify the balance due to be paid, cash discount as well the number of checks in case of outgoing payment by checks. Click the Non Included Transaction to view which ones are not part of the recommendation, and the reason they are not included.
7. Save Options. Choose between executing the run, saving the recommendation or save the selection criteria only. You can also save the run on the server, and schedule it to run at a later date and time.
8. Document and Report Printing. Print varies reports such as the payment forms, non-included transactions, outgoing checks and summary reports.

> **Note**
>
> Block Payments. The payment wizard includes all type of open transactions: Invoices, Journal Entries, Payments on Account, and Credits. You have an option to block a particular invoice or journal entry from being paid by the wizard.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Select the Payment Block checkbox on the business partner row in the journal entry or on the Accounting tab in the invoice window. You can also block a business partner by selecting the Payment Block checkbox on the Payment System tab in the business partner master data.

3.6.5 Printing Checks

Printing checks is an important payment process for most U.S. businesses. The setup for printing checks usually requires some help from an implementation partner. Part of the check printing process involves making sure that the correct printer is designated for check printing and that the check forms are loaded and ready to go.

Once properly set up, printing the checks is easy. Simply choose your house bank, verify the next check number is correct and print. Once the printing is done you will need to confirm the assigned check numbers, with an option to make additional corrections,

You can choose one of three preferences to print checks:

- Blank Paper. This option is primarily for companies that do not use a pre-printed check stock, where checks are printed in electronic format (also called MICR)
- Overflow Check Stock. If the check stub overflows to the next page, the system continues to use the pre-numbered check stock for all pages, while voiding the numbers that were used for overflow.
- Overflow Blank Paper. The system prints the first page of the check on the regular pre-numbered check stock. For overflow pages, the system pauses, asks you to replace the check stock, with non pre-numbered pages, and prints the rest on blank checks.

To define the printing preferences go to Administration → System Initialization → Print Preferences → Per Document → Checks for Payments.

You can override the company default printing method when you define your house banks. Go to Administration → Setup → Banking → House Bank Accounts → Paper Type field

Note

Audit Trail. Use the Check Register Report to keep an audit trail of all check numbers that were used. Go to Banking → Banking Reports → Check Register Report

3.7 Internal Reconciliation

Internal reconciliation is a mechanism that runs in the background of SAP Business One and is automatically performed for documents; however, users can also conduct internal reconciliation manually. You may wonder how critical internal reconciliation is to the running of your company. Well, the answer is that internal reconciliation is absolutely critical! Essentially, internal reconciliation matches debits and credits in the same G/L account or business partner. For example, an invoice is matched with a payment or a credit, or a payment is matched with a deposit. If no internal reconciliation was performed by SAP Business One, invoices would remain open even if they had been paid. Imagine that your invoices remain open after they are paid. You would not be able to do collections from customers, pay vendors and more.

In SAP Business One, when you apply a payment to an invoice, or cancel a document, and a posting is made to the general ledger, an internal reconciliation normally takes place, and you do not have to do anything more. In a few cases, you will have to complete the process by conducting manual reconciliation. Manual reconciliation is necessary in the following cases:

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

- For a payment on account, where the invoice was created after the payment
- When writing off any rounding or over/under payments differences
- To match transactions for a business partner that is both a customer and a vendor
- To make corrections to previously reconciled transactions

To internally reconcile a G/L account, go to Financials →Internal Reconciliations → Reconciliation and choose the account.

To access internal reconciliation for a business partner go to Business Partners →Internal Reconciliation → Reconciliation. Select the Business Partner and click Reconcile. If you have customers that are also vendors, check the Multi BP's box and choose both master records. You can also access internal reconciliation for a business partner if you open the business partner account balance, and choose the Internal Reconciliation button.

> **Note**
>
> Reconciliation trail. Simply right click the mouse on any document window, and choose Applied Transactions. This will show you all the transactions that are reconciled with the current document.

Internal reconciliation supports cash discount calculation, exchange rate differences, and over/under payment scenarios when you reconcile a single payment with one or more invoices.

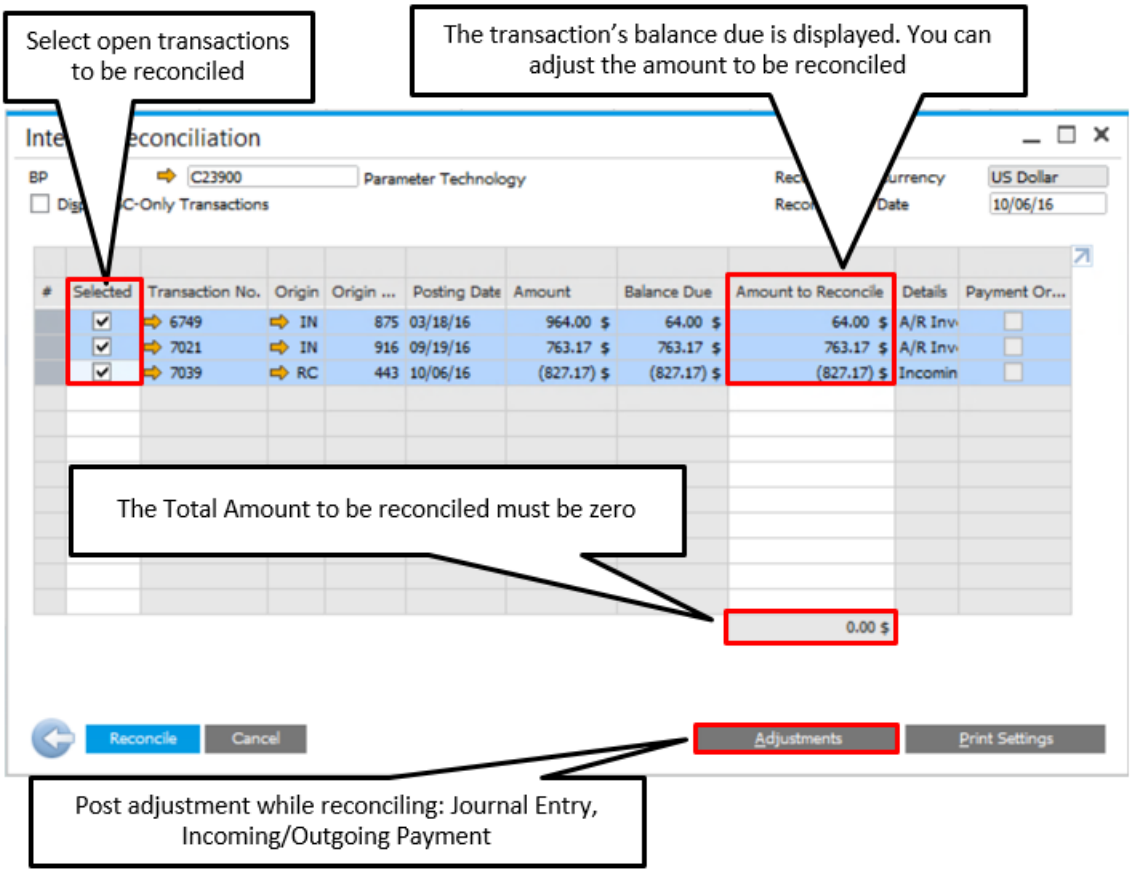


Figure 3-13: Internal Reconciliation window

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

3.8 External Reconciliation

While internal reconciliation mostly occurs automatically, external reconciliations must be initiated by the user. Most commonly, external reconciliation is applied to your house bank accounts. Some customers conduct external reconciliation on their business partners or certain G/L accounts.

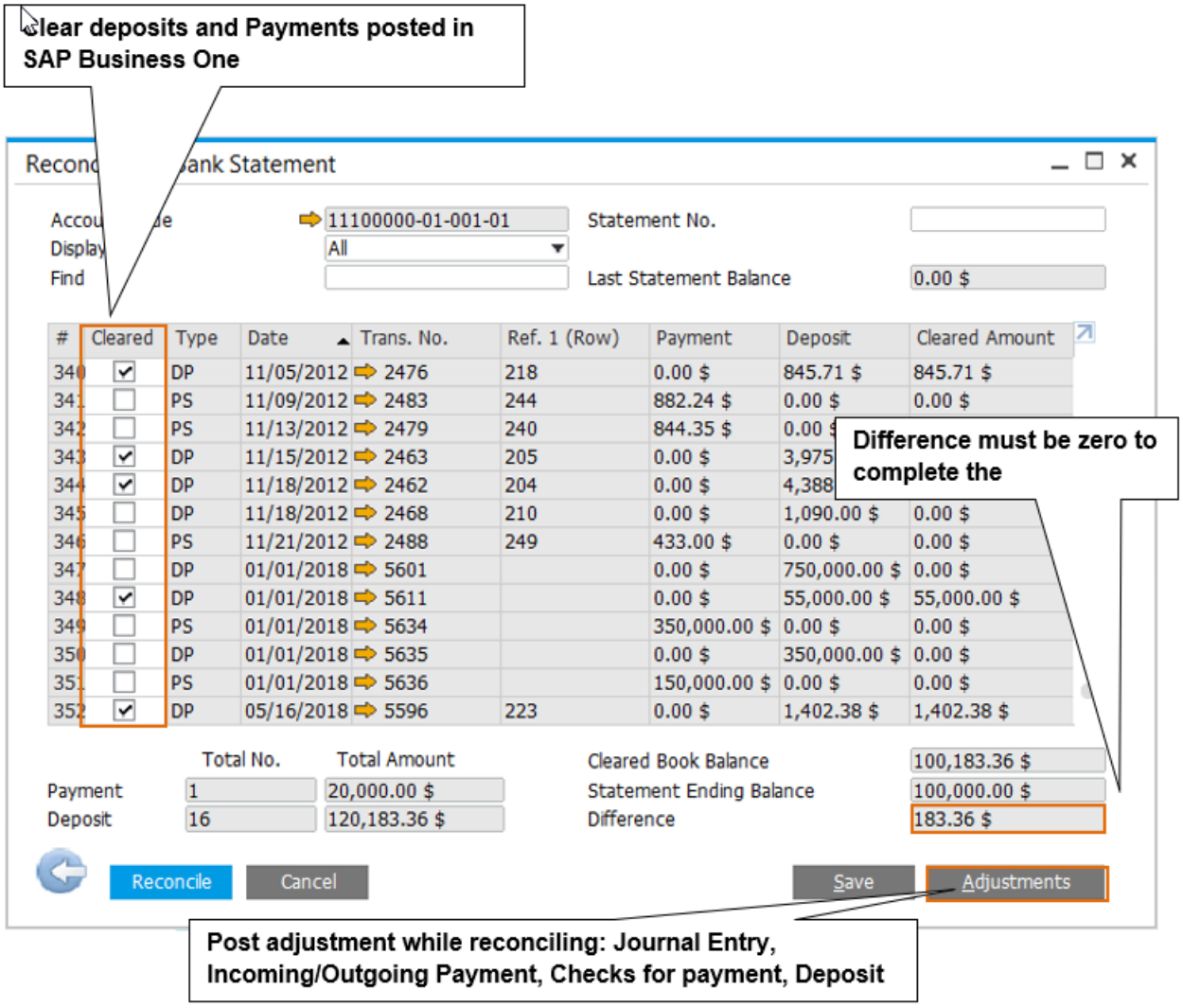
The essence of external reconciliation is matching transactions occur in SAP Business One with transactions that occur externally, for example at the bank.

Think about a check you deposited - you created a deposit document in SAP Business One, then you went ahead and deposited the check at your bank. To confirm the check went through, and that your overall bank account balance in SAP Business One matches your actual balance, you use external reconciliation to verify that and adjust if needed.

There are two ways to conduct external reconciliation: match each individual bank transaction, such as deposit, fee, payments, loans etc. to every journal entry in SAP Business One, or to match the journal entries in SAP Business One to an ending balance in your bank account.

We will look at the second option first. In Banking → Reconciliations → Manual Reconciliation.

In the Selection Criteria, choose your house bank account, date and ending balance for the date. Next you need to clear deposits and payments to match the ending balance as described in figure 3-14



© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Figure 3-14: External Manual Reconciliation

The second options can be found on Banking → Reconciliations →Reconciliation. To be able to reconcile bank statement with SAP Business One transactions, you need to enter or import your bank statement beforehand. This can be found on the reconciliation menu, Process External Bank Statement

Transaction from the external bank statement are displayed on the right. Transactions from SAP Business One are displayed on the left. You need to match one to one, or one to many, by double clicking the rows on each side. you can complete the reconciliation once there is no difference between the two sides.

> **Note**
>
> Bank Statement Processing (BSP). Use the BSP add-on to automatically import bank files into your external bank statement. Part of the import process allows you to automatically create payments and other adjusting transaction in SAP Business One, while conducting external reconciliation for most transaction, allowing the user to complete the rest manually. The add-on also lets you generate bank files to send to the bank, for bank transfer, as part of the payment wizard run.

3.9 Cost Accounting

Cost accounting is used to track the various cost and cost centers of a business. Using cost accounting, you can track departments, divisions, or various geographies as if they were separate entities. You can determine how much spending or revenue is being generated for various business purposes. In Europe and other parts of the world, segmented charts of accounts are not considered Generally Accepted Accounting Practices (GAAP); cost accounting is the prevalent method used.

Using cost accounting can help you reduce the number of general ledger accounts that need to be maintained. For example, instead of having a separate revenue account for each department, product line and location, you can have just one general account, the total of which is then divided between the cost centers through reporting.

Using SAP Business One's cost accounting functionality, you can establish cost centers for almost any purpose by going to Main Menu → Financials → Cost Accounting → Cost Centers.

> **Note**
>
> Cost center definition. A cost center is a company unit or division that performs a specific business function. For example, a specific company unit might be responsible for manufacturing a product or providing a service. You can use the profit center function to define the cost centers that exist in your company. However, account segmentation often serves the same purpose and allows you to analyze profits and expenses by business unit in much the same way.

3.9.1 Using Dimensions to Group Cost Centers

You can also use Dimensions to group cost centers together and present data in different ways in cost accounting reports. Using dimensions is optional; therefore you need to decide whether to activate the multi dimensions option for the company in the Cost Accounting tab of the General Settings.

You should not use the multi dimension option if you have a simple company structure with just a few divisions or if you maintain a separate account for each area. In these cases, you can still use the cost accounting module, just in a simplified way.

How to activate Dimensions is shown in figure 3-14.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

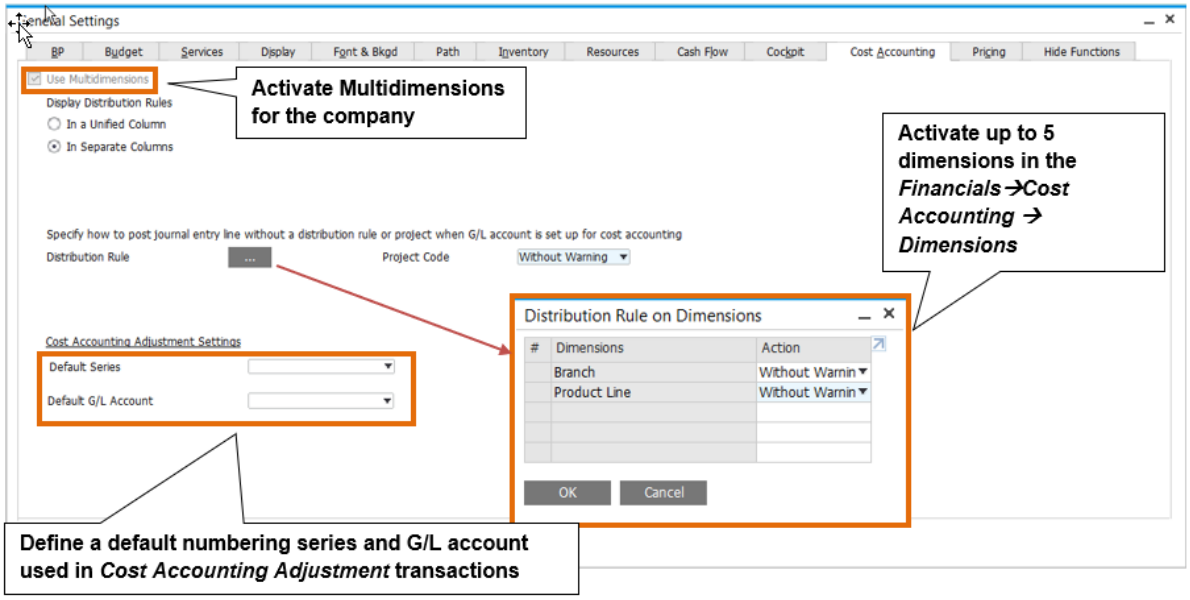


Figure 3-15: Activating Dimensions

The next step for setting up dimensions is to define the various locations or departments in your company as cost centers. You assign each cost center to a dimension, set validity dates and make it active.

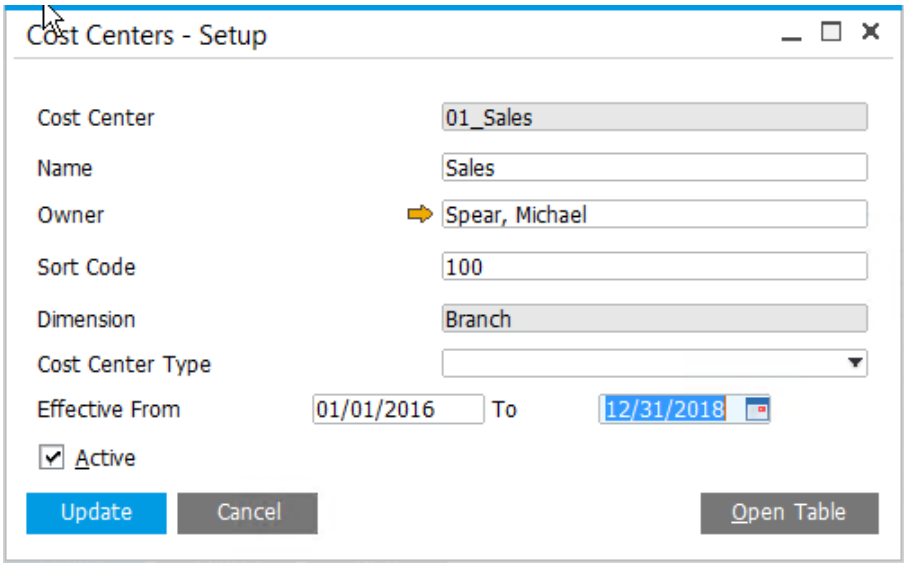


Figure 3-16: Setup Cost Center

Once you create a cost center, a distribution rule is created automatically, and marked as direct allocation, with 100% of the amount assigned. On a daily basis, the system uses distribution rules, whether you created them manually or automatically. See the next section to learn more about distribution rules.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

3.9.2 How Are Distribution Rules Used?

A distribution rule is used to allocate direct and indirect costs and revenues to one or more cost centers. Consequently, each distribution rule contains information regarding the portion of costs or revenues to be allocated to each individual cost center.

Distribution rules that are created when you set up a cost center are always considered as direct allocation. To distribute indirect costs incurred by rent, for example, you could specify what portion of the total rented space a specific cost center uses. Alternatively, you could allocate costs by specifying the number of employees belonging to a cost center as a percentage of the total headcount in the company.

You can use a distribution rule for several different cost elements. If, for example, one store uses 1,500 square feet of the total rented floor space of 2,000 square feet while another uses only 500 square feet, you distribute the costs incurred by rent and professional cleaning services proportionately between the two stores on the basis of this information.

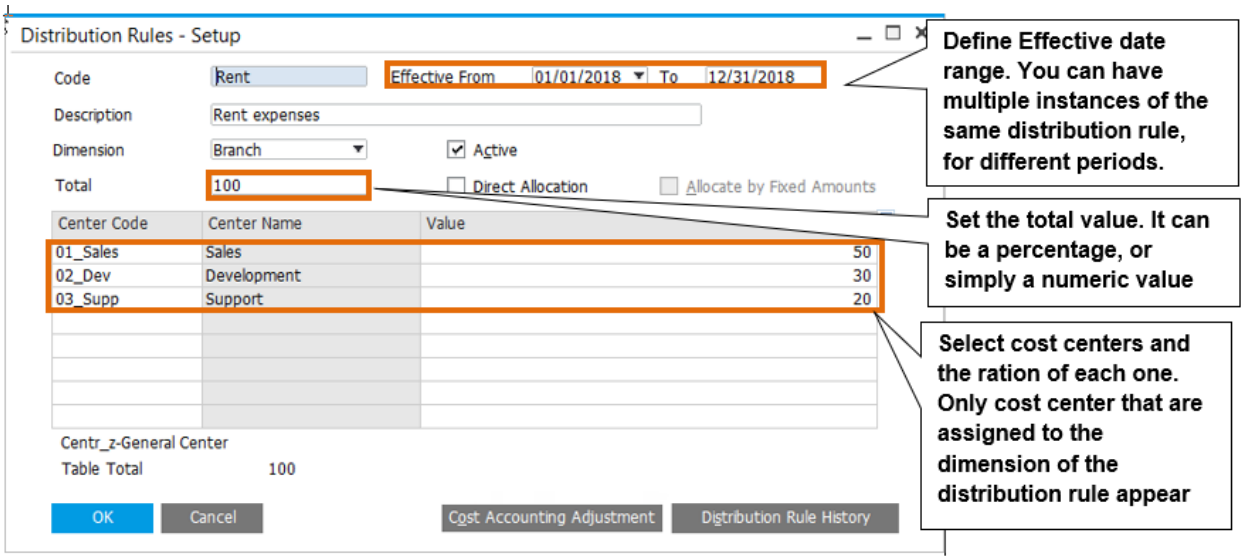


Figure 3-17: Indirect distribution rule

If the ratio between the cost centers changes, or if you need to add or remove a cost center from the distribution rule, use the Effective From date to define multiple instances of the same distribution rule. This way you maintain the historical allocation of revenues and expenses but activate new rules for reporting future transactions.

To access the cost accounting distribution rules function, go to Main Menu → Financials → Cost Accounting → Distribution Rules.

3.9.2.1 Assigning Distribution Rules

You can assign distribution rules to transactions throughout the application, including sales and purchasing documents, manual journal entries, and more. You can assign a default distribution rule to a specific revenue or expense account. To do this, open the chart of accounts, locate the account, select the Dimension, and the corresponding distribution rule.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

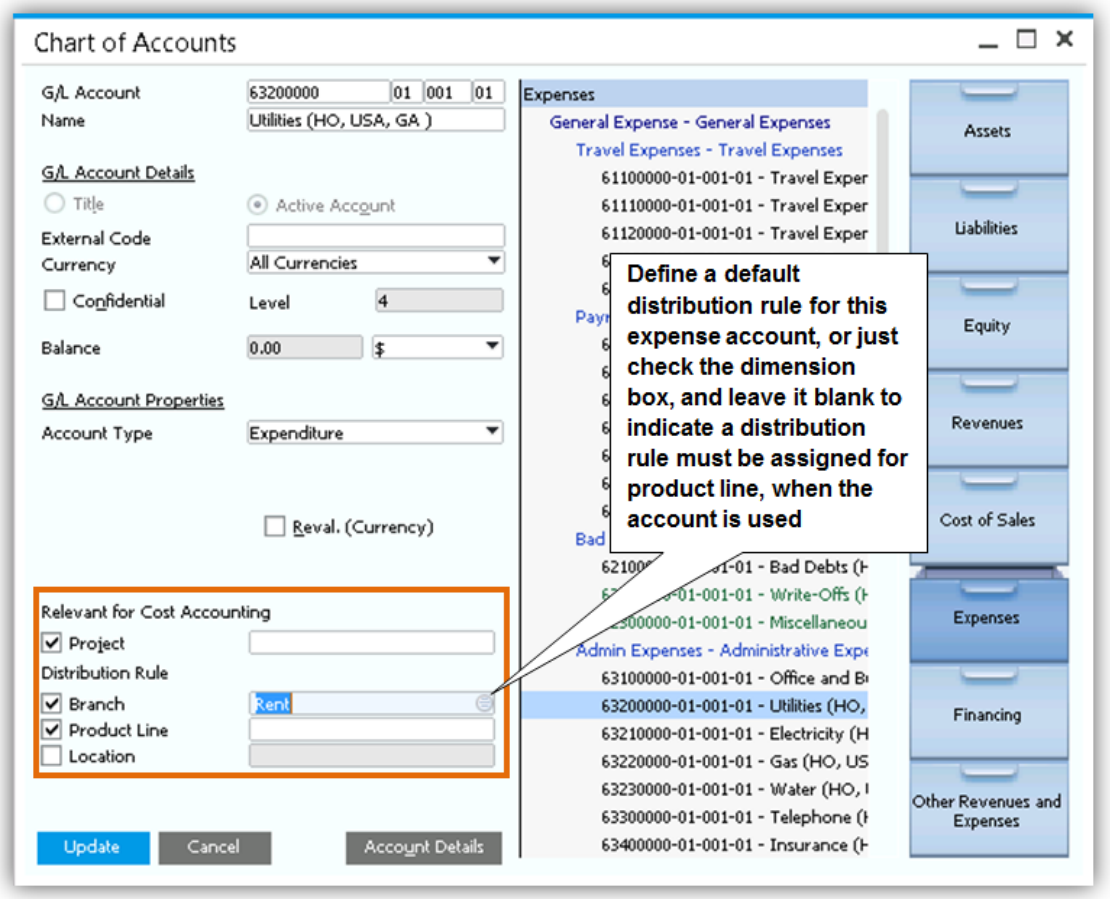


Figure 3-18: Assigning Distribution Rule to accounts

If you are not using dimensions, there will be one field in each account for assigning the relevant distribution rule.

3.9.2.2 Using Distribution Rules in Transactions

Using the distribution rules and cost centers in transactions is simple. When the account already has an assigned rule, the rule will appear in the invoice or journal entry. Otherwise, you need to select the distribution rule for each dimension. Use the Administration → System Initialization → General Settings → Cost Accounting tab to make the following setup (see figure 3-15):

- Display distribution rule in a unified column, or in separate columns
- Choose whether to prompt a warning or to block posting, when you are using an account that is set up for cost accounting and the transaction does not have a distribution rule assign to it.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

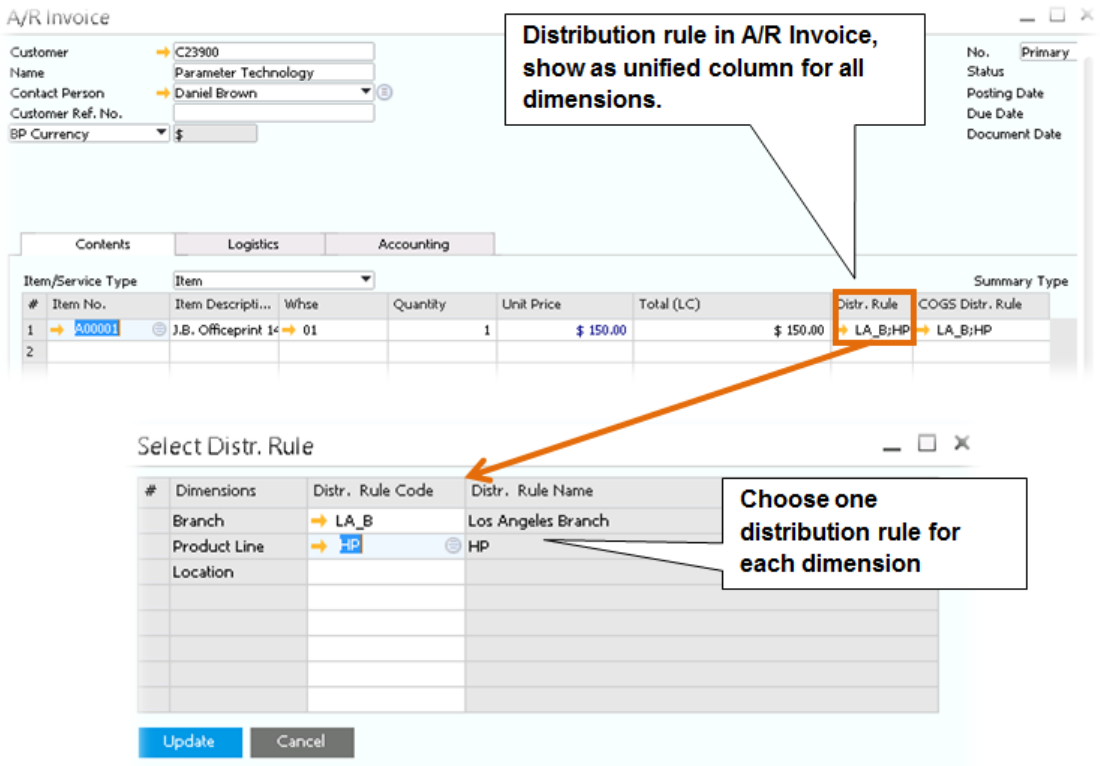


Figure 3-19: Assigning Distribution Rule A/R Invoice

If you specified to have the distribution rules in separate columns, the dimensions appear as columns, where you can select a distribution rule for each dimension from the document window.

3.9.3 Cost Center Transfer

In some cases, you may need to adjust amounts allocated to a cost center. The system allows you to define a Journal Entry numbering series dedicated for these types or transactions by checking the Cost Accounting Adjusting. You can dedicate G/L accounts to be used as for cost center adjustments only, by checking the appropriate box on the account details.

3.9.4 Cost Accounting Reports

The key reason for using cost accounting is the ability to run reports to analyze your business and company divisions for profitability and efficiency. There are multiple reports available to you:

- Table of Cost Centers and Distribution Rules is simply a list of your cost centers and distribution rules by dimensions, including effective dates and total amounts.
- Distribution report is a more detailed report that shows transactions posted to your distribution rules by G/L Accounts including budget amounts. Cost Center Transfer journal entries can be initiated directly from here.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

- Cost Accounting Summary Report is similar to the previous report, only it shows you the data from the cost center perspective rather than by distribution rules.
- Budget Versus Cost Accounting is a comparison report of your actual amounts versus budget amounts by G/L Account.
- Cost Accounting Reconciliation allows you to compare your profit and loss amounts in terms of legal requirements vs. management reporting needs. Specifically you can see cost accounting postings to a certain G/L account shown as accruals spread across a period of time, as opposed to an external view with the posting dates of the financial transactions. To make the report work, you need to perform additional steps, such as defining additional G/L accounts and accrual types. If you would like to know more about this functionality, consult your implementation partner.

> **Note**
>
> Cost Center Hierarchy: the Cost Center Report, and the Cost Center Summary Report can be based on a custom cost center hierarchy. A hierarchy is a way to create a report structure customized to your company's needs, which allows you to present data grouped in various ways. A template can be created for each dimension separately, with up to 3 levels, text lines for informational purposes, and formulas.

3.10 Budgeting

You use the budget functions in SAP Business One to track corporate expenses and revenues. SAP Business One has an encumbrance function that allows you to block additional transactions if the budget is exceeded. SAP Business One can calculate budget amounts automatically based on a series of distribution methods that you specify for calendar months. For example, you can base budget amounts on a previous year's budget and mark them up by a certain factor if you expect expenses or revenues will increase by a certain percentage. The markup can be distributed equally to all accounts or incrementally. SAP Business One can automate the process, but your accountant should help decide what distribution method to use.

In the course of routine work, SAP Business One checks the debit side of accounts for which you have defined a budget amount, and, if the budget is exceeded, issues a warning or blocks the action, depending on which method was chosen.

To begin the process of defining a budget, set the required options in the Administration → System Initialization → General Settings → Budget tab. For all other budget functions, go to Main Menu → Financials → Budget.

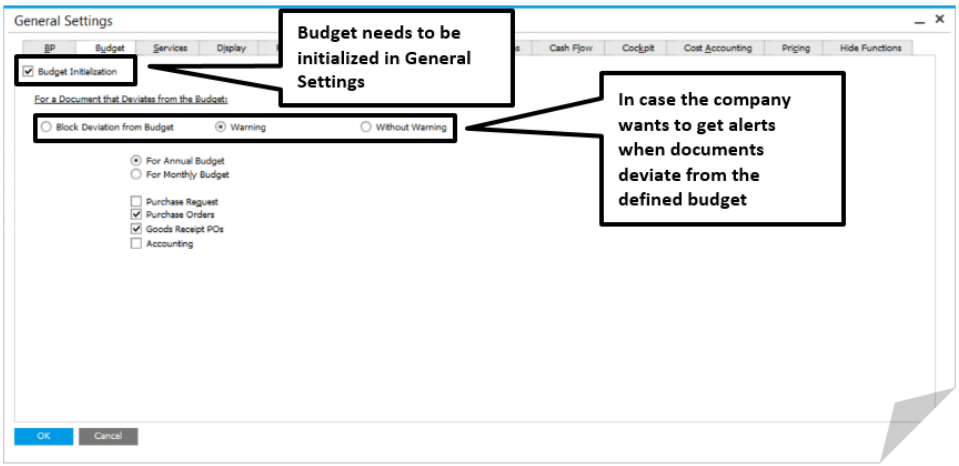


Figure 3-20: Initializing Budget and defining alerts to get notifications on transactions

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

3.10.1 Budget Scenarios

Budget scenarios are used for planning as well as budget tracking and reporting. They help you analyze the financial position for your company (or division or department) given certain conditions. SAP Business One allows you to define these conditions as well as determine the fiscal period during which they apply. Whenever you set up a new company, a scenario called the “main budget” is created automatically. All the checks for budget deviation are done against the main budget. You can use this scenario as a basis of other scenarios, but you cannot delete the main budget scenario. When you create a new posting period, you must define the main budget first for this fiscal year.

When you run the different budget reports on the Main Menu → Financials →Financial Reports → Budget reports, you select which scenario to use for comparison. This way you can get insights regarding how your budget may be affected if you increased or decreased the budget amount.

To define the monthly budget amount, go to Main Menu → Financials → Budget Setup→ Budget. Enter debit amount for expenses, and credit for revenues.

To set up budget scenarios, go to Main Menu → Financials → Budget Setup→ Budget Scenarios.

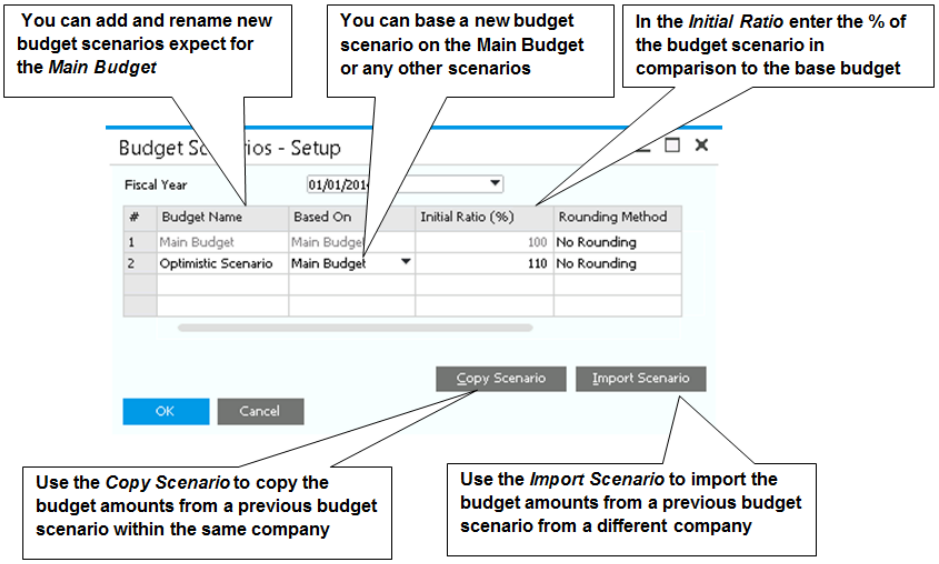


Figure 3-21: Setting up budget scenarios

3.10.2 Budget Distribution Methods

By default, each company in SAP Business One has three common methods of budget distribution:

- Equal: This method distributes the budget amount equally among the months of the year.
- Ascending order: This method distributes the budget amount in ascending order and is used when you increase your budget expenses over the year. For example, in January you use only a small portion of your budget, in February you increase your expenses, and so on.
- Descending order: This method distributes the budget amount in descending order and can be used when you decrease your budget expenses over the year. For example, in January, you use the largest portion of your budget, in February you use a little less, and so on.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

When you set up the budget amount, in the Main Menu → Financials → Budget Setup→ Budget, you can choose for each G/L account what will be the Budget Distribution Methods. Once you enter the debit, or credit amount, double click the row number to view and modify the budget amount by calendar months.

You can use these methods or define new budget distribution methods for the budget scenarios you create by going to Main Menu → Financials → Budget Setup → Budget Distribution Methods.

> **Note**
>
> Budget distribution method alert. Even if you work with an annual budget, the amount is still distributed between the months. This definition only applies to the budget alerts calculation. Remember that the amount is distributed by calendar months. If your sub periods are defined otherwise, the monthly budget amount may not match exactly the amount that should be distributed for a certain sub period.

3.11 Cashflow

Knowing your cashflow situation is a crucial part of running your business. You can plan ahead by being proactive about incoming and outgoing funds. You can predict times where the company may be low on cashflow, so you can reduce your expenses, or avoid large purchases. On the other hand, if you are expecting times where more money is available, you can choose to expand, and invest.

SAP Business One provides different cashflow reports. The cashflow reports are based on your existing accounting entries, however in some of the reports, you can include non-accounting documents such as drafts and journal vouchers.

You can find all cashflow reports in the Financials → Financial Reports → Financials.

We will focus on the Cashflow Forecast, which is only available in the SAP Business One, version for SAP HANA.

3.11.1 Cashflow Forecast

The cashflow forecast is a robust, visual tool that gathers all transactions in the database and presents them in a time line that is easy to interpret. You can choose which transactions to include by certainty level, whether to add opening balances, adjust the time line you are analyzing, and drill down to view the details.

Figure 3-21 shows the cashflow forecast looking 6 months ahead. The blue bars represent incoming amount from debits to cash accounts, A/R invoices, incoming payments and more. The green bar represents outgoing amounts from credits to the cash account, A/P transactions, and outgoing payments and more.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

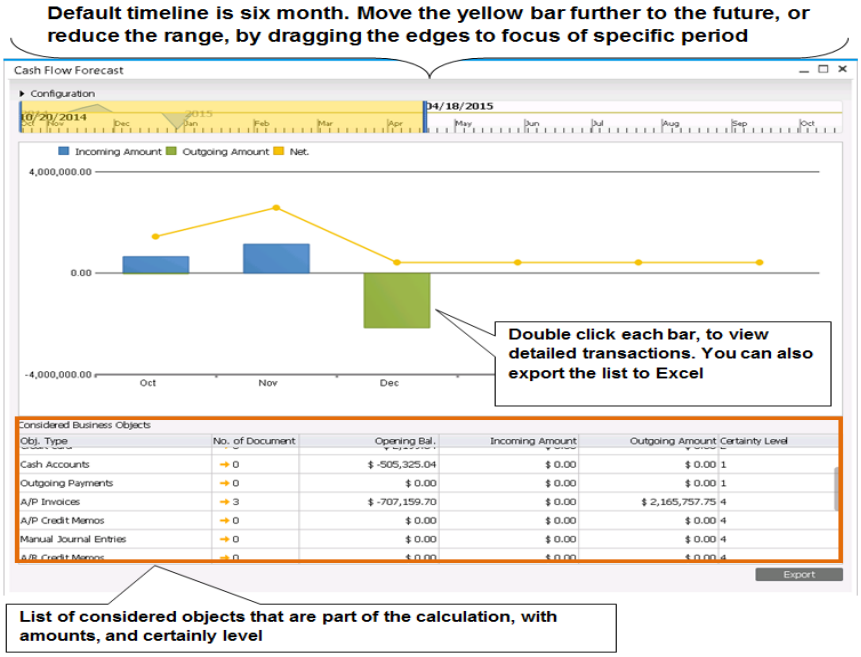


Figure 3-22: Cashflow Forecast main window

3.11.1.1 Configuring the Certainty Levels

If you expand the Configuration area at the top of the report, you can change some settings in the forecast. You can choose which measures to include along with additional criteria. You can also modify the certainly level. The certainty level represents in a nutshell how sure you are about receiving or paying this money. For example, incoming payments are very secure, since they are money in your bank, so they can be in level 1. However, sales orders may or may not get paid, so they should be in level 7 or 8. The system does provide defaults for each certainly level, but you can also modify them as shown in figure 3-22.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

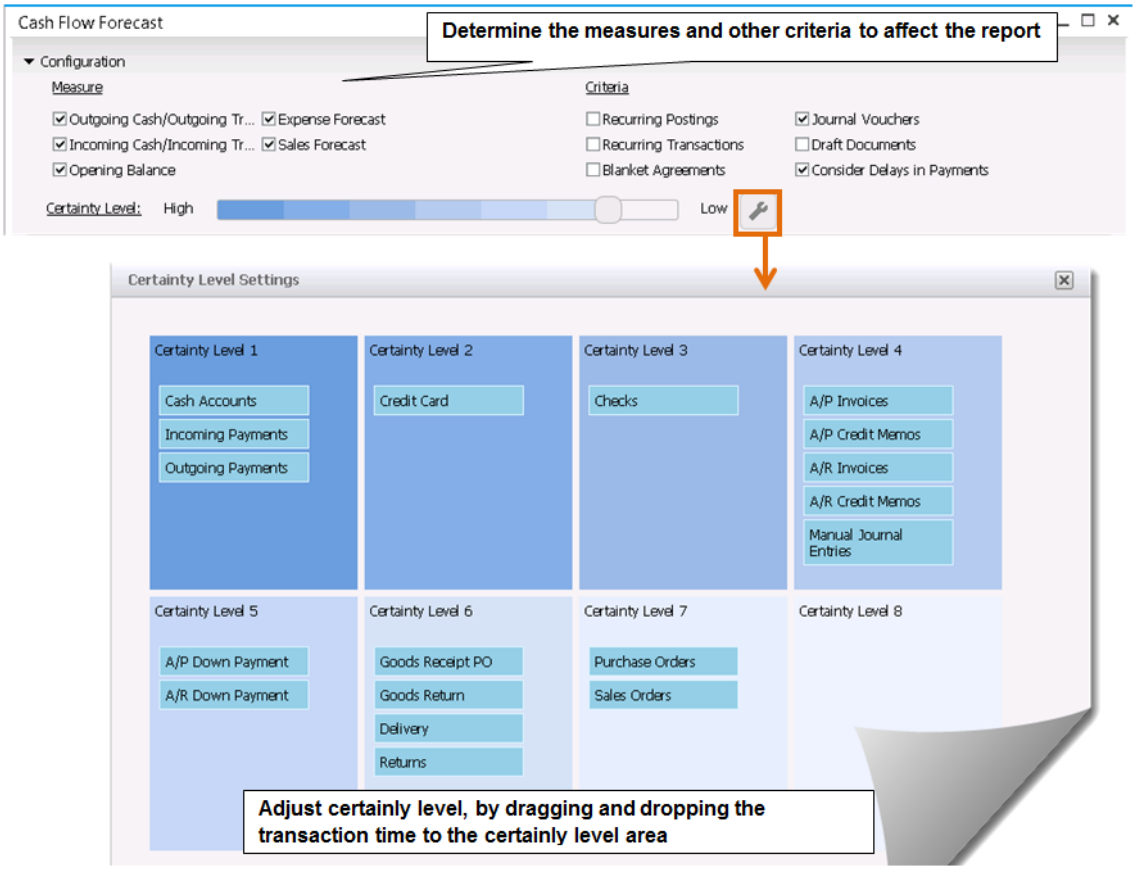


Figure 3-23: Cashflow Forecast main window

3.12 Inquiries and Reports

SAP Business One offers a comprehensive suite of standard financial and control reports. Choose Main Menu → Financials → Financial Reports to access standard reports such as those in the following table. In addition to these standard reports, SAP Business One offers tools for creating custom reports.

Report	How to reach	What it shows
Customer receivables aging	Accounting → Aging	All of the receivables that are current and past due, usually by several periods; receivables aging in aggregate as well as detail for each customer. Customer statements can be accessed and printed from this report. Available on the Business Partners Reports menu as well
Vendor liabilities aging	Accounting → Aging	How much is owed each vendor and how much is current and past due (in the same way as the customer receivables aging report)

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Report	How to reach	What it shows
Balance sheet	Financials	Summary of the financial position of a business: value of a company's assets, total liabilities, and owner's equity including a relative percentage of each account of the total
Trial balance	Financials	Details for each account: beginning balance for a particular period, all of the debits and credits, and the ending balance. You can include all customers and vendors in this report
Profit and loss statement	Financials	Income of your business
Cash flow	Financials	Cash flow forecast based on open A/R and A/P as well as cash accounts
Document journal	Accounting	All the detailed journal entries created manually or automatically
Transaction journal	Accounting	Posted journal entries by journal entry number, with drill-down to related transactions for more detail
Inventory audit	Inventory → Inventory Reports	Listing of all items in inventory, along with details of every posted transaction related to the item and cost of the remaining on-hand quantities; used by accountants and auditors to reconcile inventory transactions to their G/L
Check register	Banking → Outgoing Payments	Listing of all checks including complete details such as account code, vendor ID, payment amount, status, whether it was printed, and who printed it

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

4 Entering and Managing Master Data

In This Chapter

- How Master Data Is Used in SAP Business One
- The Master Data Creation and Management Process
- Setting Up Predefined Values and Defaults for Master Data
- Creating Business Partner Master Data
- Creating Item Master Data

Skillful use of master data is essential to getting the most out of the SAP Business One application. Data describing business partners such as customers, vendors, and leads is master data. Descriptions of items that are kept in inventory or manufactured by the company are master data. G/L accounts which are used to post transactions are also master data. When a new document, such as a purchase order, an invoice, a sales quotation, or a goods receipt, is created, master data provides much of the necessary information.

Master data also keeps track of predefined values and settings that are used by the automated wizards for payment processing, dunning activities, and material requirements planning (MRP). Default control accounts assigned to vendors and customers are also master data. The rest of the information that describes what is happening for a specific transaction is called transactional data.

Proper setup and management of master data allow everyone to use SAP Business One to maximum efficiency. If master data is set up accurately, creating a document such as a sales order becomes a lot easier. You only have to confirm that the default information is correct.

However, if master data is not accurate, business processes come to a halt while people figure out how to enter the correct information. This chapter offers guidance to help you understand, set up, and use master data properly so that you and your company get the full benefit of SAP Business One.

4.1 How Master Data Is Used in SAP Business One

If business were a game like chess, master data would be a description of each of the pieces. Instead of kings, queens, and rooks, you have customers, vendors, leads, and items. Transactional data describes specific moves that a piece has made. Instead of “rook moves to square a3,” you have a task such as “create purchase order for vendor x.” Documents contain data that describes a set of moves that may involve master data records for several chess pieces. For example, a purchase order may include master data describing several items, the ship-to address of the correct warehouse, the preferred payment method, and the name of the contact at the vendor selling the items. All of this master data and more goes into a purchase order.

The reason that master data is so important in SAP Business One is that almost every document is created by starting with one or more master data records. What happens is that the player of the SAP Business One chess game tells the application: “Create a purchase order for this vendor” and the application takes the vendor information from the master data record and copies it into the newly created purchase order. If the data being copied is correct, the purchase order will be correct. If the data is not correct, the purchase order will have to be corrected somewhere down the road. Ensuring that master data is correct makes your work in SAP Business One easier.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

4.1.1 Different Types of Master Data Records

In SAP Business One, master data falls mainly into three categories: business partners, G/L accounts and items.

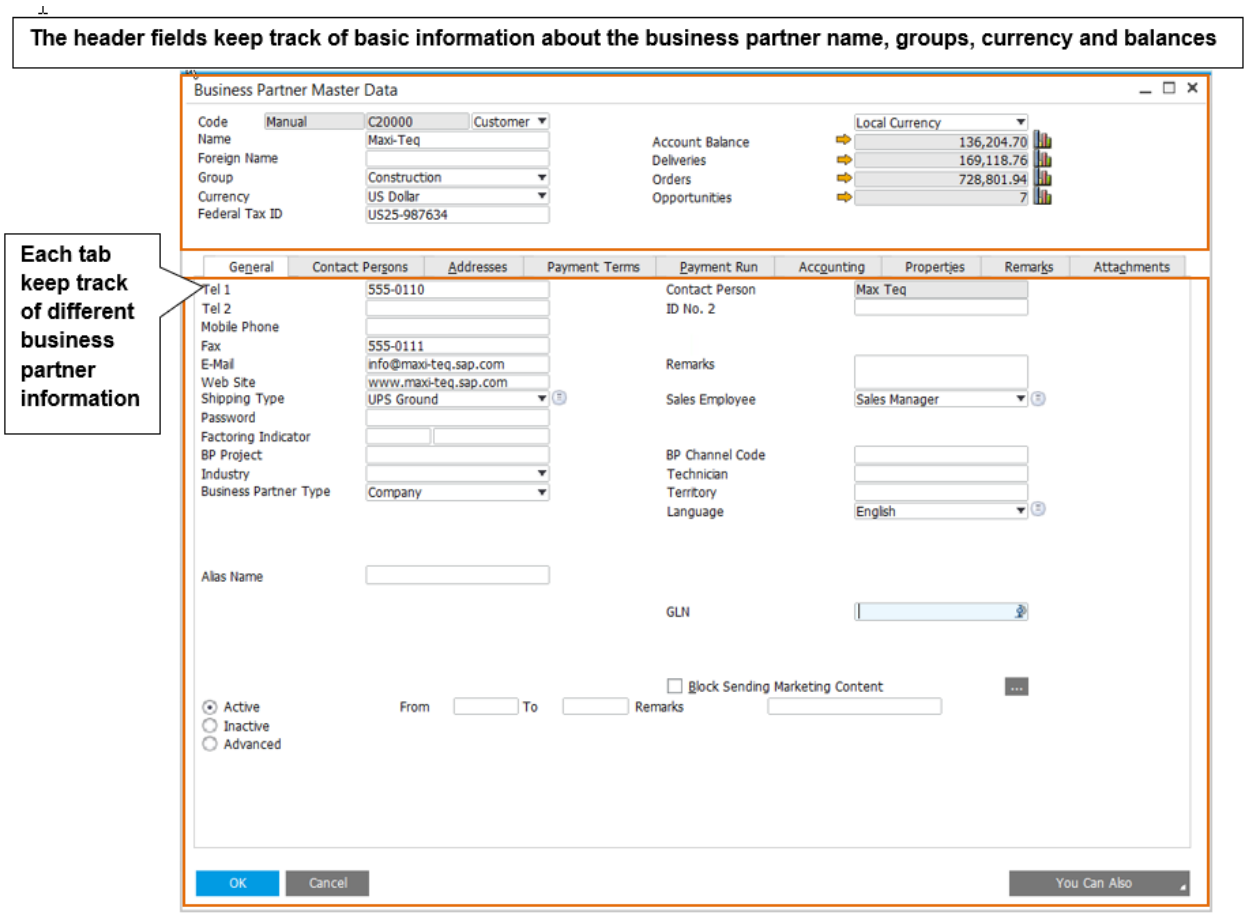
The business partner category includes:

- Lead data: Describes people and organizations in the sales pipeline—your potential customers. Lead master data records are used as the foundation for sales and marketing. When you make the first sale to a lead, you change the business partner type to customer, turning the lead into a customer.
- Customer data: Describes people and organizations to which your company sells products and services. Customer master data records are used as the foundation for documents related to processing and fulfilling orders for customers and for the wizard for dunning customers.
- Vendor data: Describes the people and organizations from which your company buys products and services. Vendor master data records are used to create documents related to purchasing and accepting delivery of goods and services and processing payments to vendors.

Note

Additional Master Data Types. There are additional master data types, such as resources, fixed assets and serial numbers. These will be discussed in their respective chapters.

Because there is a great deal of similarity between the data for each of these types of master data records, SAP Business One uses windows with a common structure (see Figure 4-1) for each record type.



© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Figure 4-1: Business Partner Master Data window

The various areas of this window are discussed in more detail in the following sections.

Item master records are used to create sales quotations, purchase orders, bills of materials, and documents used to move goods in and out of your company. Figure 4-2 shows the structure of the Item Master Data window.

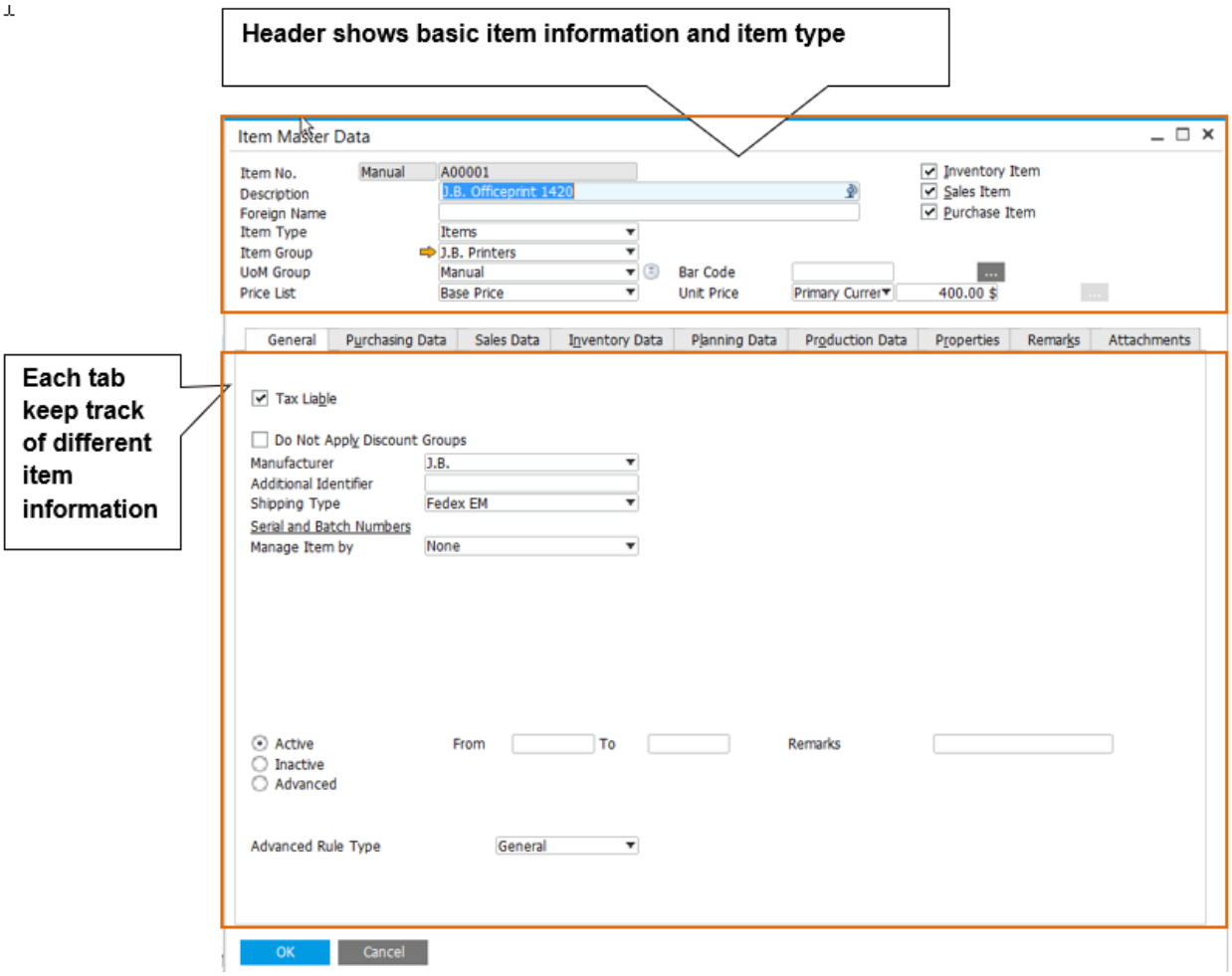


Figure 4-2: Item Master Data window

Item data includes how the item may be purchased or sold, the price of the item, the inventory level, and how purchasing of the item is forecast and planned. Item master data supports a two-way process. Some items in inventory are sold by your company. Other items are purchased by your company. Some items may be fixed assets that are tracked for accounting purposes.

Note

Master data record deletion reminder. One important rule applies to all master data. If a master data record is involved in an accounting or inventory transaction (such as an A/P invoice, A/R Invoice, Journal Entry and so on), it cannot be deleted. In addition, once a sales order is created, the business partner or the item linked to it cannot be removed.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Note

Fixed Assets data. Use the Fixed Assets module to maintain the company assets. Fixed Assets allows you to automatically calculate and post depreciation journal entries across fiscal years, and to create forecast reports with regards to each asset's future value. To activate the feature go to Administration → System Initialization → Company Details → Basic Initialization.

4.1.2 Predefined Values and Defaults

One kind of data used in business partners and items is the data that populates the drop-down lists and shows up in each window by default as the first choice to populate certain fields.

We call the data that populates the drop-down lists "predefined values." For example, when a list of countries is shown, where does that list come from? What about the list of vendors, customers, or items? Or what about different payment terms? All of this data describes various values that are used over and over again in master data records and that are crucial to reporting and to powering the automation performed by various wizards; for example, the payment wizard uses the payment methods information. You can add predefined values by selecting the Define New when you open the drop-down list, or go to the corresponding menu item, under setup.

Default data is also crucially important. When a new master record is created, SAP Business One uses the settings for default data to determine what data the records start with. What is the most common method of payment? That should be the default payment method. What warehouse are most products shipped from? That should probably be the default warehouse. And so on.

4.1.3 Master Data and Documents

One of the most useful features of SAP Business One is the ability to create documents such as invoices, purchase orders, using master data records as a starting point. When creating a new document, you have to specify which master records will be the foundation, and then the appropriate fields are copied into the document. This feature helps reduce data entry errors and speeds up the creation of new documents.

Most of the documents in SAP Business One can be created from one or more master data records. This is possible because an initial document can be created from one kind of master data record but completed by adding others. For example, let's say that a purchase order is created for an item. The vendor information is drawn into that purchase order, and other items can be drawn in as well. This is covered later in this chapter and in greater detail in Chapter 10, which describes how to copy from one or several documents to create the next document in the process flow.

4.1.4 Master Data and General Ledger Account Determination

One of the most important aspects of master data for customers and vendors is the control account determination that appears on the Accounting tab. The whole topic of account determination comes up because SAP Business One automatically creates accounting journal entries when various documents such as invoices are saved.

When an A/P invoice is received and posted, for example, SAP Business One creates an accounting journal entry indicating an increase in accounts payable. The question that account determination answers is: To what control account should that journal

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

entry be posted? The Accounting tab of master data records allows you to set which account receives automatically created journal entries.

Automatic postings from documents that affect business partners are made to what is called a control account, which is an account that represents all the business partner's transactions in the trial balance. Customers have a default accounts receivable control account; and vendors have a default accounts payable control account. On documents that creates a journal entry; it is possible to replace the default control account for an individual transaction. This is useful if you need to separate outstanding transactions, without affecting the master data.

4.1.5 How Master Data Is Used in Reporting

Master data plays a crucial role in allowing SAP Business One reports to be created to meet your needs. The Group and Properties fields of the business partner master data record and the item master data record allow master data records to be classified in ways that help you keep track of and report on your business. Business partner and item master data records also have a set of general purpose properties, on/off switches if you will, that can be assigned values.

The reporting mechanisms in SAP Business One can use these classifications to select and aggregate data to help provide the right level of detail. If you want to report on how items introduced in a specific year fared, create an item property. If you want to separate retailers from wholesalers in reports, create a business partner property. You must consider the types of information you want in your reports to set up master data most effectively.

4.2 Master Data Creation and Management

When you set up SAP Business One, you work with an implementation partner who is expert at making the application work for your business. As shown in Figure 4-3, there are two broad phases to creating master data—setting up the master data and then using it to run your business.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

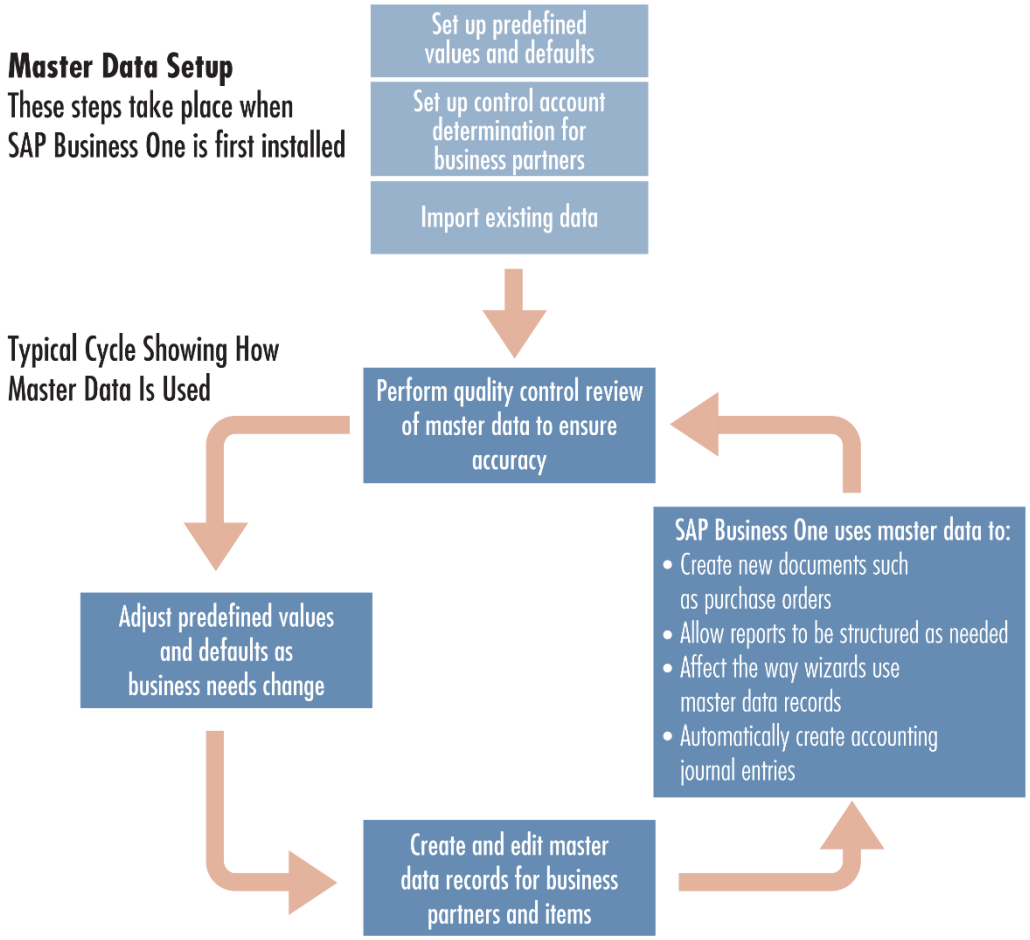


Figure 4-3: Master data process overview

Master data setup is a key part of implementation. This phase involves creating predefined values and defaults, making sure the primary accounts are properly determined, and importing data.

> **Note**
>
> Data import tip. SAP Business One gives you multiple tools for importing master data. The Data Transfer workbench allows you to import data from all core business areas, such as accounting, sales, purchasing, and logistics. The data transfer workbench tool transfers master data, such as business partner and item records, as well as transaction data from actual sales orders and invoices; The Import from Excel Utility allows you to import business partner , items, price lists, business partner catalog numbers and journal entries from an Excel spreadsheet. A similar utility is available for importing fixed asset master data from Excel as well as Financial Reports Templates. For more information on these tools see the online help or training courses on the SAP Community.

Creating new master data records is part of the daily work of the SAP Business One user. While SAP Business One does everything it can to ensure master data is created correctly, mistakes are inevitable, and a regular quality control review is part of any sound master data management process. As business needs change, predefined values and default values may also need to be adjusted (for example, if the company is reorganized).

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

4.3 Setting up Predefined Values and Defaults for Master Data

In the ideal situation, when a user creates a new master data record or a document that draws data from a master data record, adjusting the data is a simple process of looking everything over and changing a few data items here or there if needed, preferably by using drop-down lists and other error-resistant methods. The rationale for creating this type of master data is to help SAP Business One make this ideal situation happen as frequently as possible. The predefined values appear in the drop-down lists for countries, groups of customers, payment terms and more. The default data is the data that fills in fields as a first choice.

Each of these settings provides defaults that are used when master data records are created and controls various behavior in documents that use master data. For example, in the Inventory tab of the System Initialization window, you can select a checkbox to indicate that a given item should be added automatically to every warehouse.

Setting up predefined values and defaults happens in four places in the administration module of SAP Business One:

- Administration → System Initialization → General Settings → BP tab

  Defaults and settings such as credit and commitment limits, commissions, payment terms, payment methods, dunning terms, and approval procedures for business partner master records, as shown in Figure 4-4

- Administration → System Initialization → General Settings → Inventory tab → Items tab

  Defaults and settings such as management methods for serial and batch numbers, default warehouses for items, and whether to show inactive items in reports and document.

- Administration → Setup → General / Business Partner

  Defaults and settings for predefined values such as countries, customer and vendor groups, custom properties, sales employees and address formats.

- Administration → Setup → Inventory

  Defaults and settings for predefined values such as item groups, item properties, warehouses, units of measurement, customs groups, shipping types, cycle count and bin location

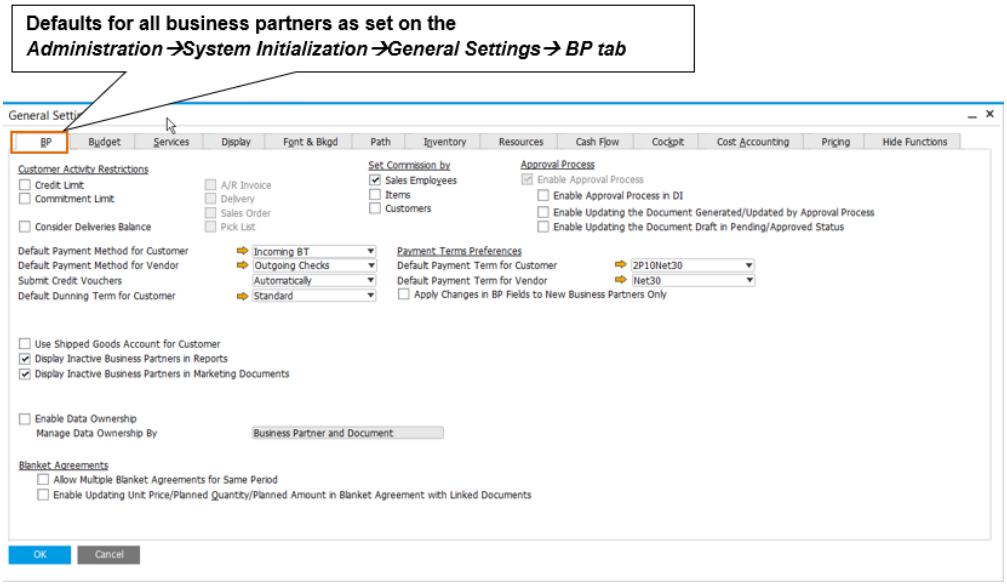


Figure 4-4: General settings for business partners

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

4.4 Creating Business Partner Master Data

With all of the predefined values and defaults in place, it is possible to create master data records quickly and efficiently. As we pointed out in the process overview of setting up master data earlier, it is likely that much of the data will be imported from legacy sources and then massaged into shape. But after that is done, many people will be adding new business partner master records during the course of business as usual to keep track of new customers and vendors, and that's what we are going to review in this section. We will focus on:

- The data that resides in each type of master record
- How that data is used by other parts of SAP Business One

After we cover business partners, we will do the same for item master data in the next section.

4.4.1 Business Partner Master Data Window

The customer, lead, and vendor master data records share a common structure. Figure 4-5 shows a customer master data record with the Accounting tab selected.

Note that in the following discussion we use the term "business partner" to describe both vendor and customer master data settings.

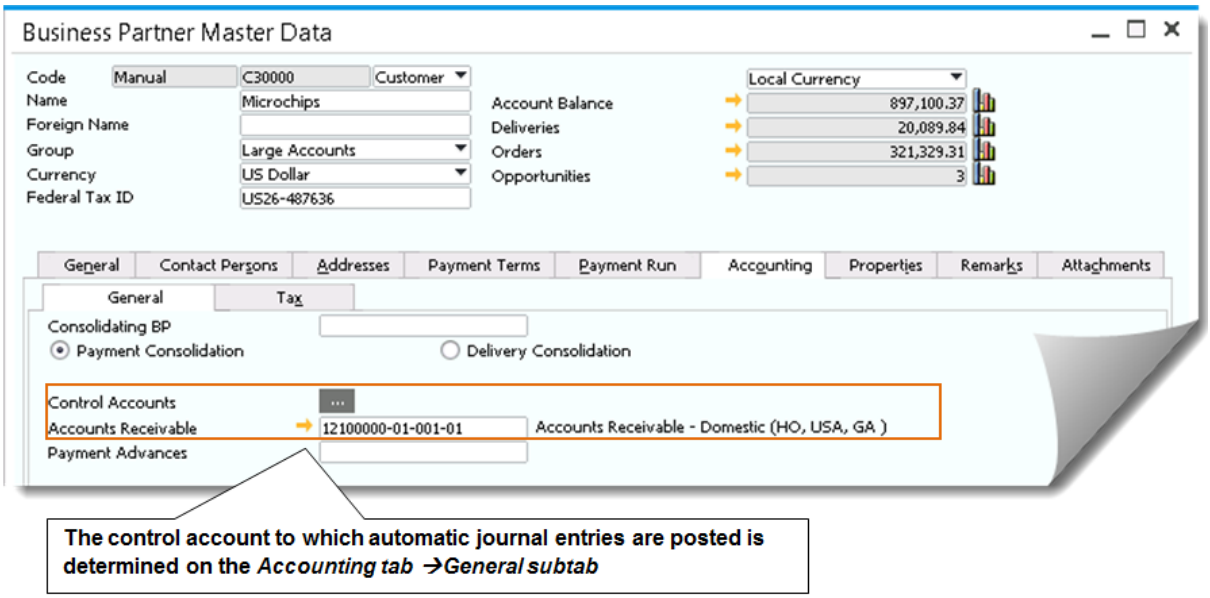


Figure 4-5: Business Partner Master Data window, Accounting tab

Each of the tabs in the master data record has the same header information and a footer that consists of a row of buttons along the bottom.

Right-click a field and choose What's This? to open field level help and get a description of each field.

The Business Partner Master Data header is divided into two groups of fields. The left side lists crucial information about the company. On the right are several fields summarizing the financial activity related to a business partner. Here are some highlights:

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

- Each business partner has a unique ID assigned by the user, the Code field. If a business partner is both a customer and a vendor, you must create two business partner master data records: one customer type and one vendor type.
- The Foreign Name shows the name of the company in its native language.
- The Group specifies the user-defined category in which the customer falls. You choose from a drop-down list of groups defined in the predefined values mentioned earlier. Groups can be used for reporting and dividing up customers for other types of processing.
- The Currency setting is very important because it determines the currency that will be used for documents created for this customer. Once transaction has been posted, you can only change the field value to All Currencies
- The orange link arrows next to the fields on the right side of the header allow you to drill down to see the detail of the documents that make up the summary numbers.
- The graph icons on the far right of the header allow you to display graphs that summarize the activity for the customer.

> **Note**
>
> Master Data Codes. When you move your master data from the legacy system, it is a good opportunity to set new clean and improved codes for your business partners and items. The master data codes are alpha numeric with up to 50 characters for items and 15 for business partners. A common convention is to start customer codes with the letter "C" followed by a certain number of zeroes and to start vendor codes with the letter "V". You can also set automatic numbering, for customers, vendors and items. Go to Administration → System Initialization → Document Numbering. By using the automatic numbering series, you can enforce your coding convention to get unified master data codes. Using the Administration → System Initialization →Manual Master Data Series Converter, you can do a bulk update for existing record with a manual code, to a numbering series.

The General tab, provides a summary of various important aspects of a customer as well as key information about how your company works with the customer. Information ranges from contact information, such as phone numbers and e-mail addresses, to preferred shipping methods to information about which salesperson on your staff handles the account. Business partners, either customers or vendors, can be assigned to territories in the General tab and can also be marked as active or inactive by date range. (Note that all business partners are active, by default.)

In the Contact Persons tab, you can keep track of the contact details for people associated with the business partner. One of those contacts can be set as the default, which means that this name will be populated by default in new transactions for this business partner. You can choose to remove a contact person, if it is not linked to a document, or make it inactive if it does. You can assign contacts with an email group, which is a distribution list. When you send out emails, you can send a message to an email group, and all contacts assigned to it will be included.

The Addresses tab keeps track of multiple bill-to and ship-to addresses for each customer and vendor and allows one of each type of address to be set as the default. The ship-to address is used in the Logistics tab of the sales document. In the US, it is important to assign the appropriate tax code to the customer's ship to address, since the tax rate is determined by the selected location. Alternatively, you can also set up Tax Codes Determination to create rules for sales and purchasing documents that will automatically determine which tax code to use based on different criteria such as business partner group, ship to state, warehouse and user defined fields. Go to Administration → Setup → Financials → Tax. If TaaS (Tax as a service) is used in the company, opt out a particular ship to address from being automatically assigned a tax code in sales documents.

The Payment Terms tab enables you to define all the parameters related to the calculation of the due date of invoices, and how and when the payments should take place (for example, you could set up four installments, the first of which is due 30 days after the invoice was created, and you could also choose whether holidays are considered as business days for the payment date calculation). On this tab, you also enter the business partner's bank information, credit card, dunning preferences, effective discounts and priority.

The Payment System tab specifies the set of parameters required for efficient use of the Payment Wizard.

The Accounting tab, shown in Figure 4-5, displays the control account settings that were made as part of the crucially important G/L account determination. Other fields control dunning and enable you to assign one customer to a group that will be consolidated for billing and payments.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

You can setup relationship between business partners for deliveries or payments consolidation. For example, if customer A is a branch of customer B which is the headquarters, and there is a delivery consolidation setup, the deliveries are issued to customer A, however the invoice is issued to customer B. if payment consolidation is used, customer A gets billed, and customer B pays the invoices.

The Properties tab allows you to set any of the 64 custom properties associated with each master record. Defining the meaning of these properties is part of the job of setting up predefined values. Properties can be used in reporting or to control other behavior of SAP Business One.

At the bottom right use the You Can Also drop-down list to view related service calls, activities, recurring transactions, blanket agreement or create a new activity, opportunity, quotation, order, etc.

4.4.2 Lead Master Data

When you identify a potential customer, you can create a lead master data record using the Business Partner Master Data window. This enables you to document and track the presales activities with this lead. You can create the following documents for lead master data: sales quotation, sales order, sales opportunity, and activity.

When the lead takes the next step and buys a product or service, the lead becomes a customer. In this case, all you have to do is to change the type of the business partner master record from lead to customer. All the information you have added to the lead master data record is saved, as well as the documents you created for this lead. It is recommended to use the same numbering sequence for lead and customer master data codes, since you will not be able to change the code once you have posted documents to this lead.

> **Note**
>
> Additional functions. Once the business partner is set up, right mouse click anywhere in the business partner master data window to access additional functions. You can define Special Prices and Catalog Numbers for the business partner. You can also access a Dunning History report and an Inventory Posting List by BP report.

4.5 Creating Item Master Data

Although item master data is completely different from business partner master data in content, both are set up in a robust yet versatile way. For example, item master records keep track of items that are sold, purchased, and inventoried by your business. Frequently the same items are purchased, inventoried, and sold. The information is the same; it is just used differently.

Item master data is at the heart of almost every process in SAP Business One. It is used in almost every module, including the sales, purchasing, production, MRP, inventory, and service modules.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

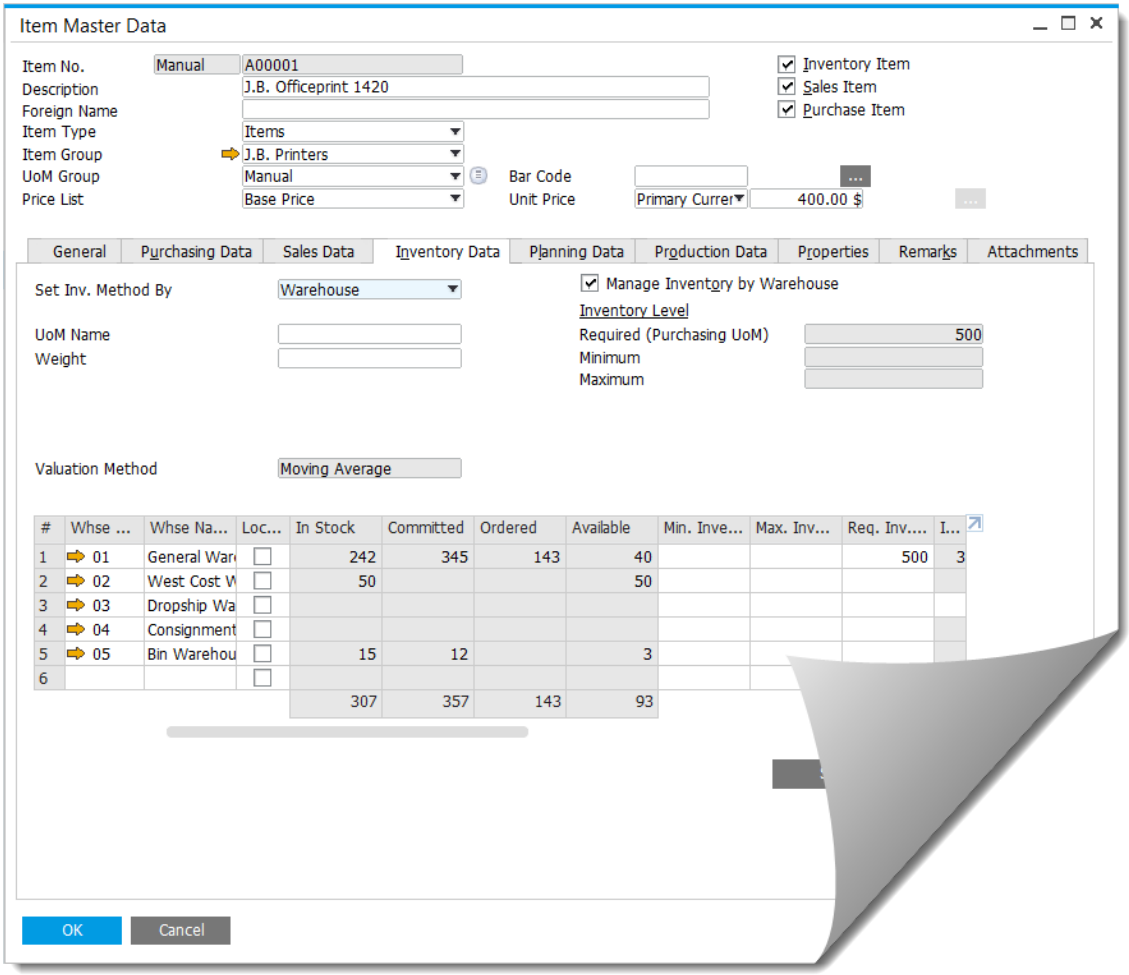


Figure 4-6: Item Master Data window, Inventory Data tab

Figure 4-6 shows the Inventory Data tab of the Item Master Data window. At the top of the window, a header provides the essential summary information about the item. Each tab on the window goes into greater detail about various aspects of the item.

The header of the item master data record contains general information about the item, including a unique ID number assigned by the user or assigned automatically by a numbering series, a description (including a description in a foreign language), and settings to determine the type of the item, the group it belongs to, the price list, and the applicable price. Define one or more barcodes for the item, by Unit of Measure. Checkboxes on the right indicate whether the item is kept in inventory and whether it is offered for sale or purchase (in many cases both apply).

The General tab of the Item Master Data window has a mix of information about the manufacturer of the item, additional identifiers, shipping methods, and issue method.

The Purchasing Data tab indicates the main vendor or vendors who sells the item, how to identify the item in a catalog, the units of measurement used for the item for purchasing purposes, and the actual size of the item. For items with a purchasing history, you can click on the chart icon on the lower left of the tab to display a graphical purchase analysis.

The Sales Data tab contains similar fields to the ones in the Purchasing Data tab such as units of measurement, packaging, and other parameters that determine how the item is handled. It also offers a graphical view of sales data for the item when you click on the chart icon in the lower left of the tab.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

The Inventory Data tab, shown in Figure 4-6, tracks quantities in warehouses and sets inventory and management parameters, such as the following:

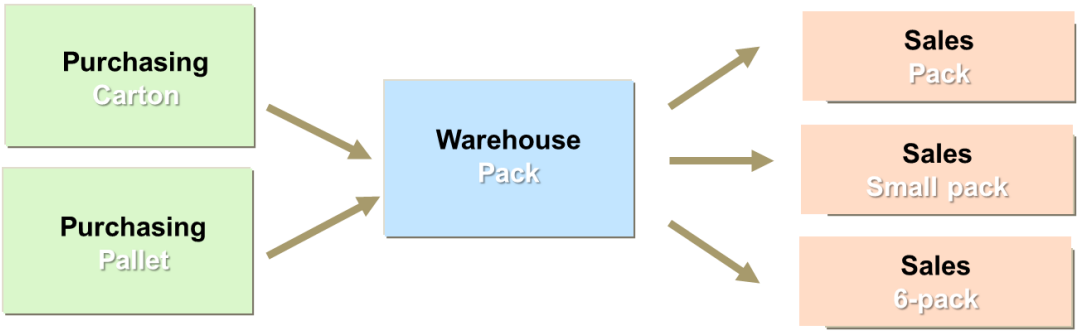
- A valuation method that controls how item costs are calculated. This is applicable when the perpetual inventory system is used in the company. The default is retrieved from the selected item group. When the item is first set up, you can choose a different valuation method (Standard, Moving Average, FIFO or Serial/Batch if the item is managed by serial or batch numbers).
- A Manage Inventory by Warehouse checkbox that determines whether item quantities are managed separately in each warehouse or at the company level. If this box is checked, the Maximum, Minimum and Required quantity fields move from the Inventory Data tab header to the warehouse grid below.
- The actual inventory quantities for the item for each of the warehouses.
- Default Bin, cycle count codes and alerts can be defined by warehouse.

You can read more about perpetual inventory system in the Inventory chapter.

The Planning Data tab contains settings that control how the planning for purchasing or producing an item takes place. The order interval, order multiple, and minimum order quantity can be set here, as well as the required lead time in days. These settings are used by the MRP module.

4.5.1 Units of Measure

Items are sold in different shapes and sizes. You may purchase an item by the carton but sell it by a different packaging. In SAP Business One you can define Unit of Measure groups that explain the ratio between different measures, allowing the system to automatically convert from a base unit to the other units of measure.



There are two setup windows for defining units of measure in the Administration → Setup → Inventory:

- Units of Measure where you define all the possible units your company uses, including volume and weight
- Units of Measure Groups where you define the ratio between a base unit and other units of measure. Figure 4-7 shows a unit of measure group called paper, where the base unit is a pack and the ratio is set up for other units of measure.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

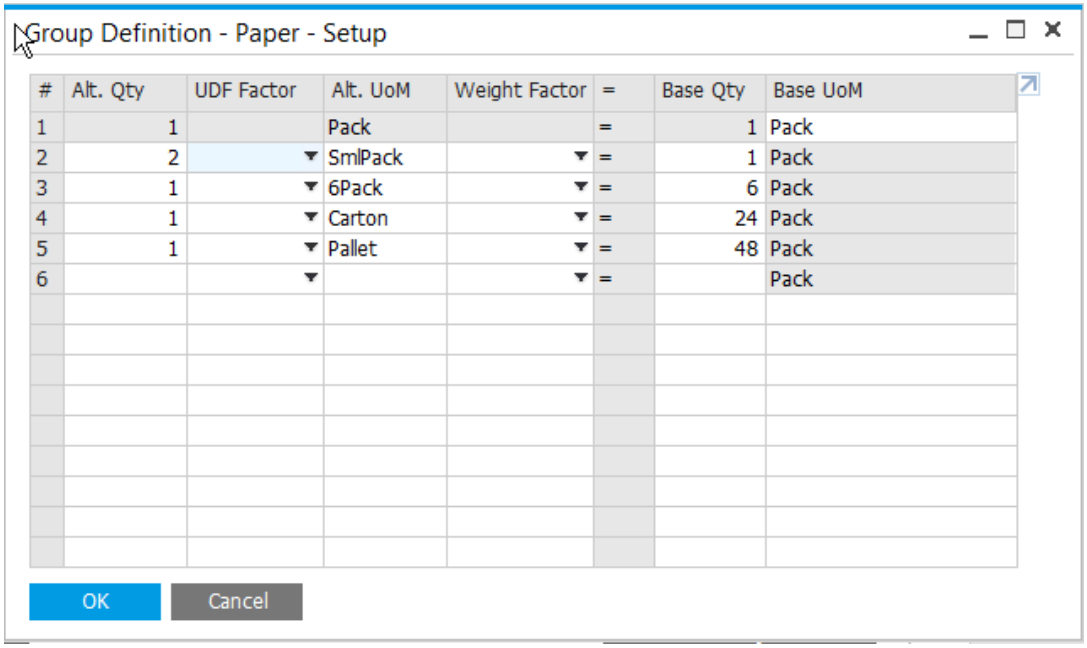


Figure 4-7: Unit of Measure Group setup

In the item master data, you would assign the group and set up a default unit of measure for purchasing, sales and inventory in the respective tabs. Figure 4-8 shows the window opened from the Purchasing UoM Code on the Purchasing Data tab. When you create sales, purchasing and inventory counting documents, the default unit of measure is populated automatically; however, you can replace it if needed. once a Unit of Measure group is assigned to the item, you can select what will be the Unit of Measure inventory cycle count. For Production, goods receipt and good issue, the base unit will be used.

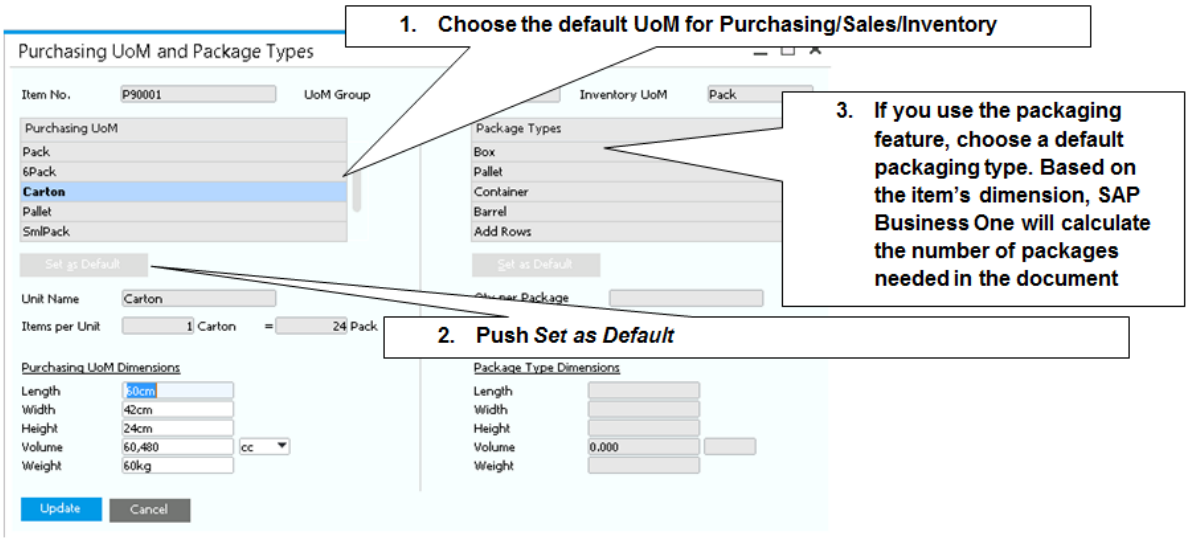


Figure 4-8: Unit of Measure Group Selection

If you are selling items by weight, you can incorporate the weight factor when you create the units of measure groups. For example you purchase a carton of screws, and sell them by kilos or pounds. You create a UoM for kilos and pounds and use the

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

additional column in the unit of measure group window to assign the unit to a weight factor. Based on the weight setup of the company, SAP Business One will convert from the base unit to the appropriate unit in the document. You can also use any user defined field from the item as a factor in the unit conversion.

Pricing can be also determined by unit of measure. You can choose the base unit of measure for pricing. Usually you may go with the base one, however is some cases, it is easier to price another unit of measure. For example, instead of entering the unit price of a single nail, enter the price of the carton. The system calculates the prices of the other units, based on the ration as defined in the group. You can apply discounts as well, during the conversion of the pricing to the other units of measures.

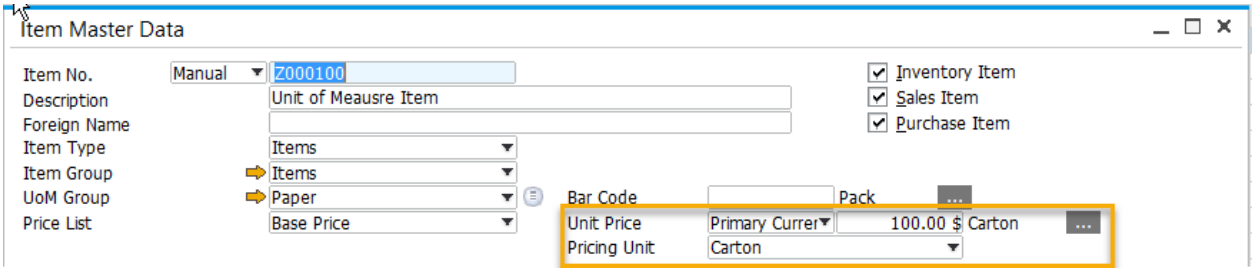


Figure 4-9: Pricing Unit of Measure selection

Note

Manual UoM Groups. If you do not want to define units of measure groups, use the Manual UoM group for your items. Even without setting up a group, you can still create a relationship between a base unit for the item and a different quantity for receiving or selling items. In the Sales Data and Purchasing Data tabs of the item, you can set the Items per Purchase/Sales unit. The quantity entered here is multiplied by the quantity entered in the document to calculate the total quantity of the inventory change. For example, you purchase cases of bottles and each case contains 12 units. When you buy the quantity of 1 case, 12 bottles enter stock. This field can be updated at any time in the item master or in the document itself to reflect different units of measure for the item.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

5 Sales Documents and Accounts Receivable

In This Chapter

- Overview of Sales-A/R Process
- Getting Started
- Taking It Step by Step
- Building One Document from Another
- Processing Groups of Documents
- Accounting and Inventory Impact
- Sales Checklist

Today the sales process is rarely as simple as selling widgets over the counter for cash to one customer at a time. Rather, it has evolved into a complex collection of interrelated processes that may involve some, if not all, of the following: production planning, inventory and logistics management, ordering, billing and dunning, and maintaining customer relationships as well as seeking out new sales opportunities. The sales process starts with nurturing sales opportunities (see Chapter 8 for details), creating sales quotations, entering sales orders, and invoicing customers. This chapter covers the important steps once you've closed the deal, including how to convert a quotation into a sales order, how to make sure that an order is delivered properly, and how to ensure that a timely invoice is generated to enhance positive cash flow.

5.1 Overview of Sales-A/R Process

The sales-A/R process moves from issuing a sales quotation to selling the goods (and services) to delivering those goods to invoicing the customer for their purchases.

Figure 5-1 illustrates this process, and we describe each step in the Taking It Step by Step section. Each of the steps involves a document, such as a sales order or A/R invoice. SAP Business One efficiently moves all relevant information from one document to the next in the document flow. (Note that you can adapt the steps for your needs and business processes.)

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

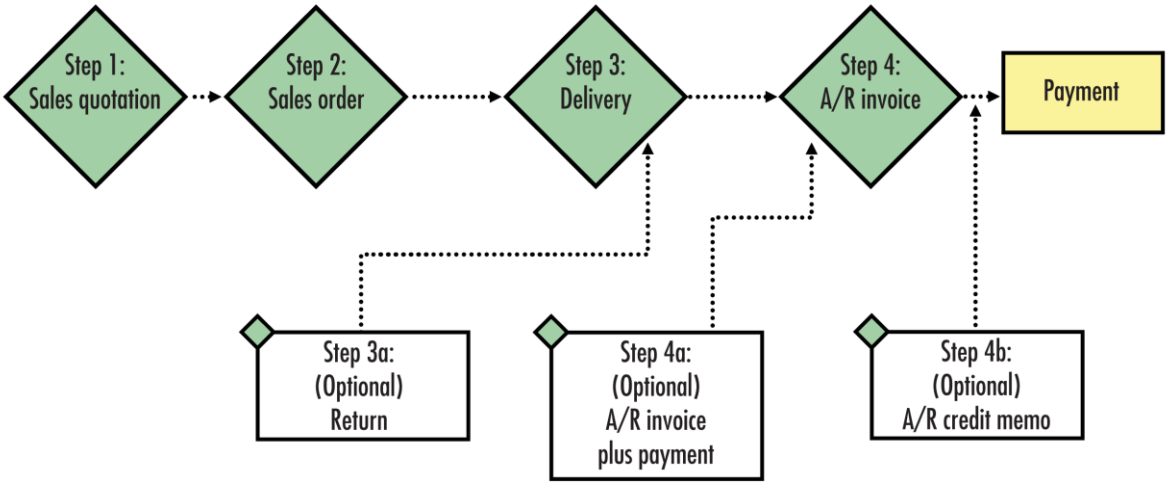


Figure 5-1: Sales and A/R document flow in SAP Business One

5.2 Getting Started

Sales and A/R documents carry much of the same information throughout the sales process. This section helps you recognize what is the same in each document so that you can quickly focus on just the information you need.

Terminologies	Definitions
Item	The term item is used in a very specific way in SAP Business One. It refers only to goods and materials bought, produced, sold, and warehoused. Items can also be used for services the company provides. In this case, the item is defined as a non-inventory item.
Blanket Agreement	The Blanket Agreement is a commitment document from your customer to purchase items or services from you, in a certain period of time. Once sales documents are posted and a blanket agreement exists, the system keeps track of the fulfillment of the agreement.
Sales Quotation	The sales quotation is an offer or proposal containing a price commitment for specific goods or services that you would provide to a customer or a lead if accepted.
Sales Order	The sales order is a commitment from a customer or lead to buy—at agreed-to quantities and price—a product or service from you.
Delivery	The delivery indicates that the shipment of goods has occurred.
Return	The return document reverses—either partially or fully—the postings of a delivery. It is used when customers send goods back or to correct errors made in the base document(s) before the A/R invoice is posted.
A/R invoice	The A/R invoice is the only document that must be created in the sales process. It is the request for payment and records the revenue in the profit-and-loss statement.
A/R Invoice plus Payment	The A/R invoice plus payment is the A/R invoice document you use for cash sales to one-time customers.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Terminologies	Definitions
A/R Credit Memo	The A/R credit memo reverses—either partially or fully—the postings of an A/R invoice. It is used when customers send back goods for which an A/R invoice has already been created or to correct errors made in the A/R invoice.
A/R Reserve Invoice	The A/R Reserve Invoice is an alternative to the standard A/R invoice used to bill your customer before items are shipped. The inventory transaction will take place once the A/R reserve invoice is copied over to a delivery document
A/R Down Payment Invoice	The A/R Down Payment Invoice is used in a prepayment scenario. The amount is recorded to a predefined liability account, and moved to the revenue accounts once the down payment is applied to a standard A/R invoice. This document does not affect inventory.

5.2.1 Common Document Structure

Each sales and A/R document in SAP Business One has similar header and footer fields and four tabs for Contents, Logistics, Accounting and Attachments, as shown in Figure 5-2.

Header fields appear in every window of a sales document. You enter customer data and delivery dates here, unless you are building one document from another (as described near the end of this chapter).

Footer fields appear in every window of a sales document and contain the calculated totals for the sale, including discounts (if any), freight costs, and tax.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

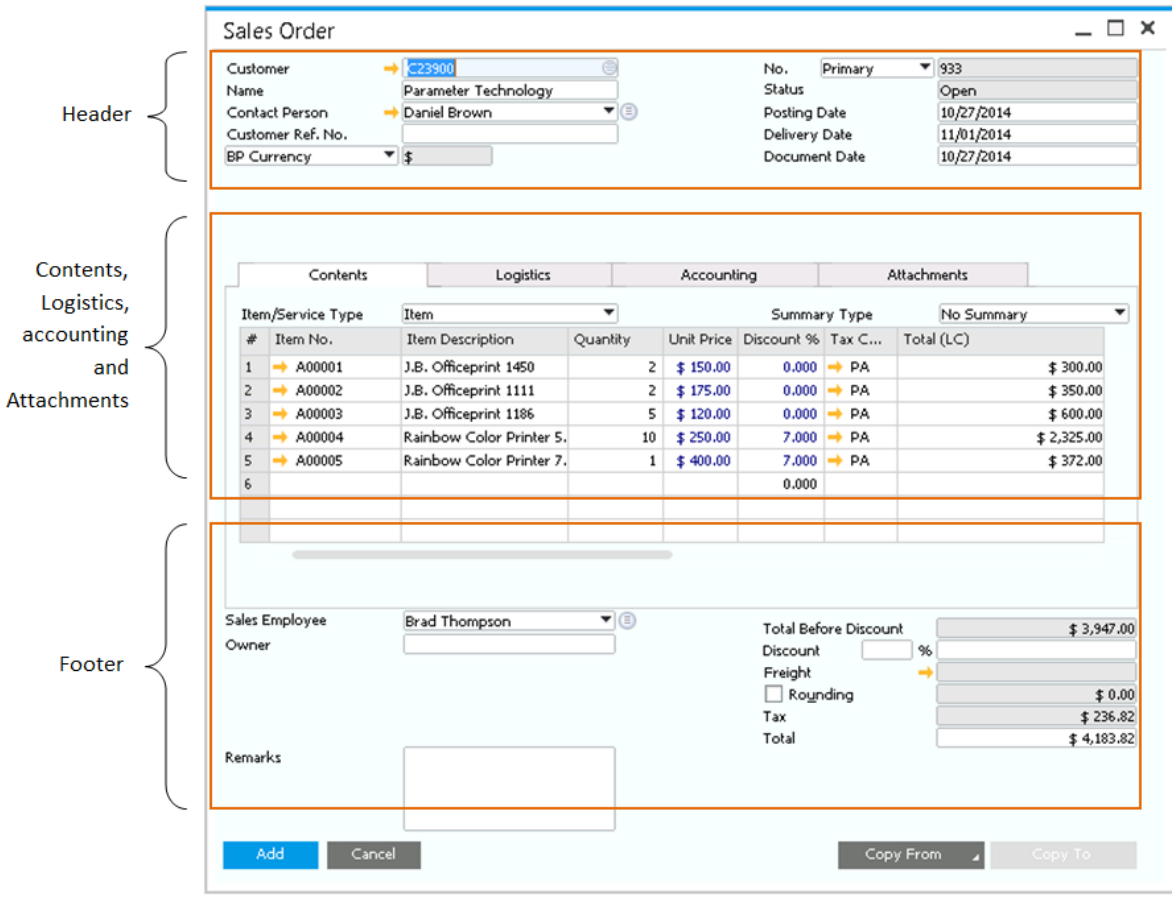


Figure 5-2: Anatomy of a sales document in SAP Business One

The Contents tab includes all the specific information about the ordered items or services.

The Logistics tab describes where items are to be sent and by what shipping method. It also includes a billing address for sending the A/R invoice. Most of the data here is pulled from item and business partner master data you have already entered in SAP Business One. See Chapter 4 for information on master data entry and management.

The Accounting tab contains information about the payment terms, payment methods, installments, the customer's control account and a link to the automatic journal entry that was created after the document is added. See Chapter 3 for more information about G/L account determination and automatic journal entries that come from the sales and inventory modules.

The Attachments tab contains links to different attachment files assigned to this document. To use attachments, you need to define an attachments folder in the Administration → System Initialization → General Settings → Path window. Any attachment file you select is automatically copied to this default folder therefore ensure that the folder is on a server that is available to all users.

5.2.2 Key Data

Ensuring that key data is correct from the outset helps avoid problems later on, especially since SAP Business One allows you to build one document from another, as described later in this chapter. Even if the information is filled in for you, it's a good idea to check and make sure it's correct.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Note

Data entry alert. Only those with proper authorization may enter or update business partners, items, or other master data. See Chapter 10 for more information.

5.2.2.1 Key Data: Customer

Customer data provides information about those buying your goods or services. Before you create a sales document, make sure all relevant data has been entered correctly into the customer's business partner master record. Especially take a look at the bill-to and ship-to addresses to make sure they are correct.

To locate existing customer information, click on the button to the right of the Customer field in the document header or press the Tab key or the Choose from List icon in the Customer field. The List of Business Partners window appears (see Figure 5-3).

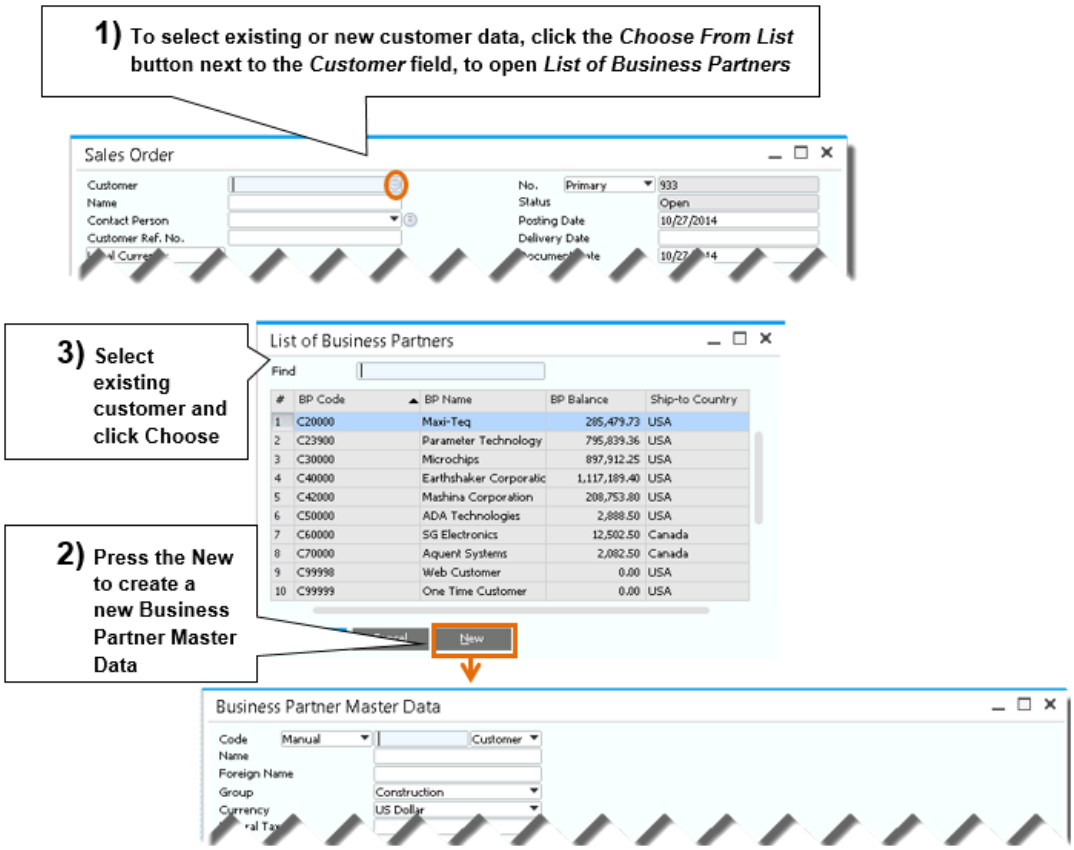


Figure 5-3: Specifying a customer in a sales document

If you are authorized, you can enter new customer information while creating a sales document. To do so, click on the New button on the bottom of the List of Business Partners window to open the Business Partner Master Data window in Add mode.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Note

Choose From List tip. Use the Form Settings when the Choose From List is open to customize which fields appear in the list, as well as how to optionally group the list of customers. This change will apply to any field that has a Choose From List of business partners.

5.2.2.2 Key Data: Item

Item data identifies goods or services being sold. To view a list of items, press the Tab key or the Choose from List icon from the Item No. field in the document's Contents tab. If you start typing the item number or description, the system brings up matching record, which you can choose from. you can activate this feature in the Administration → System Initialization → General Setting → Service tab, check the Enable SAP Business One Suggest box.

Note

Usability tip. What if the customer wants to order multiple items? You can select multiple items from the List of Items by holding down the Ctrl key and clicking on as many items as desired.

You can update customer or item information directly in the relevant fields in the sales document. However, you should note that this information does not update the master data record and is relevant only to the specific sales document where you entered it. If you do change a customer's name or an item's description directly in the sales document, press Ctrl + Tab to proceed when you are finished. Note, however, that if you want to make a permanent change or create a new item or customer, we recommend that you change the relevant master data record or create a new one. That way, the data you update or the new item or customer is available from now on for all users.

Using the form settings feature in SAP Business One, you can add the Type column to the table in the Contents tab of any sales document. You may want to insert subtotals for groups of items ordered. Or you may want to communicate special information about the manufacturing, handling, or shipping of specific items. As long as you have made the appropriate changes using the form settings feature (see Chapter 6, Figure 6-5), all you need to do is click on the drop-down list in the Type field and select T (for text) or Σ (for subtotal).

Note

Key data: ship-to and bill-to addresses. Because SAP Business One automates so much of the processes related to the sales-A/R process, it is essential that you select or enter the correct customer and item data when you initiate a sales order. For example, things as simple as a customer's ship-to and bill-to addresses, if entered inaccurately or incompletely, can have a huge impact on your company's bottom line when goods ordered show up where they are not supposed to or invoices are sent to the wrong office. The tax code and rate is determined based on the ship to assignment, or based on Tax Code Determination, so make sure you select the appropriate ship to address from the drop down list, rather than updating the address manually.

5.3 Key Calculations: Gross Profit and Weight and Volume

The SAP Business One toolbar provides icons for easy access to two useful calculations: gross profit and the weight and volume of all of the items in a sales document.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

5.3.1 Calculating Gross Profit

You can immediately find out the impact of a sales document in terms of the bottom line using the gross profit calculation. Simply click on the (Gross Profit) icon on the SAP Business One toolbar or open the context menu to display a window like the one shown in Figure 5-4.

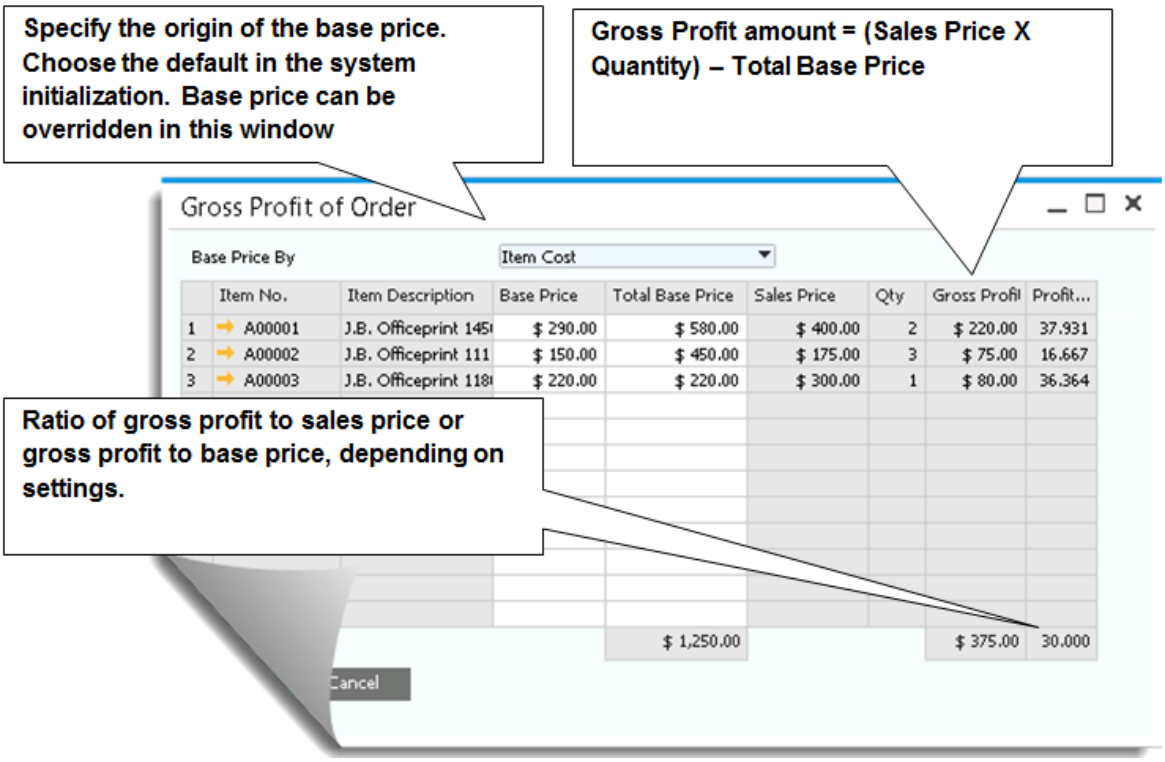


Figure 5-4: The gross profit calculation in action

Gross Profit is calculated by finding the extended sales prices (sales price multiplied by the quantity) minus the extended base price (base price multiplied by the quantity). You can always go back and update base amounts, even if the sales document is already closed. Note that there is no effect on the accounting figures in this case. The Profit % is calculated depending on settings on the Administration → Document Settings → General tab, where you specified whether gross profit percentage is the ratio of gross profit to sales price or gross profit to cost price. On the General tab of the Document Settings window, you can set the default for how the base price is calculated: the item cost (the default shown in Figure 5-4), a specific price list, the cost of the item, which is the recommended option, the last purchase price, and so forth.

Note

Gross profit for service documents. In service type documents, there is no item master data therefore the base price cannot be retrieved automatically. If you would like to calculate gross profit in these documents, define the default % on the Administration → Document Settings → General tab.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

5.3.2 Calculating Volume and Weight

Determining the volume and weight of an order is critical to the logistics of sending and receiving orders. To calculate the volume and weight of all the items in a given sales document, click on the (Volume and Weight) icon on the SAP Business One toolbar. Volume and weight information is pulled from master data for each item and totaled automatically. Note, however, that if some items do not have this information in their master data records, the total will not be accurate.

5.3.3 Key Reminders: Adding an Activity to a Sales Document

You may want to record information about your contacts with customers. For example, you might want to make notes about a phone call or a meeting with customers. You might also want to set a reminder so that you can follow up to make sure the customer received the merchandise and is satisfied. You can add an activity to any sales document. Display the sales document as the active window and select Go to → New Activity from the menu bar to display the Activity window or right-click and select the New Activity option. In the Activity window, you can specify activity types and make notes about the activity. You can also set an activity to repeat using the Recurrence option. The activity automatically links to the sales document displayed. You can do the same for master data records and other document types. For more information, see Chapter 8.

5.4 Taking It Step by Step

Now we look at the Sales-A/R process in more detail one step at a time, starting with the sales quotation.

5.4.1 Step 1: Sales Quotation

Before customers commit to ordering, they frequently want a sales quotation that they can review and circulate within their company. You can enter and work with sales quotations either in this module or through the Microsoft Outlook integration add-on for SAP Business One, as described in Chapter 8. Sales quotations can be created for leads or customers.

To create a sales quotation, select Main Menu → Sales - A/R → Sales Quotation. A blank sales quotation appears. You specify a customer (or lead) and the desired items. Once you are satisfied with the quotation details, click Add. SAP Business One adds the sales quotation. You can make changes later as needed.

As described in the previous section, you can view the calculation of the gross profit and the weight and volume of an item. Simply click on the relevant icons in the SAP Business One toolbar.

> **Note**
>
> How does SAP Business One manage price information? In SAP Business One, prices are defined for items in price lists. A price list is assigned to a business partner (customer or vendor). When you choose an item, unit prices appear based on the price list assigned to the customer or lead. The assigned price list appears in the Form Settings window for the document and if necessary, you can select a different price list for that document. This change will not override the price list in the customer master data. On top of price lists, you can offer special discounts for added flexibility. See Chapter 12 for more information on entering and managing special prices and various discounts for items.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

A unique feature for sales quotations is the alternative item row type. Imagine your customer is interested in a couple of expensive printers but would also like to know about more affordable printers as part of the quotation. By adding an Alternative row type you include additional items without affecting the total amount of the quotation. When you convert the quotation to a sales order, you can decide whether to delete the alternative items, or include them as regular items.

5.4.2 Step 2: Sales Order

The sales order is an important document - it tells everyone to get busy filling that order. As such, this document is important for planning production, picking the items from the warehouse, creating purchase orders, and scheduling resources. One unique feature of SAP Business One is that you can create purchase orders directly from sales orders or use a wizard to create purchase orders in bulk, in addition, when placing an order to inventory items, the ordered quantity increases the committed quantity of the item, therefore lowers the available quantity thereby streamlining your supply chain as well as material requirements planning processes (see Chapter 7 for details).

5.4.2.1 Creating and Adding a Sales Order

You can create a sales order either from a sales quotation or from scratch. Figure 5-5 shows how to create a sales order from a sales quotation using the Copy To button.

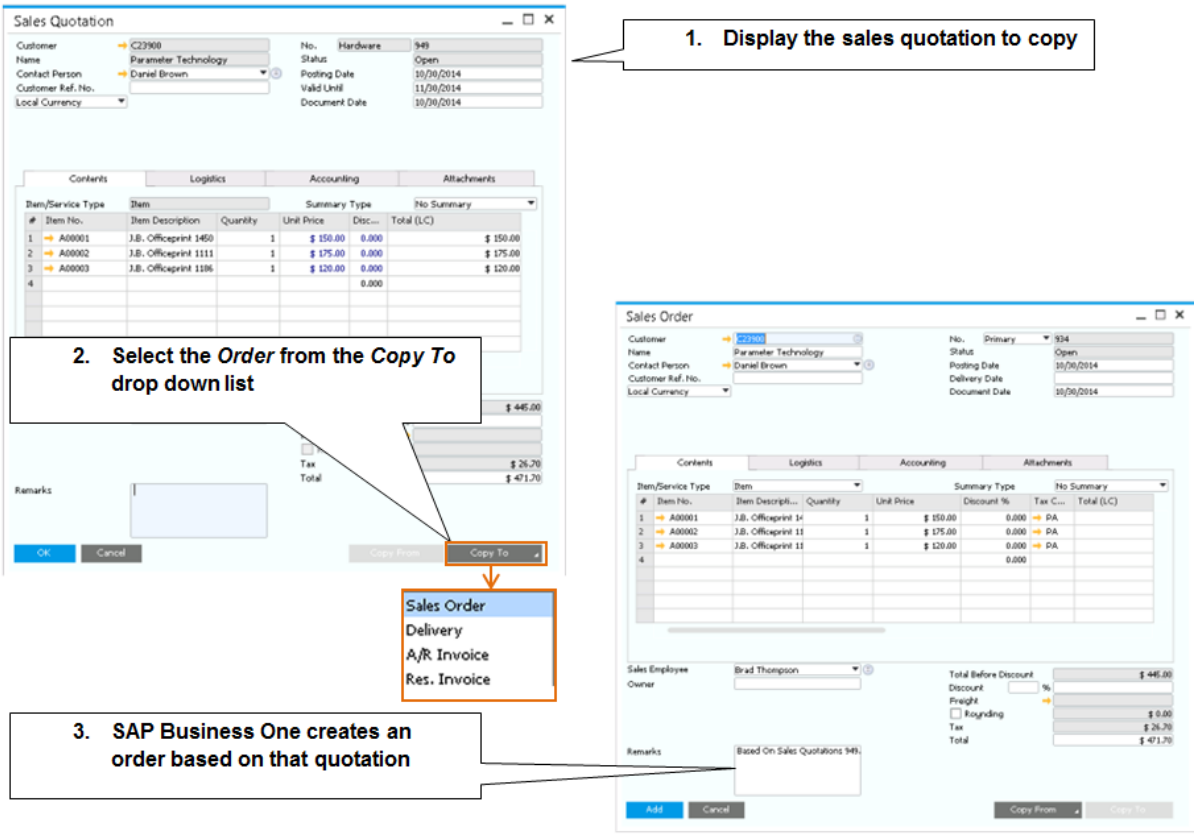


Figure 5-5: Copying a sales quotation to a sales order

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

The Copy To button provides an almost instantaneous way to create the next document in your process. It copies all the information from the base document. Now you can make changes in the target document, such as reducing quantity and adjusting prices. See Building One Document from Another later in this chapter for more information.

You can create a new sales order with no reference to a quotation by selecting Sales - A/R → Sales Order. When master data is set up properly, you enter information in just a couple of fields:

- Customer field: See Figure 5-3
- Items: Enter items and specify quantities

If you are not ready to add the sales order (by clicking on the Add button), you can save it as a draft (by choosing File → Save as Draft). See Chapter 10 for more information about document drafts.

You can change a sales order (changing quantities, updating prices or discounts, and so on) after you've posted it, as long as you have selected the option to allow changes to existing orders under Administration → System Initialization → Document Settings → Per Document tab → Sales Orders. You can only change orders that are open.

If a sales process is stopped, and the sales order has not been copied to a higher level A/R document, such as a delivery or an A/R invoice, it is possible to cancel it (as shown in Figure 5-6). However, when a sales order has been copied, either entirely or partially, to a higher-level A/R document, the sales order cannot be cancelled; it can only be closed. If you want to only cancel a particular row, right-click it, and choose Close Row.

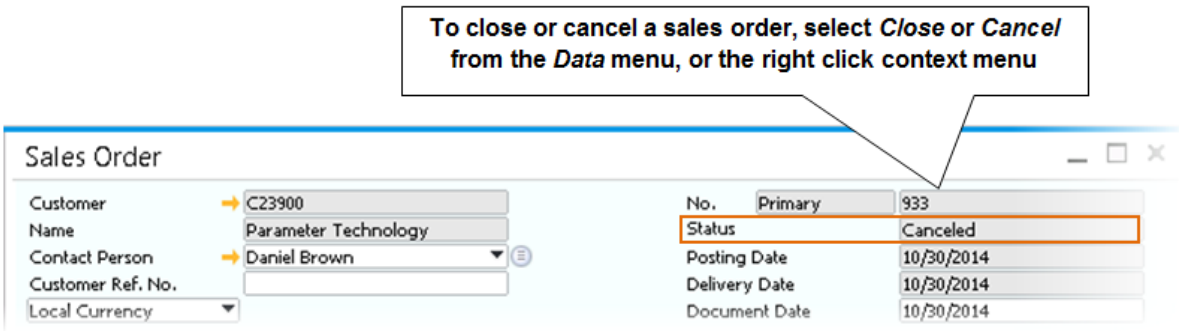


Figure 5-6: Cancelling or closing a sales order

Note

Document handling alert. Like all documents in SAP Business One, a sales order is not deleted when cancelled or closed. It can still be displayed and printed, but it cannot be changed or copied to a higher-level sales document. In addition, a cancelled or closed document in SAP Business One is no longer displayed in the open items list.

In a sales order, you can commit specific batch and serial numbers to your customers, for items that are managed by batch/serial numbers. Right-click the quantity field, or press CTRL tab, and select the Batch/Serial Numbers option. The selected batches and serials are allocated to this sales order and cannot be taken by another sales document however you still need to reconfirm this selection, when you deliver the item using a delivery or an A/R Invoice.

You can easily create a pick list directly from the order screen, by right clicking and selecting Generate Pick List. Find additional information on the Pick and Pack process in chapter 12.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

5.4.2.2 Item Availability Check

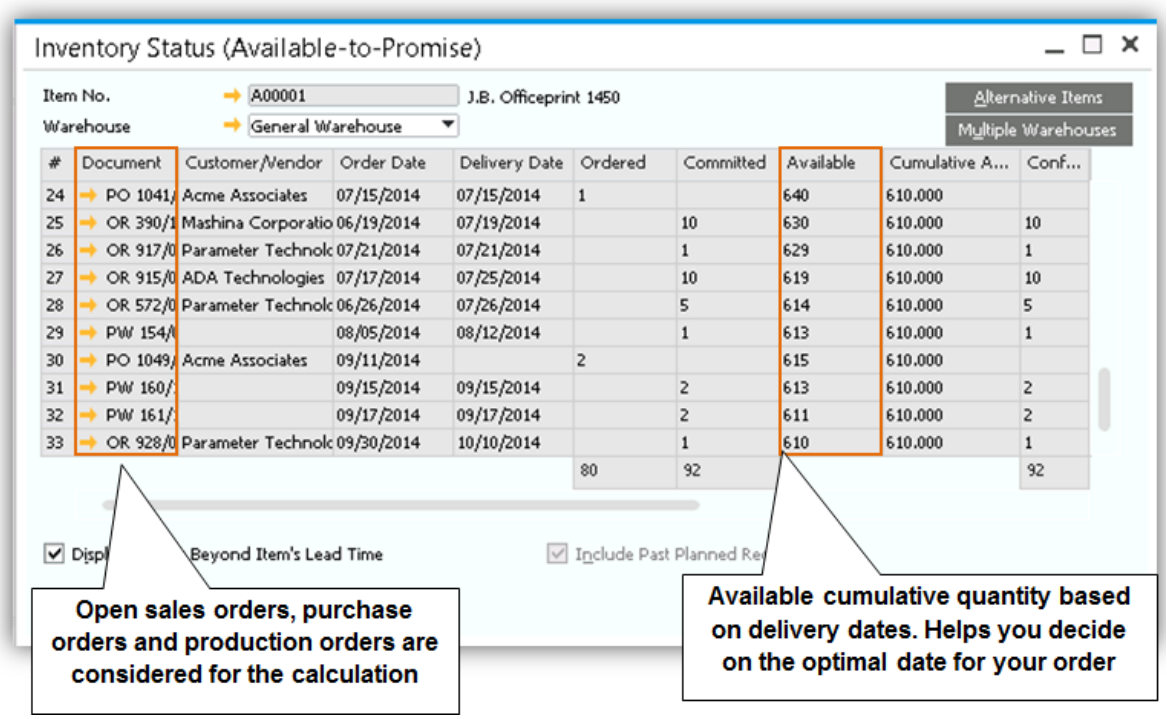
A sales order represents a commitment that the items will be delivered in full at a certain date. How can you make sure you fulfill this commitment to your customers? This is where you can use the Item Availability Check. To activate this option, go to Administration → System Initialization → Document Settings → Per Document tab → Sales Orders and check the Activate Automatic Availability checkbox.

As you enter the quantity for an item in a sales order, if the available quantity for this item falls below the amount required, a new window opens that displays the following options:

- Continue – ignores the alert, and keep the items as entered
- Change to Available Quantity – the quantity in the row changes to what is currently available regardless of the date.
- Change to Earliest Available – the row's delivery date changes based on the earliest date that the quantity is available. If this quantity is not available in future, this option is disabled.
- Display Available to Promise Report – the report shows cumulative quantity by date, based on the report you can change the delivery date for that item. See figure 5-7.
- Display Quantities in Other Warehouses – opens the Items by Warehouse report. If the quantity is available in another warehouse, this report can provide the information needed.
- Display Alternative Items – opens the Alternative Items – Selection, where you can choose to offer a different item that you do have available. The alternative items should be predefined for the current item.
- Delete Row – deletes the current row.

Even if you do not wish to use the automatic availability check, you can manually open some of the options:

- Right-click the item code to open the alternative items.
- Right-click the quantity to open the available to promise report.
- Right-click on the warehouse code to open the items by warehouse report.



#	Document	Customer/Vendor	Order Date	Delivery Date	Ordered	Committed	Available	Cumulative A...	Conf...
24	PO 1041/	Acme Associates	07/15/2014	07/15/2014	1		640	610.000	
25	OR 390/1	Mashina Corporatio	06/19/2014	07/19/2014		10	630	610.000	10
26	OR 917/0	Parameter Technolc	07/21/2014	07/21/2014		1	629	610.000	1
27	OR 915/0	ADA Technologies	07/17/2014	07/25/2014		10	619	610.000	10
28	OR 572/0	Parameter Technolc	06/26/2014	07/26/2014		5	614	610.000	5
29	PW 154/		08/05/2014	08/12/2014		1	613	610.000	1
30	PO 1049/	Acme Associates	09/11/2014		2		615	610.000	
31	PW 160/		09/15/2014	09/15/2014		2	613	610.000	2
32	PW 161/		09/17/2014	09/17/2014		2	611	610.000	2
33	OR 928/0	Parameter Technolc	09/30/2014	10/10/2014		1	610	610.000	1
					80	92			92

Figure 5-7: Available to Promise

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Note

Backorder. If you would like to place a backorder, simply create a regular order. Use the backorder report located under sales reports, to trace backorders and their status. The report shows open rows from sales orders, the ordered quantity, the delivered quantity and the backorder quantity.

5.4.2.3 Advanced Available-to-Promise Check and Delivery Scheduling

With the SAP Business One version for SAP HANA you can activate an advanced Available to Promise (ATP) check in the Administration → System Initialization → Document Settings → General tab.

Click the icon on the tool bar to open the ATP check. A graphical view displays an item's availability. You can scroll right and left on a timeline to see when the item is available as shown in figure 5-8.

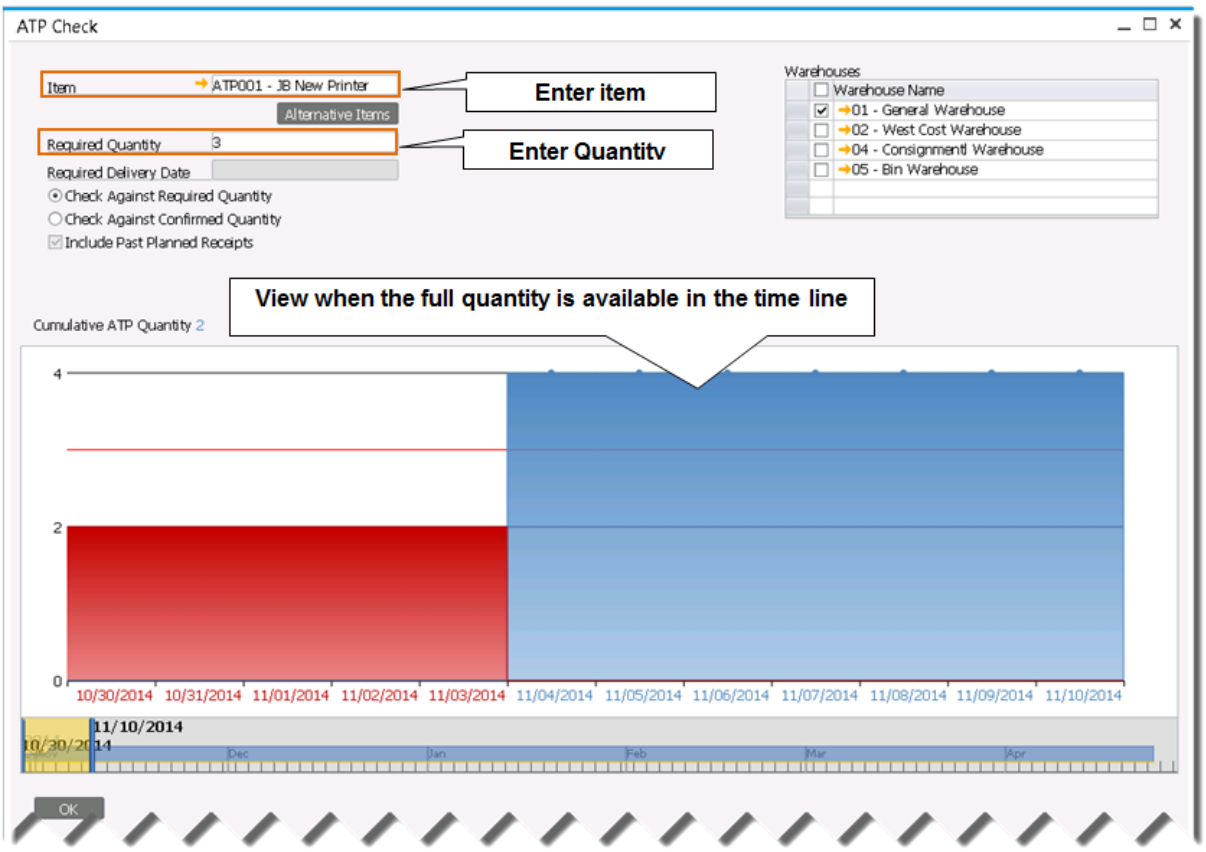


Figure 5-8: ATP Check

When you go ahead and place an order, SAP Business One verifies there is enough quantity available to deliver on the required date. In case there is insufficient quantity, the Delivery Schedule Details window opens with recommendations for quantity and delivery dates. In this example, the customer ordered three printers, however only two can be delivered on time, and the third one will be delivered in a later date as shown in figure 5-9. If there is not enough available quantity on the dates needed, you can choose a delivery strategy:

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

- Delivery Proposal - splits the delivery to match your available quantity
- One-Time Delivery – only delivers the items that can be sent on time
- Complete Delivery - postpones the delivery so the entire quantity is delivered in full.

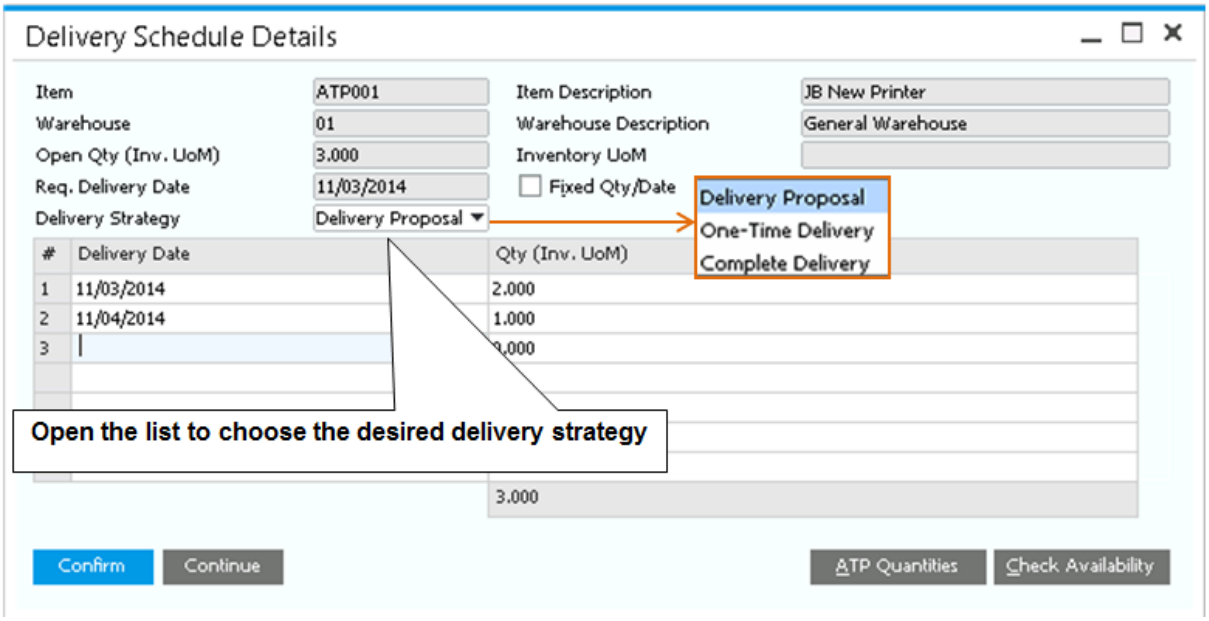


Figure 5-9: Delivery Schedule in Sales Order

Delivery Schedule Management is a tool for rescheduling orders. For example, you have a VIP customer that requested items, which are committed to another customer. You can use the Delivery Schedule Management to view all open orders for the item with the ability to reschedule one sales order so that you can fulfil the VIP customer's order. You can open the Delivery Schedule Management inside a saved order by right-clicking on a row to view a list of all open orders for that item. Alternatively, you can choose the (Delivery Schedule Management) icon on the tool bar then select the item.

Figure 5-10 shows the process of rescheduling a prior order so the sales order with the higher priority is delivered in full on time.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

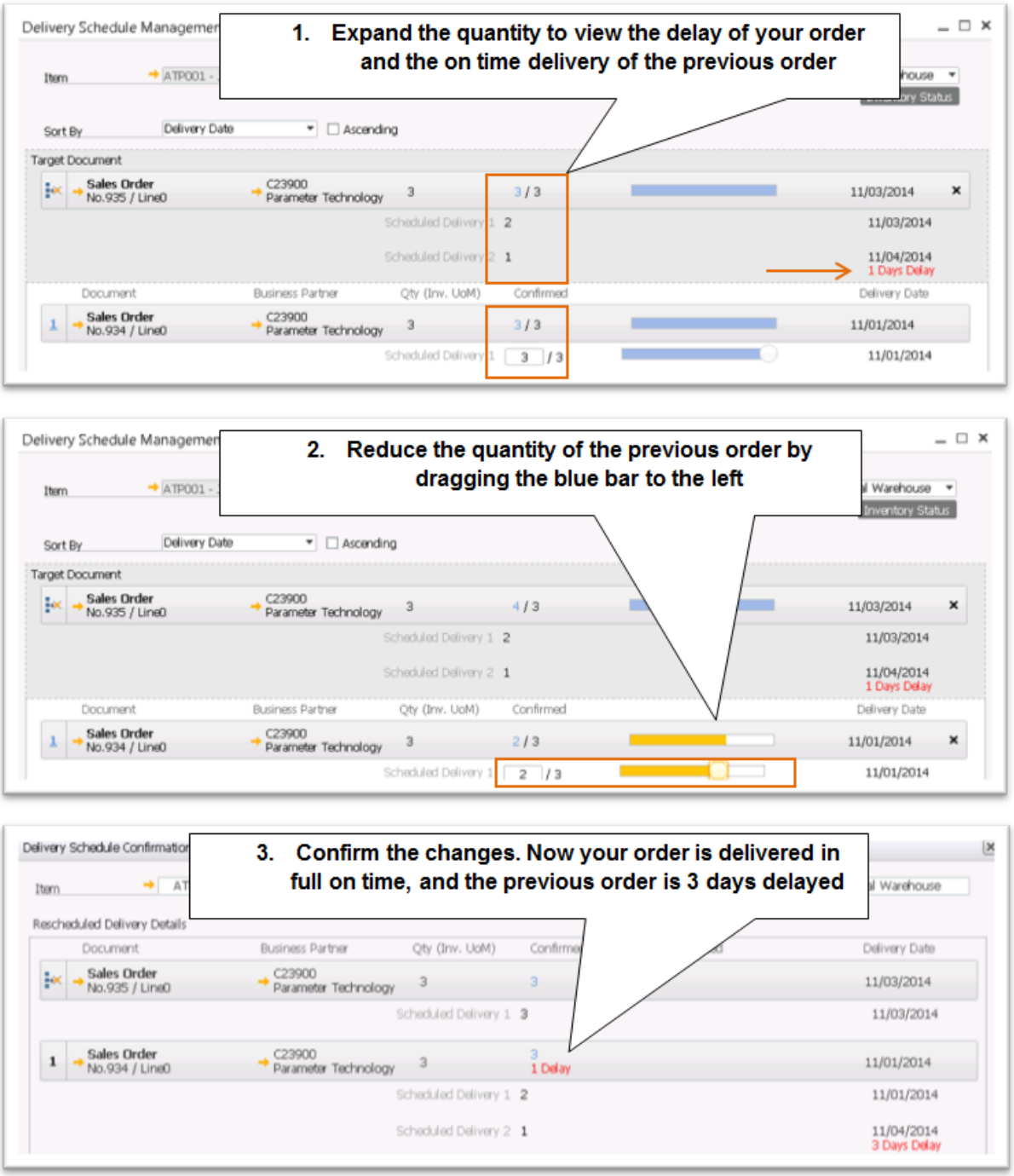


Figure 5-10: Rescheduling order using the Delivery Schedule Management

5.4.2.4 Drop Shipment

How would you handle a sales process where your company only serves as the intermediary between customers and vendors? Your customer orders from you and you order from a vendor that ships the items directly to your customer. This is where you

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

can use the Drop Ship warehouse functionality. Dedicate one of your warehouses to drop shipment, and apply it to the sales order when appropriate. When you add the order, the system automatically recommends a purchase order creation. In the confirmation screen, you choose which items to order, the vendor and the prices. You just need to accept and a purchase order is created in addition to the sales order. The ship to address in the purchase order is the customer's ship to address from the sales order.

When using a drop ship warehouse, as opposed to a regular warehouse, no inventory transaction is posted and the committed quantity is not increased. This means that, even during the delivery of the items, there will be no effect on the inventory level, nor is a journal entry posted to reflect inventory value changes. Thus, the drop ship warehouse is not part of the different inventory reports.

To setup a drop ship warehouse go to Administration → Setup → Inventory → Warehouses. Select the Drop Ship checkbox.

> **Note**
>
> Automatic PO creation. It is possible to create a purchase order automatically, similar to drop ship function, by checking the Procurement Document box on the Logistics tab of the sales order. This will open the Procurement Confirmation Wizard allowing you to create a purchase order or a production order. This function is useful if you do not keep your inventory items in your warehouse, but you want to purchase on an order-by-order basis and reflect the inventory movement in your general ledger. You can also use the Procurement Confirmation Wizard to create PO's based on Sales Orders in bulk. See more information in chapter 10.

5.4.2.5 Accounting and Inventory Impact of the Sales Order

In SAP Business One, a sales order affects the available stock level. This means that the stock available to sell is reduced by the quantity in the order. When you enter sales orders, no value-based changes are posted to the G/L, but the items are added to the committed quantity in the inventory module.

When an order for items is cancelled or closed, the committed quantity in the inventory module is decreased. You can view the ordered quantities in various reports, such as the inventory status report. This information is important for optimizing sales processes and stock levels.

5.4.3 Step 3: Delivery

A delivery indicates that goods have been shipped. A delivery is sometimes referred to as a packing slip.

5.4.3.1 Creating and Posting a Delivery

To create a delivery, select Sales - A/R → Delivery. A blank delivery appears; you select a customer and fill in the items for delivery. To post the delivery, click Add.

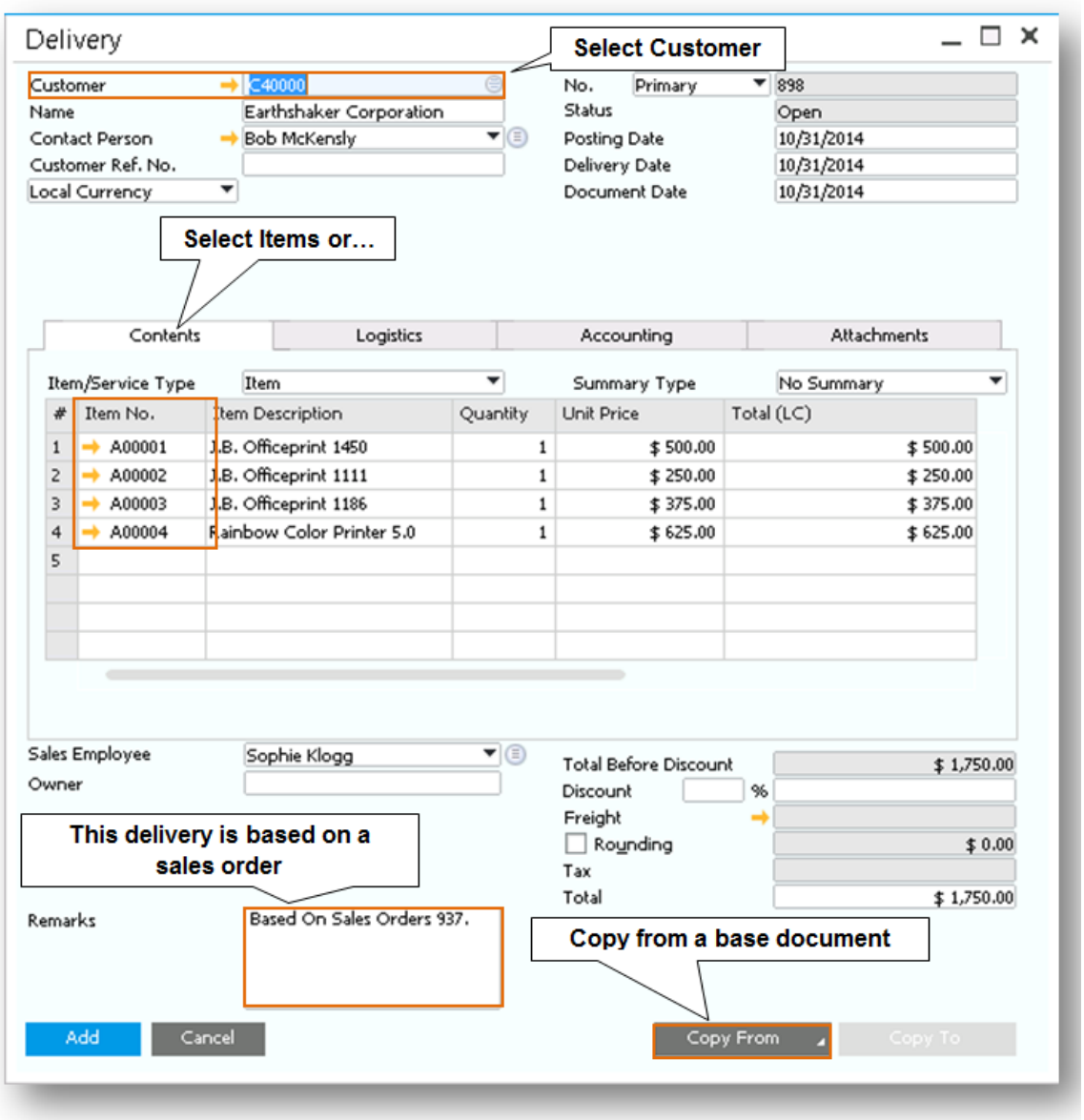
Often you may want to create a delivery from a sales order or sales quotation. To do so, simply display the sales order or quotation and select Delivery from the Copy To button's drop-down list. Alternatively, you can create a delivery from multiple orders or quotations; see Building One Document from Another later in this chapter for more details.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Note

How does SAP Business One facilitate the pick and pack process? Once you have created a new sales order with an approved status, you may use the pick and pack manager, accessed through the inventory module, to handle your picking activities. The process starts with the creation of a pick list, moves to the reporting of picked quantities, and terminates with packaging and delivery. The pick and pack manager allows you to release some or all items to a pick list, perform a partial pick for the items, or pick all items. You can also create a delivery at any stage of the picking process. See chapter 12 for more information on the pick and pack process

You can cancel a delivery document, choosing the Data → Cancel or by choosing the same option in the context menu. In this case, a new cancellation delivery document is opened, and both the inventory and the accounting transactions are reversed, once you add the cancelation delivery. Use this option when you make a mistake creating the delivery document. For example, if you choose the wrong customer or item. Alternatively, if items were delivered and sent back to you, create a return document based on the delivery to reverse all the transactions. You cannot create an A/R invoice from a delivery that has been closed or canceled nor can you create another sales document with reference to the delivery. You can no longer make changes to the closed delivery either.



© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Figure 5-11: Creating a delivery

Note that you cannot copy from a sales order to create a delivery if the business partner is still classified as a lead. See the following text box for details about changing a lead to a customer.

> **Note**
>
> How does a lead become a customer? You change a lead to a customer in the business partner master data. Go to the business partner master record and select Customer from the drop-down list to the right of the business partner code.

You can identify the packaging structure in a delivery document. This is especially useful when you pack and ship large number of items. Select the Packing Slip option from the context menu. Here you can allocate items and quantities to package types.

If one or more items are managed by serial or batch numbers, right-click the quantity field, and select the Batch/Serial Numbers option, to identify which batch and serials are released from stock.

5.4.3.2 Accounting and Inventory Impact of Delivery

Creating a delivery in SAP Business One reduces the actual inventory levels. When you post a delivery, the corresponding goods issue is also posted. The goods leave the warehouse and the relevant inventory changes are posted. The inventory account is credited and the cost of goods sold account is debited based on the current item cost.

To accommodate the Matching Principal in the US, instead of posting to the cost of goods sold during the delivery creation, you can check the Use Shipped Goods Account box in the delivery or the business partner window, accounting tab. Once the delivery is converted to an invoice, the cost of goods sold will be debited, and the shipped goods account will be credited and cleared. The default account should be defined in the G/L account determination.

> **Note**
>
> Perpetual inventory alert. When your company is set up to use perpetual inventory, it is crucial that all items have a cost before you sell them. Otherwise, upon the delivery of the items, the G/L does not reflect the change in inventory value. You can choose to block this situation by deselecting the Allow Stock Release Without Item Cost checkbox from Administration → System Initialization →Company Details → Basic Initialization.

5.4.4 Optional Step: Return Request

For various reasons, customers sometimes return goods. If your company has a procedure that requires an approval prior to accepting a return, use this document. A return request can be based on a delivery or an A/R invoice, as well as a stand-alone document. The return request can be used to return the full quantity or part of it. From inventory perspective it is treated as a sales order - the item is considered ordered and available quantity is increased, however no accounting entry is created.

Once the return request is approved, you can copy it to a subsequent document, depending on whether it was based on a delivery or an invoice, it can be converted to a return or a credit memo.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

5.4.5 Optional Step: Return

The return document reverses a delivery document. . If the returned goods have already been invoiced, you should create an A/R credit memo instead, as described later in this chapter.

When you enter a return document, you reverse—either partially or fully—the posting of a delivery. Once a return document is posted, the inventory quantities are updated. Posting a return document also automatically updates the inventory value using the original item cost that was used in the delivery it's based on. If the delivery was based on a sales order, it can be reopened once the return is posted. To allow your users to reopen orders, activate the option in Administration → System Initialization → Document Settings → Per Document tab.

5.4.6 Step 4: A/R Invoice

Once you deliver goods or provide services, you bill the customer using an A/R invoice. An A/R invoice is a request for payment. Posting an A/R invoice records the revenue in the profit and loss statement.

5.4.6.1 Creating and Posting an A/R Invoice

You can create an A/R invoice from single or multiple sales quotations, sales orders, or deliveries (see "Building One Document from Another" later in this chapter). You can also create an invoice from scratch by selecting Sales - A/R → A/R Invoice.

Once an A/R invoice has been posted, it cannot be changed or deleted because it is a legal accounting document that creates entries in the G/L.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

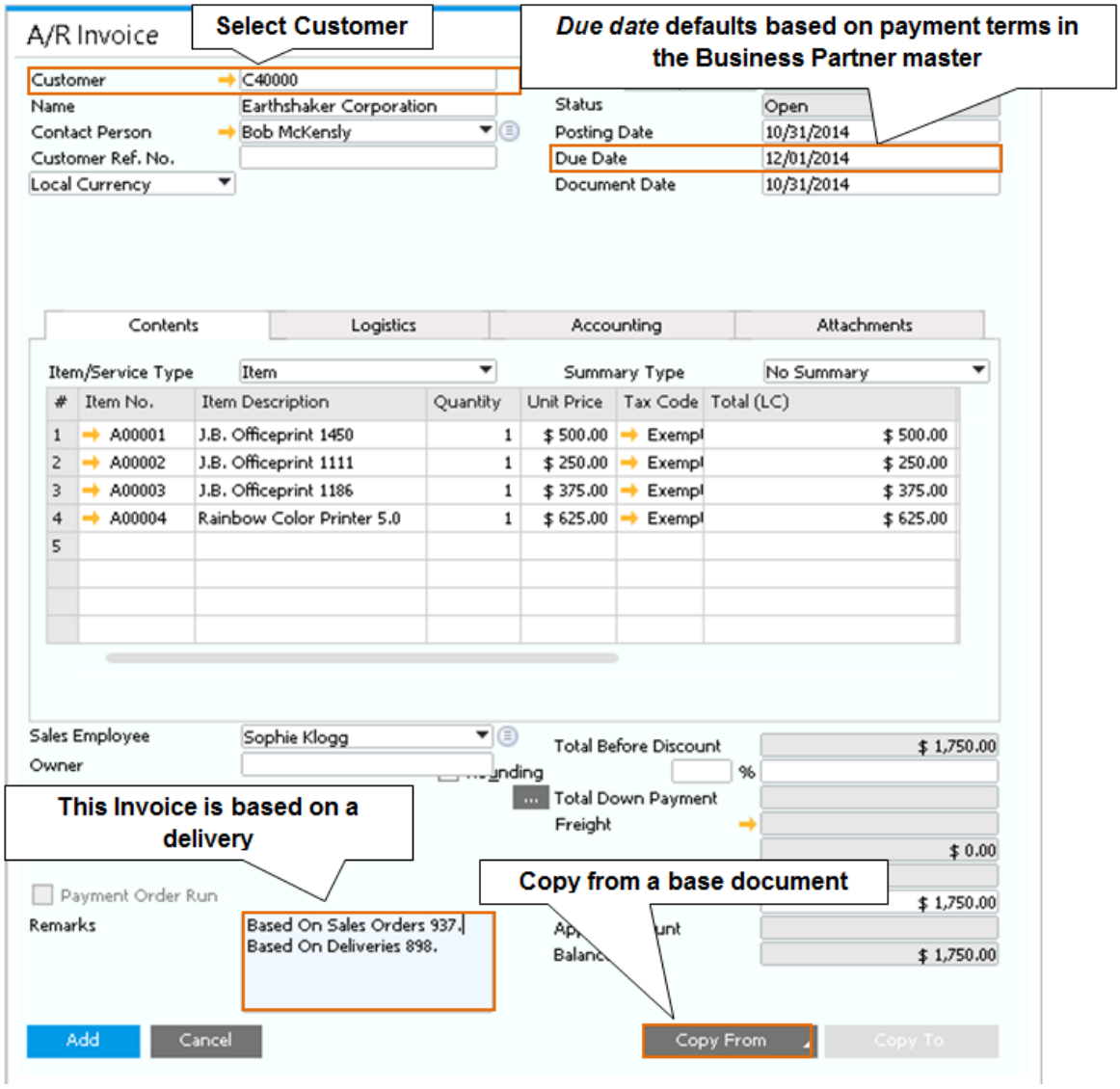


Figure 5-12: Creating an A/R invoice

Note

Tax Only Invoice. SAP Business One allows you to post a Tax Only invoice. For example, if you gave away items as a gift or a trial, and you must charge sales tax, use the tax only function.

The tax amount is calculated based on the unit price and the journal entry reflects the tax posting only. Use the Form Settings icon to add the Tax Only column to the invoice table.

5.4.6.2 Accounting and Inventory Impact of the A/R Invoice

Once posted, the A/R invoice posts a journal entry to the corresponding customer and revenue accounts. If it is posted without reference to a delivery, the A/R invoice also decreases inventory values and quantities. The inventory account is credited, and

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

the cost of goods sold account is debited based on the current item cost in addition to the postings to customer and revenue accounts.

> **Note**
>
> Negative Invoice. An invoice can include negative rows. A negative row can be used to record credits or returns from the customer in the same document instead of creating an additional one. It is also possible to have the invoice total as negative. A message appears once you add the invoice, however if you confirm it, the negative invoice is added.

Similar to orders and deliveries, an A/R invoice can be cancelled, by right clicking and choosing Cancel. Use this method in case you simply made an error. If you are actually crediting the customer on goods that were returned for example, use a credit memo document.

5.4.6.3 Optional Step: A/R Invoice Plus Payment

You use this document for cash sales to one-time customers. However, before you can do so, you need to create a separate master record for one-time customers. This master record is usually defined during the configuration of SAP Business One when you determine the primary G/L accounts. If you haven't already specified a default one-time customer, you can do so by going to Administration → Setup → Financials → G/L Account Determination. Choose the Sales tab. On the General subtab, press Tab in the Default Customer for A/R Invoice + Payment field to display a list of customers. Select a customer or enter a new customer for this purpose.

To enter a one-time sale, select Sales - A/R → A/R Invoice + Payment. SAP Business One fills in the one-time customer's information for you; however you can select any other customer record. Enter the items, quantities, tax code, and any discounts, then click the (Payment Means) icon to display the Payment Means window. Enter a payment for the full amount of the invoice and click OK. (Partial payments cannot be accepted.) Click the Add button to complete the sale.

SAP Business One manages the A/R invoice plus payment in the same way as a standard A/R invoice. The corresponding journal entries in the SAP Business One accounting and inventory modules are processed automatically once the document is posted.

5.4.6.4 Optional Step: A/R Credit Memo

When a customer returns goods, you issue a return document, as described earlier. But if you have already posted the A/R invoice, you issue an A/R credit memo. When you create an A/R credit memo, you reverse—either partially or fully—the posting of an A/R invoice. Once the A/R credit memo is posted, inventory quantities are increased, the customer account is credited, and the revenue account is amended by the same amount. The sales tax is also corrected automatically.

There is a restriction regarding copying return documents to A/R credit memos based on how you created the return document. If you created the return document based on a delivery, you cannot copy the return document to an A/R credit memo. However, if you did not base the return document on a delivery, you can copy the return document to an A/R credit memo.

In SAP Business One, an A/R credit memo can be created from existing A/R invoices and return documents. Sometimes when a customer is receiving a credit or rebate, you also want to invoice them for items they are purchasing. In those cases, you can have negative rows in a credit memo. The negative rows are billed to a customer, rather than crediting the customer.

It is also possible to create A/R credit memos for services (non-inventory items). The posting of a credit memo for services has no effect on inventory quantities.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

When you have a need to credit a customer for overcharging for a certain item, instead of using a service A/R credit memo, you can enter the items but mark the Without Quantity Posting checkbox for the row to indicate the credit would be monetary only, without effect on inventory. Use the Form Settings to reveal this field.

5.4.6.5 Optional Step: A/R Reserve Invoice

Use the reserve invoice in cases where you bill your customer before you ship the items. In a reserve invoice, the revenues are recognized, but no inventory transaction takes place. Once the items are shipped, create a delivery, and copy from the reserve invoice. At this point, the reserve invoice status changes to Delivered and the delivery is set to Closed.

If you credit an un-delivered reserve invoice, the credit memo will not increase inventory level.

5.4.6.6 Accounting and Inventory Impact of the A/R Reserve Invoice

Once posted, the reserve invoice posts a journal entry to the customer and revenue account. No inventory transaction is posted; however, the committed quantity is increased. When a related delivery is created, the committed quantity is cleared, and the on hand inventory level is decreased.

5.4.6.7 Cancelling an A/R Reserve Invoice

To cancel a delivered reserve invoice, you must create an independent credit memo and use the internal reconciliation as explained in chapter 3 to match the two together.

If you credit an un-delivered A/R reserve invoice, the credit memo will not increase inventory level. It will only reverse the journal entry that resulted from saving the A/R reserve invoice initially.

5.4.6.8 Optional Step: A/R Down Payment Process

In some cases, you require a portion of the total due in advance, usually at the time you create the sales order, in order to get a real commitment from your customer. This is also known as a Deposit on Order. For example, if your customer provided his credit card information at the time he signed the order, you will record this as a down payment.

To record this payment, while creating the sales order, click the (Payment Means) icon to open the Payment Means window. Once you add the sales order, three documents are created:

- The sales order
- The down payment invoice. linked to the sales order
- An incoming payment that closes the down payment invoice.

Alternatively, you can select to create a down payment request (not available in the US localizaiton). Select the desired option using the drill down field in the payment means window. In this case, only the order and the down payment request documents are created. Use this option if the fund have not been accepted yet, but you wish to send a request for payment to your customer.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

The process is complete when you issue the final A/R invoice. If you base the invoice on the sales order, the down payment invoice is applied, and the amount is reduced from the invoice amount.

> **Note**
>
> Down Payment Amount Reminder. When you apply a down payment, you can choose to pay the full amount of the order, including tax and freight. It is also possible to pay an amount above the original order amount. In this case, when you create the A/R invoice, by default the invoice total about will be zero, however if you choose to, you can apply the entire down payment amount, so the invoice total is negative.

The down payment invoice can also be created from scratch with or without reference to a sales order. Depending on the business process in your company, you may not create sales orders, or perhaps the advance payment arrives at a later stage, after you add the sales order. In these cases, you can create the down payment invoice independently. When the payment arrives, create an incoming payment, and apply it to the down payment invoice.

5.4.6.9 Accounting and Inventory Impact of the A/R Down Payment Invoice

The down payment invoice has no effect on inventory. The funds identified in the document are credited to a predefined liability account, and customer is debited.

Once the down payment is paid, it can be applied to the A/R invoice. At this stage, the amount is transferred from the liability to the revenue account. The customer is debited for the remaining balance.

Specify the default down payment account by going to Administration → Setup → Financials → G/L Account Determination. Choose the Sales tab. On the General subtab, press `Tab` in the Payment Advance to select the liability account. This account also appears on the business partner master data and can be overridden with a different account.

> **Note**
>
> Applying a Down Payment to an A/R Invoice. While creating the A/R invoice, click the browse button at the bottom of the document, next to the Total Down Payment field. A list of paid down payment invoices for the selected customer is presented. You can choose to draw the entire amount, or adjust the Amount to Draw field.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

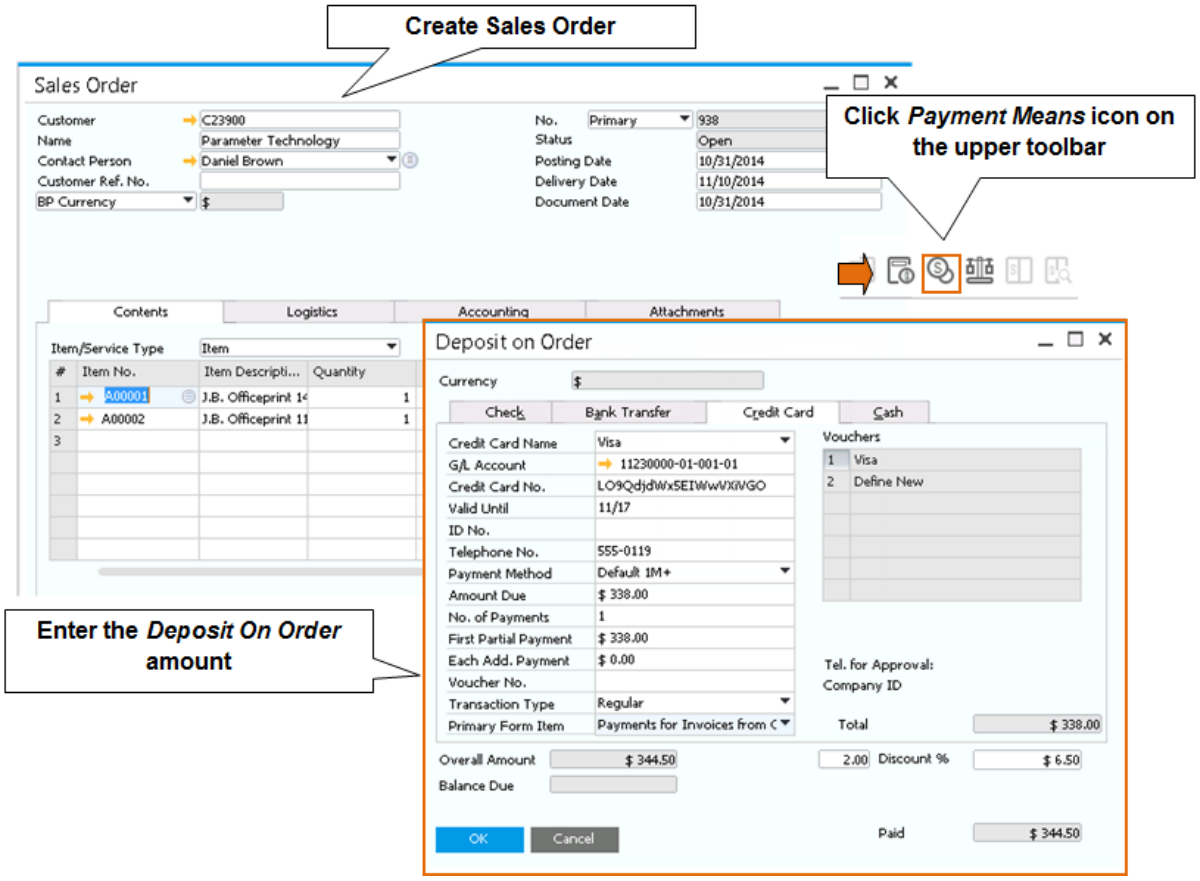


Figure 5-13: Creating Deposit on Order

You can apply multiple deposits on the same order. To view a list of all down payments, right click the sales order screen and choose Related Down Payment Transactions.

5.4.6.10 Optional Step: Blanket Agreement

With a blanket agreement, a customer commits to buying certain items or services from you over a period of time, and you commit to deliver them on time at a special price. Throughout the period, you need the ability to track the fulfilment level of the agreement to make sure you are on track. Use the Blanket Agreement document to record these terms and the system will do the rest. Any time you sell items that are covered by the blanket agreement the sales order is automatically linked to the blanket agreement allowing you to know at any point in time the agreement's status.

The blanket agreement document contains the customer name and period. It can be based on a monetary value or be based on items. It has the following tabs:

- General – specify if it is a Specific or a General agreement. If the agreement is specific, the prices set in it will be used in the sales documents. In the General tab you can also specify payment terms, payment method, shipping type and exchange rate that will apply to this contract, that may differ from the values defined the business partner master data.
- Details – here you identify the items, quantities and prices if the agreement is using the Item method. If the method is monetary, you specify the total amount and discounts the customer has committed to purchase from you. Double click the

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

row in both cases to identify the frequency and schedule of the sales amount or delivered quantities as shown in figure 5-14.

- Documents – shows all sales documents that were posted for this customer that apply to this blanket agreement.
- Recurring transactions – lets you link recurring documents to the blanket agreement in order to reflect the sales throughout the period.

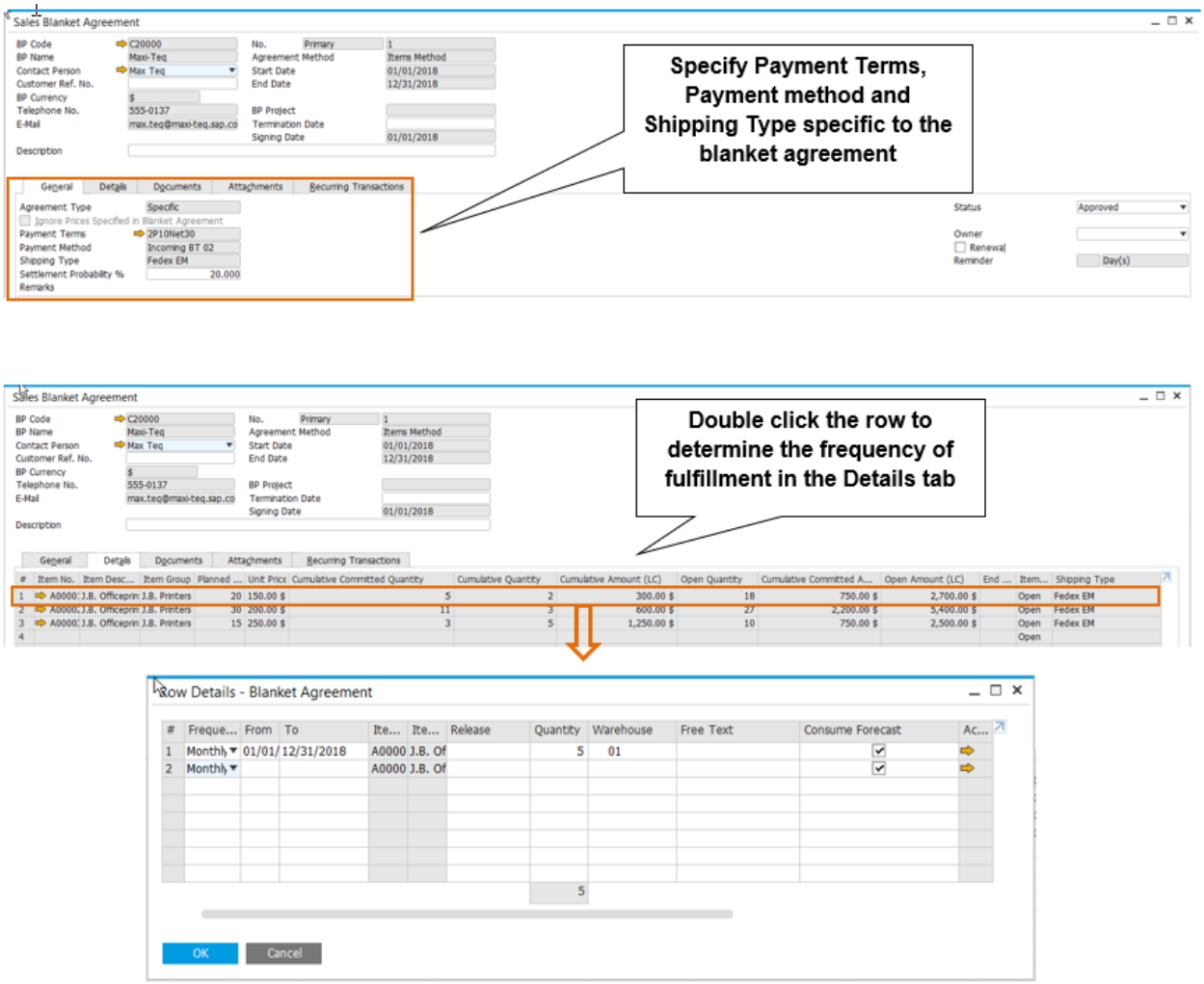


Figure 5-14: Blanket Agreement

5.4.6.10.1 Using Blanket Agreement to Accommodate IFRS 15

IFRS 15 - International Financial Reporting Standard was adopted in May of 2014, and is applicable since January 1st of 2018. It provides guidance on accounting for revenue from contracts with customers:

Here are the steps as described in the new standard:

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

- Identify the contract with a customer
- Identify all the individual performance obligations within the contract
- Determine the transaction price
- Allocate the price to the performance obligations
- Recognize revenue as the performance obligations are fulfilled – which means revenue is recorded and recognized, at the time the service or product is delivered.

Use the Sales Blanket Agreement to record the contract with the customer, including validity dates, termination date and a description. Enter specific exchange rates, payment terms, shipping type, project and payment method in the agreement, If required, blanket agreement can go through and approval procedure.

When the time comes, and you deliver the product or service, the AR document is created, linked to the blanket agreement, so all the settings you identify in the agreement are copied over automatically.

Finally, when the AR invoice is posted, revenues will be recognized.

Blanket agreements are available for purchasing as well, allowing you to commit your company to purchase from your vendors based on predefined terms. In both sales and purchasing, the blanket agreement is not a legally binding document, and has no effect on accounting or inventory.

5.5 Building One Document from Another

Sales documents build on each other. Often, a quotation becomes a sales order that forms the basis for a delivery and finally an A/R invoice. Figure 5-5, earlier in this chapter, shows how to quickly copy a document to the next document in the sequence using the Copy To button. The original document is called a base document; the document you create from it is called a target document. Building one document from another saves time and effort.

> **Note**
>
> Document type alert. When you copy one sales document to another, make sure that the base document and the target document are of the same type, whether items or services. Sales documents cannot mix items and services, and an item sales document cannot be copied to or from a services sales document.

SAP Business One makes it easy to follow the trail from document to document as well. If you display a sales order created from a sales quotation and click the (Base Document) icon, SAP Business One displays the sales quotation the document was based on. If you display the sales quotation and click the (Target Document) icon, SAP Business One displays the sales order.

The Copy From button allows you to select a base document or documents from which to create a new document. Clicking Copy From starts the Draw Document wizard, explained in Chapter 10.

Use the Relationship Map to see the entire document flow in a graphical way, with an option to drill down to every document, item or business partner, as well as see the journal entry a document posted. The Relationship Map can be opened from the context menu of any document type, including purchasing and payments.

Figure 5-15 shows a sales process that includes a quotation, an order, two deliveries, A/R Invoice and a partial payment. The yellow color of the invoice box identifies it was partially paid, a blue indicator means it was fully paid, and a red one means it’s fully open.

You can drilldown into any of the objects by clicking on them. You can also right-click on the documents shown to view posting details, related items and pick lists.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

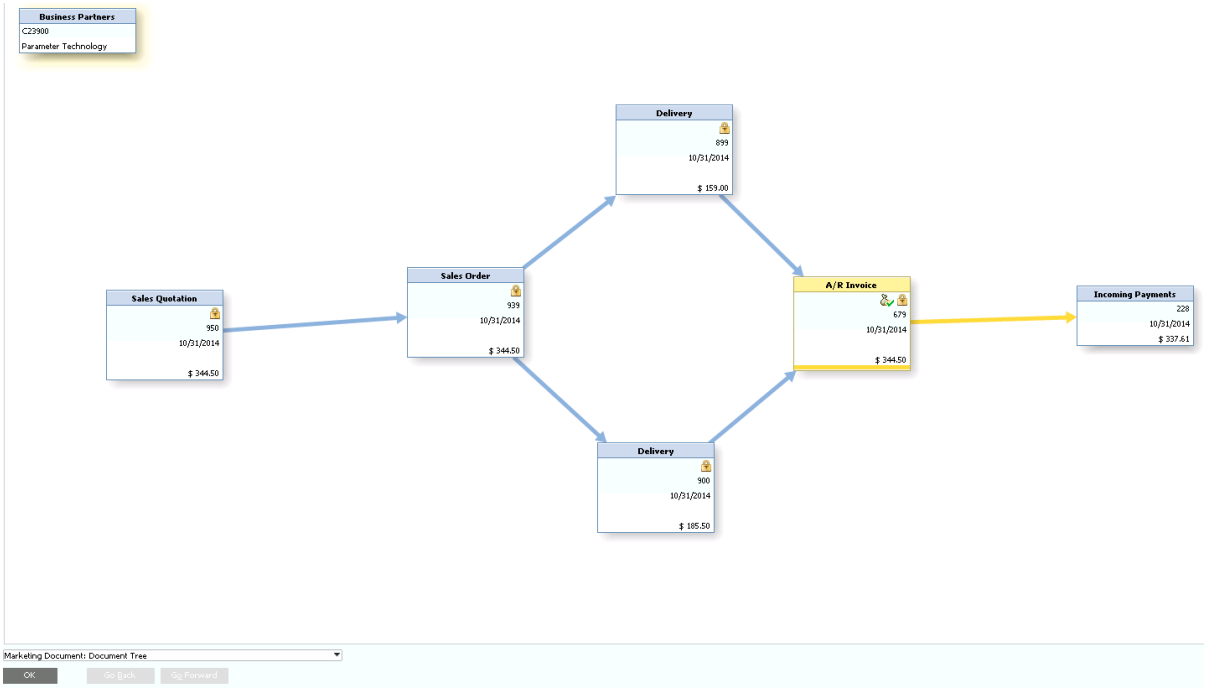


Figure 5-15: Relationship Map

Note

Referenced Document. You can manually link documents or reference to an external document using the Referenced Document link on the accounting tab of marketing document. The referenced document can be displayed in the relationship map and will appear with a dotted red line to the base document.

5.6 Processing Groups of Documents

Sometimes it's convenient to create many sales documents at once. Perhaps you want to create a batch of A/R invoices or deliveries. In that case, you would use the Document Generation wizard. If you have a number of customers who are late with payments, you may want to use the Dunning wizard to create late notices. This section describes these wizards.

5.6.1 The Document Generation Wizard

The Document Generation wizard allows you to perform mass processing of target sales documents. Many companies prefer to do an invoice run rather than generating individual invoices. This can also streamline invoicing for your customers. When you use this wizard, you can combine open sales orders or deliveries in one invoice, making it convenient for customers to pay all they owe you from a single invoice instead of receiving multiple invoices from you.

You start the wizard by choosing Sales - A/R → Document Generation Wizard. In the wizard, you select the type of the base and target document. For example, the base is a delivery and the target is an invoice. It is also possible to select the base as sales order, and the target a delivery or invoice. Next, you identify whether one base document creates one target, or multiple base

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

documents are consolidated into one target. Finally, you select what to do in case of missing data, such as exchange rate, as well as accounting and inventory alerts such as credit limit deviation. At the end of the run, you receive a summary of all the newly created documents. In Figure 5-16, you can see the main steps for the document generation wizard.

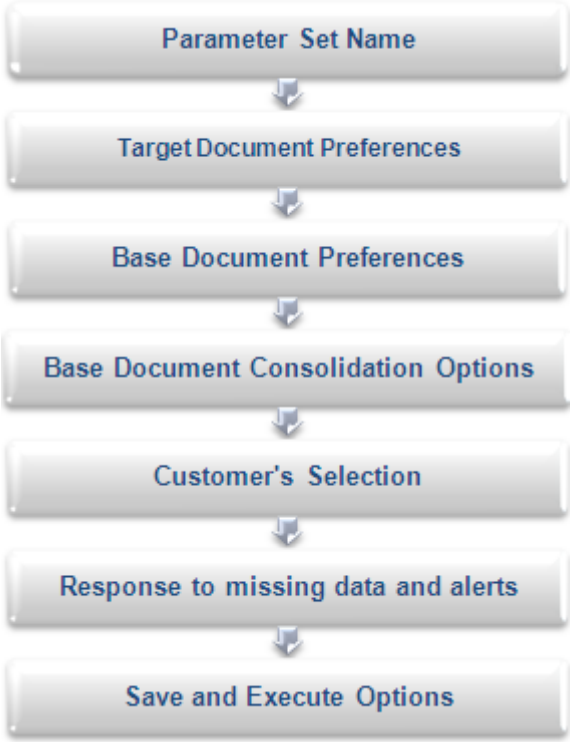


Figure 5-16. Document Generation Wizard Steps

Note

Document Generation wizard alert. Because creating sales documents creates automatic entries in the general ledger, the document generation wizard must be used with care and preferably with help from your implementation partner. See Chapter 10 for details.

5.6.2 The Dunning Wizard

The Dunning wizard automates the process of sending late notices to customers. In addition, the wizard keeps track of a customer's "payment behavior," which allows you to make decisions about payment terms for future orders. With the help of this wizard, you can post dunning fees and interest automatically. This information is also useful when reporting to credit agencies and other financial institutions about customers.

You start the wizard by selecting Sales - A/R → Dunning Wizard. You can specify whether to load a saved wizard with its parameters or start a new one. You can specify general parameters, such as the name of this dunning run and its date then you select business partners. The wizard allows you to specify a posting date range to include. By default, all dates through today's date are included. The wizard runs and shows the Recommendation Report, shown in Figure 5-17.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

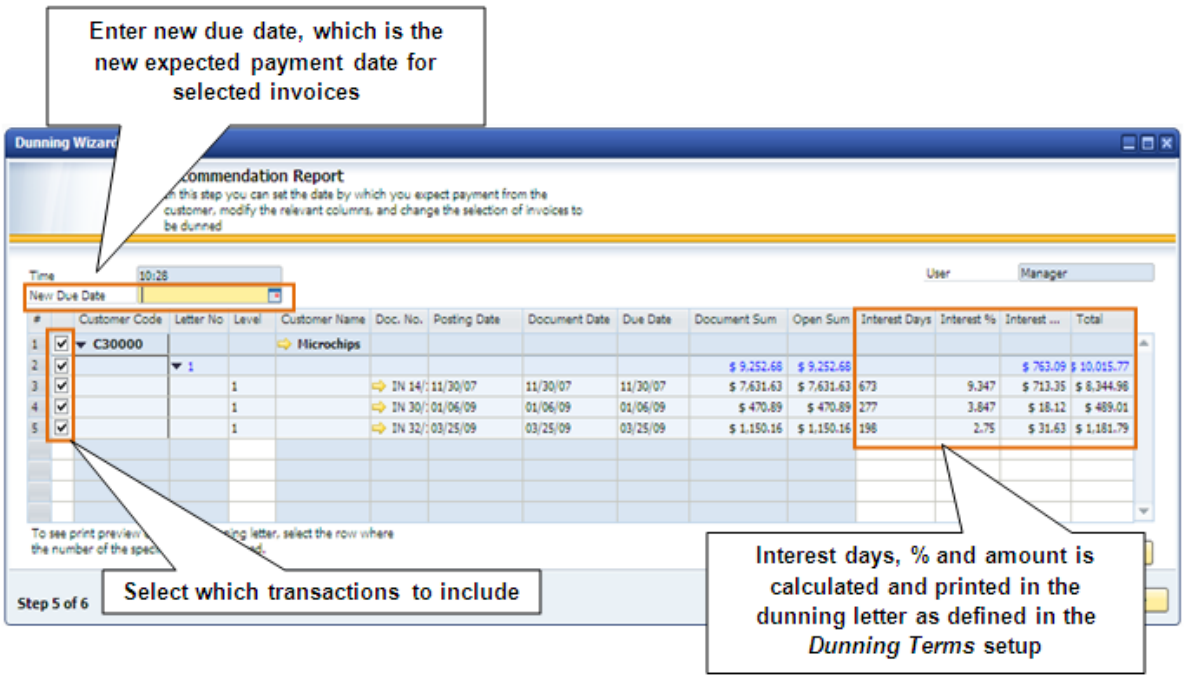


Figure 5-17: The Recommendation Report in the Dunning Wizard

This window lists overdue A/R invoices for which dunning letters will be created. You can choose to include manual journal entries, credits and payments that are not based on invoices in the run. You can collapse the list to include only business partners without invoice detail by clicking the Collapse All button. At the end of the wizard, you have options to save the parameter set and exit, save the recommendation report as a draft and exit, or print dunning letters and exit. For more information on the dunning wizard, see the online help.

Note

Dunning system setup. Prior to running the Dunning Wizard, you must setup the dunning levels and dunning terms in the company. Go to Administration → Setup → Business Partners. Each customer must be assigned with a dunning term. It is possible to setup a default dunning term for new customers on the Administration → System Initialization → General Settings → BP tab.

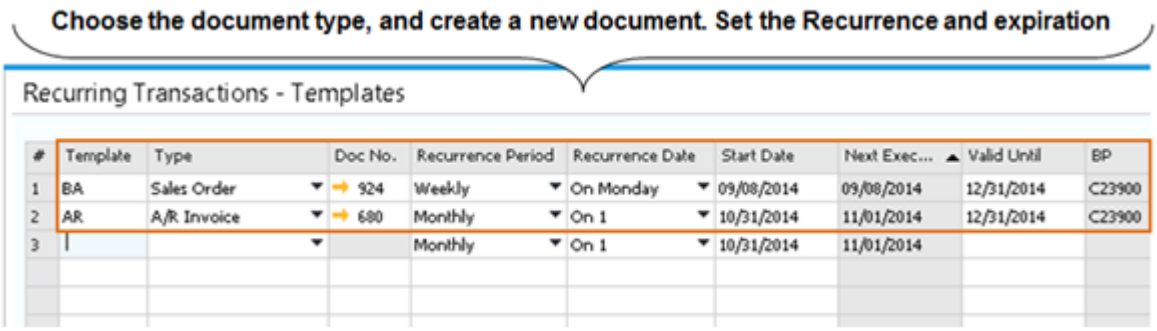
5.6.3 Recurring Transactions

Similar to recurring journal entries as explained in the financials chapter, you can use recurring transactions for sales, purchasing and inventory documents. For example, if you are a service provider that bills your customers on a monthly basis, you can create a recurring invoice template with a frequency of one month, and SAP Business One will prompt you when the time comes to post the invoice.

To set up a recurring transaction, you open the Recurring Transaction Template window in the sales main menu to create a document template. Once you specify the document type (such as a sales order or A/R invoice), you create a draft document. Then you specify how often to generate the transaction.

In Figure 5-18, a sales order has been set up to be posted weekly on every Monday for a particular time period and an invoice has been set up to bill monthly on the first day of the month.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.



#	Template	Type	Doc No.	Recurrence Period	Recurrence Date	Start Date	Next Exec...	Valid Until	BP
1	BA	Sales Order	924	Weekly	On Monday	09/08/2014	09/08/2014	12/31/2014	C23900
2	AR	A/R Invoice	680	Monthly	On 1	10/31/2014	11/01/2014	12/31/2014	C23900
3				Monthly	On 1	10/31/2014	11/01/2014		

Figure 5-18: Recurring Transactions Template

Based on the next scheduled execution date, SAP Business One will recommend posting a recurring transaction. You can view the recommendation using the Recurring Transactions under the Sales main menu.

5.7 Sales Mobile app

The SAP Business One Sales App lets you effectively handle your sales activities anywhere, anytime. Sales representatives gain access to the most relevant business information and processes, for efficient and successful management of customers and sales. It provides insights to your customers status, potential deals and predictability in the sales operations. Figure 5-19 shows the home screen, where you can view and create new activities, opportunities, quotations and orders. You can also check customers and items status. The app also provides various dashboards and KPI's relevant to the sales role.

The app allows you to synchronize business partners and items information, so they are available when you are off line.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

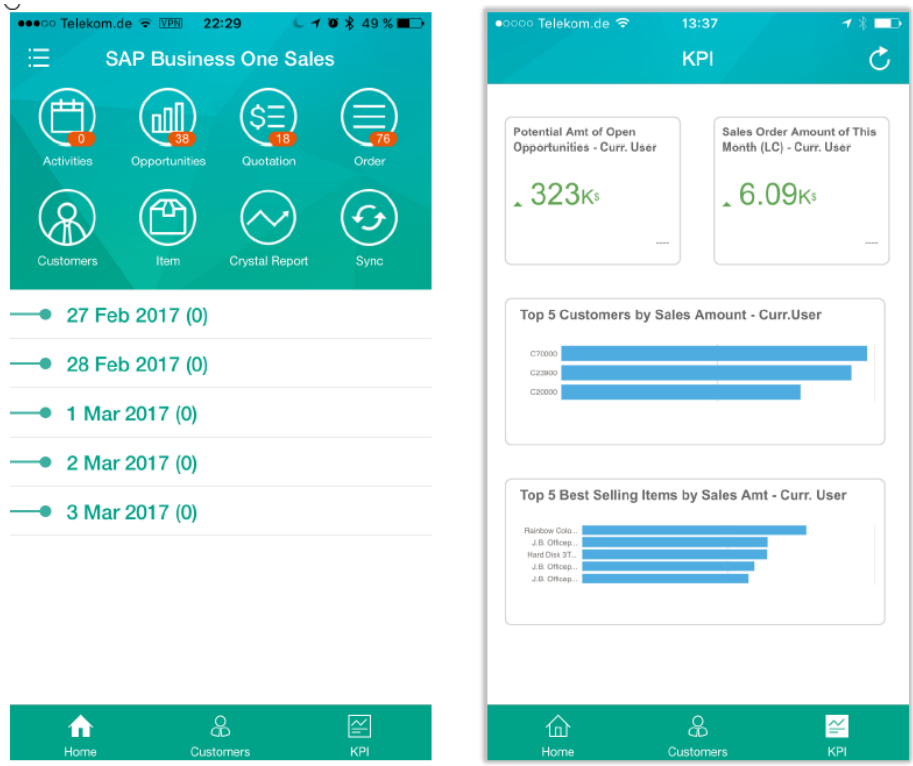


Figure 5-19: Sales Mobile App

Note

Compatibility. the mobile sales app is available on IOS and Android devices and works only with the SAP Business One version for SAP HANA. An additional app is available for the SQL version of SAP Business One. You can download the app at no cost, use demo mode to test it, or connect to your live system. The login user name, requires either a professional /limited user, or a dedicated more affordable mobile user.

5.8 Accounting and Inventory Impact

Summarized below are the most important accounting and inventory implications of the SAP Business One sales documents discussed in this chapter.

Sales document	Accounting impact	Inventory impact
Blanket Agreement	No postings	No postings
Sales quotation	No postings	No postings
Sales order	No postings	Increases committed quantity, decreases available inventory.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Sales document	Accounting impact	Inventory impact
Delivery	Debits cost-of-goods-sold account and credits inventory account when using perpetual inventory system	Decreases actual inventory and committed quantity
Return Request	No posting of value-based changes	Increases ordered quantity, and increases available quantity
Return	Debits inventory returns account and credits cost-of-goods-sold account when using perpetual inventory system	Increases actual inventory
A/R invoice	If the A/R invoice is based on a delivery, debits business partner's A/R control account and credits sales revenue account. If the A/R invoice is not based on a delivery, debits business partner's A/R control account and credits sales revenue account; also debits cost-of-goods-sold account and credits inventory account.	Decreases actual inventory if A/R invoice is created without reference to a delivery
A/R Down Payment Invoice	Debits business partner's A/R control account and credits payment advance as defined in the customer master data. If payment means were entered, there will be a credit to the business partner's A/R control account, and a debit to the bank or a clearing account, depending on the payment means selected.	No postings
A/R invoice plus payment	Debits business partner's A/R control account and credits sales revenue account; debits cost-of-goods-sold account and credits inventory account; debits checks-received account and credits business partner's A/R control account	Decreases available inventory
A/R credit memo	Credits business partner's A/R control account and Debits revenue account also credits cost-of-goods-sold account and debits sales return account	Increases actual inventory
A/R reserve invoice	Debits business partner's A/R control account and credits sales revenue account	Increases committed inventory if not based on sales order

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

6 Purchasing Documents and Accounts Payable

In This Chapter

- Overview of Purchasing-A/P Process
- Getting Started: Common Structure and Key Data
- Taking It Step by Step
- Building One Document from Another
- Accounting and Inventory Impact
- Purchasing Checklist

Purchasing is not just about ordering and paying for pencils and paper clips. Rather, purchasing is the process of making sure that a steady stream of required materials is on the way to your company when and where you need them. As a fully integrated, end-to-end business management application, SAP Business One helps you run the purchasing process, starting with the purchase quotation and purchase order and continuing with the rest of the purchasing documents. SAP Business One automatically captures information at each step so you always know what's on hand in inventory as well as the up-to-the-minute financial state of your business. The real-time view helps you identify potential shortages before they happen (see details about material requirements planning in Chapter 7). Precise historical information keeps track of which vendors come through for you consistently.

In this chapter, we focus on the basic steps involved in executing a purchase order (PO) in SAP Business One and the other purchasing documents that flow from it.

6.1 Overview of Purchasing-A/P Process

In this section, we take you through the basic three-part process of ordering, receiving, and paying for goods or services. The flowchart in Figure 6-1 presents the "big picture" of how SAP Business One purchasing documents relate to each other, including all of the optional steps, which are discussed in the next section.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

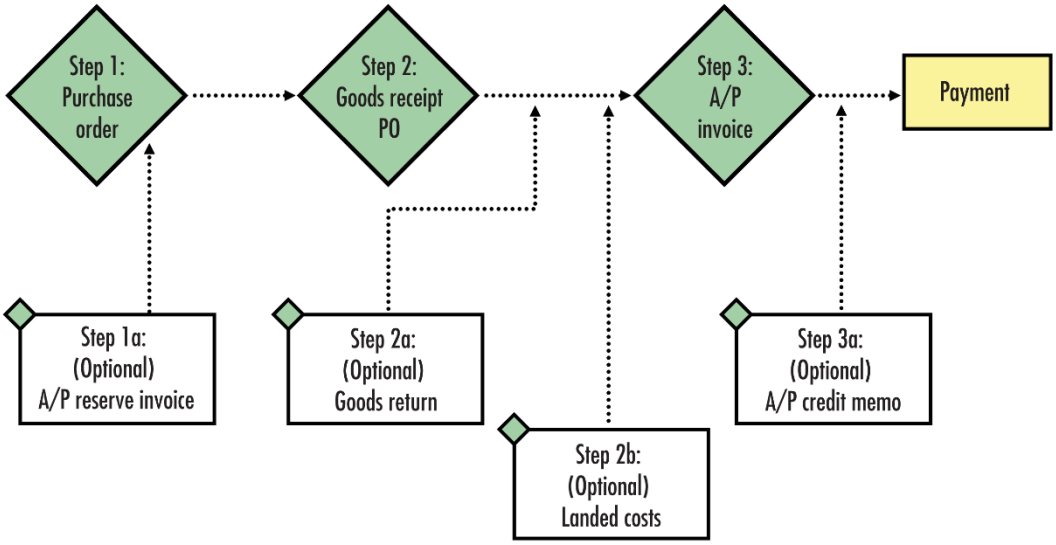


Figure 6-1: Purchasing document flow in SAP Business One

Sometimes the process doesn't take a straight path because of one problem or another. For this reason, SAP Business One allows you to create other related purchasing documents to address special circumstances. These additional purchasing documents allow you to account automatically for all changes that may occur along the A/P process path—such as sending multiple purchase quotations to vendors to get the best offer, having to return defective items, paying customs charges or other fees, and so on. Obviously, this will save you a lot of time and trouble because you won't have to manually match the changes to the original purchasing documents.

Terminologies	Definitions
Item	The term item is used in a very specific way in SAP Business One. It refers only to goods and materials bought, produced, sold, and warehoused.
Purchase Request	The purchase request is an internal document that is submitted by an employee including a request to purchase item or service.
Purchase Blanket Agreement	The purchase blanket agreement is a commitment from your company to purchase items or monetary value from your vendor over a specified period of time.
Purchase Quotation	The purchase quotation is the document you send to your vendors, so they can provide you with an offer for requested items or services, including prices, quantities and delivery dates.
Purchase Order	The purchase order (PO) is the document you provide to the vendor specifying the items or services you want to purchase, including agreed-to quantities and prices.
A/P Reserve Invoice	The A/P reserve invoice is similar to a PO but it includes a request for payment. It is used when the vendor bills you before delivering an item or service.
Goods Receipt PO	The goods receipt PO is the document that denotes the delivery of goods from a vendor to a company. It is used to update the inventory quantities and values.
Goods Return	The goods return document reverses a goods receipt PO after it has been posted. It is used whenever part or all of the goods received are returned to the vendor.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Terminologies	Definitions
Landed Costs	The landed costs document is used when additional costs are involved in the purchase of items, usually from abroad, such as tariffs, brokers' fees, and so on.
A/P Invoice	The A/P invoice is the document into which accounts payable enters the vendor's invoice information and sets up the payment.
A/P Credit Memo	The A/P credit memo is used to reverse the A/P invoice - partially or in its entirety - after it has been posted. It credits the company for the goods returned to the vendor.
A/P Down Payment Invoice	The A/P Down Payment Invoice is used in a prepayment scenario. The amount is recorded to a predefined asset account, and moved to the expenses or the inventory account once the down payment is applied to a standard A/P invoice. This document does not affect inventory.

6.2 Getting Started: Common Structure and Key Data

All of the purchasing documents in SAP Business One share a similar structure and use much of the same data. Before diving into the documents, here's an explanation of what is the same about each document.

6.2.1 Common Document Structure

Each purchasing document in SAP Business One has nearly identical header and footer fields and four tabs for Contents, Logistics, Accounting and Attachments.

Header fields appear in every window of a purchasing document. You enter vendor data and delivery dates here, if SAP Business One does not fill it in automatically as part of the process flow.

Footer fields appear in every window of a purchasing document and contain the calculated totals for the purchase, including freight costs and tax.

The Contents tab is where all the specific information about the ordered items or services is entered, such as quantity, price, item number, and description.

The Logistics tab contains the details about where the items or services as well as payments are to be sent. Shipping method is also specified here. Most of the data defaults from preconfigured master company details and vendor data.

The Accounting tab contains the relevant general ledger (G/L) account information for the purchase pulled from the financial accounting master data. See Chapter 4 for more information about G/L account determination and how SAP Business One handles automated journal entries that come via the purchasing as well as sales and inventory modules.

The Attachments tab contains links to different attachment files assigned to this document. An attachment folder must be predefined in the Administration → System Initialization → General Settings → Path. Any attachment file you select is automatically copied to this default folder therefore make sure it's a shared folder on a server that is available to all users.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

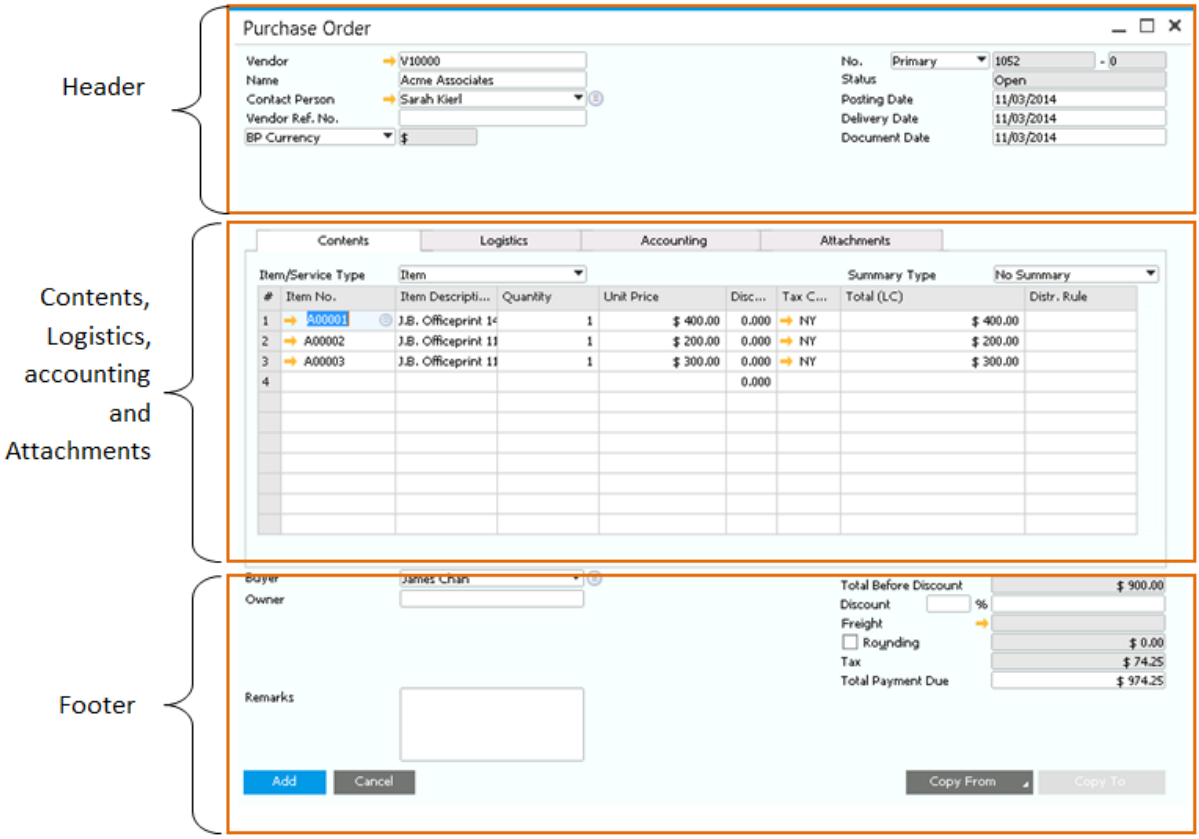


Figure 6-2: Anatomy of a purchasing document in SAP Business One

6.2.2 Key Data

Getting the most important data right from the start ensures that the A/P processes flow smoothly and avoids unnecessary roadblocks later on—especially since SAP Business One allows you to build documents from existing ones (see Building One Document from Another later in this chapter). For each of the purchasing documents, therefore, it is wise to make sure that the following information is complete and correct.

Note

Data entry alert. Only users with the proper authorization may enter or update business partner or other master data. See Chapter 10 for more information.

6.2.2.1 Key Data: Vendor

Vendor data identifies who is supplying the goods and services. Before purchasing documents can be created, the vendor must be entered in the SAP Business One list of business partners. See Chapter 4 for instructions on entering master data.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

To locate existing vendor information, either click on the button to the right of the Vendor field in the document header or press the Tab key in the Vendor field. The List of Business Partners appears in a pop-up window.

If you are authorized, you can enter new vendor information while creating a purchasing document. To do so, click on the New button on the bottom of the List of Business Partners pop-up window.

> **Note**
>
> Payment method alert. If you plan to issue the vendor a check using the payment wizard, make sure you have defined the payment method in the vendor business partner master data record. See Chapter 4 for more information on master data management.

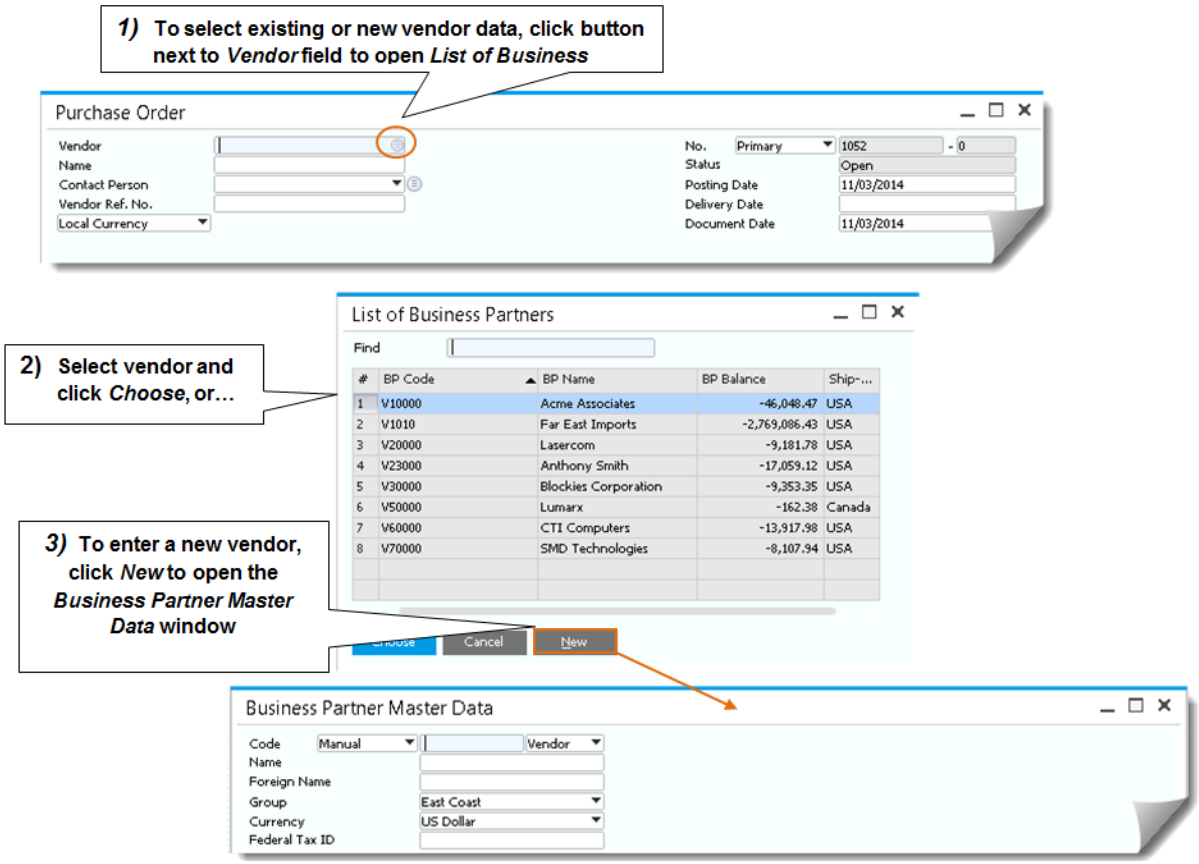


Figure 6-3: Specifying a vendor

Alternately you can type the code or the name of the vendor. The system displays potential records to choose from that matches the information you entered.

6.2.2.2 Key Data: Item

Item data identifies what is being purchased. To locate the List of Items (goods and materials), press the Tab key or the Choose From List icon from the Item No. field in the document's Contents tab. From the resulting pop-up window, you can select from the list or enter new data by clicking on the New button.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

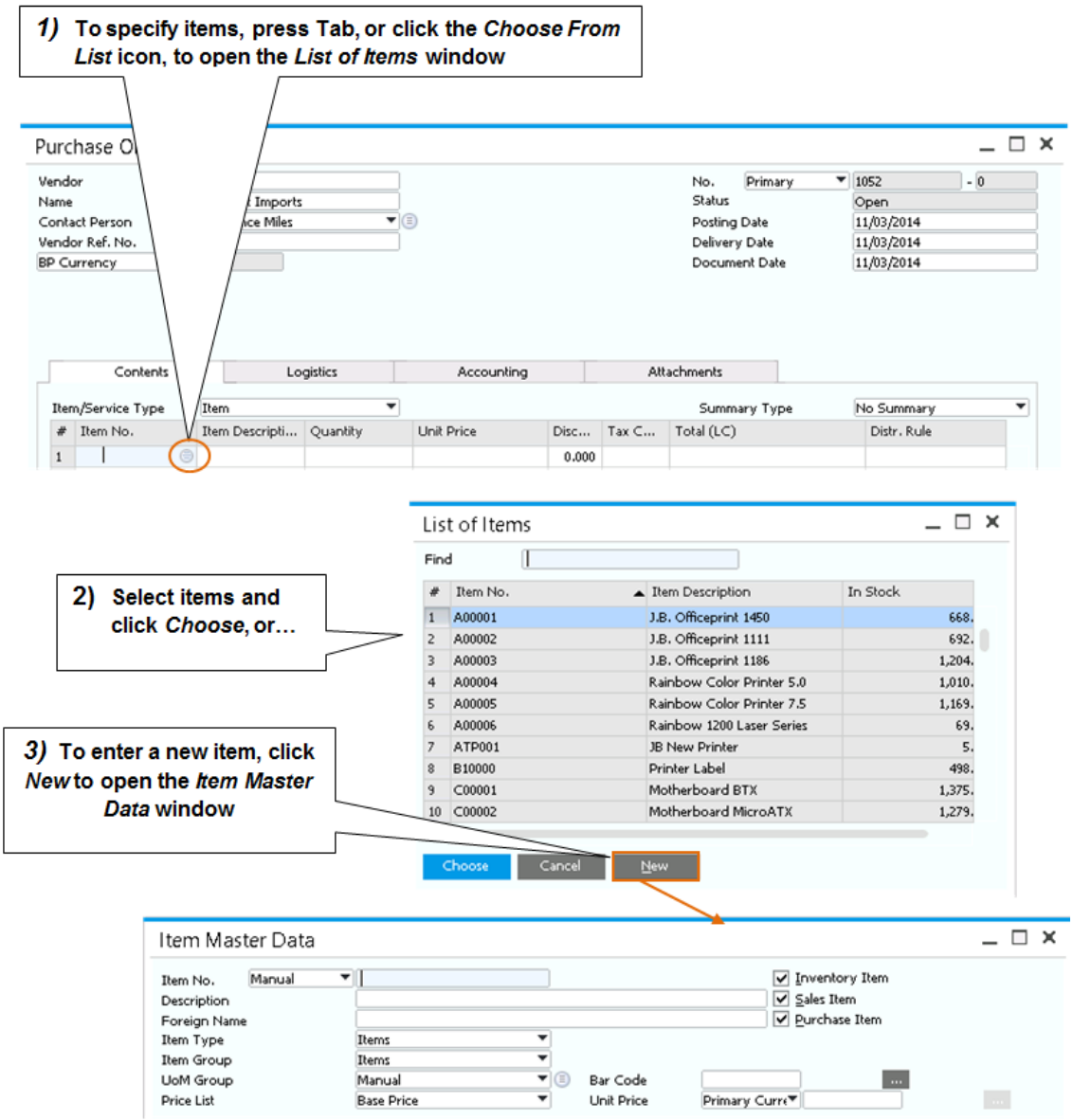


Figure 6-4: Specifying an item

Note

Usability tip. You can select multiple items from the list by holding down the `Ctrl` key and clicking on as many items as desired. To select a range of items, click the first record, hold down the `Shift` key and click the last record.

You can enter new or updated vendor or item information directly into the relevant fields in the purchasing document. However, you should note that this information does not update the master data record and is relevant only to the specific purchasing document into which it has been entered. If you do change the vendor's name or an item's description directly in the purchasing document, press `Ctrl` + `Tab` to proceed when you are finished. However, if you want to make a permanent change or create a new item or vendor, we recommend that you change the relevant master data record or create a new item or vendor. That way, the data you update or the new item or vendor will be available from now on.

As shown in Figure 6-5, you can change the format of any row in the Contents tab of any SAP Business One purchasing document to insert text or a subtotal of the preceding row. Simply click on the drop-down list in the Type field and select **T** (for

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

text) or Σ (for subtotal). When you select T, the Text Editor pop-up window appears. From here, insert predefined text from the drop-down list or insert your own text. This is especially helpful when you want to convey specific instructions to your vendor about how items should be manufactured, handled, or shipped.

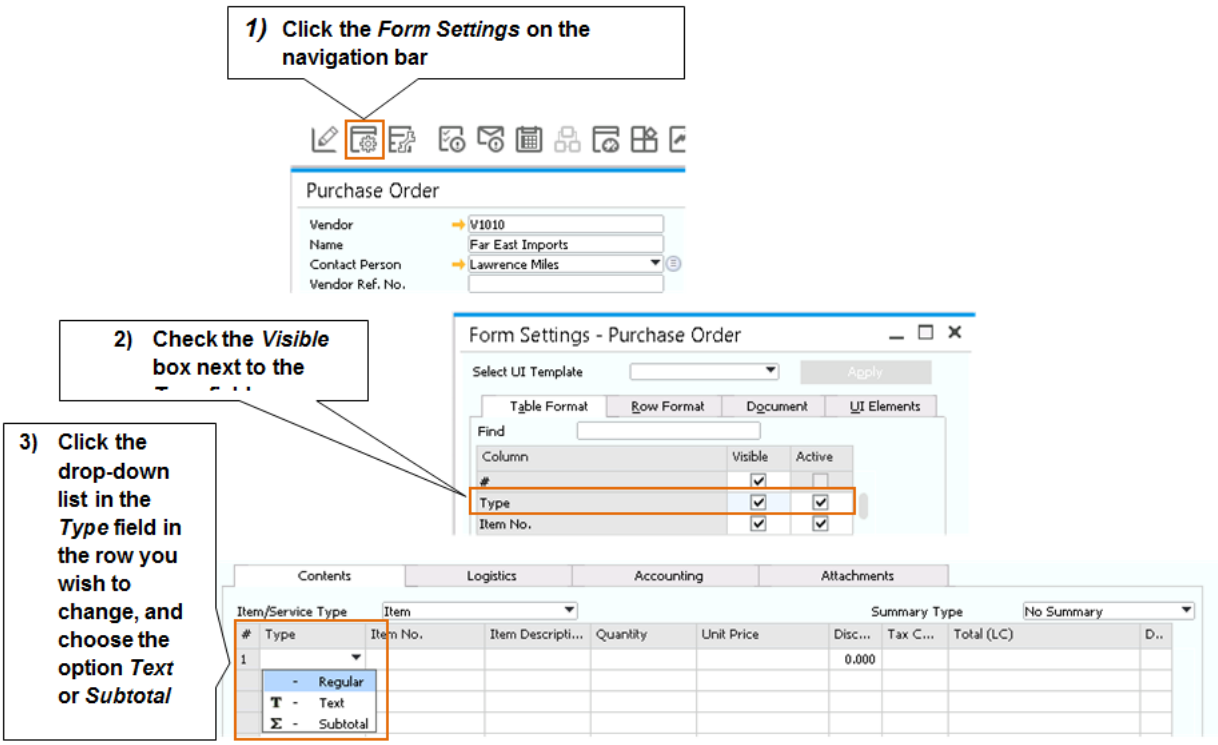


Figure 6-5: Changing the type of a row in a purchasing document

6.2.2.3 Key Data: Pay to and Ship to Addresses

It is important to understand how the Ship to and Pay to addresses are used in the purchasing process.

- Ship to address: This information displays under the Logistics tab. If you check the Use Warehouse Address box under Administration → System Initialization → Document Settings → General tab, the ship to address displayed is the one from the first selected warehouse. Otherwise, the company's address displays here. You can modify the Ship to address in purchasing documents to ensure that goods are shipped to the correct location.
- Pay to address: This information appears under the Logistics tab and is defined in the vendor business partner master data record. Make sure the Pay to address is the one you want for a given purchase since this information prints on the check when payment is issued.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

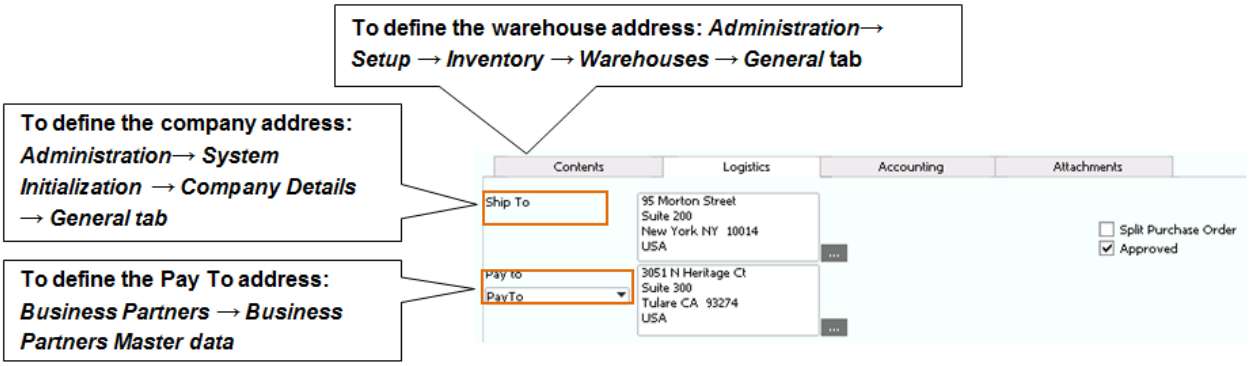


Figure 6-6: Where Ship to and Pay to addresses are defined

The tax code in purchasing documents is determined based on the selected warehouse. Go to Administration → Setup → Inventory → Warehouse to identify the tax code for the warehouse. If different items have different warehouses, the appropriate tax code appears for each row.

> **Note**
>
> Approval alert. The Approved checkbox is selected only if the person creating the purchasing document has the authorization to post it. See Chapter 10 for more information.

6.3 Taking It Step by Step

Now we look at the process in more detail one step at a time, starting with the purchase order.

6.3.1 Step 1: Purchase Order

Creating a PO is the first and most basic task in any purchasing application. In a nutshell, a PO is a commercial document issued by a buyer to a seller specifying the items (goods or materials) or services - along with agreed-to quantities and price - that the seller will provide the buyer.

6.3.1.1 Creating and Posting a PO

You may create a new PO by clicking on the document name in the module menu or by basing it on an existing sales order. This latter feature is especially useful if keeping inventory in the warehouse is expensive or dangerous (such as with diamonds or flammable materials), and the company orders the product from the vendor (that is, creates a PO) only after a customer wants to buy the product (that is, creates a sales order). See more information in the previous chapter about Drop Shipment. PO's can also be created in bulk using the Procurement Confirmation Wizard as explained later in this chapter. Additionally, the MRP module can create PO's automatically. See chapter 7 for more information.

If you have attended to the master data issues discussed earlier, you need to enter only the following information in your PO:

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

- Delivery Date: This is the date that you would like to receive the items (or services) being ordered.
- Vendor: See Getting Started: Common Structure and Key Data earlier in this chapter.
- Contents tab: In the Item/Service Type field, make sure the type you select corresponds to what you are ordering, as shown in Figure 6-7. Enter all items (or services - but note that you cannot mix the two items and services in a single purchasing document) you are ordering into the table. (See Getting Started: Common Structure and Key Data earlier in this chapter.)

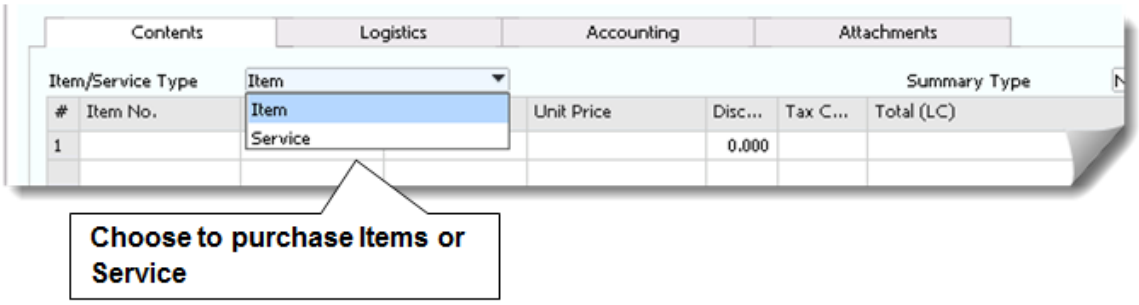


Figure 6-7: Purchasing an item and or a service

Once you have entered this information into the header and Contents tab of your PO, the rest of the document is populated with the data necessary to issue the PO. If you are not ready to add the PO (by clicking the Add button), you can save it as a draft (by pressing Alt + S or clicking File → Save as Draft; see Chapter 10 for more information about document drafts). In SAP Business One, the PO is the only purchasing document you can amend after it has been added.

> **Note**
>
> Approval procedures tip. In SAP Business One not only can you specify who may initiate purchase orders and who needs to sign off on purchase orders, but you can also set spending limits for each person so authorized. See Chapter 10 for more information.

6.3.1.2 Accounting and Inventory Impact of a PO

When a PO is added in SAP Business One, no value-based accounting changes occur. However, the order quantities listed in inventory management are increased. You can view items and quantities on order in various reports and windows, such as the inventory status report and the Item Master Data window. Obviously, having such real-time access to this information can play a key role in optimizing your company's purchasing and inventory management business processes.

6.3.1.3 How PO Information Is Used Later

In the course of a garden-variety accounts payable process, when goods are received, purchase orders are matched with packing slips and vendor invoices before the invoices are paid. In SAP Business One, this process is automated: the purchase order can be linked to the goods receipt PO (information from packing slip), which then can be linked to the A/P invoice (information from vendor's invoice), allowing information to be consistent and retained throughout the process. You never have to enter data twice - especially if you have been mindful to attend to the master data issues discussed earlier.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Note

Report reminder. The vendor liabilities aging report and purchase analysis report are essential reports in the Purchasing-A/P module. The vendor liabilities aging report shows all the money a company owes and how long it has been owed. This is a key report in managing the cash flow of a company and choosing which bills to pay first in times of cash shortages. The purchase analysis report allows purchases to be listed by vendor, item, purchasing employee, and other dimensions to enable detailed analysis of purchasing patterns. Both reports are available under Purchasing Reports in the Purchasing - A/P area of the main menu.

6.3.1.4 Optional Step: Purchase Request

In some cases, the purchasing process may be initiated by a purchase request document. The purchase request is an internal document used by the company's employees to request to purchase certain items or services by a certain date. The request might be for office equipment or to prepare for an upcoming sales event where additional items need to be on hand. The purchase request can later be used as a base document for creating purchase quotations or purchase orders.

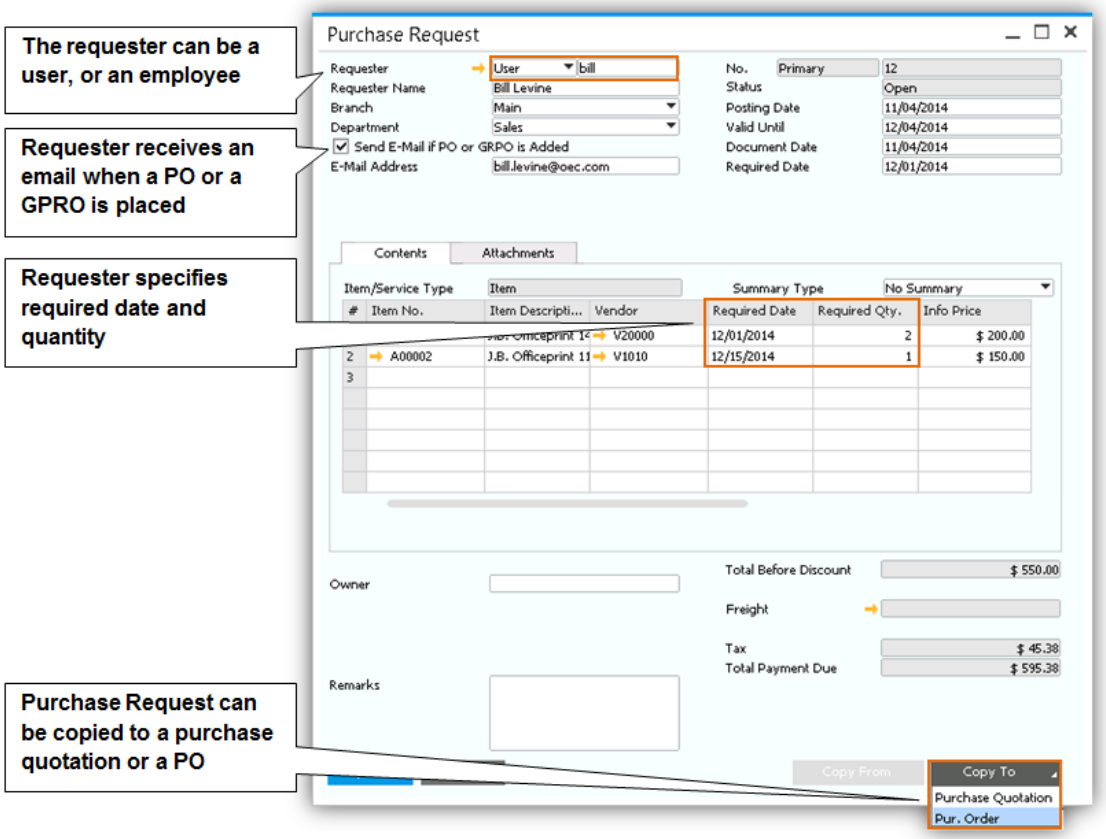


Figure 6-8: Purchase Request document

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

6.3.1.5 Optional Step: Purchase Quotation

Any good purchasing manager knows that purchases have to be carefully planned to obtain the best possible offer that fits the company's needs. Before you make a purchase, you may want to survey a few vendors and see which one gives you a better price and better delivery options. The purchase quotation allows you to create an informal document to record quotations you are receiving from vendors. You can create purchase quotations individually or by using a wizard. For example, you are buying a new printer. Five known vendors sell this printer. You want to know how soon, in what quantity and at what price you can buy the new printer. Here are the steps of creating multiple purchase quotations to multiple vendors for your printer. To start the wizard, go to Purchasing – A/P → Purchase Quotation Generation Wizard.

You can follow the steps in the wizard to set the relevant selection criteria for the items you plan to purchase, optionally specify possible vendors, and then run the wizard to generate purchase quotations.

There is an option to create an online quotation that automatically sends an email to the vendors with a link to the purchase quotations. The vendor can than update prices, quantities and delivery dates, and the information is sent back using the Integration Framework of SAP Business One.

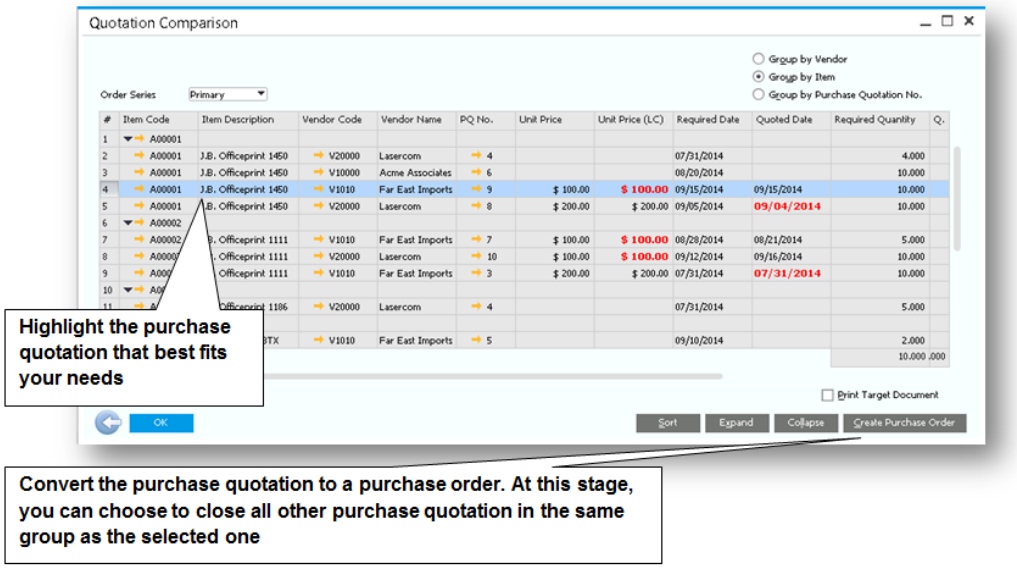


Figure 6-9: Quotation comparison report

Once the expiration date arrived, you can run the Purchase Quotation Comparison Report located in the Purchasing - A/P → Purchasing Reports. This report shows you all the purchase quotations you created, with the updated information received from the vendors, allowing you to choose the best offer and convert it into a purchase order as shown in figure 6-10.

6.3.1.6 Optional step: Blanket Agreement

The purchasing blanket agreement records an agreement you make with your vendor in which you commit to purchase certain items or services in a period of time, and your vendor commits to deliver them on time and sometimes with a special price. Throughout the period, you need the ability to track the fulfillment level of the agreement. Anytime you post a purchasing document for this vendor, it automatically links to the blanket agreement allowing you to keep track of its status at any point in time. See more information about the Blanket Agreement document in chapter 5.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

6.3.2 Step 2: Goods Receipt PO

In SAP Business One, a goods receipt PO is created when you receive goods from a vendor. In most companies, the person in the warehouse or the office responsible for taking delivery of shipments executes the goods receipt PO. For services, the person who receives the services usually issues the document.

6.3.2.1 Creating and Posting a Goods Receipt PO

A goods receipt PO can be created without a purchase order by selecting the document name in the module menu, or it can be built from an existing PO (Figure 6-11 shows how to create a GRPO from a PO). If you are basing your goods receipt PO on an existing PO, you may copy all the data contained in the PO or use the draw document wizard (see Chapter 10) to select the data to copy from one or more existing POs. Even if you copy all data from an existing PO you can still adjust quantities and prices - as well as dates, vendor, and item information—before you post (add) the document.

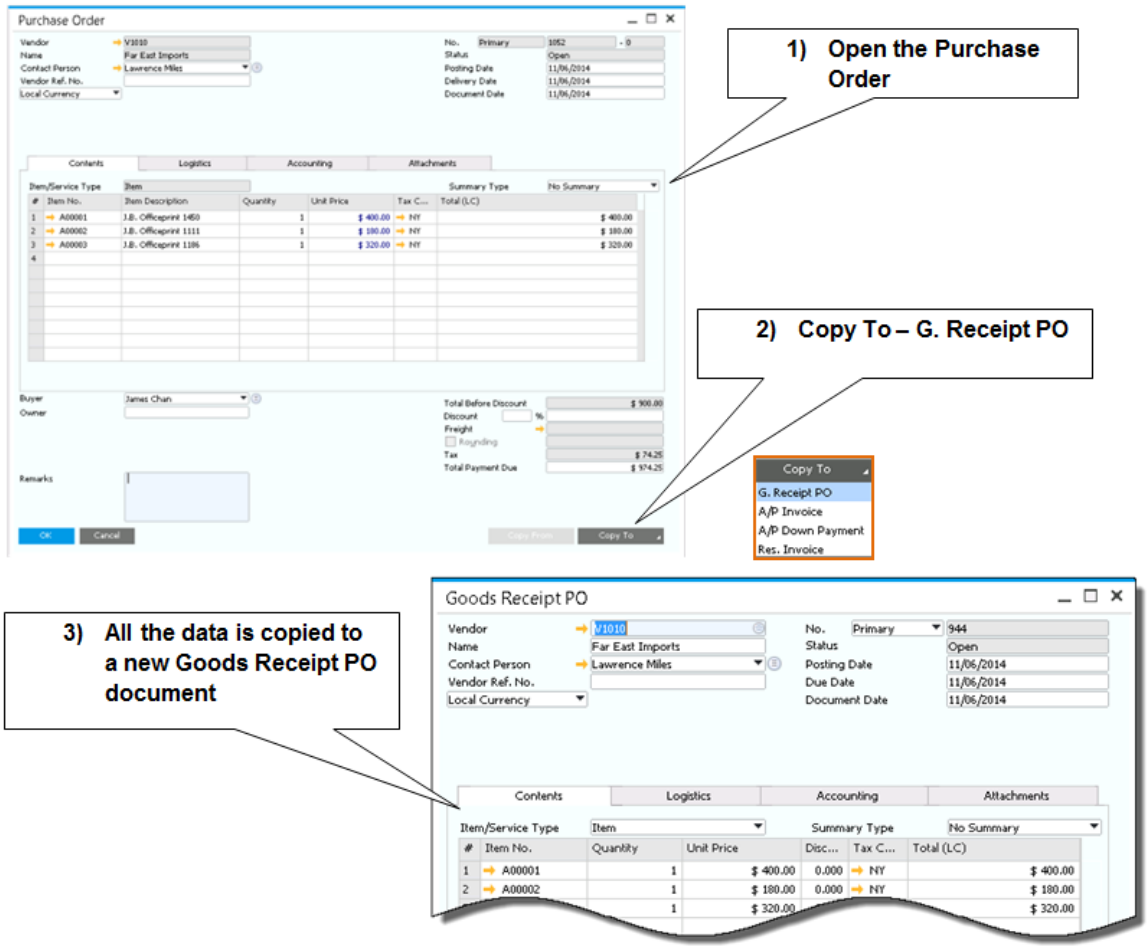


Figure 6-10: Creating a goods receipt PO from an existing PO

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Regardless of how you create your goods receipt PO, there should be no differences between the data in the goods receipt PO and the vendor's shipping document (packing slip) sent with the items, because the details in the vendor's document are legally binding. If there are any discrepancies between the base PO data and the vendor's shipping document, you should resolve them with the vendor before you post your goods receipt PO.

6.3.2.2 Managing serial numbers

Managing serial numbers for inventory items allows you to accurately locate and track particular units you have purchased and sold. Every stock movement records which serial number was used, and by using various reports you can view the transaction log of each serial number.

Serial numbers can be used in the Service module as well. Customer equipment cards can be created automatically when a serial number is sold. Read more about the service module in chapter 9.

On the Administration → System Initialization → General Settings → Inventory → Items tab you can set the management method for serial numbers. If you select the On Every Transaction option, a serial number must be identified in every stock entry or release. For items received into inventory, for example, using a goods receipt PO, you must define the serial number attributes in order to create them and add the document. If you select the On Release Only option, serial numbers must be selected to be released on documents that reduce inventory such as a delivery. That means that upon the creation of the goods receipt PO it is not necessary to define the serial number's attributes. That method is mainly dedicated for companies that purchase large volumes and do not wish the purchasing process to be held up while defining serial numbers. At a later stage, the serial number's attributes are updated.

To define serial number attributes on creation or to select ones to be released, right-click the quantity field in a document and choose Serial Numbers.

6.3.2.3 Accounting and Inventory Impact of a Goods Receipt PO

It is essential that the quantities and prices in your goods receipt PO match the vendor's shipping document. Unlike a PO, a goods receipt PO cannot be amended after it has been added to SAP Business One because it triggers both inventory and accounting transactions.

6.3.2.4 Optional Step: Goods Return Request

For various reasons, you may need to return goods. To record step, prior to returning the items to your vendors, use the Goods Return Request. A goods return request can be based on a goods return or an A/P invoice, as well as a stand-alone document. The goods return request can be used to return the full quantity or part of it. From inventory perspective it is treated as a purchase order - the item is considered as committed and available quantity is decreased, however no accounting entry is created.

Once the goods return request is approved, you can copy it to a subsequent document, depending on whether it was based on a return or an A/P invoice, it can be converted to a return or a credit memo.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

6.3.2.5 Optional Step: Goods Return

Since you can't change or cancel a goods receipt PO, you can create a goods return document, as shown in Figure 6-12. This purchasing document reverses partially or completely the quantity and value-based changes made by the goods receipt PO that was created when the items were received. It can be based on goods receipt PO or goods return request. ,

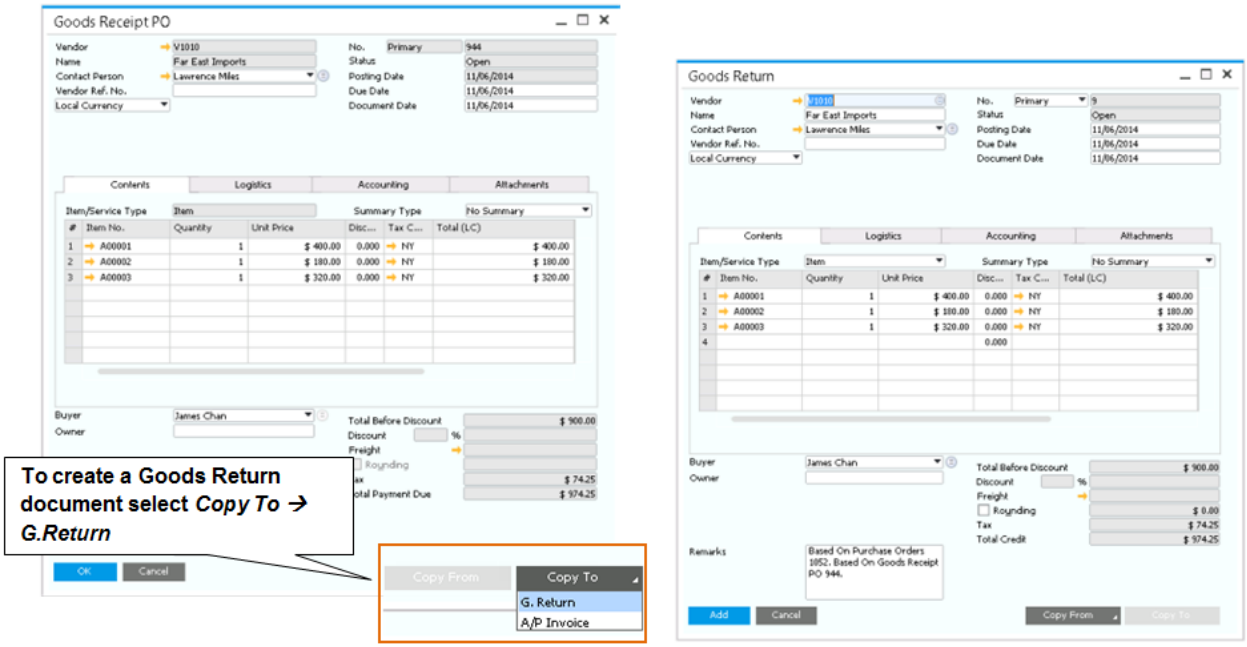


Figure 6-11: Creating a goods return document

6.3.2.6 Optional Step: Landed Costs

From time to time, you may need to account for costs incurred when importing items from abroad, such as customs, broker, and insurance fees. In SAP Business One you can create a landed costs document that is used to update the cost of the imported items and is required for calculating inventory valuation, gross profit, or any other inventory-related calculation. It is mandatory that this purchasing document be based on a goods receipt PO, A/P Invoice or another landed cost. After you post the landed costs document, the price of the imported items is updated. And since it also contains all the costs that were allocated, the landed costs document creates a journal entry to reflect the additional import costs in accounting.

If your final costs are not known yet, you can post landed costs as an estimate, and at a later stage post an adjusted landed cost document with the final numbers, by copying the first landed cost document to a new one.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

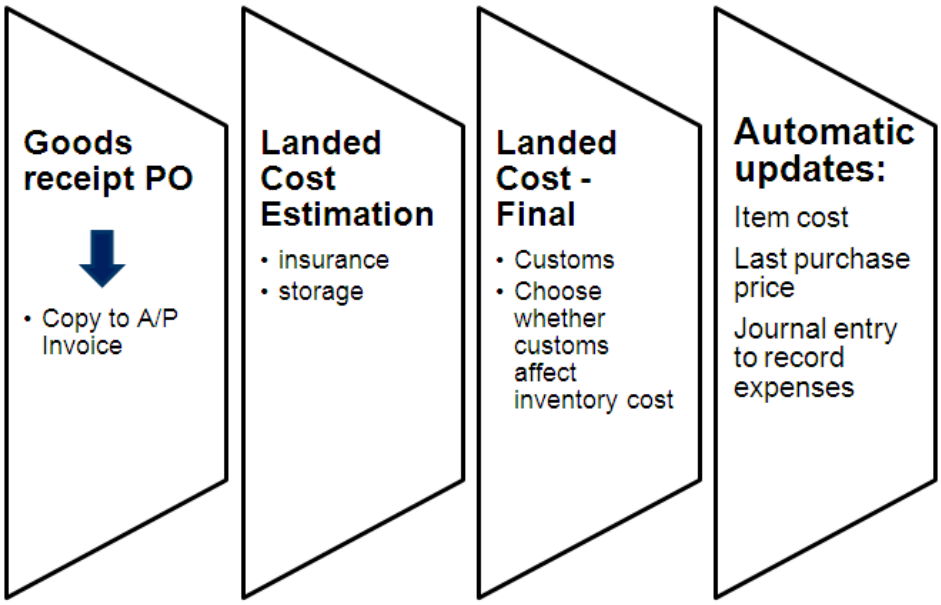


Figure 6-12: Landed Cost Steps

In order to enable automatic journal entries, you must define the appropriate G/L accounts. Go to Administration → Setup → Purchasing → Landed Cost to define the landed cost's allocation account. Go to Administration → Setup → Inventory → Customs Groups to define the customs allocation and expense accounts.

6.3.2.7 Accounting and Inventory Impact of Landed Costs

The landed cost document does not change quantity levels in inventory. It does however update the item unit cost, based on the Goods Receipt PO or A/P Invoice original cost plus the additional expenses identified in the landed cost document. The journal entry will debit the inventory account and credit the Customs Allocation account for the customs amount. If you prefer that customs does not affect inventory cost, the amount will be posted to the Customs Expenses account instead. As for the landed cost expenses, the journal entry will debit the inventory account and credit the landed costs allocation accounts.

The final step of recording landed cost is to post a service A/P invoice to your vendor that represents the broker you paid the additional expenses to. Here you would credit the vendor, and debit the corresponding allocation accounts so the amount is cleared.

6.3.3 Step 3: A/P Invoice

The A/P invoice is the purchasing document in SAP Business One that "vouches" for the invoice that the vendor sends for items or services ordered and received. The accounts payable clerk usually creates the A/P invoice that is required to request payment for the vendor. The A/P invoice results in a journal entry that reflects an increase in the company's liability to the vendor and updates the tax account and relevant expense account(s).

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

6.3.3.1 Creating and Posting an A/P Invoice

You can create an A/P invoice directly by selecting the document name in the module menu or by basing it on one or more POs or goods receipt POs. If you are basing your A/P invoice on one or more existing purchasing documents, you may copy all the data contained in the PO or use the Draw Document wizard (see Chapter 10) to select the data to copy from one or more existing POs or goods receipt POs. Even if you copy all data from existing purchasing document(s), you can still adjust quantities and prices - as well as dates, vendor, and item information - before you post the document.

> **Note**
>
> Data entry tip. Use the Document Date field in the A/P invoice header to enter the vendor's invoice date. This is important for accounting and auditing reasons as the invoice date and the posting date may differ. You may also wish to change the name of the Vendor Ref. No. field in the document header to Vendor Invoice No. This field prints on the check and allows your vendor to tie the payment to their invoice. See Figure 2-24 for details. You can choose whether to allow a duplicate vendor reference number, receive a warning, or block this situation. You can select your desired option in the Administration → System Initialization → Document Settings → Per Document for each document type.

6.3.3.2 Accounting and Inventory Impact of an A/P Invoice

Once posted to SAP Business One, an A/P invoice cannot be changed, as it is the legal accounting document that generates entries in the general ledger. The posted A/P invoice also updates the related vendor accounts in accounting.

In those cases where a vendor's invoice arrives before the items are received and are for items whose purchase is managed in the warehouse, the resulting A/P invoice also increases inventory quantities and values.

6.3.3.3 Optional Step: A/P Reserve Invoice

The A/P reserve invoice is similar to a PO but it also includes a request for payment. It is used when the vendor is concerned about your creditworthiness and requires prepayment before delivering an item

The A/P reserve invoice is a combination of a PO and a request for payment. It can be created directly or from an existing PO. Once posted, the document debits the relevant accounts in the general ledger without affecting inventory quantities and values. The A/P reserve invoice cannot be used for services.

6.3.3.4 Optional Step: A/P Credit Memo

You use the A/P credit memo in SAP Business One to reverse in part or entirely the inventory or accounting transactions posted by an A/P invoice in the case you return items later or realize you have made mistakes while entering data in previous related purchasing documents that have not been corrected. You create an A/P credit memo using the A/P invoice as your base document (as shown in Figure 6-14) if you want to establish a link between the two transactions. However, you can also create an A/P credit memo without a base document.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

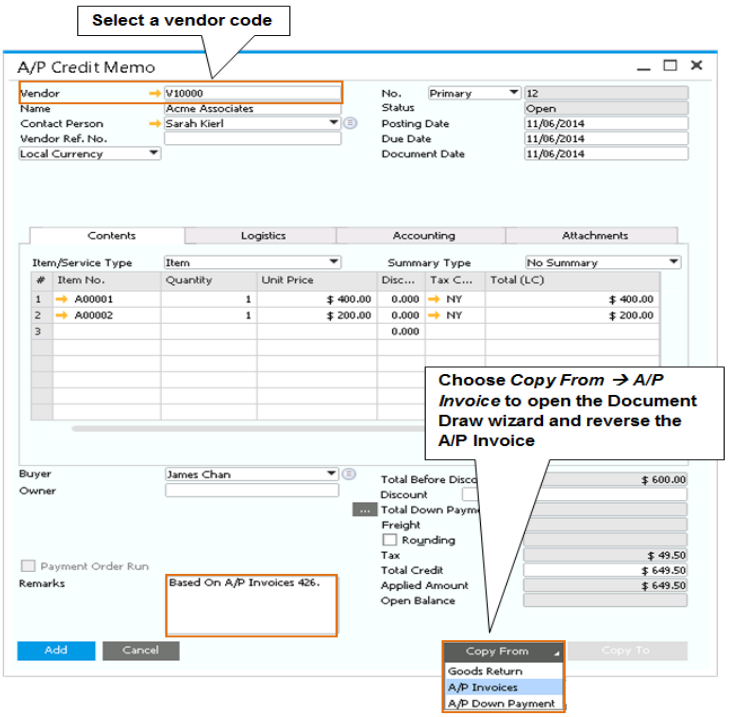


Figure 6-13: Creating an A/P credit memo

If, before you execute an A/P invoice, you have returned items and the vendor has sent you a goods return document, first create a goods return in SAP Business One that will update the inventory quantities and values. When you receive a credit memo for the returned items from the vendor, create an A/P credit memo to update the accounting transactions.

When you received a credit for being overcharged for a certain item, instead of using a service credit, you can enter the items but mark the Without Quantity Posting checkbox for the row to indicate the credit would be monetary only, without effect on inventory. Use the Form Settings to reveal this field.

If you received a credit for being overcharged for tax, check the Tax Only box on the row level of the credit.

6.3.3.5 Optional Step: A/P Down Payment Process

In some cases, you are required to pay a portion of the total due in advance, usually at the time you place the PO. For example, if your vendor asks you to provide your credit card information at the time he commits to fulfill your purchase order, you will record this as a down payment.

To record this payment, while creating the PO, click the (Payment Means) icon to open the Payment Means window. Once you add the PO, three documents are created:

- The PO
- The A/P down payment invoice linked to the PO
- An Outgoing Payment that closes the A/P down payment invoice.

The process is complete when you issue the final A/P invoice. If you base the invoice on the PO, the A/P down payment invoice is applied, and the amount is reduced from the A/P invoice amount.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Note

Down Payment Amount Reminder. When you apply a down payment, you can choose to pay the full amount of the order, including tax and freight. It is also possible to pay an amount above the original PO amount. In this case, when you create the A/P invoice, by default the invoice total about will be zero, however if you choose to, you can apply the entire down payment amount, so the A/P invoice total is negative.

The A/P down payment invoice can also be created from scratch with or without reference to a PO. Depending on the business process in your company, you may not create PO, or perhaps the advance payment is done at a later stage, after you add the PO. In these cases, you can create the A/P down payment invoice independently. When the payment is done, create an outgoing payment, and apply it to the A/P down payment invoice.

6.3.3.6 Accounting and Inventory Impact of the A/P Down Payment Invoice

The down payment invoice has no effect on inventory. The funds identified in the document are debited to a predefined asset account, and the vendor is credited.

Once the A/P down payment is paid, it can be applied to the A/P invoice. At this point the amount is transferred from the asset to the inventory or expense account. The vendor is credited for the remaining balance.

Specify the default down payment account by going to Administration → Setup → Financials → G/L Account Determination. Choose the Purchasing tab. On the General subtab, press Tab in the Payment Advance to select the asset account. This account also appears on the business partner master data. The account can be overridden by entering a different account.

Note

Applying a Down Payment to an A/P Invoice. While creating the A/P invoice, click the browse button at the bottom of the document, next to the Total Down Payment field. A list of paid A/P down payment invoices for the selected vendor is presented. You can choose to draw the entire amount, or adjust the Amount to Draw field.

You can apply multiple outgoing down payments on the same PO. To view a list of all down payments, right click the sales order screen and choose Related Down Payment Transactions.

6.4 Building One Document from Another

Many of these documents have much of the same information. SAP Business One allows you to create each “target” purchasing document described here from the “base” document or documents that precede it in the process.

For example, a goods receipt PO is usually built from the PO through which the item was ordered. When one document is built from another, all the relevant information is copied from the base document to the new document. This saves you valuable time by cutting back on redundant data entry and also reduces data entry errors. However, you can build purchasing documents in SAP Business One from scratch by creating the document from the main menu without copying any data from an existing document.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Note

Document type alert. When you copy one purchasing document to another, make sure that the base document and the target document are of the same type, whether items or services. Purchasing documents cannot mix items and services, and an item purchasing document cannot be copied to or from a services purchasing document.

6.4.1 Locating Base Documents

You can locate base documents upon which to build your target purchasing documents in several ways. See Chapter 10 for more information about document handling.

Here are the two most common methods:

- Go to Main Menu → Purchasing - A/P → Purchasing Reports → Open Items List.
  - Select the type of base document you are seeking from the drop-down list.
  - Select the base document you want and click to open.
  - Once the document is opened, use the Copy To button's drop-down list to select the type of target document you want and click to create.
- Use the Enterprise Search to enter information you know, such as document number, vendor name or code, filter by open only and the document type you are trying to locate until you pin point the base document you were looking for. See chapter 2 for more information on enterprise search.
- If you would like to create your target document using data from two or more base documents, use the Draw Document wizard. See Chapter 10 for more information about the wizard. See chapter 5 for more information about copying one document and another, as well as the Relationship Map.

6.5 Accounting and Inventory Impact

Summarized in the following table are the most important inventory management and accounting implications of the SAP Business One purchasing documents discussed in this chapter.

Purchasing Document	Accounting Impact	Inventory Impact
Purchase Blanket Agreement	No posting of value-based changes	No inventory impact
Purchase Request	No posting of value-based changes	No inventory impact
Purchase Quotation	No posting of value-based changes	No inventory impact
Purchase order	No posting of value-based changes	Allows viewing of ordered quantities in various reports and windows, such as inventory status report and Item Master Data window
A/P reserve invoice	Debits accrued payable/allocation account and credits business partner's A/P control account	Allows viewing of ordered quantities

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Purchasing Document	Accounting Impact	Inventory Impact
Goods receipt PO	Debits inventory account and credits accrued payable/allocation account	Increases inventory quantities
Goods Return Request	No posting of value-based changes	Increases committed quantity, and decreases available quantity
Goods return	Debits accrued payable/allocation account and credits inventory account	Reduces inventory quantities
Landed costs	Debits inventory account and credits landed-costs and customs account	Updates last purchase price of imported item(s) - containing all costs that were allocated - in price lists
A/P invoice	If the A/P invoice is based on a goods receipt PO, debits accrued-payable/allocation account and credits business partner's A/P control account If the A/P invoice is not based on a goods receipt PO, debits inventory account and credits business partner's A/P control account	Posts no changes in inventory (A/P invoice with reference to goods receipt PO) Posts inventory changes (A/P invoice without reference to goods receipt PO)
A/P credit memo	Debits business partner's A/P control account and credits inventory account	Reduces inventory quantities only if not based on goods return

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

7 The ABCs of MRP

In This Chapter

- Material Requirements Planning Defined
- Preparing for an MRP Run
- Using the Wizard to Execute an MRP Run
- MRP Checklist

Material requirements planning (referred to universally as MRP) is, in the most generic sense, a set of planning techniques that use bill-of-materials data, inventory data, and supply inputs from scheduled production and purchase orders, as well as demand inputs from actual and forecasted orders, to calculate material requirements for made or bought items. The output of an MRP run is a set of recommendations to reorder or produce materials as well as alerts about materials that will be past due. Based on the results of an MRP run, the arrival of materials can be accelerated and delays in production can be accommodated through schedule changes. MRP can also be used to maintain proper inventory levels of items purchased for resale.

This chapter explains how to properly model your inventory and demand for products so that you can use SAP Business One to support a streamlined MRP process for your business.

7.1 Material Requirements Planning Defined

When a business is considering using MRP, the first and most important step is to understand exactly how the process steps are implemented in SAP Business One. In other words, before you prepare to use MRP, it is important to understand what SAP Business One can do for you.

For those who may be familiar with the way that MRP is implemented in industry, it is important to define precisely the terms used in this chapter.

Terminologies	Definitions
Generic MRP process	The term generic MRP process refers to the general definition of MRP that is in common use. We use this term when referring to the larger concept of MRP, not just what SAP Business One does for MRP.
MRP process	The term MRP process refers to the scope and definition of the generic MRP process that is supported by SAP Business One.
MRP functionality	The term MRP functionality means the SAP Business One functionality that supports the MRP process.
MRP run	The term MRP run means using the SAP Business One MRP wizard to execute the MRP process so that the results can be used to efficiently schedule and manage production and replenish needed inventory.

These terms enable a clear explanation of how MRP is implemented in SAP Business One.

An MRP run is a schedule calculation that uses different demand and supply , as well as the minimum and maximum inventory level to predict what the company needs to purchase or produce.. An MRP run uses the due date in the sales order, and the

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

other transactions, indicating when the product must be delivered to customers as its basis for scheduling. The MRP run works backwards and calculates the dates at which items must be available at the factory, using the bill of materials and the information describing how long it takes to purchase or make items specified in the bill of materials based on the item's lead time.

> **Note**
>
> MRP process scope reminder. The MRP functionality of SAP Business One assumes that sufficient production capacity is available. The results of an MRP run should be reconciled with the production schedule for a factory. Insufficient capability to fulfill the requirements displays on the Historic Data column in the MRP run.

The key to getting the most out of the MRP functionality in SAP Business One is understanding how inventory and demand are modeled and how the MRP run uses this information. Here is the definition of MRP as implemented in SAP Business One:

- The current state of inventory is modeled through the levels of items on hand in each warehouse, supplemented by the items that are already on the way through purchase orders or production orders. In addition, you can take into account Required, Minimum, Maximum or Minimum - Maximum inventory level of the item.
- The current state of demand is modeled through open sales orders, sales quotations, blanket sales agreements, inventory transfer requests, recurring order transactions, reserve invoices, open production orders, and forecasts. Entire categories of demand can be included or excluded. For example, an MRP run can be configured to look only at sales orders and ignore forecasts or, alternatively, to have actual orders consume forecasted quantities to avoid inflating inventory.
- The current state of supply is modeled through open purchase requests, purchase quotations, purchase orders, blanket purchase agreements, production orders and inventory transfer requests. Similar to the demand calculation, you can pick and choose which category to include in the supply state.
- The result of an MRP run is a suggested set of purchase orders, production orders, purchase requests, purchase quotations or inventory transfer requests between warehouses. These recommendations can be converted easily to actual documents. If enough materials are not going to be on hand in time, the MRP run signals when a required quantity will not meet its due date based on its lead time. The recommendation report highlights proposed purchases or production orders that are past due. The MRP run does not suggest whether it would be better to delay the date at which the sales orders will be delivered or to attempt to rush the arrival of the needed items.

The reason to use MRP is simple: it replaces informal, ad hoc, error-prone production and purchase scheduling based on the instincts of one or two people with a more structured process that allows more people to participate using better information. Here are the sorts of errors that the MRP functionality of SAP Business One can prevent and some improvements that can be introduced:

- If the warehouse staff keeps inventory up to date, procurement managers don't have to worry about double-checking the accuracy of inventory levels and can instead focus on strategic procurement - cutting a better deal with suppliers.
- To reduce procurement costs, order intervals can be set up to consolidate purchases of like items. Minimum order quantities and order multiples allow companies to take advantage of quantity and order discounts.
- If an answer is needed about the ability to fill a big order, you don't have to wait your warehouse staff to get back from vacation. You can do an MRP run yourself and get an idea of whether you have the required materials.
- Inventory levels can be reduced because you know how much of all the items you need are on hand. Surplus inventory kept as insurance to avoid shortages can be reduced, and so can the bulge in inventory that can result from two people noticing a shortage and each placing an order without the other's knowledge.

SAP Business One implements MRP in a way that provides structure, but in a flexible manner, so that the instincts about what orders may or may not arrive can be represented in the models of inventory and demand and can inform the MRP runs. The application does not place orders automatically, but instead suggests them. These orders can then be improved after inspection by purchasing professionals or production managers who may have special knowledge that goes beyond what can be captured in an MRP application. For small and midsize businesses, this architecture provides just the right balance between automation and hands-on control.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

7.2 Preparing for an MRP Run

Much of the work of preparing for an MRP run takes place through the normal routine of using SAP Business One to run your business. If master data for items, inventory, bills of material, purchase orders, production orders, sales orders, forecasts, and so forth is kept up to date, MRP can provide a sharp, accurate view of your requirements.

7.2.1 An Overview of the MRP Process

As Figure 7-1 shows, to execute an MRP run, production, supply, and demand data must be accurate. Once a run is completed, any problems can be addressed so that production proceeds smoothly.

7.2.2 Key Master Data Settings Related to MRP

Two kinds of master data represent the core of the MRP process: the bill of materials specifies the items used to produce a manufactured item, the item data specifies the lead time that it takes to acquire each item, and the inventory data represents how much of each item is on hand. Here are suggestions for keeping this sort of master data up to date to make sure that the MRP run has an accurate picture of how to produce goods.

7.2.2.1 Bill of Materials

The bill of materials lists all items used as inputs to a production process. Items in bills of materials can refer to items that are purchased or made. Made items must have their own bill of materials, which may include other made items, and so on. An MRP run starts with the products in demand and then traverses the relevant bills of materials to see if all required items will be available when needed.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

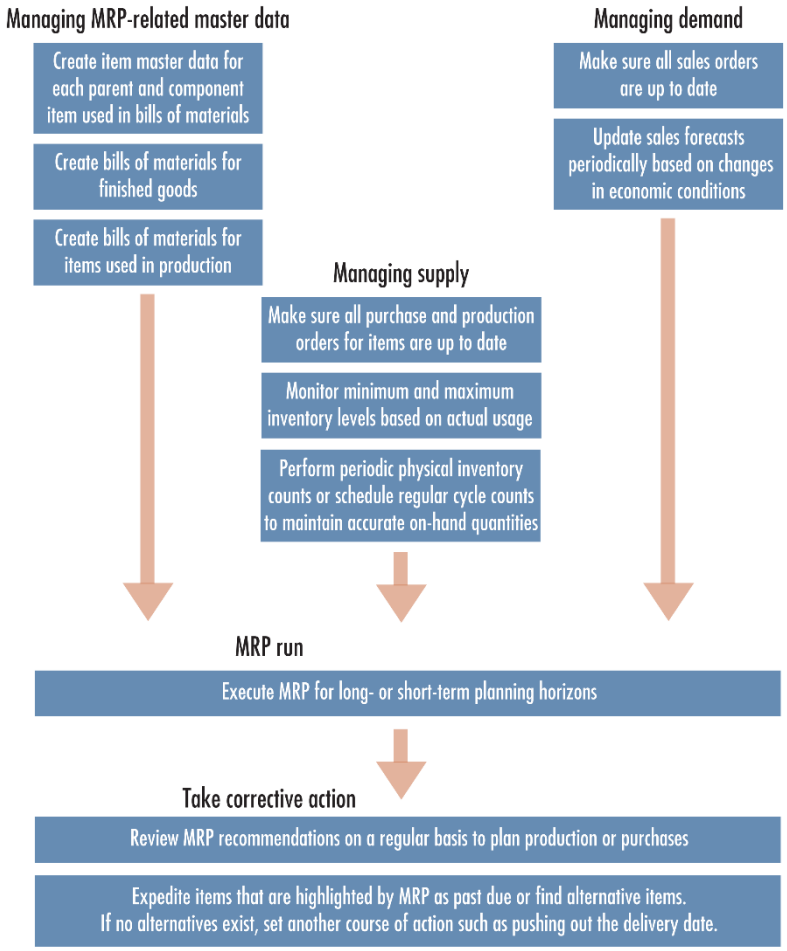


Figure 7-1: The MRP process

7.2.2.2 Item and Inventory Master Data

Figure 7-2 shows the Lead Time field on the Planning Data tab of the Item Master Data window (available by choosing Inventory from the Main Menu). This is one of the most important fields to specify correctly because the accuracy and usefulness of the MRP run is governed by this data.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

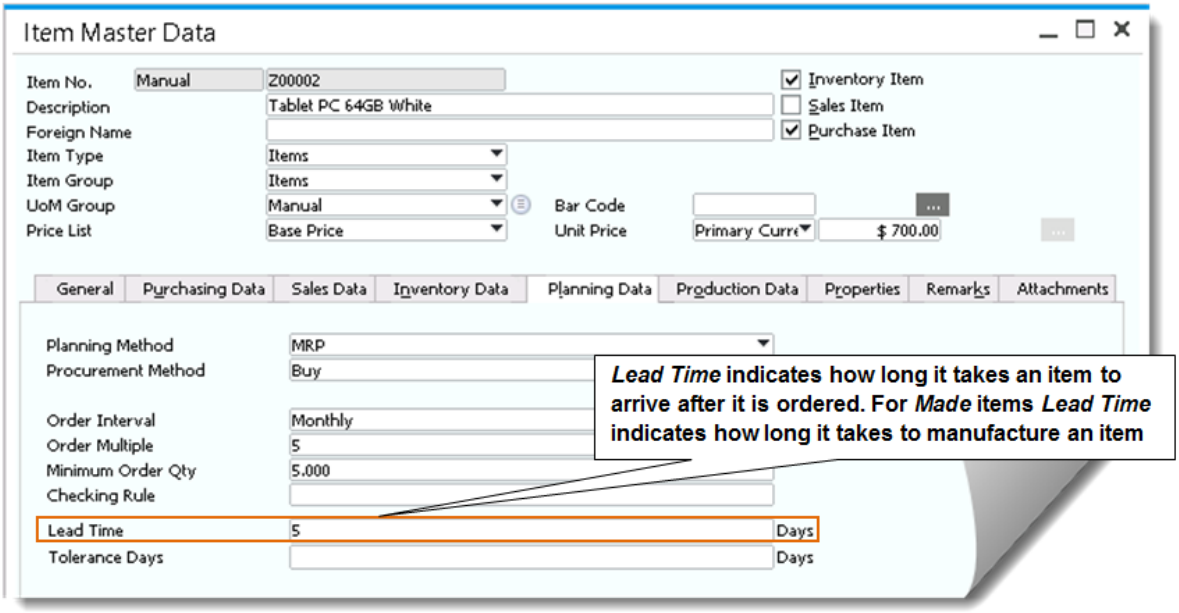


Figure 7-2: Lead Time field used in MRP calculations

The key steps in making sure an MRP run executes correctly are as follows:

- Enter the required and minimum inventory level for each item on the Inventory Data tab.
- Set the planning method to MRP for each item. If the planning method is not set to MRP, the item cannot be selected in the MRP wizard.
- Define the procurement method for the item as “make” or “buy”. For “buy” items a purchase document is created and for “make” items, a production order is created. Make sure all items that are parents of a production bill of material are set to “make”. If you choose “make,” an additional field is revealed for a Component Warehouse. Here you can choose how MRP selects the relevant warehouse for a component in the bill of materials.
- Enter the order intervals and multiples for the item, as well as the minimum quantity.
- If you are using the Advanced Available to Promise feature, you can specify checking rules for delivery dates determination.
- Specify the lead time it takes to purchase or make the item, as shown in Figure 7-2.
- Define the number of days outside of the lead time that you are willing to tolerate before the demand for the item is satisfied as Tolerance days.

You can also create sales forecasts as needed. Sales Forecasts are discussed later in the MRP Example 2: Consuming Forecasts section of this chapter.

7.3 Using the Wizard to Execute an MRP Run

With an accurate model of your business in place, you are ready for an MRP run, which will help you figure out how to get the materials you need in time to make or sell products.

Executing an MRP run involves proceeding through the following steps:

1. Create an MRP scenario or choose an existing one.
2. Enter scenario details such as planning horizon, sort preferences and other display preferences.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

3. Select the items and warehouses to be included.
4. Select supply and demand data sources.
5. Execute the MRP run and analyze recommendations.
6. Take action based on recommendations of the MRP run.

The complete picture of how you execute an MRP run is explained using three examples. In the first example, which covers how the MRP functionality handles a multilevel bill of materials, each step is covered in detail. The other two examples, covering consuming forecasts and order consolidation, explain these two advanced aspects of the MRP process at a higher level.

7.3.1 MRP Example 1: Multilevel Bill of Materials

One of the core features of the MRP functionality of SAP Business One is the way that it analyzes a multilevel bill of materials, in which one bill of materials refers to another bill of materials that could refer to still more. The challenge is to make sure that every item needed is available soon enough so that the components can be made far enough in advance to meet the schedule for the highest level item that includes them. With complex products, bills of materials can cascade for several levels.

7.3.1.1 Steps 1 and 2: Creating or Selecting a Scenario

To begin the process of an MRP run, you first select Main Menu → MRP → MRP Wizard. This presents a simple welcome window that leads to a list of existing scenarios. Each scenario defines the scope of the MRP run. In this example, a bill of materials with two levels is analyzed:

Lexmax Printer Bill of Materials

Component	Lead time (days)	Make or buy	On-hand quantity
Memory board	2	Buy	0
Printer head	0	Buy	0
Power supply assembly	1	Make	0

Power Supply Assembly Bill of Materials

Component	Lead time (days)	Make or buy	On-hand quantity
AC adaptor	2	Buy	0
Power supply	0	Buy	0

At the time of the MRP run, a sales order containing 10 Lexmax printers has been created with a due date of December 07. There is no available on-hand quantity to fulfill the order as of the order creation date, December 01. The MRP run determines what we need to have on hand to fill this order. Figure 7-3 shows the Scenario Details window of the MRP Wizard, which appears after the welcome window.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

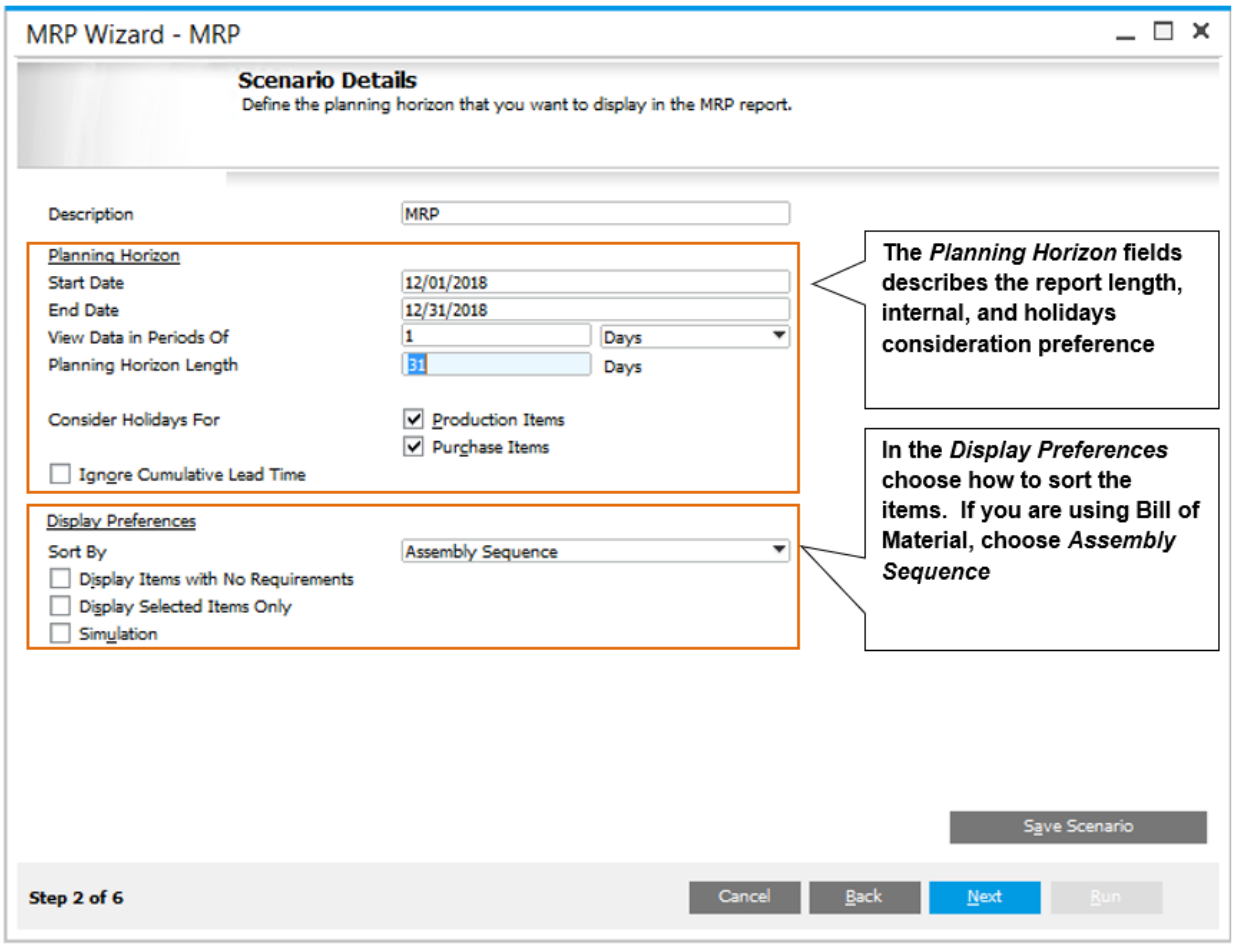


Figure 7-3: Scenario Details window

This MRP run has a 31-day planning horizon that will analyze all sources for demand in the period from December 01 to December 31. The MRP run calculates the production and purchase orders needed for all items included in the bill of materials. You can choose to run a simulation to get an advanced look at the system recommendation, without posting. The Save Scenario button that appears on this and later windows in the process saves the settings used in the MRP run.

7.3.1.2 Step 3: Item Selection

In this step you select which items to include in the run. You can choose all items or specific ones based on a range, item groups or properties. Additionally, you can update the planning parameters for the selected items by pressing the Update Selected Items button. The change you make here is only applicable to this MRP run and will not update the item master data.

Note

Preferred Vendors and UDFs in the Item List: In the Item List - Selection Criteria window, MRP Wizard can include a Preferred Vendor and User Defined Fields for items in the expanded selection criteria. This provides flexibility because it allows you to be more specific with the item selection inside MRP.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

7.3.1.3 Step 4: Inventory Data Sources

In the next window in the MRP Wizard, shown in Figure 7-4, specify which storage locations and warehouses to include in the MRP run, as well as the sources of demand and supply.

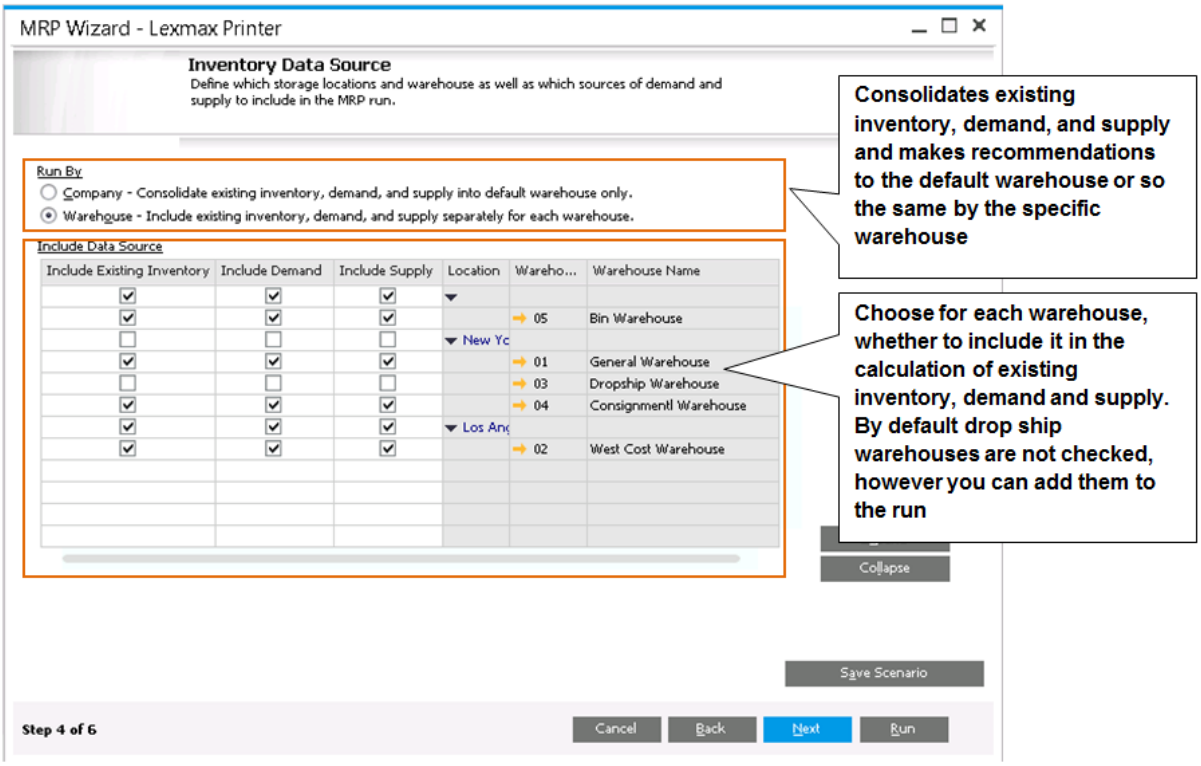


Figure 7-4: Data Source window

Choose between 2 options to Run By:

- Company level – the system looks at the company as a whole. If you have a demand from warehouse number 02 and sufficient inventory in warehouse number 01, there will be no recommendations from the MRP wizard. Also, all suggested procurement or production documents will be created for the default warehouse.
- Warehouse – the system looks at each warehouse separately and considers its inventory levels, demand and supply. If you have a demand from warehouse number 02, the system recommends a procurement or production document for warehouse number 02, ignoring existing inventory in other warehouses. When the warehouse option is used, an inventory transfer request can be recommended, meaning that sufficient inventory exists in another warehouse and you can transfer it to fulfil the demand.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

7.3.1.4 Step 5: Documents Data Source

The Documents Data Source step specifies the types of documents that are used to calculate supply and demand for products, such as production orders, sales orders, and purchase orders, and identifies which inventory level to consider. Here you choose whether to consider a sales forecast, as explained later in this chapter.

If you ran the MRP wizard by warehouse, you can choose to generate the document to the item's default warehouse, or to the warehouse where the demand is triggered from. You can also add the option to recommend inventory transfer requests between warehouses in case there is sufficient inventory in another warehouse location.

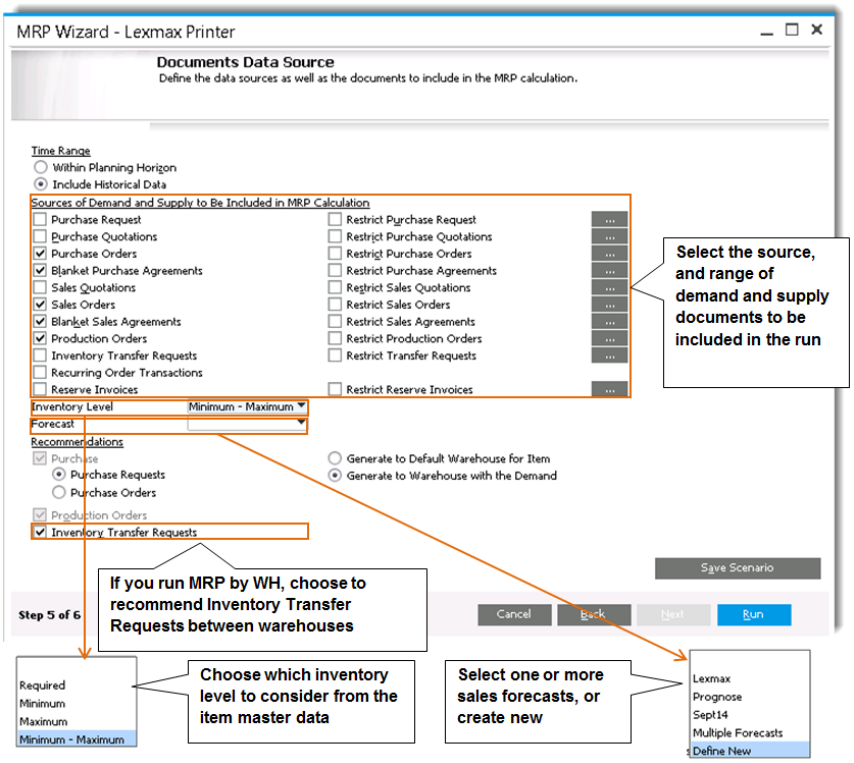


Figure 7-5: Documents Data Source

7.3.1.5 Executing the MRP Run and Analyzing Recommendations

An MRP run is executed by clicking the Run button in the lower right corner on any of the MRP Wizard windows. This triggers the MRP functionality that calculates current inventory and demand for products, reports whether you have enough materials on hand, and makes recommendations about which actions to take to acquire sufficient materials. Figure 7-6 shows the results from the MRP run.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

The shaded area represent the item's lead time. Red quantities indicate requirements with insufficient lead time. Red dates represent weekends or holidays, Yellow fields, indicates that additional information will be displayed upon expanding the item's view

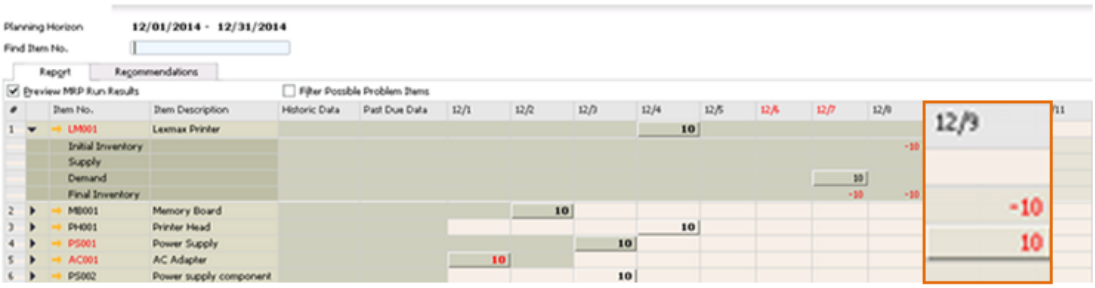


Figure 7-6: Item list from an MRP run

Let's look in detail at how the MRP functionality arrived at the results shown in Figure 7-6:

- The MRP run created a requirement for the parent item Lexmax printer to fulfill the sales order due on December 09 for 10 units.
- The Lexmax printer has a lead time of 3 days to produce, so the MRP run counts 3 days back from the due date of December 09 to determine the due date of each first-level component needed to build the Lexmax printer. December 7 and 6 are ignored during the count because they fall on the weekend and are considered nonworking days. Therefore, the due date for each first-level component is determined to be December 4.
- The next step is for the MRP run to determine the second-level component requirements. One of the first-level components, the power supply assembly, is a subassembly with two items; it requires one day for production. In order to have the power supply assembly available on December 4, the AC adaptor and power supply need to be available on December 3.
- Results: The AC adaptor has a two-day lead time, so it is highlighted in red to show it is past due. If today December 1 and the adaptor is needed today, there is no way the item will be in stock in time to fulfill the requirement.

Using the MRP Results window (shown in Figure 7-6), you can drill down to view the master data for each item by using the orange navigation arrows. In addition, you can examine existing purchase, sales, and production orders; review demand forecasts; and view the inventory levels if you expand the item row in this window.

To see any recommended versions of production orders needed to create the items for the sales order, click the Recommendations tab visible in Figure 7-5. If you click the Save Recommendations button, you accept and save the recommendations and make them available in the order recommendation report. Remember that saving recommendations does not mean that you have created the production and purchase orders recommended in the report - it simply means that you are saving the recommendations for later use. Read on for more information about this report.

7.3.1.6 Taking Action Using the Results of an MRP Run

The final step of the MRP process is to use the order recommendation report to create the new production and purchase orders needed to satisfy the demand for products. In this step, you bring all your experience and knowledge to this process to supplement what SAP Business One has done. You can take the following actions, among others:

- Change the dates on production, purchase, or sales orders and inform suppliers or customers of the changes
- Change quantities on purchase orders to take advantage of special offers or to round up or round down to lot sizes that may mean better prices
- Decide to make items rather than purchase them, or vice versa

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

- Shift inventory from one warehouse to another
- Change production schedules

Once such changes have been made and entered into SAP Business One, further MRP runs may be made to make sure that all required items will be available on time.

7.3.2 MRP Example 2: Consuming Forecasts

The previous example shows how the MRP analysis looks backward from the due date of an order, starting with the lead time for the items in a sales order, and then cascading all of the other lead times in bills of materials for components to determine whether all materials can be obtained on time. It is also important to understand that the MRP analysis reaches forward and reduces forecasted quantities so that inventory does not unintentionally become too high.

Excess inventory sometimes builds up after companies prepare annual, quarterly, and monthly forecasts for the number of units they plan to ship in order to avoid stock shortages and maintain on-time deliveries. If a company plans production based on forecasted quantities and then adds actual ordered quantities to the forecasts, production may exceed actual needs and inventory may be inflated. To avoid this situation, SAP Business One has a feature that tells the application to reduce forecasted quantities by actual order quantities. As a result, only the net forecast quantity (forecast minus ordered quantity) will be added to the MRP run.

This capability of the MRP functionality of SAP Business One is important because forecasts are considered sources of demand for MRP. This means that if you make a forecast that orders for 50 units will come in during a certain period, MRP treats that forecast as actual orders and generates production orders so that the items are ready when needed. Continuing with this example, assume that an actual order for 10 units comes in. Now, MRP will adjust the forecast downward by the 10 units ordered to avoid a buildup of excess inventory. This is referred to as consuming the forecast.

Let’s consider another example. Suppose you have received a sales order for 10 Lexmax printers with a due date of December 07. There is no available on-hand quantity to fulfill the order as of December 01, the order creation date. In addition to the sales order you created, there is also forecasted demand for 50 units on December 09. MRP is set up to have sales orders consume the forecast. (You can find this on the Administration → System Initialization → General Settings → Inventory tab → Planning tab.) In our example, the setting is 7 days forward, which means that the application searches 7 days forward from the due date (December 07) to look for forecast quantities to consume.

The MRP analysis takes place as follows. Based on the settings in the consumption method, the analysis counts forward 7 days and allows actual sales orders to consume forecasted amounts. In our example, the sales order for 10 units due on December 07 consumes 10 units of the forecasted quantities from December 09, reducing the forecasted quantities to 40 units as depicted in the MRP results shown in Figure 7-7.

> **Note**
>
> Creating Sales Forecasts, you can create forecasts either manually or automatically. Based on your past experience in selling certain items, you predict when a certain quantity will be required or you let the system generate forecast based on a simple average or monthly history. Forecasts can be defined as Daily, Monthly or Quarterly. To create new forecasts, go to MRP → Forecasts. In the Documents Data Source step of the wizard, choose the forecast from the drop down list.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

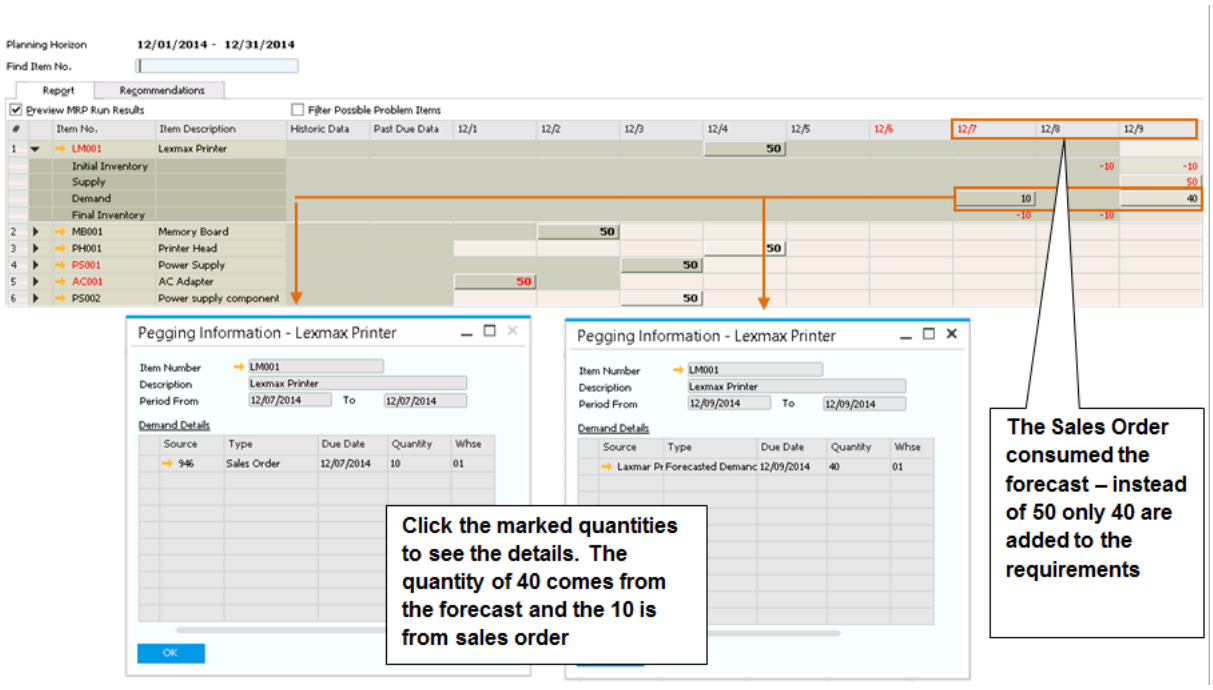


Figure 7-7: Results for MRP scenario in which forecasted orders are consumed

Note

Fine-tuning your forecasts: The Forecasts window contains three useful ways to manage your forecasts:

- The possibility to create and maintain forecasts for items per warehouse;
- Increase or decrease the forecast % across multiple line items; and
- Delete multiple item rows by right click on the Forecast Line.

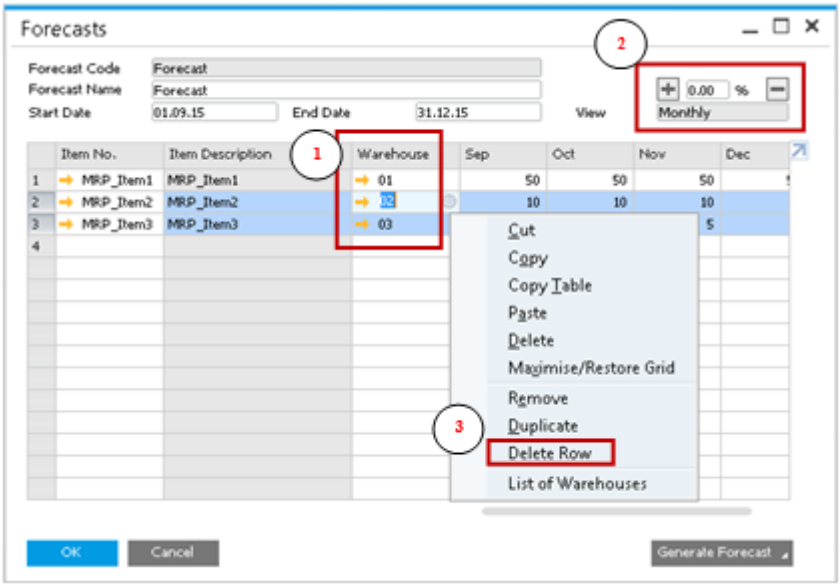
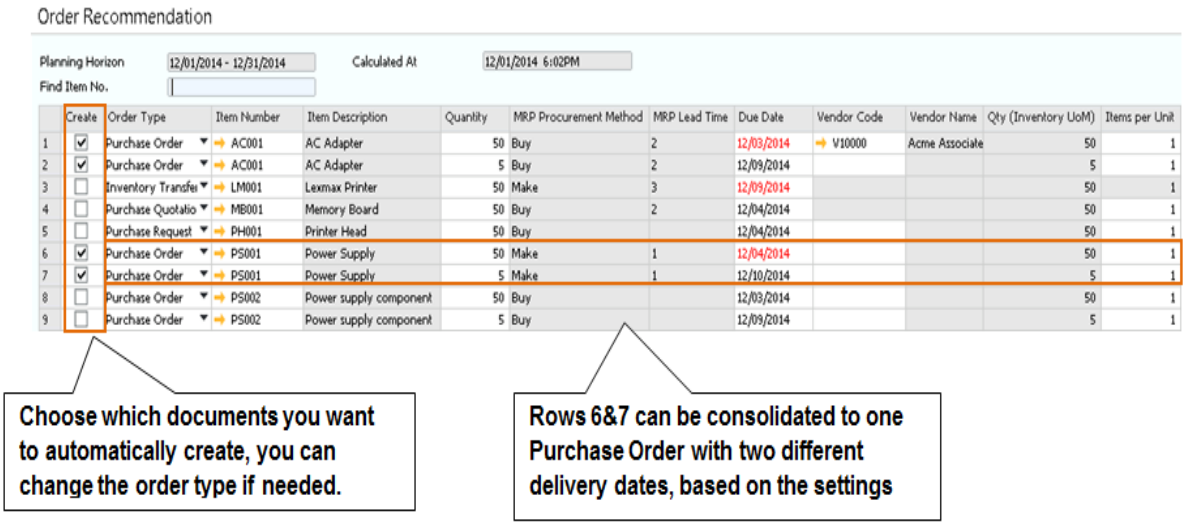


Figure 7-8: Ways to fine tune a forecast

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

7.3.3 MRP Example 3: Order Consolidation

Another efficiency feature of the MRP functionality of SAP Business One is its ability to consolidate orders so that quantities are purchased in amounts that ensure the highest discounts. For example, if a significant discount were available for Lexmax memory boards when they are ordered in lots of 100, the MRP functionality will consolidate any needed orders for any Lexmax memory boards up to an order amount of 100 to maximize the discount. Figure 7-9 shows the Order Recommendation report. Here is where you confirm the creation of production orders, purchase orders, purchase quotations, purchase requests and inventory transfer requests. You can adjust quantities, dates and vendors as explained in the Taking Action Using the Results of an MRP Run section earlier. Use the Form Settings to choose the consolidation options in the order recommendation report prior to updating.



	Create	Order Type	Item Number	Item Description	Quantity	MRP Procurement Method	MRP Lead Time	Due Date	Vendor Code	Vendor Name	Qty (Inventory UoM)	Items per Unit
1	☑	Purchase Order	AC001	AC Adapter	50	Buy	2	12/03/2014	V10000	Acme Associate	50	1
2	☑	Purchase Order	AC001	AC Adapter	5	Buy	2	12/09/2014			5	1
3	☐	Inventory Transfer	LM001	Lexmax Printer	50	Make	3	12/09/2014			50	1
4	☐	Purchase Quotatio	MB001	Memory Board	50	Buy	2	12/04/2014			50	1
5	☐	Purchase Request	PH001	Printer Head	50	Buy		12/04/2014			50	1
6	☑	Purchase Order	PS001	Power Supply	50	Make	1	12/04/2014			50	1
7	☑	Purchase Order	PS001	Power Supply	5	Make	1	12/10/2014			5	1
8	☐	Purchase Order	PS002	Power supply component	50	Buy		12/03/2014			50	1
9	☐	Purchase Order	PS002	Power supply component	5	Buy		12/09/2014			5	1

Figure 7-9: Order Recommendation report

See How to Configure and Use MRP in SAP Business One 9.0 document to learn more about the MRP functionality in SAP Business One.

7.3.4 Intelligent Forecast

SAP Business One version for HANA brings a feature called Intelligent Forecast (Figure 7-10). This forecast brings built-in models based on statistical calculations that help predict trends and seasonal factors inside your organization. These statistical calculations are: TESM (Triple Exponential Smoothing) and LRDTSA (Linear Regression with Damped Trend and Seasonal Adjust).

Using the power of SAP Business One on HANA, a selection is automatically chosen by the system and takes into account the best algorithm to be used. The result generated by the Intelligent Forecast can be used in the MRP Wizard. You have also the ability to leverage the what-if-analysis, by adjusting abnormal past transactions in order to have a better prediction for the future.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

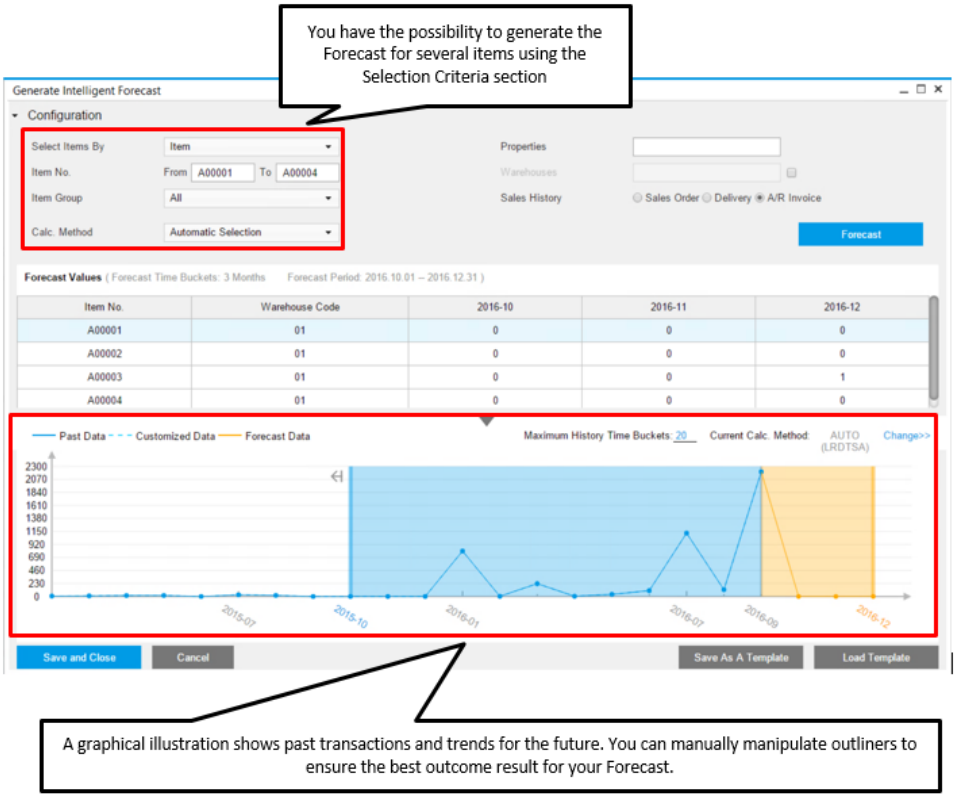


Figure 7-10: Intelligent Forecast

7.4 MRP Checklist

Preparing item master data
☐ Make sure item master data records exist for each item
☐ Enter the required and minimum inventory levels for each item
☐ Set the planning method to MRP for each item
☐ Set the procurement method for each item to make or buy
☐ Enter the intervals or multiples in which each item should be made or purchased
☐ Enter the minimum quantity for each item
☐ Specify the lead time for making or ordering each item
☐ Define the tolerance days for the item
☐ Optionally specify checking rules for delivery dates in the Advanced ATP feature

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Running the MRP wizard
Select a scenario
Define the planning horizon
Specify the items to include
Specify the data sources used to calculate demand
View the results and recommendations
Open Recommendation report
Make adjustments as needed and click Update

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

8 Opportunities

In This Chapter

- Getting Started with Opportunities
- Managing Opportunities in SAP Business One
- Managing Opportunities in Microsoft Outlook
- Reporting on Opportunities
- Campaign Management

Closing business, turning leads into sales, is the lifeblood of your company's revenue stream. You have to monitor all the leads to view the sales stream as a whole and tend each lead as if it were your only sale. SAP Business One gives you a simple way to enter and manage your sales opportunities, providing vital information for reporting and analysis. In addition, the day-to-day work of turning leads into sales, such as making calendar appointments, setting up meetings, and sending e-mails, can be managed either in SAP Business One or in Microsoft Outlook.

This chapter describes the tools that SAP Business One puts at your fingertips, giving you:

- An easy method for moving a lead through all the sales stages
- The ability to see what's in your sales pipeline, for individual salespeople or for the company as a whole
- Powerful reporting functionality
- A 360-degree view of leads and customers
- The ability to work with sales quotations right from Microsoft Outlook
- How to create and manage marketing campaigns

SAP Business One provides you with all the tools you need to stay on top of sales and turn leads into revenue and, even more important, into satisfied customers who come back again and again.

> **Note**
>
> Purchase opportunities: The Opportunities module allows you to create sales, as well as purchase opportunities. Use opportunities for purchasing to track potential large upcoming purchases, and later analyze the purchasing process effectiveness. However, since usually opportunities are used in the sales module, this chapter will focus on that aspect of your business.

8.1 Getting Started with Opportunities

You need to track what is most important to your company's bottom line: the deals in the making that will become your revenue stream. You create an opportunity record for each sales opportunity and, since you may well be working on more than one deal per customer, SAP Business One enables you to track by opportunity, not just by customer and lead.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

8.1.1 Sales Opportunities Process Overview

The basic process for managing sales opportunities in SAP Business One is shown in Figure 8-1.

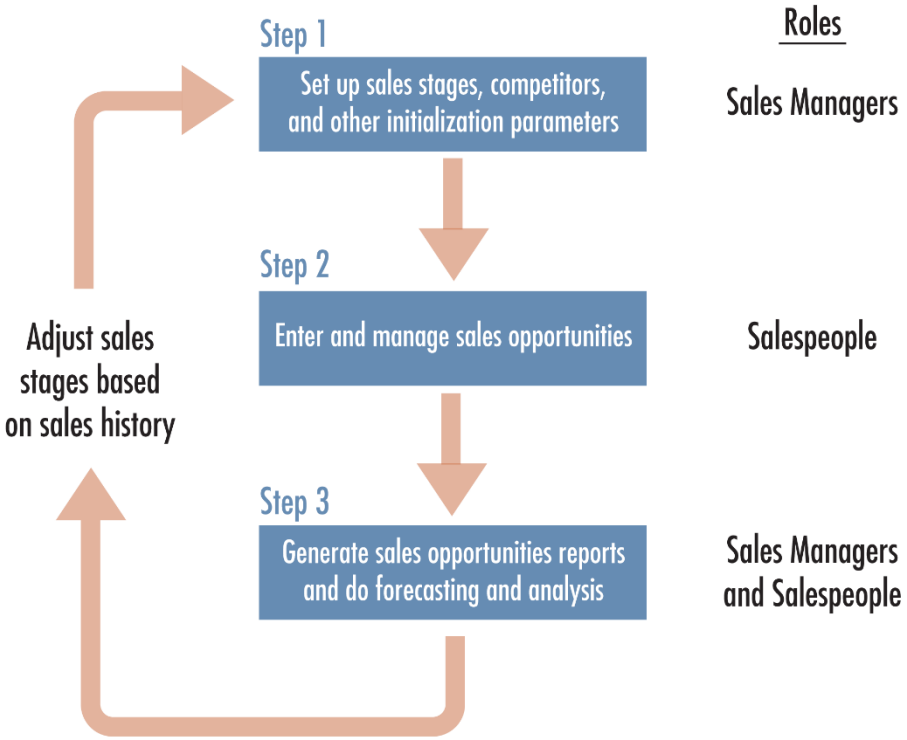


Figure 8-1: The sales opportunity process overview

8.1.1.1 Step 1: Setting up sales-related information

Sales managers set up important information such as the stages that a sale passes through and the likelihood (by percentage) that a sale in a given stage will close. This information helps with sales forecasting. Reports are key to the sales process, and the setup for the sales opportunities module in SAP Business One relates almost entirely to reporting. What do you want to monitor? What do you want to know? Do you want reports on who your competitors are? This information must be entered so that reports can be generated that help you monitor the all-important sales process.

8.1.1.2 Step 2: Managing opportunities

Salespeople enter opportunities and manage them throughout the sales process. One simple window in SAP Business One provides salespeople with comprehensive information about a particular sales opportunity. Again, the more details you enter for opportunities, the more visibility you have when you report on your leads, whether your own or those of your team.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Ongoing appointments, phone calls, tasks, and contact management can be done through SAP Business One or using Microsoft Outlook, as described later in this chapter.

8.1.1.3 Step 3: Reporting

Opportunities reports give you visibility into the sales pipeline, won and lost opportunities, sales forecasting, and more.

8.1.2 Setting Up Sales-Related Information

You set up information that you want to track for sales opportunities by going to Administration → Setup → Opportunities. Here you can set up sales and purchasing stages, competitors, partners, and relationships. You may want to set up all of these parameters, but most critical for sales forecasting are the sales stages.

Some sales cycles are long and some are short. Some have ten stages and some have two. Setting up sales stages, and the associated likelihood of closing based on those stages, is very important for accurate sales forecasting. For example, if a deal has a potential amount of $100,000 but is at a stage where it has a 20% chance of closing, its weighted amount is $20,000.

In the Opportunity Stages – Setup window, shown in Figure 8-2, you enter a name for each stage, a stage number, and a closing percentage. For example, let's say there are six sales stages, from Lead, which has a closing percentage of 6%, to Order, which has a closing percentage of 95%. How do you determine the closing percentage? Think of it this way. If you have 100 leads, how many turn into sales? That is the closing percentage for that sales stage. If the answer is 20 out of 100, you have a closing percentage of 20%.

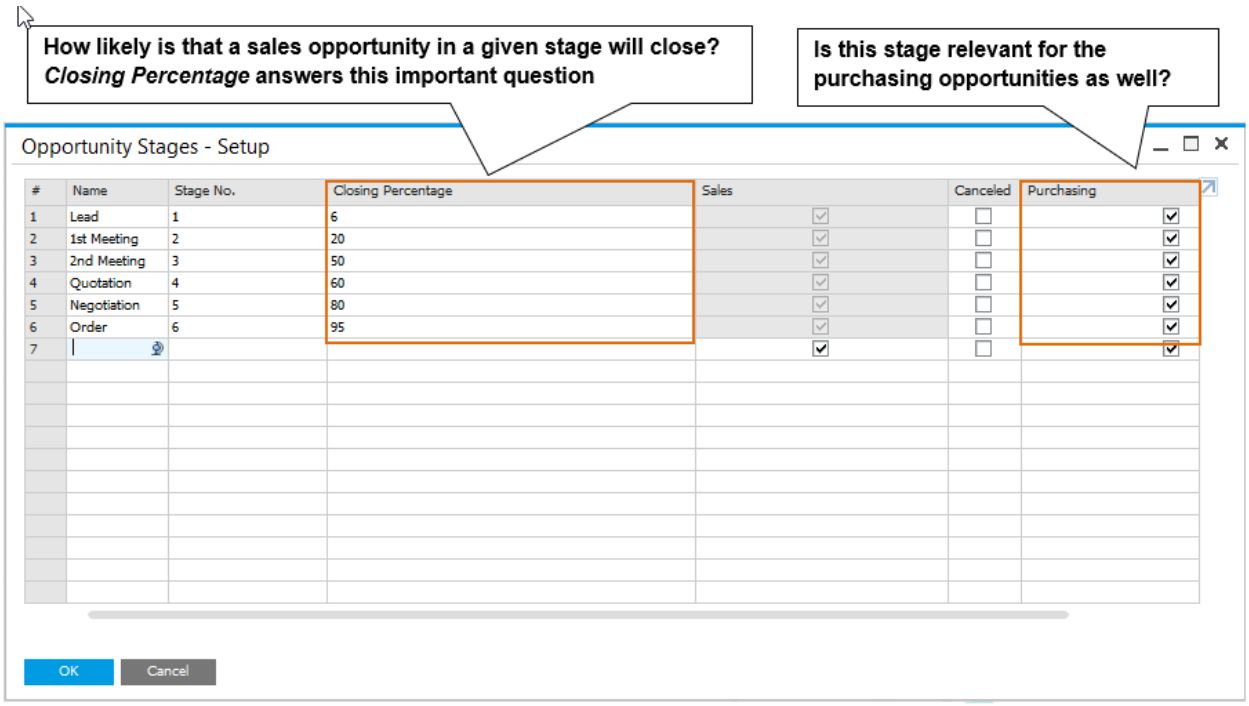


Figure 8-2: Opportunity Stages – Setup window

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

What if you later discover that more realistic percentages are higher or lower than indicated here? That's no problem. Just go back into setup and change them; all your sales forecasting will be adjusted automatically. In fact, the Stage Analysis report, created by choosing Opportunity → Opportunities Reports → Stage Analysis and shown in Figure 8-3, is designed to help you fine-tune your closing percentages based on actual history. You can also modify the percentage in the opportunity itself. Perhaps you feel that in this particular sales cycle there is more or less chanced for the opportunity to be successful. Additional information about sales reports can be found at the end of this chapter.

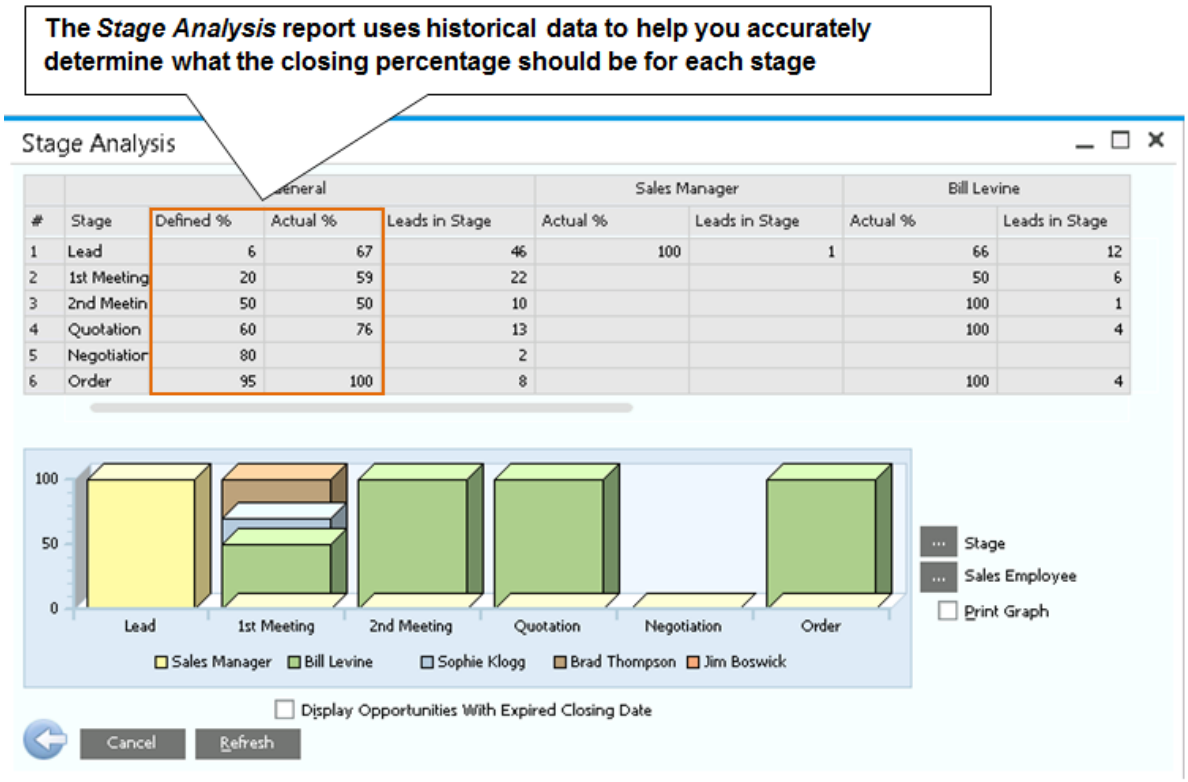


Figure 8-3: Stage Analysis report

So far, the SAP Business One features we have talked about help you manage the status of your leads and project their outcome. But what about the day-to-day work of turning a lead into a sale? This involves strategic contacts with key people, including phone calls, meetings, and e-mails. It also involves sending important documents such as sales quotations. It's critical that you have the ability to look at all this information in one place.

You have the option of handling these important activities either directly in SAP Business One or in Microsoft Outlook through the Microsoft Outlook integration add-on for SAP Business One. First, here's a brief look at how to handle these activities in SAP Business One. The next section describes Microsoft Outlook integration.

8.2 Managing Opportunities in SAP Business One

The opportunities module allows you to create an opportunity in the application immediately after it has been identified. For example, a prospect inquires about certain products your company is selling. You can respond immediately by creating a sales opportunity, allowing you to track this prospect and inform others about the status of this lead.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

8.2.1 Entering an Opportunity

To enter and track sales opportunities, go to the SAP Business One main menu and choose Opportunities → Opportunity to display the Sales Opportunity window (see Figure 8-4). In this section, we go into more detail about this window and the most relevant tabs. Select whether it's a sales or a purchasing opportunity.

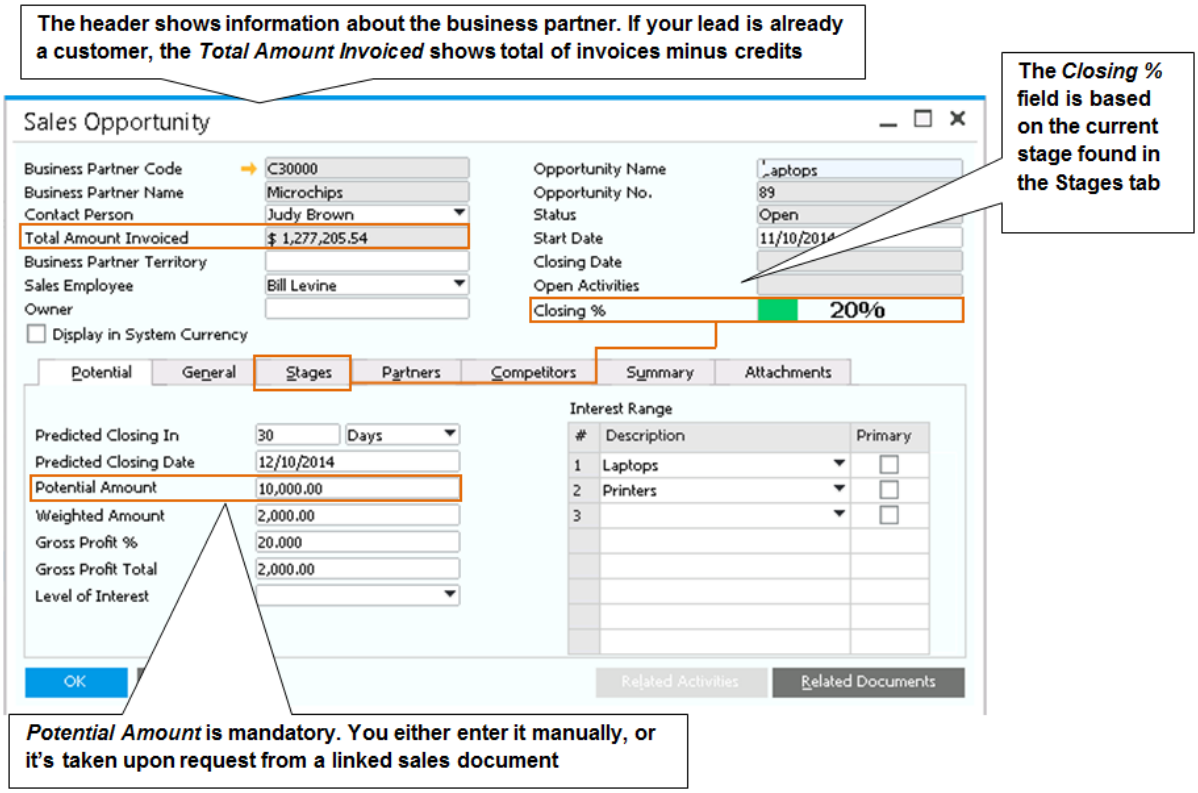


Figure 8-4: Anatomy of a sales opportunity in SAP Business One

8.2.1.1 Who Is Your Prospect?

The first step in entering a sales opportunity is identifying your prospect. Click on the button to the right of the Business Partner Code field to display the List of Business Partners window. If your prospect has already been entered as a customer, vendor or as a lead, then the prospect will be listed here. If not, click on the New button to display the Business Partner Master Data window. Chapter 4 provides information about entering business partner master data.

If you are selling to an existing customer, or buying from an existing vendor, the Opportunity header includes details such as the total of all invoices the customer currently owes, taking into account any credit memos they might have. Such information doesn't apply, of course, to new leads.

Business Partner Territory and Sales Employee default from the business partner master data record; you can change them. Owner indicates the default connected owner, who will be used for authorization purposes, in case the data ownership module is used. See chapter 10 for more details on data ownership

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

You can give a name to your opportunity in the Opportunity Name field; SAP Business One assigns a number automatically. The Status field defaults to Open; the sales opportunity remains open until you close it on the Summary tab, providing flexibility for you to continue to track the opportunity, if desired, even after the sale is closed and the delivery has been made, to ensure customer satisfaction.

Closing % is associated with the stage of the sales opportunity, as discussed previously.

Note that only the Potential tab has required fields, but each tab holds a particular type of information that helps you track not only this sale, but all your sales opportunities as a whole.

8.2.1.2 The Bottom Line: What's the Potential for This Opportunity?

Sales managers are especially interested in the Potential tab as shown in Figure 8-4, and so are you if you receive a commission on your sales.

On this tab you enter information about when this sale might close. Enter either a Predicted Closing Date or a number of days or weeks or years in which you expect this sale to close in the Predicted Closing In field (and the drop-down list allows you to specify days, weeks, or months). You fill in one field and SAP Business One calculates the other one, so if you fill in a date, the number is filled in for you (the reverse is also true).

You must fill in a Potential Amount for your sale or purchase. The Weighted Amount is calculated by SAP Business One based on the likelihood that this sale will close. In our example (see Figure 8-4), 6% of leads turn into sales. Therefore, the Weighted Amount is calculated to be $21,002.82, which is 6% (Closing %) of $350,047 (Potential Amount). On the Stages tab, as we will see, each sales stage is associated with a percentage that is used to estimate how likely it is that a given sale will close (the Closing % field in the header shows the percentage for the current stage of the sale). This methodology produces more realistic forecasting.

Another factor that is important for forecasting is the Level of Interest. Is this a hot lead or just lukewarm? This drop-down field contains entries defined by your company.

Interest Range helps you keep track of the kinds of things this client is interested in; making notes here may help you in the future to make additional sales to this prospect. You can indicate the prospect's primary interest using a checkbox.

8.2.1.3 Rounding Out the Opportunity

The remaining tabs on the Opportunity window help you track a variety of important information.

On the Stages tab, you track the sales opportunity through the stages, moving it from one stage to another as the deal progresses. The Potential Amount may not change from stage to stage (though it can), but the Weighted Amount changes because later stages typically have a higher likelihood of closing than earlier stages. For each stage you can link an activity or a sales document. For example, link a quotation to the quotation stage. You can either link an existing quotation or create one from the opportunity window. Do this by choosing the Document Type and press Tab in the Document No. field. To create an activity, click the orange link arrow from the Activity field. Later you can view all related documents and activities by pressing the button at the bottom of the window.

The General tab allows you to manage opportunities in which a third party, such as a reseller, is handling the sale on your behalf. The Partners tab, on the other hand, is available for defining relationships of any type. If you are a general contractor, for example, you could include subcontractors on the Partners tab. Using these two tabs, you can manage complex sales opportunities that involve a number of parties.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

On the Competitors tab you specify who else is competing for this sale and the threat level of that competitor. The intensity of the competition is gauged in the Threat Level field; you can either select the default for this competitor or choose a different threat level for this particular opportunity.

If the sale is ultimately won by a competitor, click the Lost checkbox. By tracking such information, you can later perform competitive analyses about which sales are being lost and won, who is winning business from you, and why, if you know the reason.

The Summary tab is important for indicating the status of this opportunity: whether it is open, won, or lost.

On the Attachments tab, you find related documents such as sales orders or sales quotations as well as e-mail messages, Microsoft Word documents, spreadsheets, and presentations - any type of document. By keeping all this information together, you can create a coherent view of this particular sales opportunity.

> **Note**
>
> Attachments tip. You can attach documents related to a sales opportunity on a shared server or on your PC. If you attach documents stored on your PC, SAP Business One creates a copy of the document on a central server directory, which makes it available to anyone viewing the sales opportunity. If you attach a document to a sales opportunity, therefore, you are in effect sharing the document with anyone who can view sales opportunities.

8.2.2 Managing Activities

In SAP Business One, everything you do with a customer is called an activity. There are six kinds of activities: phone calls, meetings, tasks, notes, campaign and “other,” which can include e-mail, for example.

Select Business Partners → Activity from the SAP Business One main menu to display the Activity window (shown in Figure 8-5). (Note that you can also attach activities to any document, and item.) In the Activity window you can set reminders that pop up in SAP Business One. Activities also appear on your SAP Business One calendar. You can link documents and attachments as well as free-form content such as e-mail messages.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

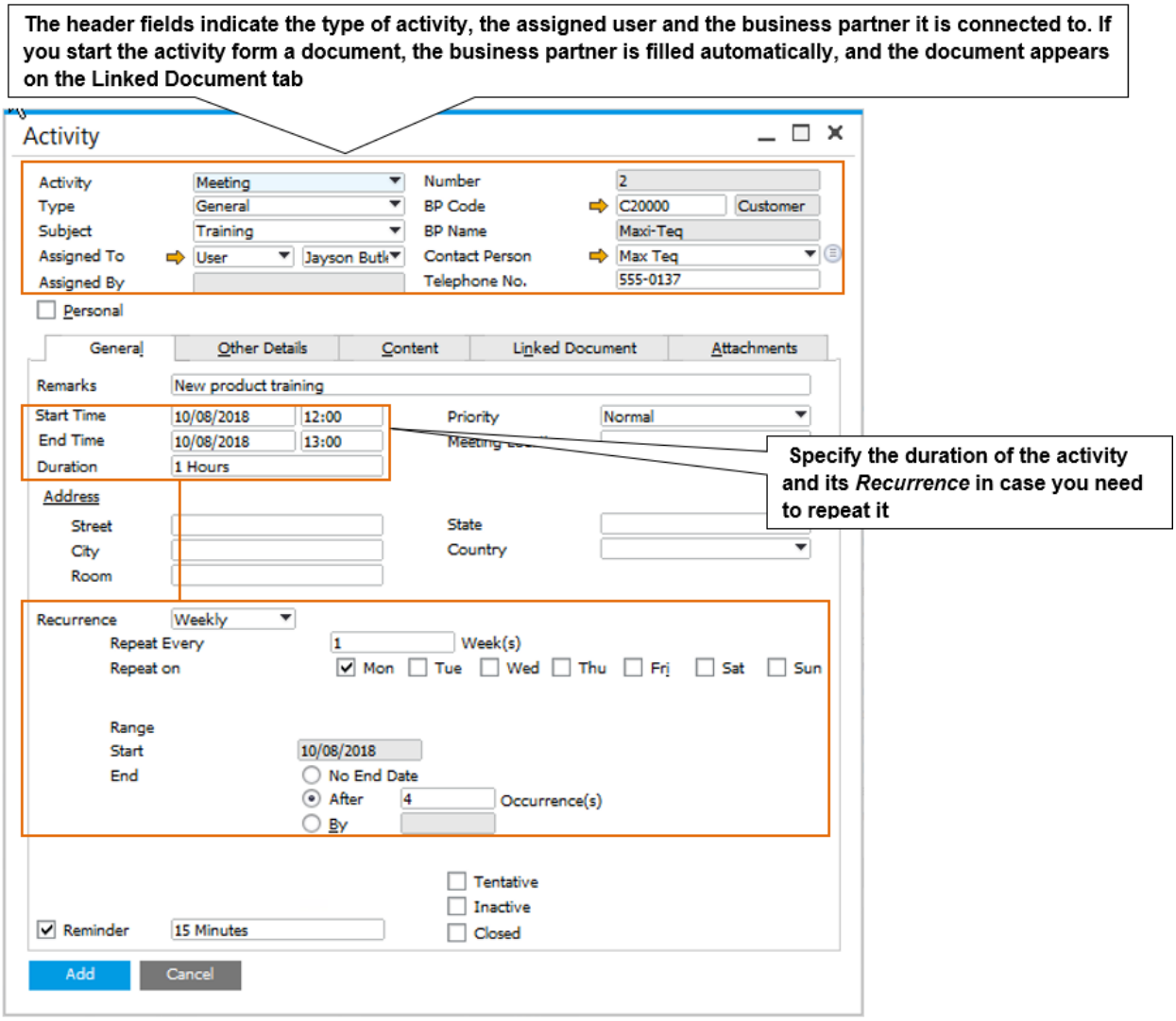


Figure 8-5: Entering activities in SAP Business One

To schedule meetings, simply click on the calendar icon on the SAP Business One toolbar. The calendar provides multiple views, including a group view that can facilitate scheduling team meetings. Click on a given date and time, and SAP Business One takes you to the Activity window (Figure 8-5) where you can describe activities and link them to business partners and documents.

Activities not only report what you have done with a given contact, but what you plan to do. For example, you record a phone call and set a follow-up reminder to call again.

When you log in to SAP Business One, reminders for scheduled activities appear, helping you manage your work with clients.

8.3 Managing Opportunities in Microsoft Outlook

It's true that you can manage sales activities in SAP Business One, and that can be very convenient when you are updating sales opportunities or entering sales orders, for example. But since many people use Microsoft Outlook to manage both their e-mail

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

and their daily schedule, you have the option of using the Microsoft Outlook integration add-on for SAP Business One to keep track of your day-to-day work on sales opportunities.

Microsoft Outlook integration gives you access to sales data without having to be logged on continuously to SAP Business One. This is especially valuable for sales managers who travel frequently and need to be able to view prospect and customer data while on the road. For example, a sales manager needs to prepare for a meeting at a customer's site. Microsoft Outlook integration allows him to synchronize information between his contacts in Microsoft Outlook and business partners in SAP Business One.

> **Note**
>
> Microsoft Outlook integration add-on installation alert. Microsoft Outlook integration requires an SAP Business One add-on that should be installed by your implementation partner.

The sales manager can generate an Excel-based snapshot of additional customer data, such as open activities, open deliveries, and invoices, as well as quotations and orders that need to be processed. He can change data and synchronize the changes later with SAP Business One. It is also possible for the sales manager to create quotations directly from Microsoft Outlook and send them to the customer via e-mail. At the next synchronization, the quotation will be imported into SAP Business One and made available to the sales department for further processing. Figure 8-6 illustrates the functionality of the Microsoft Outlook integration add-on.

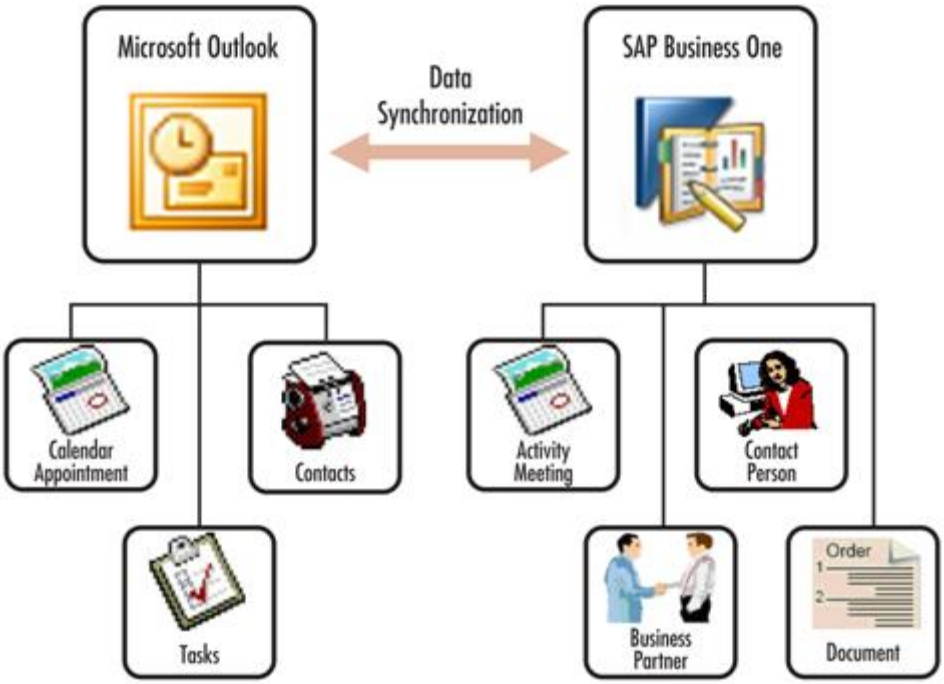


Figure 8-6: Microsoft Outlook integration with SAP Business One synchronizes your work in Microsoft Outlook with your work in SAP Business One

What kinds of things can you do with Microsoft Outlook integration? Take a look at this list:

- Import contacts from SAP Business One and synchronize them with Microsoft Outlook
- Save e-mail messages and attachments as SAP Business One activities
- Import tasks and calendar activities created in SAP Business One into Microsoft Outlook
- Edit, view, and create sales quotations and save them to SAP Business One

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

- Create up-to-the-minute snapshots of customer sales and vendor purchasing activities

Most importantly, Microsoft Outlook integration helps increase your productivity and simplify your work. It provides you with a holistic, integrated way to manage your schedule, e-mail, and activities while giving you access to all the latest information from SAP Business One.

8.3.1 What Does Microsoft Outlook Integration Look Like?

Figure 8-7 shows the integration of SAP Business One into Microsoft Outlook. To work with the Microsoft Outlook integration add-on, you must be logged in to SAP Business One.

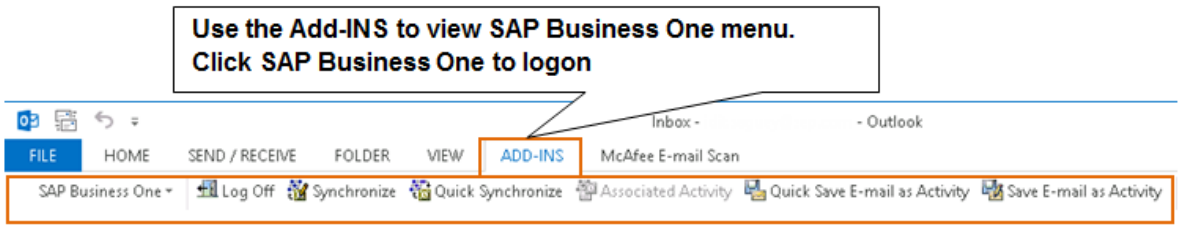


Figure 8-7: SAP Business One menu in Microsoft Outlook

8.3.2 Synchronizing SAP Business One and Microsoft Outlook

SAP Business One has contact persons, activities, and documents. Microsoft Outlook has calendar appointments, contacts, and tasks. Since this information is stored in separate databases, it is important to synchronize it. And to synchronize this information, we need a common link between Microsoft Outlook and SAP Business One. Business partner information serves as that common link between the two applications.

To synchronize with SAP Business One, therefore, each calendar appointment, contact, or task in Microsoft Outlook must be associated with a business partner. To associate a contact with a business partner, display the contact in Microsoft Outlook and select SAP Business One → Associate with to display an Associate with window shown in Figure 8-8.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

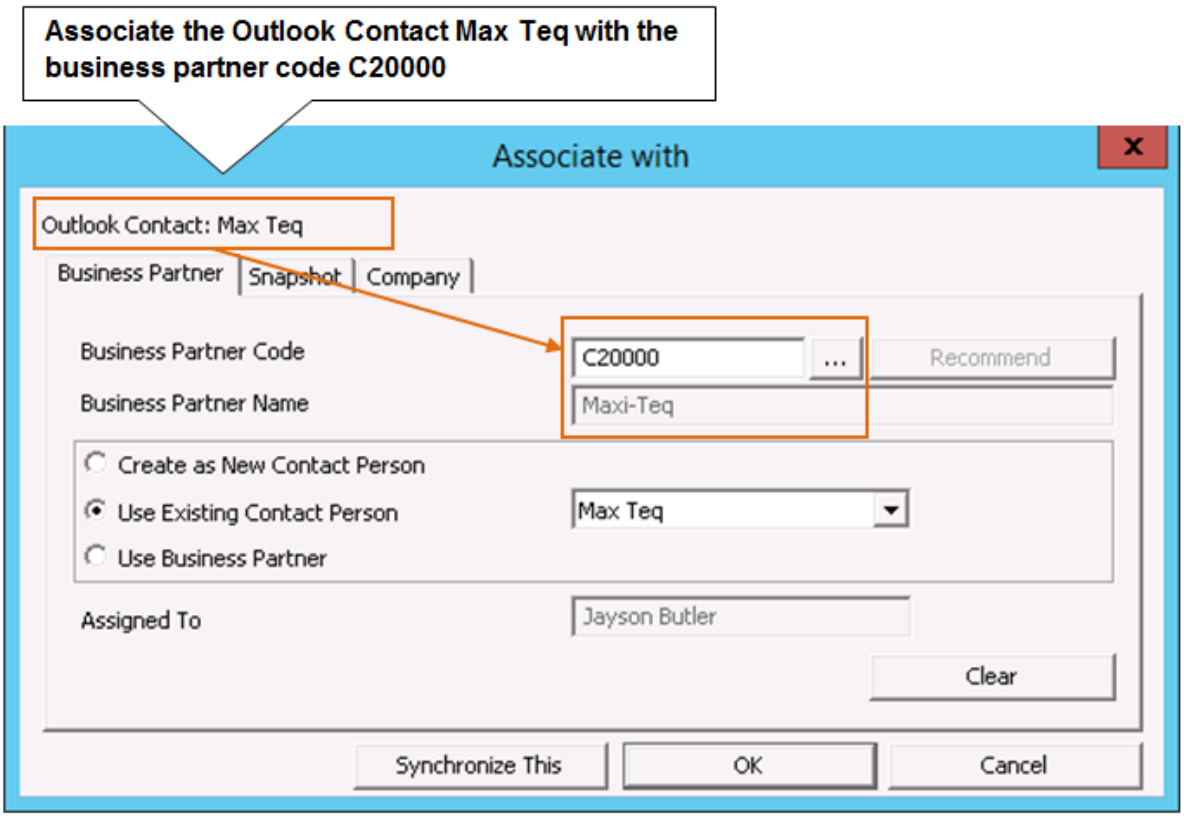


Figure 8-8: Associating a Microsoft Outlook contact with an SAP Business One business partner

Click the lookup button to the right of the Business Partner Code field to display a list of business partners, or click Recommend to display a Select Contact from Recommendation window. This window lists business partners who share the same e-mail domain name with the Microsoft Outlook contact. Select the appropriate business partner and click OK. After the contact is associated, click the Associated Contact to view the database name, business partner and contact name that this contact is associated with.

If the contact names in Microsoft Outlook and SAP Business One are different, the Create as New Contact Person button is activated automatically. If the names are the same, the Use Existing Contact button is activated. Click Synchronize This and then OK to dismiss the message that pops up, then click Save and Close. At this point, you can go into SAP Business One and see that the Microsoft Outlook contact is included on the business partner record.

You associate tasks and calendar appointments with SAP Business One business partners in a similarly intuitive fashion. When you add an appointment to your calendar in Microsoft Outlook and synchronize, it updates your calendar in SAP Business One. Similarly, tasks are added as activities in SAP Business One.

Note

Calendar appointment, task, and contact deletion alert. When deleting a calendar appointment, task, or contact in Microsoft Outlook, check whether it should be deleted in SAP Business One as well. Deletions are not automatic since they are irreversible.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

8.3.2.1 Bulk Synchronization

Often you'll want to synchronize not just one contact, calendar appointment, or task, but many at once. To do bulk synchronization in Microsoft Outlook, select SAP Business One → Synchronization → Quick Synchronize. If you want fine-grained control over what is synchronized, choose Synchronization → Synchronize instead. Consult the online help for details.

8.3.3 Saving E-Mail as an Activity

Keeping e-mail messages as part of a business partner record is a great strategy. Everyone in the organization can see the e-mail related to a given business partner, enabling everyone to have the complete details about a given customer or prospect.

Another key benefit to saving e-mail as an activity is that you can automatically create follow-up activities that remind you to take certain actions. To specify what the default follow-up activity should be, in Microsoft Outlook select SAP Business One → Default Settings → Save E-mail as Activity.

To save an e-mail as an activity, display the e-mail message in Microsoft Outlook, then choose either Quick Save E-mail as Activity or Save E-mail as Activity from the SAP Business One menu in Microsoft Outlook. Similar to synchronization, selecting Save E-mail as Activity gives you fine-grained control over exactly how this e-mail is saved, including, if necessary, creating a new contact person for the business partner, linking an existing document and creating a follow up activity. You can choose whether to save any attachments along with the e-mail message. Figure 8-9 shows how an e-mail message looks in SAP Business One. This e-mail message was a follow-up to a phone call. To display an attachment, simply click on the Attachments tab of the Activity window.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

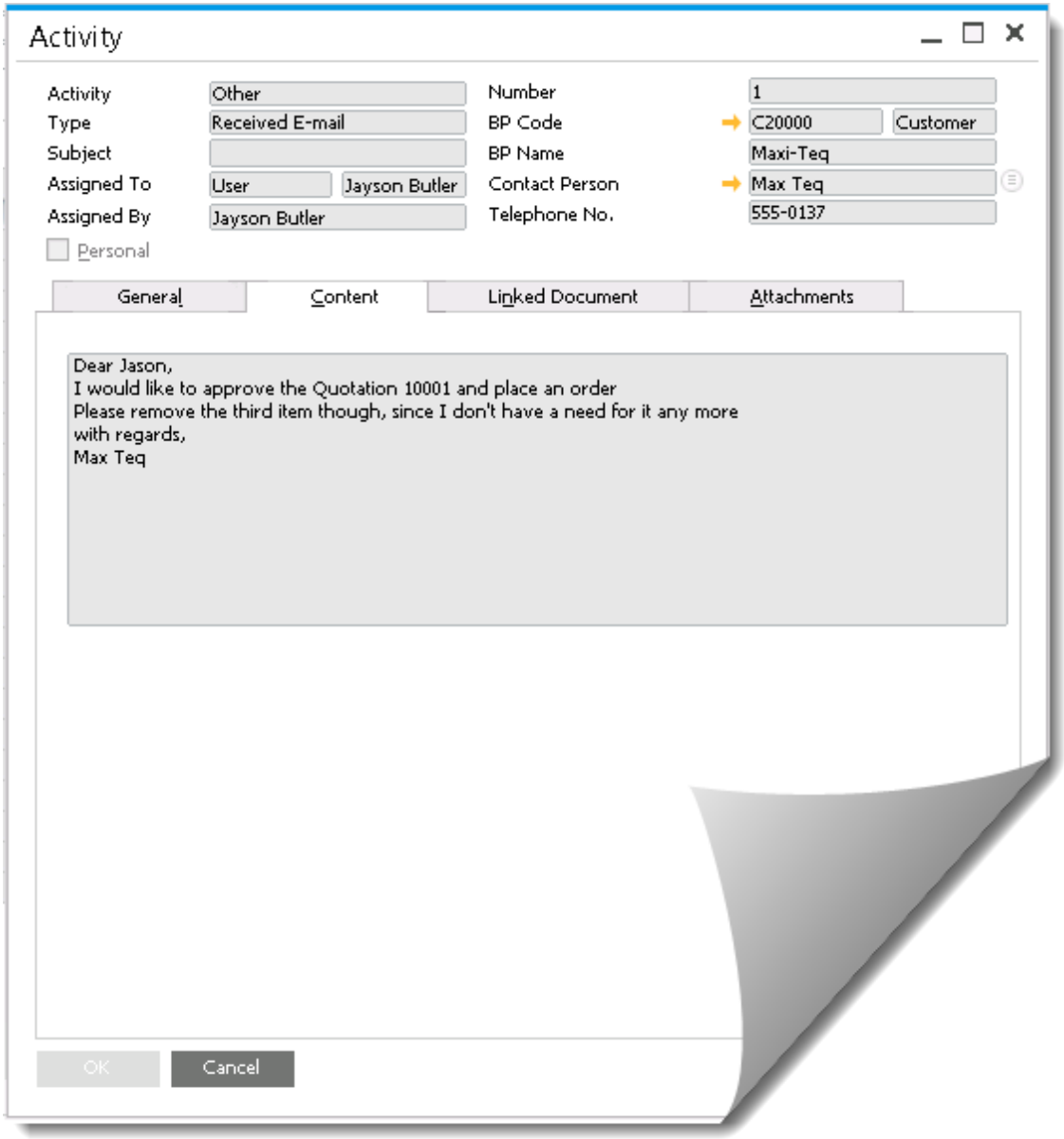


Figure 8-9: An e-mail from Microsoft Outlook saved as an activity in SAP Business One

You can save an email as an attachment easily, in every document, on the Attachments tab. Simply drag the email and drop it into an open document such as a quotation, and the email will be linked to the document in the Attachments tab.

8.3.4 Working with Quotations in Microsoft Outlook

Quotations in Microsoft Outlook work a little bit differently from what we have discussed so far. To import quotations from SAP Business One, go to the SAP Business One menu in Microsoft Outlook and choose Quotations → Set Filter to display the Quotations Filter window. In this window, you set options that filter which quotations are imported. Click Save and Refresh to import quotations using these options. Quotations are stored in an e-mail folder called Quotations, shown in Figure 8-10.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

You can create quotations in SAP Business One and then import them into Microsoft Outlook. After you import them, you can display them, edit them, or send them as e-mails. You can also create new quotations directly in Microsoft Outlook. The Quotation window provides you with direct access to information such as customer, warehouse, quantities and the latest pricing, just as you have when creating quotations in SAP Business One. In fact, when you add or update quotations through Microsoft Outlook, they are updated or added in SAP Business One; no additional step (such as synchronization) is needed. You can send the quotation immediately via an email message by pressing the Send button.

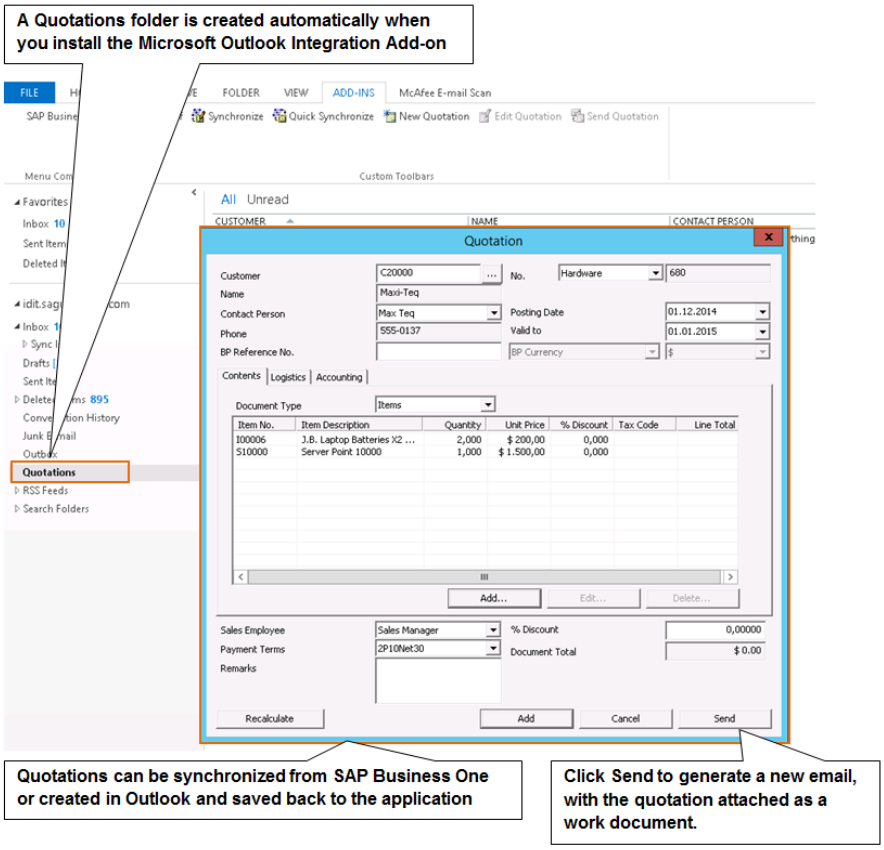


Figure 8-10: Importing sales quotations into Microsoft Outlook

8.3.5 Generating Snapshots of Business Partner Activity

Snapshots provide you with powerful, detailed information so that you can effectively work with customers and leads. Microsoft Outlook integration gives you the opportunity to see a snapshot of information about business partners when you synchronize a given contact's information. When you choose Synchronize This from the SAP Business One menu in Microsoft Outlook, you are prompted to create a snapshot of information for that business partner. Snapshots are Excel workbooks that provide detailed information about a given business partner. You can choose from 10 snapshot templates or create your own.

You can select a snapshot and generate it in one step by displaying the contact in Microsoft Outlook and choosing SAP Business One → Associate with. The Associate with window appears, as shown in Figure 8-11.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

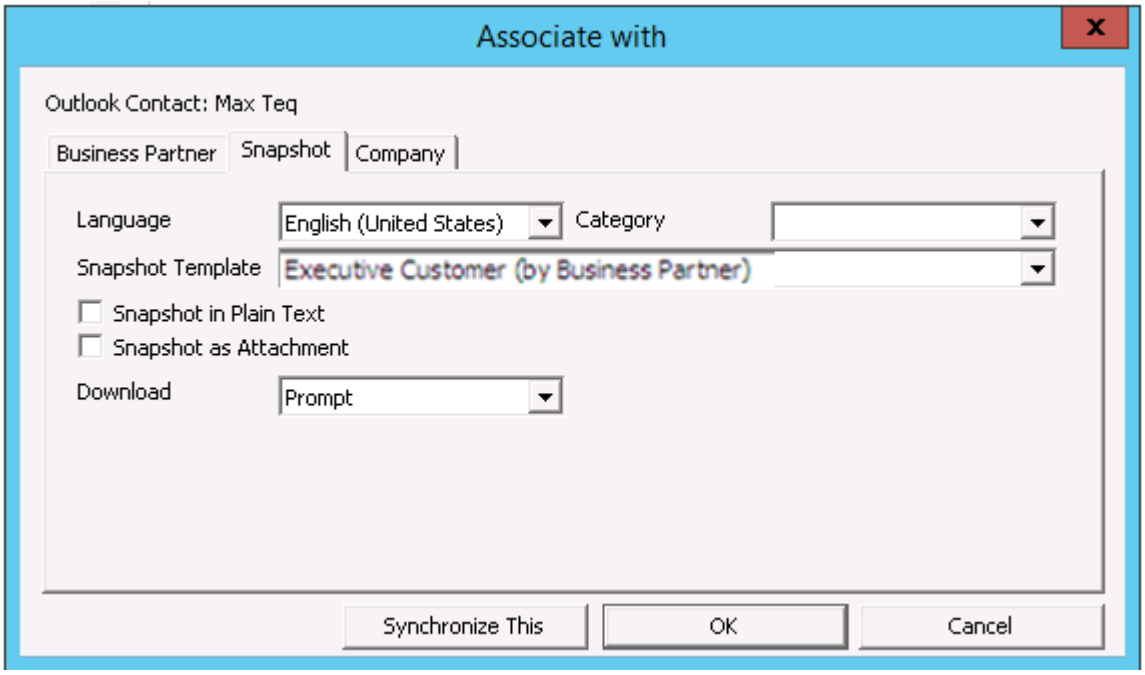


Figure 8-11: Selecting a snapshot

On the Snapshot tab, choose a Snapshot Template from the drop-down list. To generate the snapshot, click Synchronize This.

The snapshot that you create appears in the General tab of the contact's record in Microsoft Outlook. Double-click on the snapshot to open it in Microsoft Excel, as shown in Figure 8-12.

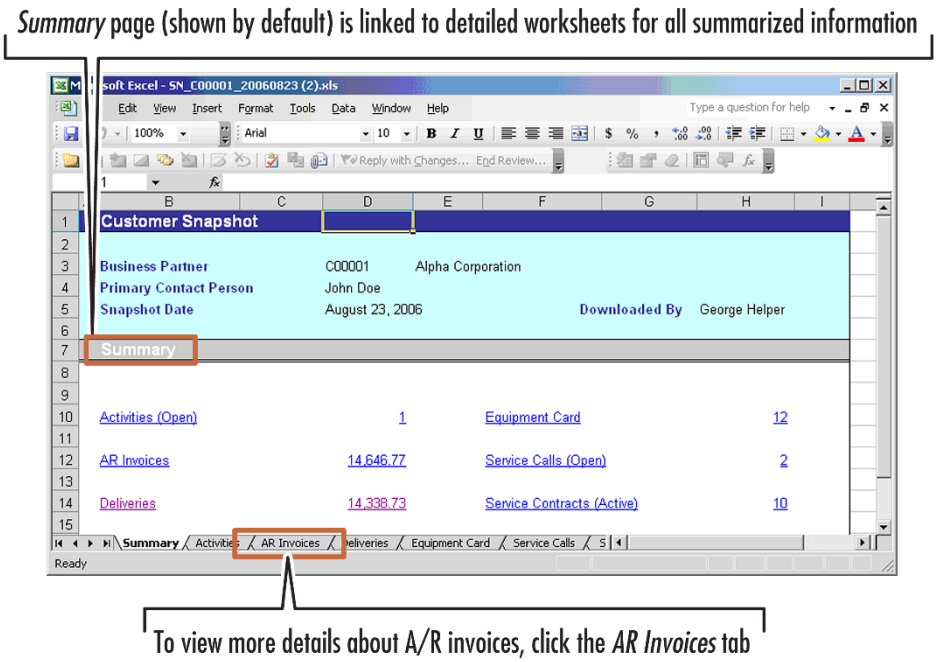


Figure 8-12: A customer snapshot opened in Microsoft Excel

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

The snapshot includes a summary page (shown by default) that is linked to detailed worksheets for all the summarized information. To view more details about service calls in the snapshot shown in Figure 8-12, for example, double-click to go to that page of the workbook or simply choose the Service Calls tab at the bottom of the workbook.

8.4 Reporting on Opportunities

Reporting on opportunities is a key step, both for individual salespeople and for sales managers and corporate executives. The SAP Business One main menu lists 11 standard sales reports that you can run to manage opportunities and perform forecasting and analysis. To generate any of these reports, select Opportunities → Opportunities Reports and choose the report you are interested in. The table on the next page summarizes the available reports.

Using these reports, you can analyze every aspect of the sales process to determine the status of opportunities that are currently on the table as well as those that have closed. This data helps your sales managers plan their sales strategy and evaluate what is working and what isn't in terms of winning new business.

Report	Selection criteria	What it shows
Opportunities forecast	Business partner, territory, main sales employee, last sales employee, stage, date, industry, documents, amount, percentage rate, sources, partners, and competitors	All open opportunities Sort order: territory, main sales employee, and business partner (two grouping levels)
Opportunities forecast over time	Same as opportunities forecast plus status	Forecast that can facilitate revenue projections over time; can include closed opportunities Sort order: month, quarter, and year
Opportunities statistics	Same as opportunities forecast over time	Open, won, lost, and total opportunities Sort order: same as opportunities forecast plus item number and item group (two grouping levels)
Opportunities	Same as opportunities forecast over time	Simple list sorted by opportunity number
Stage analysis	Start date range, predicted closing date range, sales stage, sales employee, business partner, and optional inclusion of opportunities with expired closing date	A graphical report (see Figure 8-3) that can be used to analyze stages in which opportunities are and the actual closing percentages for each sale or purchase
Source distribution over time	Same as opportunities forecast over time	Opportunities by source; can be displayed graphically
Won opportunities	Starting date range, closing date range, sales employee, and business partner	Opportunities that have been won
Lost opportunities	Same as won opportunities	Opportunities that have been lost
My open opportunities	No selection criteria	Open Opportunities

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Report	Selection criteria	What it shows
My closed opportunities	No selection criteria	Closed Opportunities
Opportunities pipeline	Business partner, sales employee, stage, date, documents, amounts, and percentage rate	A graphical display of the sales pipeline (Figure 8-13); right-click on the graphic to create a dynamic opportunity analysis (Figure 8-14)

8.4.1 Running the Opportunities Pipeline Report

Perhaps one of the most important reports is the Opportunities Pipeline report, shown in Figure 8-13, as it provides a visual answer to the perennial sales question, "What's in the pipeline?" This report is used to analyze the open opportunities in the pipeline and makes it easy to identify the proportion of open opportunities in each stage relative to all open opportunities.

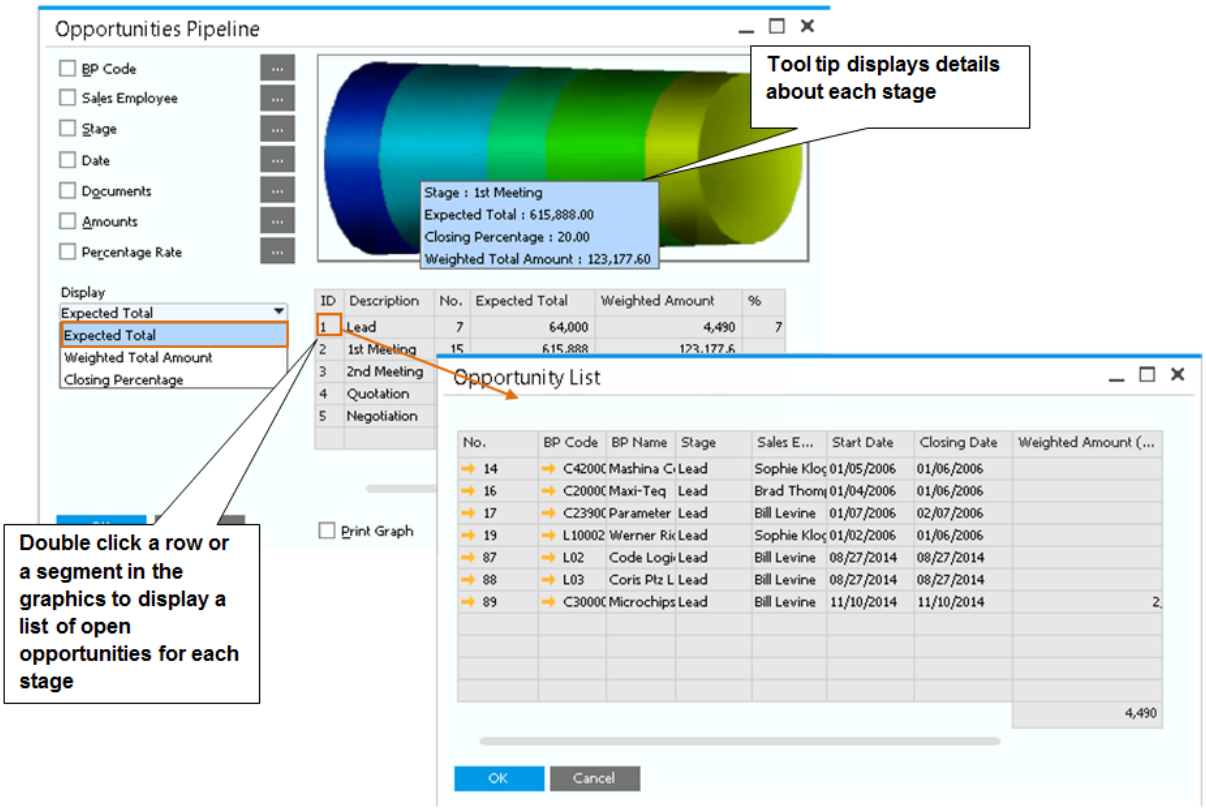


Figure 8-13: Opportunities Pipeline report

You can display the Opportunities Pipeline as a dynamically changing graphic by selecting Goto → Dynamic Opportunity Analysis or by right-clicking anywhere in the Opportunity Pipeline and selecting this option (see Figure 8-14).

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

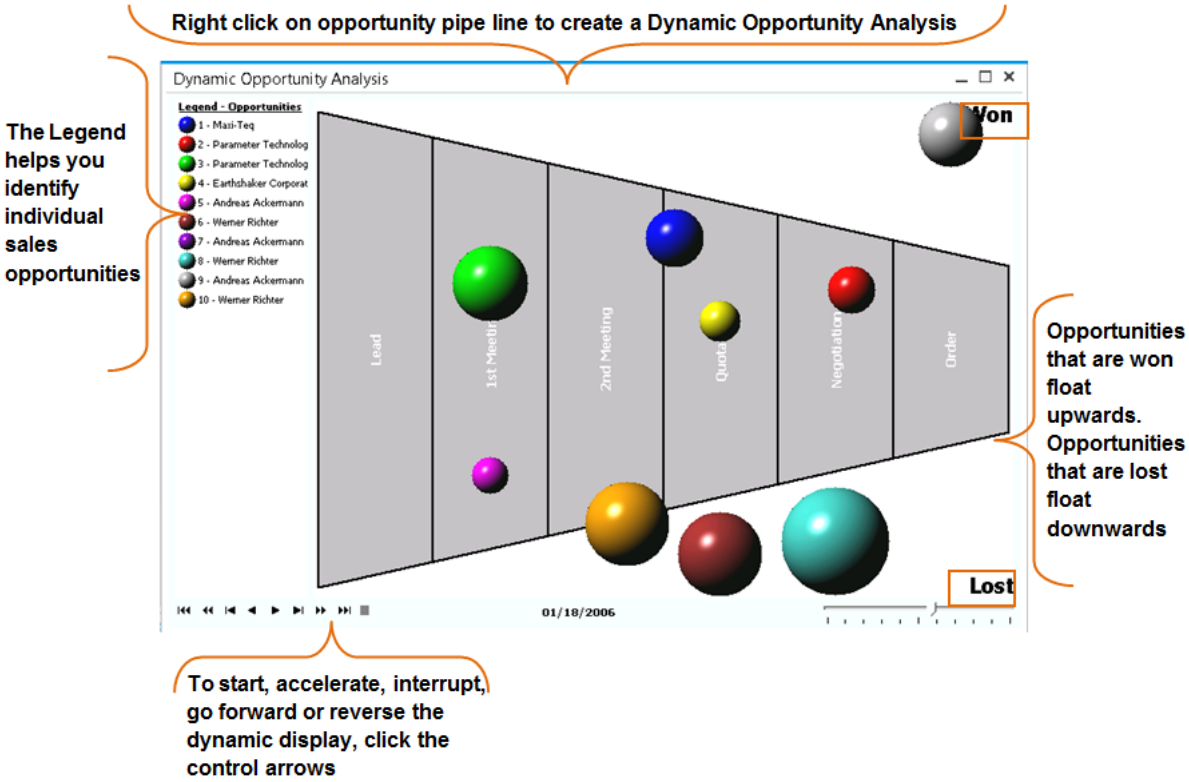


Figure 8-14: Dynamic representation of the sales opportunities pipeline

The Dynamic Opportunity Analysis window represents each opportunity as a balloon whose size corresponds to the potential amount of the sales opportunity. Both open and closed opportunities are included. Each of the vertical divisions represents a stage in the sales process. The balloons move according to their changing status along the longitudinal axis, which represents the stages of the sales process.

i Note

Main Menu Alert. All though available in their perspective main menu, to simplify customer relation management, functions related to CRM are also available in the CRM module on the main menu, you can find Business Partners, Activities, Campaigns, Opportunities, Orders, Quotations and CRM reports in this area of the application.

8.5 Campaign Management

A critical part of the company's success is to generate new revenues out of existing and potential customers. You might be surprised to know that SAP Business One can create and manage marketing campaigns using multi-channel communication. For example, you now offer a new product line and want to notify your customers. Using the Campaign Management, you can create an email and send it to a distribution list that includes your customer's contacts, even an external contact list, using a well-designed email template. Once you get a response you can record it in SAP Business One, create an activity, a sales opportunity or a sales document.

Campaigns can also be created for vendors. You might want to market a new service or products to your vendors, alternatively, you might want to record marketing campaigns your vendors sent your way.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Apart from customer's campaign, SAP Business One allows the creation and manage campaigns for Vendors. You might want to market a new service or products to your vendors, alternatively, you might want to record marketing campaigns your vendors sent your way.With that in mind, your company will have the ability to create a closer relationship with Vendors through newsletters or e-mail campaigns. By using saved campaigns, you can save time and effort when a new campaign, targeting vendors, need to be released.

To create a new campaign, go to Business Partners → Campaign or Campaign Generation Wizard. Using the wizard is an easy step-by-step process allowing you to generate a campaign based on diverse criteria. You can also load a previously created campaign, ones that were saved but not executed, as well as executed ones. Once you start the wizard, you need to identify the channel, the target group which you define ahead of time, and optionally an HTML template to be used in case you are using an e-mail campaign.

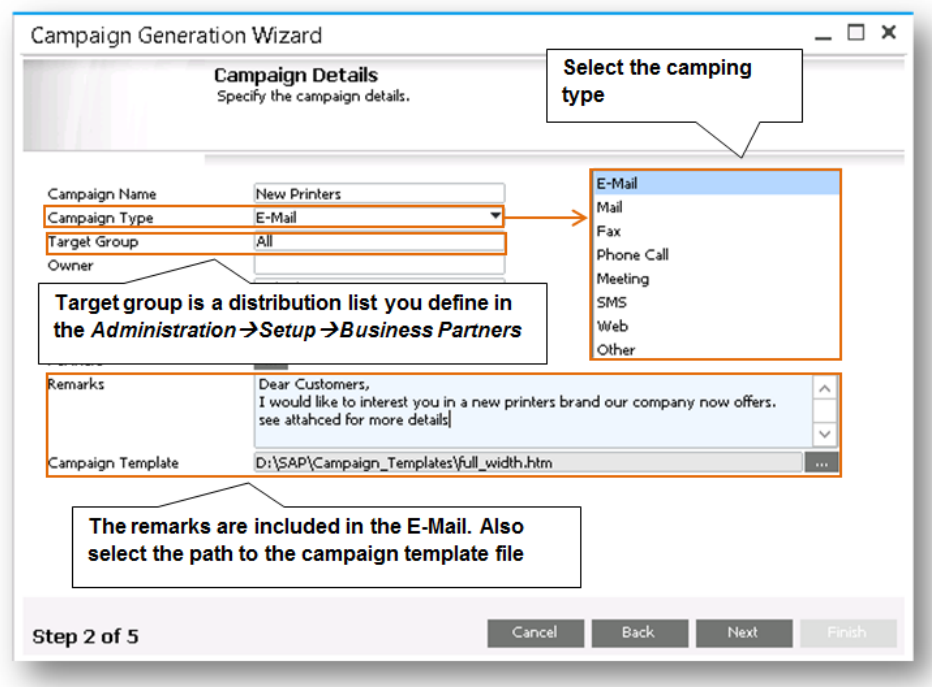


Figure 8-15: Campaign Details step

In the next step of the wizard, the contacts from the selected target group appear. You have an option to add, remove or import external list of contacts from MS Excel as shown in Figure 8-16. You can also choose to create an activity document automatically for each contact, that is an existing business partner, and assign them to a user or an employee in the system.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

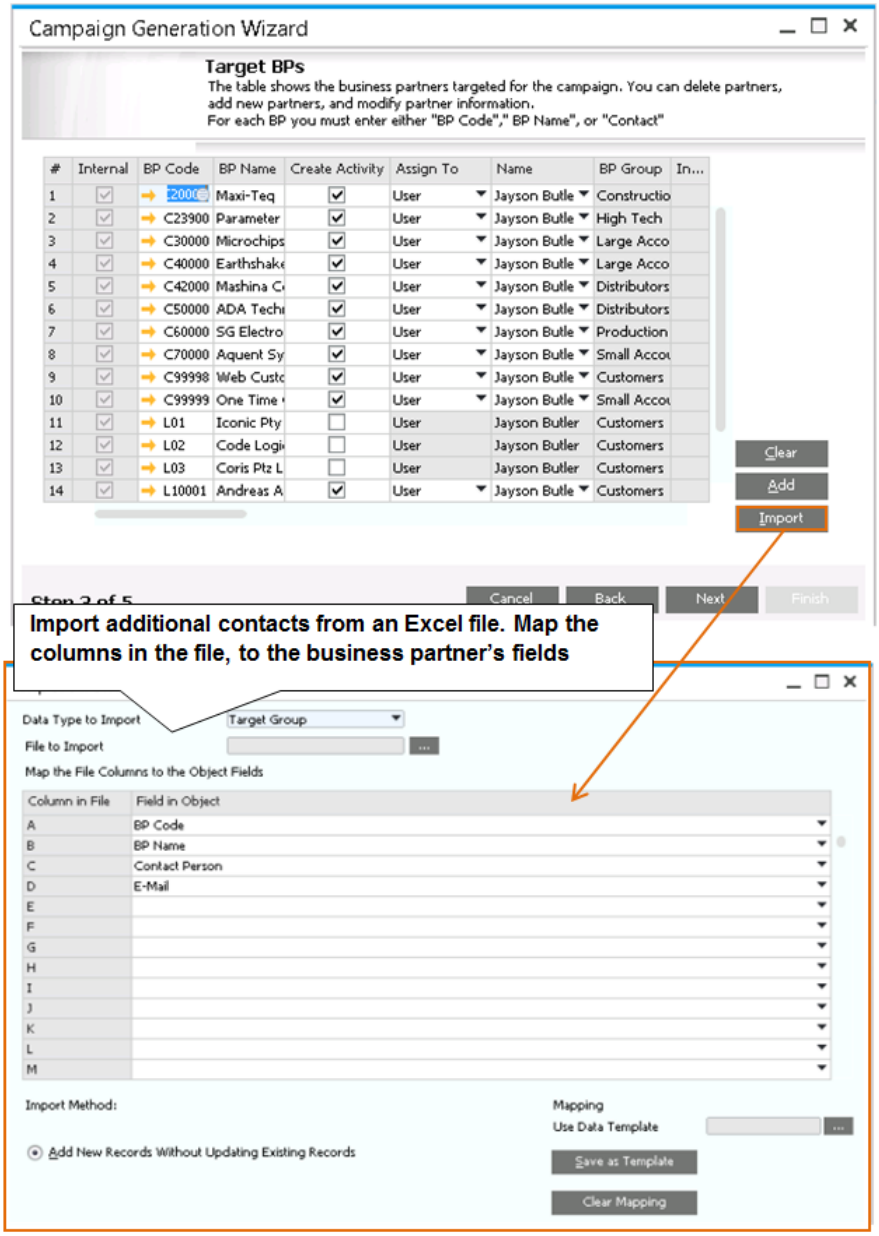


Figure 8-16: Import external contact list

The final step executes the wizard and creates a campaign document. If you used the email type, a new email message opens, using your local outlook account, with all the contacts in the blind copy field. You can drill down to the campaign document and record responses, add or remove contacts, and create a sales opportunity or another document such as sales quotation directly from the campaign. If you choose to create a sales opportunity, a sales quotation or a sales order for an external contact, the system automatically creates a Lead master data record for this contact that includes all the information provided in the campaign. If you create a delivery or an A/R invoice, a Customer master data record is created automatically.

Use the Campaigns List report to view a list of your campaigns and analyze response rates, number of leads generated, number of sales opportunities created, opportunity win rate, and more. All this information helps you analyze the effectiveness of your campaigns.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

9 The Service Module

In This Chapter

- Getting started
- Equipment Card
- Creating Service Calls
- Mobile Application
- Service Reports

This chapter describes the Service module in SAP Business One. Use this module if your company provides different services to your customer and wishes to track it in a formal way. The service can be based on particular items, serial numbers, item groups, or generally provided in the customer level. Using this module, you can also get robust reports with regards to open service calls, resolution time, and more. This allows you to analyze and evaluate the service level and service representatives in your company.

9.1 Getting Started with Service

In order to start working with the service module accurately; you need to set up service contract templates and determine whether a customer equipment card will be created automatically.

9.1.1 Service Contracts

The system has three default service contract templates: Bronze, Silver and Gold. You can add additional ones to define different coverage, expected response times and expiration date. Figure 9-1 shows the gold service contract type, which provides full coverage including parts and labor, as well as service on holidays.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

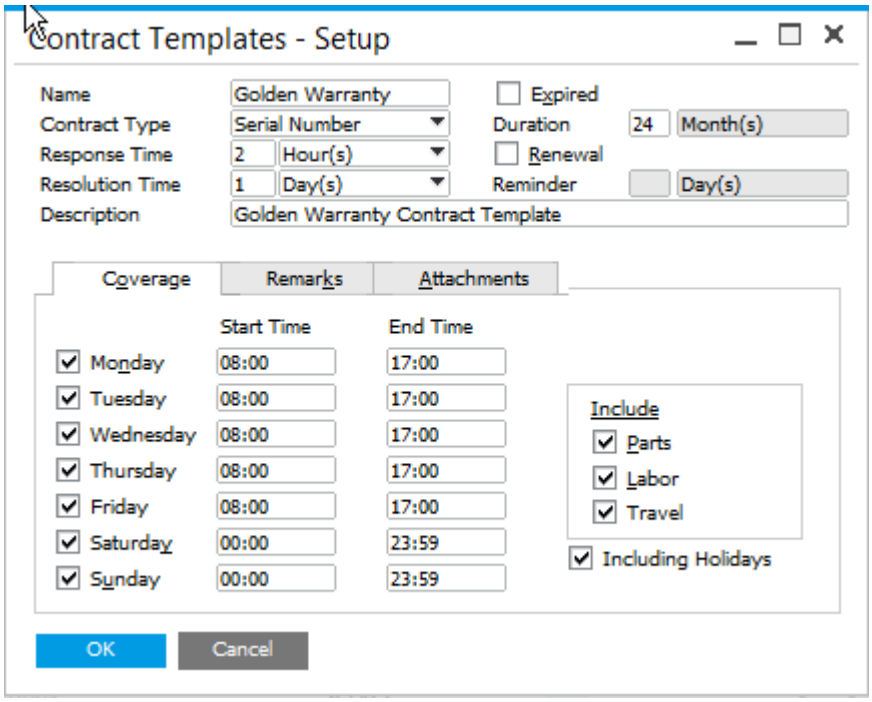


Figure 9-1: Gold Contract Template

Customers that are entitled to receive service from your company should be assigned a contract. You can use one of the templates as a basis or create it from scratch. To assign service contracts to your customers go to Service → Service Contracts.

As mentioned earlier, in SAP Business One you have three types of service, and this is determined in the service contract. Figure -9-2 shows an existing service contract for a customer, and the different types of service. Contract entitlement can be limited to specified serial numbers or item groups, or if the contract type is Customer, no restrictions apply.

If the contract type is:

- Serial numbers: on the items tab, select specific serial numbers to be covered by the contract. You can specify individual validity dates for each serial.
- Item Group - on the items tab, select from a drill down list the groups that are covered by the contract
- Business partner - items tab is disabled.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

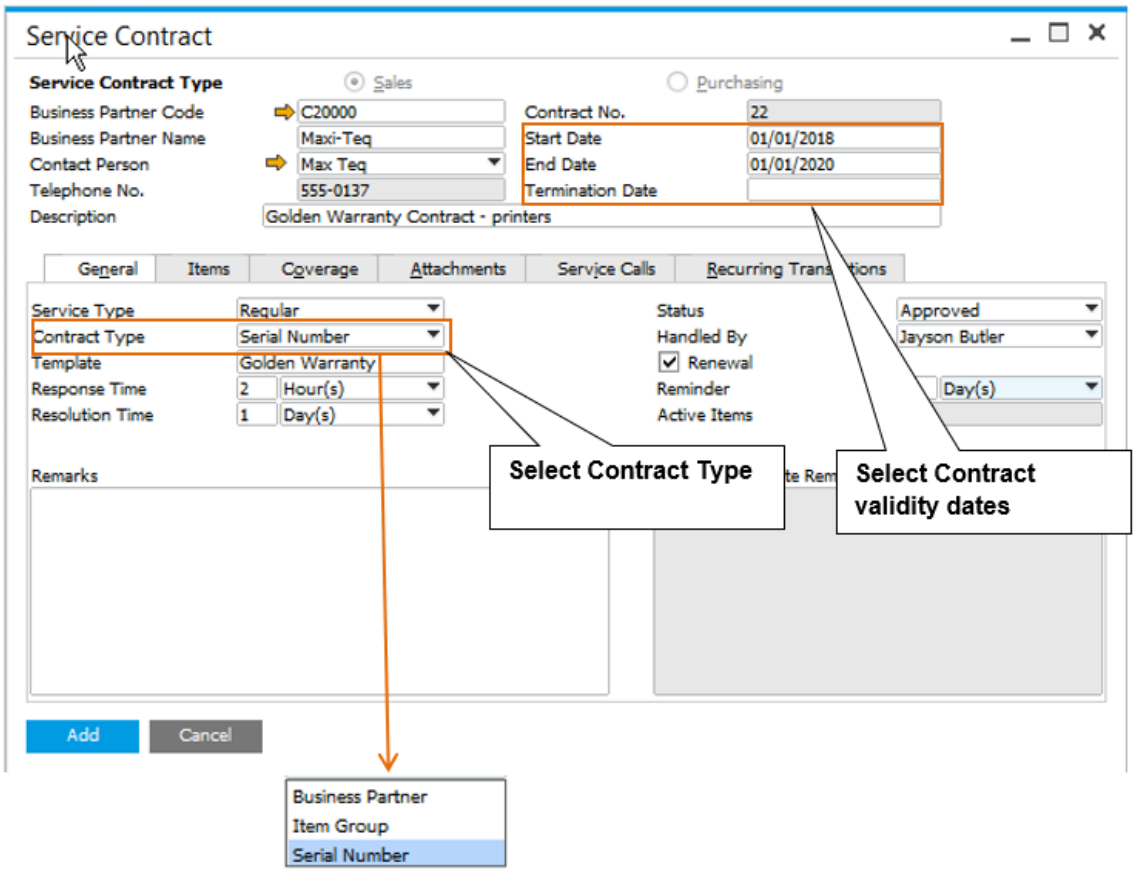


Figure 9-2: Service Contract Types

Note

Service contract type reminder. Although you define a default contract type, at any point in time it is possible to update this field. If you change the contract type from a Serial Number to Item Groups for example, the serial numbers will be deleted, and you will have to select item groups. An alert will be displayed before the change is applied.

9.1.2 Setting Up Automatic Creation of Equipment Cards

If you provide services for particular units you have sold, that means that your service type is serial numbers. In this case, a customer equipment card (CEC) must be created for these serial numbers. If you choose to, SAP Business One can automatically create a CEC when you sell a serial number via a delivery or an A/R Invoice. For this to occur, one of the attributes of the serial number must be a unique value per item. Go to Administration → System Initialization → General Settings → Inventory tab → Items subtab. In the Unique Serial Number by field, choose one of the three attributes, and check the Auto. Create Equipment Card box.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

To further automate the process, link a Warranty Template to the item master data, general tab. This is one of the service contract templates that exist in the system. Once you deliver a certain serial number, both a CEC and a service contract are created automatically for the customer.

9.2 Equipment Cards

As we mentioned before, the CEC can be created automatically. However, it is also possible to create it manually from the Main Menu → Service → Equipment Card. For manual creation you must enter a unique value in the serial number attribute, as you defined it in the system initialization. Additionally, you must select an item code and a customer code.

Equipment Cards can also be created for Purchasing documents, by selecting the correct Equipment Card, in the Equipment Type checkbox.

Figure 9-3 shows an equipment card that was created automatically. All the service contracts, existing service calls, sales data and more are displayed in the CEC window.

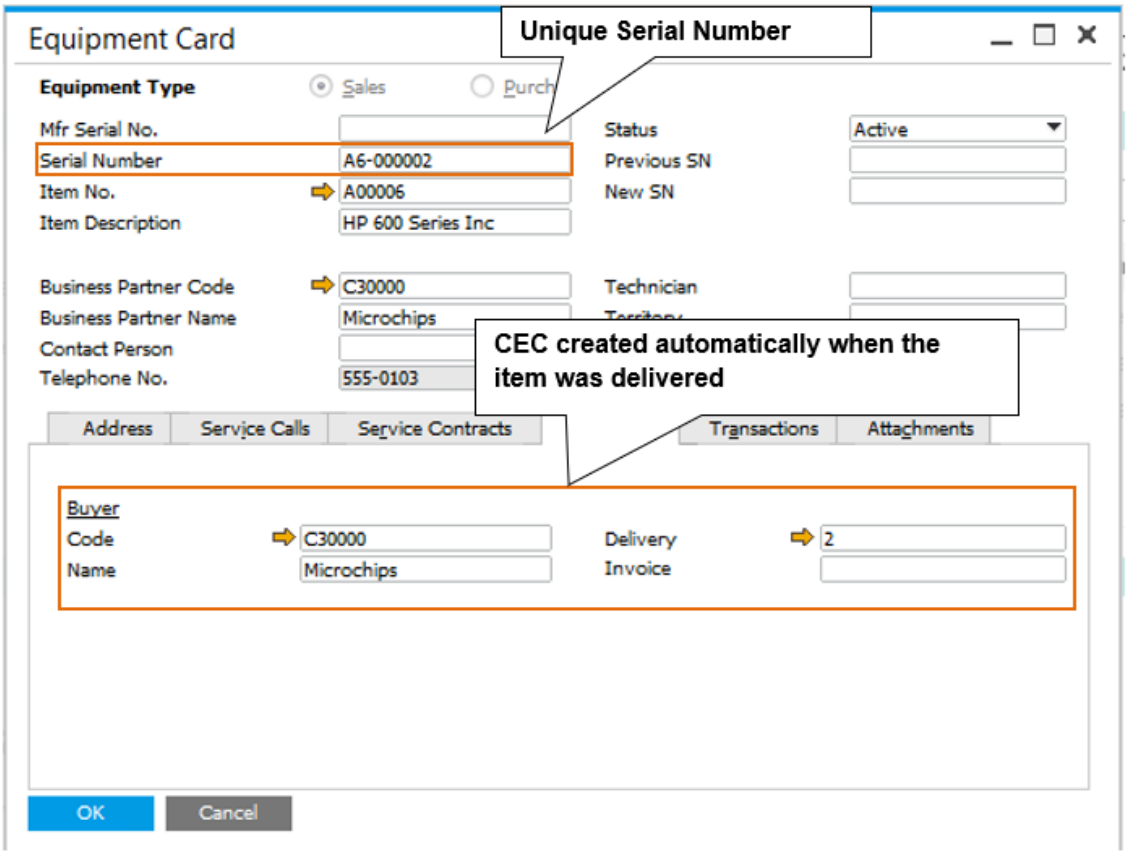


Figure 9-3: Equipment Card

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

9.3 Creating Service Calls

Now that we have service contracts and CECs, we can start creating service calls. Go to Service → Service Call. The service call represents an event where your customer or vendor contacts you to request service, and you wish to record it in the system for monitoring purposes. The service call contains the CEC, the time it was opened and closed, which user handled the call and the time it took to resolve the issue. You can link an Activity, for example to set up a reminder for a follow up. You can record the solution provided, and list additional expenses that were required to resolve the issue. To create a Service Call, follow these steps:

1. Select a customer or vendor: the system performs a credit check and determines whether this customer or vendor has a valid contract. If there is no contract, you can confirm the alert and continue anyway.
2. Select an item and a serial number.
3. Enter the subject of the call.
4. Optionally enter general information such as problem type.
5. The call is assigned to you by default; however, you can assign to another user, or to a queue.

Figure 9-4 shows an existing service call. You can add more information to the call such as remarks, related documents and the history of the call.

You can Enable Multiple Scheduling for a Service Call in the Administration → Document Settings. On the scheduling tab of the service call, you can set a reminder for your technicians to handle the call. You set a technician name, date and time, location and a reminder. The technician can later update the time spent on the call. This reminders can also be displayed on the technician calendar.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

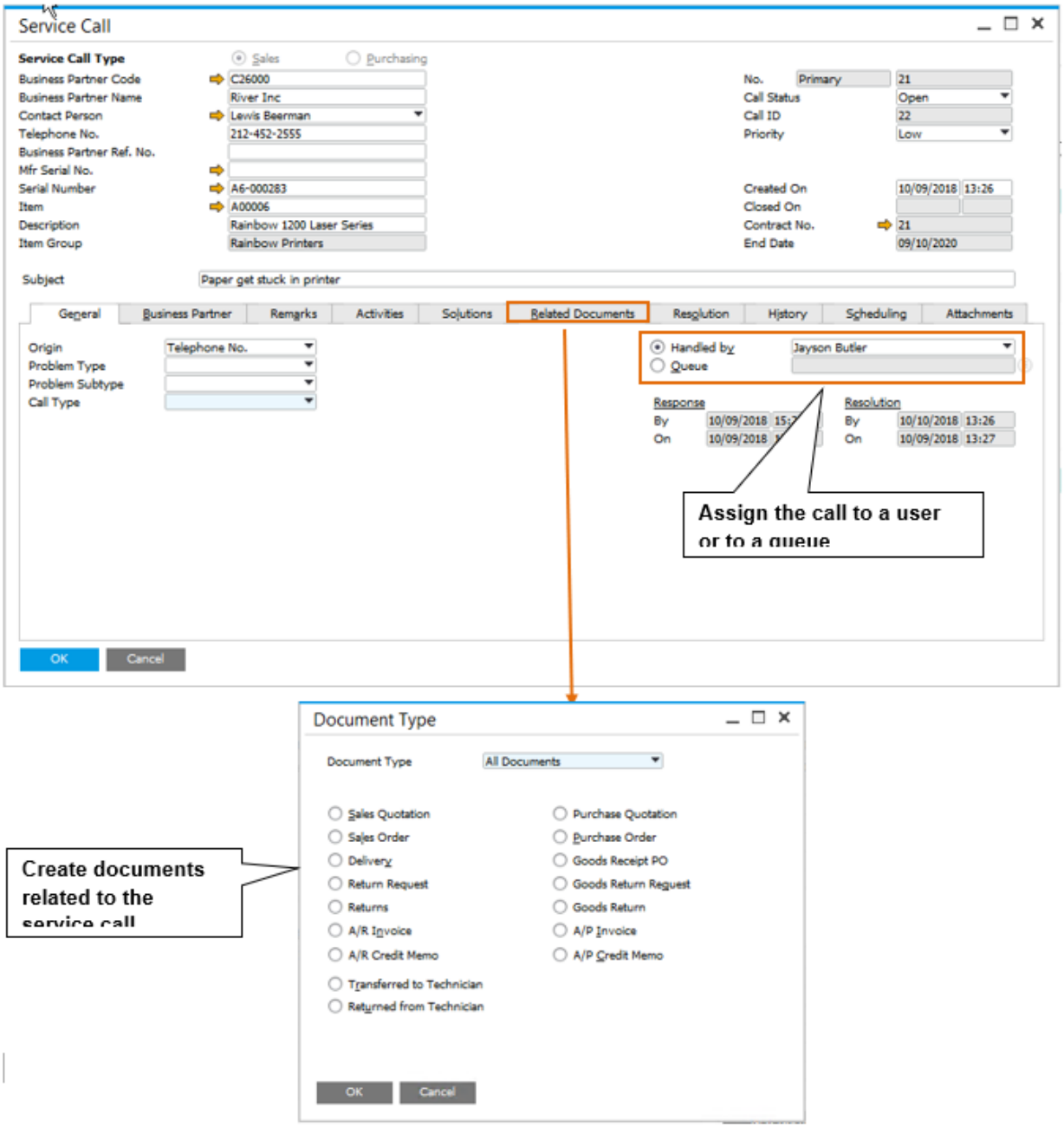


Figure 9-4: Service Call

Note

Recommended solutions. On the Solutions tab, press the Recommended button. Solutions from the knowledge base that were used in the past for this item are displayed. Choose the appropriate solution if it is applicable to your problem.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

9.4 Using Service on Your Mobile Device

As a service technician you need to have access to your customers' service contracts, your open service calls for today and more to plan your day's work on the go. SAP Business One free service mobile application lets you view open service calls, see customer master data and service contacts, as well as dashboard analytics and reports regarding the service call backlog.

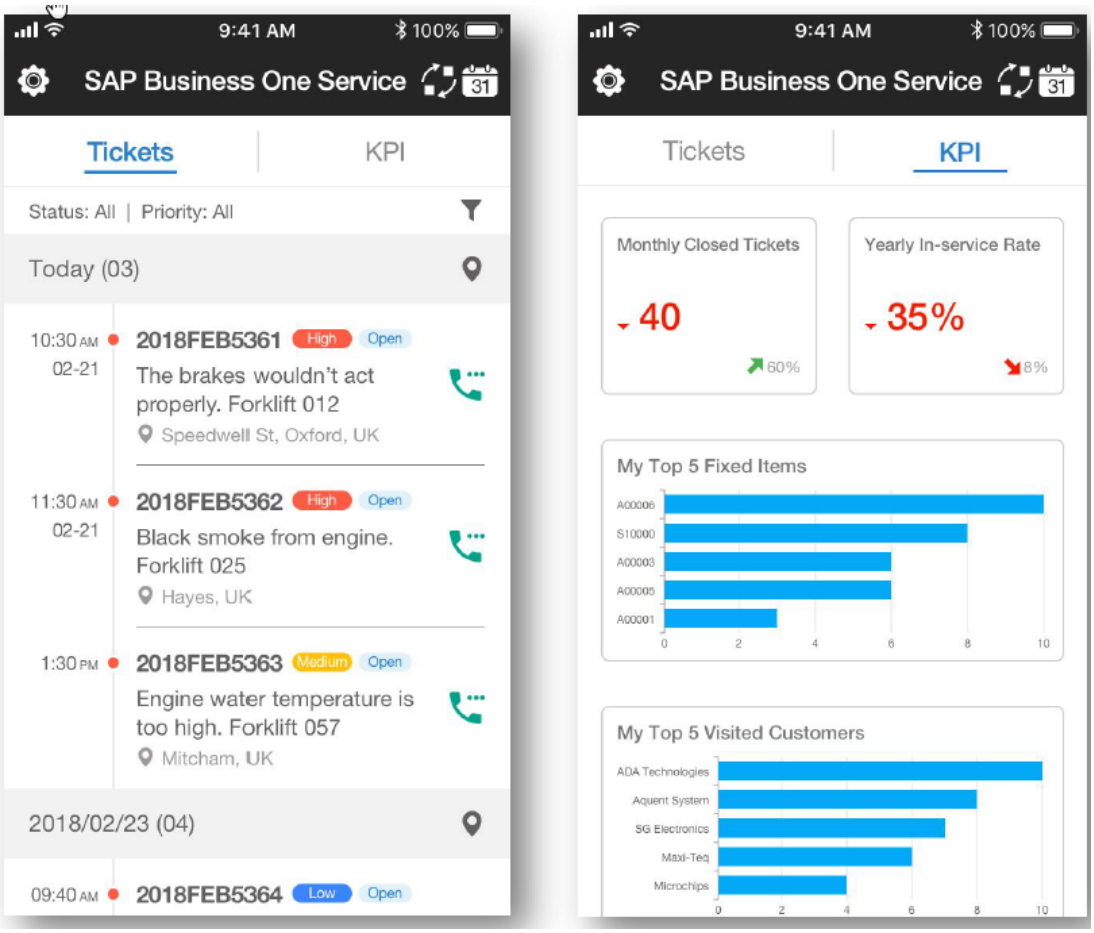


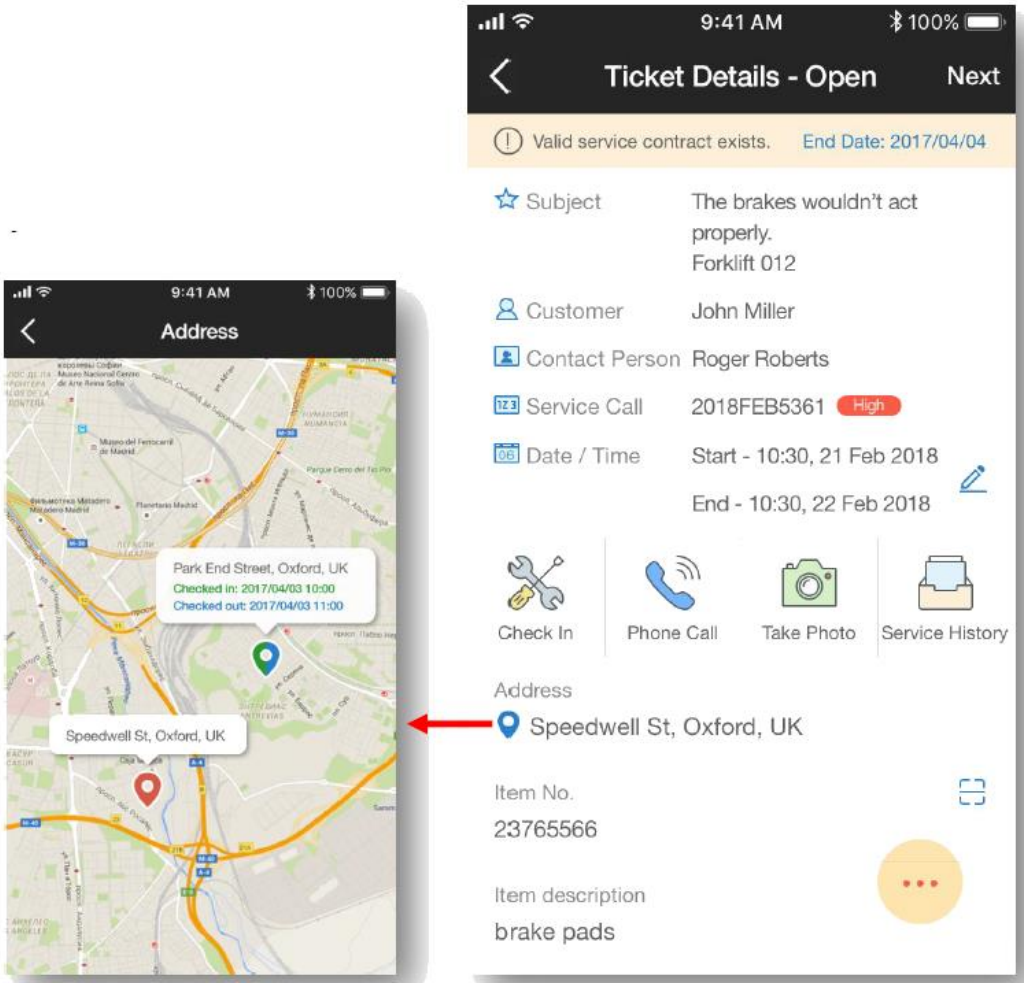
Figure 9-5: Service Mobile app

Using the native capabilities of the device, you can place a call, view the location on the map, and check-in once you arrive the location. See figure 9.6.

Once you are on site, use the camera to scan the item barcode. The system will identify which item master data you are using. When you are done, get a digital signature from the customer, and print the service details to a Bluetooth thermal printer, or generate a PDF.

No internet connection? Download the latest service tickets to your mobile device in advance, resolve them off line, and upload once you are back on line.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.



Note

Compatibility. the service mobile app is currently available for IOS devices and works only with the SAP Business One version for SAP HANA. An additional app is available for the SQL version of SAP Business One. You can download the app at no cost, use demo mode to test it, or connect to your live system. The login user name, requires either a professional /limited user, or a dedicated more affordable mobile user.

9.5 Service Reports

The various service reports give you the opportunity as a manager to monitor and analyze the service level provided by your company. As a manager, you can run the reports by user, by response type and view average closure time. As a service representative, you can view open calls waiting to be handled, as well as see a list of your open service calls and overdue calls.

Report	Selection criteria	What it shows
Service Calls	Created On, Resolved On, Customer Code, Handled by, Item, Queue ID,	All service calls within the selection criteria, including Call ID, customer and item

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Report	Selection criteria	What it shows
	Problem Type, Priority, Call Type, Origin, Call Status, Overdue Calls	information, serial number, subject, creation date and more.
Service Calls by Queue	Same as Service Calls report	Same as Service Calls report, except grouped by Queue
Response Time by Assigned to	Same as Service Calls report	Grouped by user, Call ID, Response type, Time in Queue
Average Closure Time	Same as Service Calls report	Closed service calls, including the creation time and date, closure time and date, and the calculated time for closure
Service Contract	Customer code, contract start and end date, contract type, status and service type	All service contracts with their type and status.
Customer Equipment Card	Customer and Item selection. CEC status	All CEC, with customer name, serial number attributes, item code, contact person and status
Service Monitor	Handled by, queue, and priority	Live report displays a graphic of open and overdue service calls
My Service Calls	NA	All service calls that are handled by the current user
My Open Service Calls	NA	All open service calls that are handled by the current user
My Overdue Service Calls	NA	All overdue service calls that are handled by the current user

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

10 Document Creation, Authorizations, and Approvals

In This Chapter

- Overview of Document Creation Features
- Authorizations, Approval Procedures, and Document Drafts
- Accelerating Document Creation Through Wizards

This chapter examines document creation features such as document drafts, drawing documents from one another, and mass creation of documents. These are three ways that SAP Business One helps users accelerate and automate the process of creating documents. By combining authorizations and approvals with document creation features, the application provides a powerful toolset so that users can perform only tasks that are appropriate for their level of responsibility and authority.

10.1 Overview of Document Creation Features

The document creation features of SAP Business One make repetitive tasks as easy as possible, so that with little effort or repeated work you can quickly create the documents you need. Because document creation is such a central activity in SAP Business One, different methods exist to serve the different situations that users find themselves in. The two most common ways to manually create documents one at a time - using add mode or using an existing document draft - are shown in the following two figures.

When you navigate through the main menu, frequently the document is opened in add mode. When searching or scrolling through documents, you can enter add mode by pressing `Ctrl` + `A` or by clicking the add mode icon (see Figure 10-1). In add mode, the Add button appears in the bottom left of the screen. Once you enter data, you post the document or add master data by clicking the Add button.

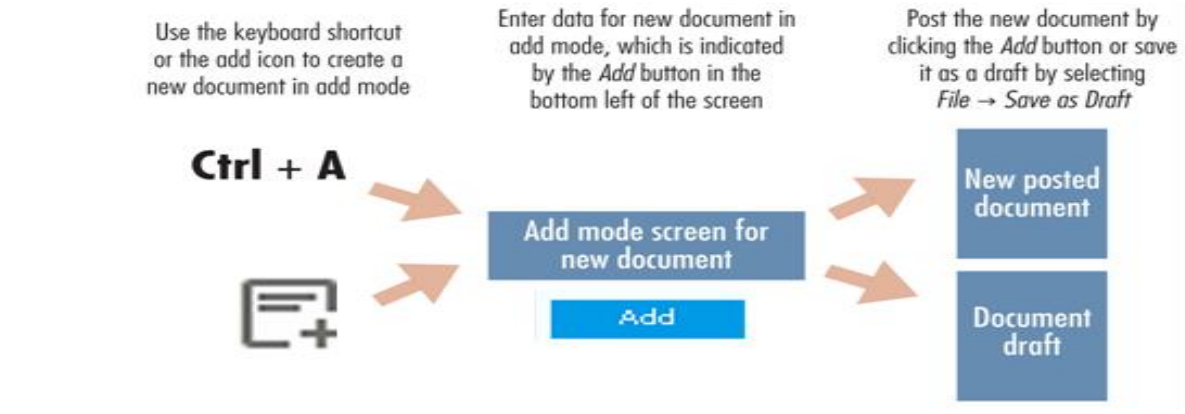


Figure 10-1: Creating documents using add mode

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Instead of clicking the Add button, you can use the File menu to save documents as drafts, or right-click the document header. Document drafts are also used to store documents that are moving through an approval procedure. View existing drafts in the reports menu of the respective module.

Figure 10-2: Using document drafts to create documents

Both of these methods for creating documents are straightforward and involve the typical process of filling out a form and saving it.

In addition to supporting the manual creation of documents, SAP Business One offers the following wizards:

- Draw Document Wizard for creating a target document based on multiple base documents
- Document Generation Wizard for creating multiple sales documents
- Procurement Confirmation Wizard for creating purchase documents
- Purchase Quotation Generation Wizard for creating multiple purchase quotations based on items or Purchase Requests, as explained in chapter 6
- Payment Wizard for creating incoming and outgoing payments in bulk as explained in chapter 3

The first three wizards are explained later in this chapter.

10.2 Authorizations, Approval Procedures, and Document Drafts

Approval procedures and authorizations are two aspects of role definition in SAP Business One. By granting and limiting authorizations of a specific user, you determine what functions the user can access and what actions he or she can perform. Approval procedures provide the administrator a way of fine-tuning what each user can do.

Perhaps you are wondering about the relationship between authorizations, approval procedures, and document creation. Well, these features can be combined; for example, a salesperson can create sales orders and grant specified discount percentages. As the administrator, you can then fine-tune this authorization so that the salesperson can create sales orders up to a specific amount. You can also use approval procedures so that a salesperson's manager must approve sales orders that exceed a certain discount percentage.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

10.2.1 User Authorizations

The process of setting up authorizations in SAP Business One is like handing out a set of keys that allow access to certain features and functions. Authorizations permit or prevent certain users or groups of users from performing such functions as:

- Creating certain types of documents
- Viewing or managing certain types of data
- Creating user accounts
- Setting permissions for other users
- Accessing features from the main menu
- Posting documents when the period status is Closing Period or Unlocked Except Sales

10.2.1.1 General Authorizations

The authorization mechanism of SAP Business One provides fine-grained control of which features of the application are available to each user. As Figure 10-3 shows, the Authorizations window (reached by selecting Administration → System Initialization → Authorizations) brings together a list of users and a list of all functions available in each module of SAP Business One.

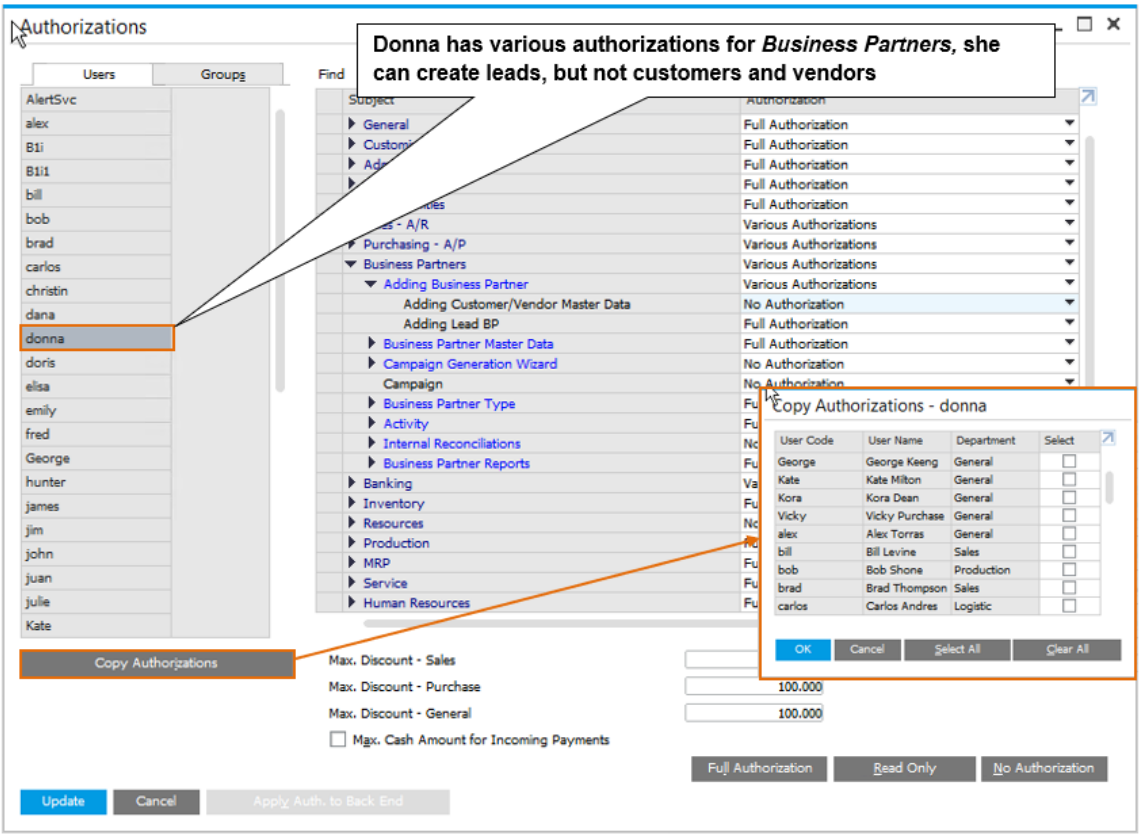


Figure 10-3: Authorizations window

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Each module includes a list of the functions available and access rights that can be granted or denied on a per user basis. This window provides additional settings for maximum discounts and maximum cash amounts for incoming payments.

To save time when you have multiple users with similar authorizations, define the full authorizations for one user and then copy it to others by pressing the Copy Authorizations button and then choosing the users who need the same or similar authorizations to the selected user. Later you can fine-tune the authorizations for each user if necessary.

10.2.1.2 User Groups

Instead of managing the authorizations by the individual user, you can create user groups, such as sales, procurement and warehouse, assign users to the group, and define the authorizations by group instead by user. That way, if you hire a new employee, you simply assign him or her to a permission group, based on the role, and all the authorizations apply immediately.

To create user groups, go to Administrations → Setup → General → User Groups. see chapter 2 for more details about user groups.

10.2.2 Password Administration

Use the password administration window to define the security level for passwords in your company. Go to Administration → Setup →General → Security. You can choose one of the three built in levels: low, medium or high, or use the Custom option to define your own. Here you can choose minimum length, minimum upper and lower case characters, minimum digits, expiration, and more. All users are required to follow these rules in order to login to the system.

> **Note**
>
> Super user vs. non-super user. When you create users, choose whether they are super users or not. You only define authorizations for non-super users. Non-super users cannot access the authorizations screens and can only change passwords for themselves, using My Personal Settings icon on the upper tool bar. Make sure you have at least one super user in the company database.

10.2.3 Data Ownership

In addition to general user authorizations, you can control document access using Data Ownership authorizations. The data ownership authorization identifies the owner of a specific sales or purchasing document and permits other users to access or change that document according to their relationship with the owner. For example, two sales employees are authorized to create quotations, but as a manager, you would like to prevent one sales employee from accessing the other's quotations. With data ownership you can define the relationship between the two employees as a Team or Department and restrict access to quotations created by others in the team or department.

To setup data ownership, follow these steps:

1. Go to Administration → System Initialization → General Settings → BP tab.. Check Enable Data Ownership.
2. Select to manage data ownership by:

- Documents Only: Permissions are defined per document.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

- Business Partners Only: Permissions to documents are defined by whether users are assigned ownership of the business partner used in documents.
- Business Partners and Documents: When Business Partners have owners, permissions to documents are decided by whether users are assigned ownership of the business partner used in documents. When Business Partners have no owner, permissions are decided per document

3. In case you have multi branch activated, you can choose to filter ownership by branch, in this case that will be the only criteria for filtering of data.
4. In the Administration → System Initialization → Authorizations →Data Ownership →Data Ownership Sharing Options define which objects can be viewed, either fully or partially, or whether only the name of a document appears in a report while the document itself cannot be viewed. If a document or sales opportunity has no owner, then any user can access it as if no data ownership is in place. Any user can assign an owner to a document or sales opportunity that does not have an owner. Once an owner is assigned, only the owner's manager or a superuser can change the owner. See more information on this window in the online help.
5. Create employee master data under the Human Resource module. Each employee should be assigned with a user code and a sales employee. Optionally assign the employees to department, branch, team and a manager.
6. Associate your customer with Sales Employees. The owner will be the human resource's record that is linked to the sales employee of the selected customer in a sales document. You can override the owner in the document header or row.
7. Finally, you need to define the relationship between employees, go to Administration → System Initialization → Authorizations →Data Ownership Authorizations. See Figure 10-4 for setting up data ownership authorizations.

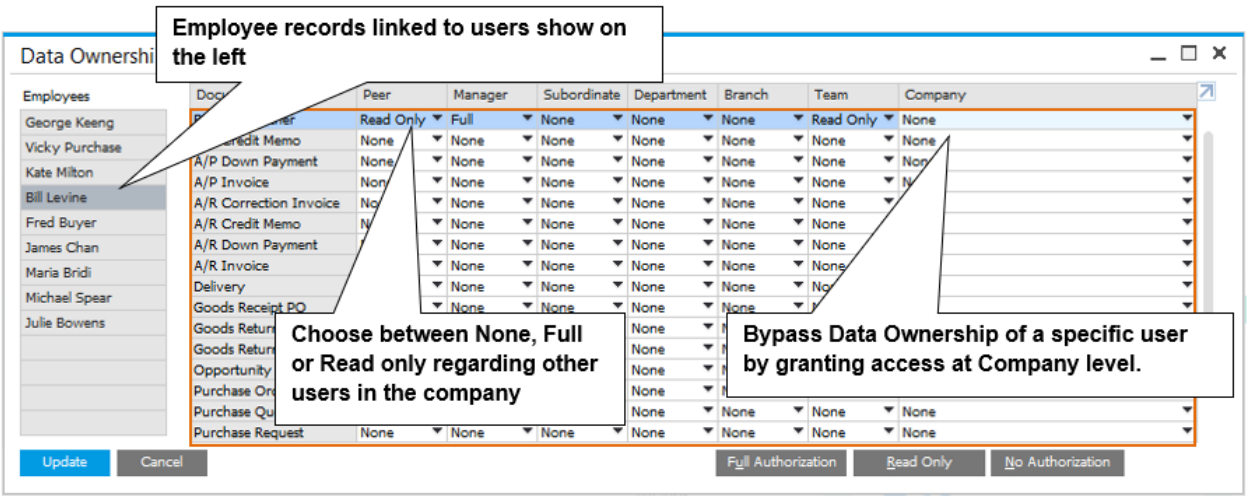


Figure 10-4: Define Data Ownership Authorizations

If you selected to manage data ownership by business partners only, this window will have just the business partner and the purchase request only.

Note that some authorizations may overlap. If two employees are in the same team and have the same manager, it is sufficient to define Team authorizations only.

Data is filtered based on each user's data ownership authorizations. The filter applies to reports, drag & relate, and browsing through existing documents. While browsing, if the user encounters a document that is restricted by authorization, the system skips it or shows it as read only, depending on whether authorization was setup as No Authorization, Read Only, or Full Authorization.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

10.2.4 Approval Procedures

Approval procedures in SAP Business One are a collection of powerful mechanisms for controlling who can do what and who must be consulted to permit exceptions. Approval procedures involve setting limits on the size and nature of the business transactions that each user is authorized to execute. When someone tries to post a document that exceeds a limit set through the approval procedures, that document is automatically saved as a draft during the approval process.

SAP Business One supports thresholds for approvals, stages for approvals, and a general-purpose mechanism that can subject almost any type of document to approval. When a document is flowing through the approval process, it is stored as a draft until approval is granted, and that is when the person who initiated the document can post it.

Approvals have two dimensions:

- Approval thresholds, which are criteria above or below which approvals are needed for various categories of documents. SAP Business One includes predefined terms that you can use to build criteria, or you can create customized criteria by writing a query.
- Approval stages, which are the steps the approval follows from the originator of the request to one or many people who must approve the work

The best way to get an idea of how approvals work is through an example. Let’s imagine that Fred, a departmental administrator responsible for ordering office supplies, has a limit of $1000 per purchase order. One day, to prepare for a large meeting, Fred has to order a much larger than normal amount of supplies, which results in a purchase order for $2,000. When Fred tries to add that purchase order, he gets a message that indicates approval is necessary, and that it has been requested. The purchase order is not added but saved as a draft, and a message is sent to Fred’s manager. If Fred’s manager grants approval, Fred can add the purchase order.

Figure 10-5 shows the steps in the approval process.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

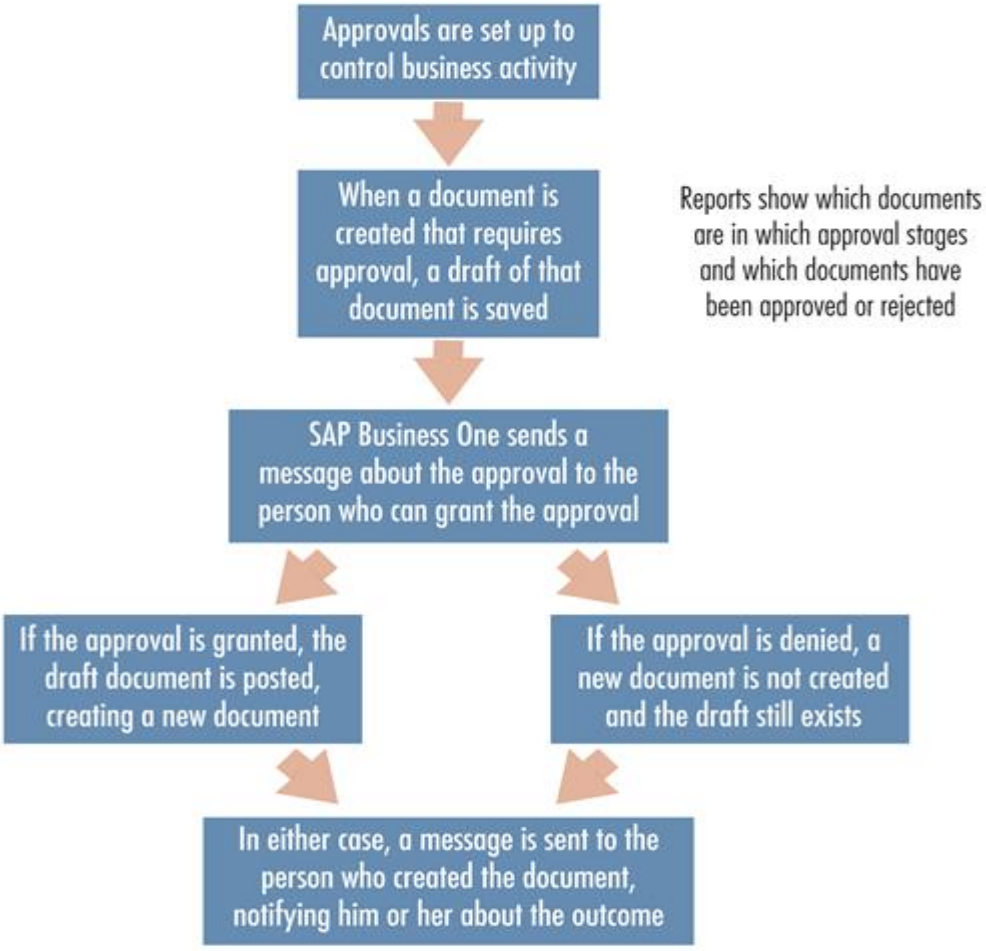


Figure 10-5: Steps in the approval process

If the approval is denied, the user can modify the document to meet the approval criteria. Once updated, if the document now meets the terms, the document is added to the system. If approval is still required, a new approval process starts.

If you decide to implement approval procedure, you must enable it in the Administration → System Initialization→ General Settings → BP. If you want to allow updating documents that have been already generated, or that are pending in the draft mode, check the boxes to enable updating documents in approval process.

After the module is activated, no user which is defined as an originator can modify these settings, even if they are a super user.

SAP Business One implements the process described in the example through approval templates that can be accessed via the main menu by selecting Administration → Approval Procedures → Approval Templates. Approval templates include four types of information:

- On the Originator tab, you specify users to whom the approval procedure is applied. The departmental administrator in the example would show up here.
- On the Documents tab, you indicate which documents need approval. You can choose sales and purchasing documents, inventory documents, or outgoing payment. Following the example above, the purchase order would be specified here.
- On the Stages tab, you define approval stages. In our example, there would be one stage created for manager approval. If multiple stages exist, once the first stage is approved, a request is sent to the users in the next stage.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

- On the Terms tab (shown in Figure 10-6), you set thresholds that trigger an approval. This is where the $1000 threshold would be set. You can alternately indicate that every document requires an approval.

Templates can be named (the template in Figure 10-6 is named PO_ Approval). The Active checkbox (to the right of the Name field) must be checked for the approval template to be enforced. Approval templates can govern a wide variety of parameters; for example, Figure 10-6 shows a rule that requires approval for a purchase order with a value more than $10,000. In addition, a custom query can be assigned as an additional condition. In this example, the approval applies to specific vendors. Special query syntax is required here. Consult your implementation partner for more details.

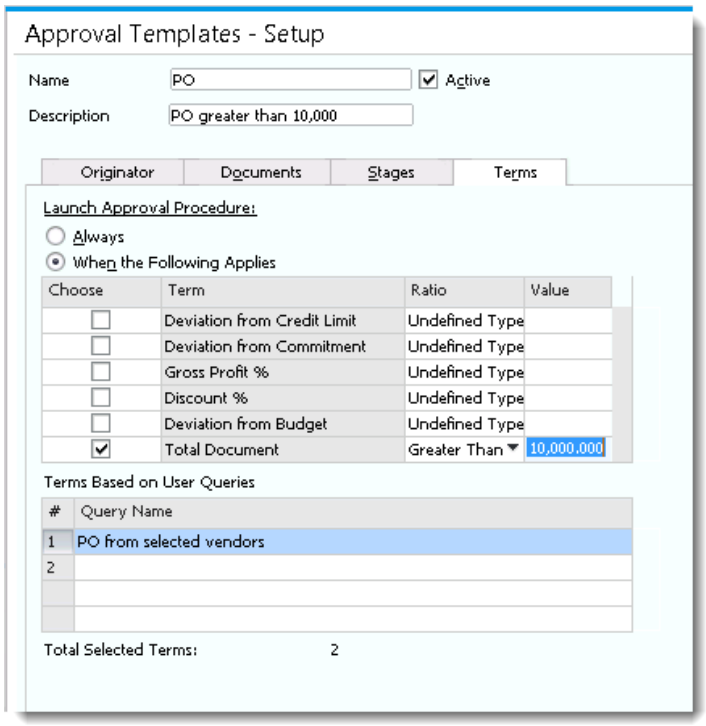


Figure 10-6: Terms tab of Approval Templates – Setup window

Note

Approvals reporting reminder. Two reports are key to the day-to-day use of approvals. The approval status report shows originators the status of their requests for approvals. The approval decision report shows authorizers all documents that are pending approval. Both reports are options under Administration → Approval Procedures.

With templates for approvals properly set up, approvals are managed in the following way. When an originator creates a document that needs approval, SAP Business One sends a message to the authorizer who is required to approve the document (there could be a chain of approvals required). An authorizer can approve or reject the document using the Messages/Alert Overview window (shown in Figure 10-7). If there are alerts pending for you, this window appears when you log in to SAP Business One. This window can also appear while you're in the application, depending on settings made for you by your system administrator in Administration → Alerts Management.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

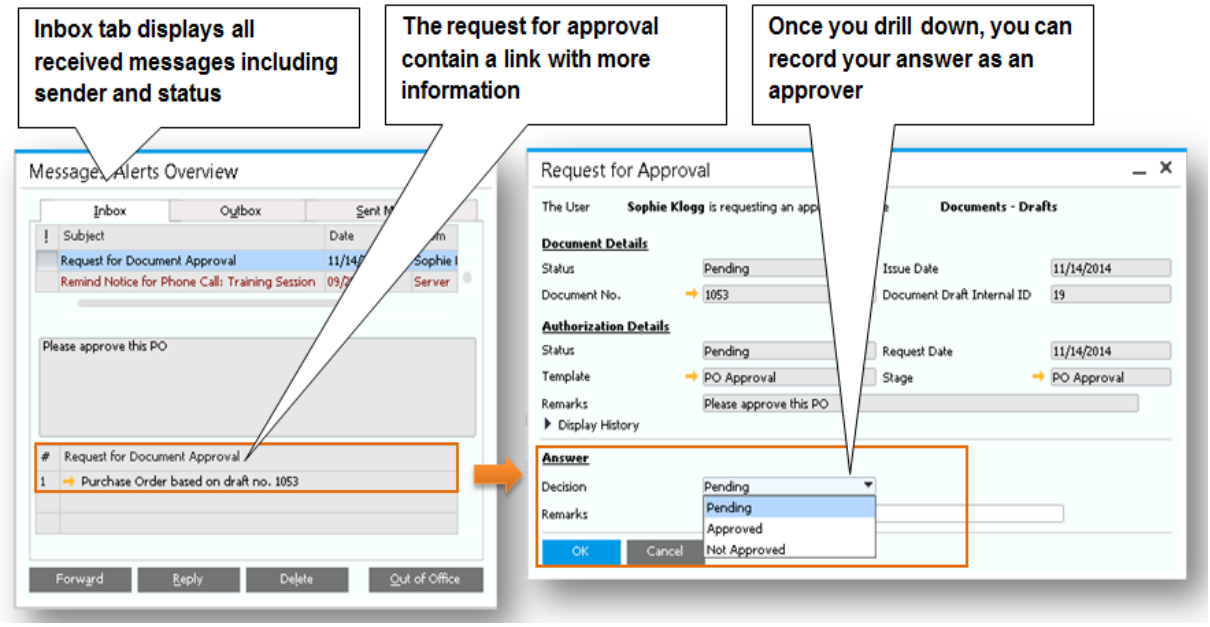


Figure 10-7: The Messages/Alert Overview window

The Messages/Alert Overview shows information about the document that is pending approval; clicking on the orange link arrows allows authorizers to quickly review documents requiring their approval. Authorizers can add remarks that clarify the rationale behind decisions.

No matter what the outcome, as soon as the authorizer acts on the document, SAP Business One sends a message to the originator of the document, and the message is displayed in that user's Messages/Alert Overview window.

If the document is approved, the originator can then convert the approved draft to a document directly from the Messages/Alert Overview window if desired.

If the authorizer does not approve the document, the originator receives a message to that effect as well. As you would expect, in this case the draft cannot be converted to a regular document.

10.2.5 Creating Document Drafts Manually

Approval procedures create document drafts automatically. It is also possible to create document drafts manually for a variety of reasons. This may be required because a document is only partially filled out and it will be completed later. Or perhaps someone knows how to fill out one part of the document but needs help from someone else to finish another part. Document drafts can also be used as templates for documents that must be filled out over and over again with minor changes.

Manually creating document drafts in SAP Business One is simple and straightforward. Document drafts can be created for sales, purchasing, inventory and inventory counting documents. When creating documents in these two areas, you can choose the Save as Draft menu option from the File menu, or right-click the document header to save as draft (Figure 10-8).

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

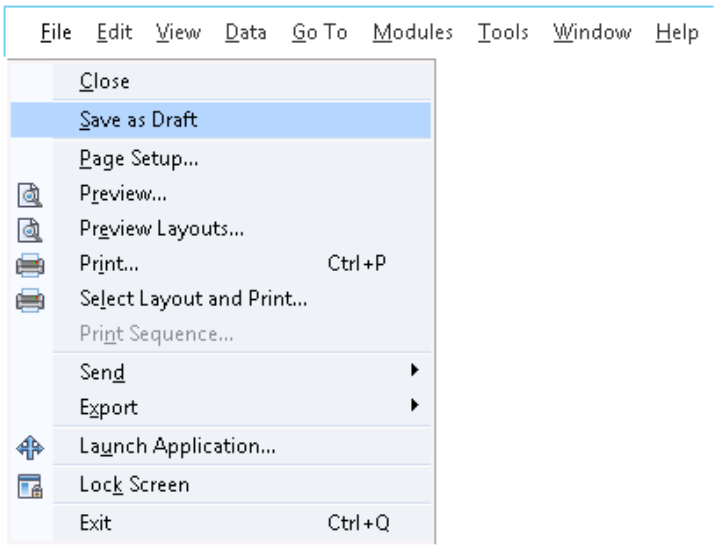


Figure 10-8: File menu for creating document drafts

If you save a document as a draft, it is available for later use. The next step in using a document draft is finding the existing drafts and then choosing one as the basis for creating a new document, a process summarized in Figure 10-9.

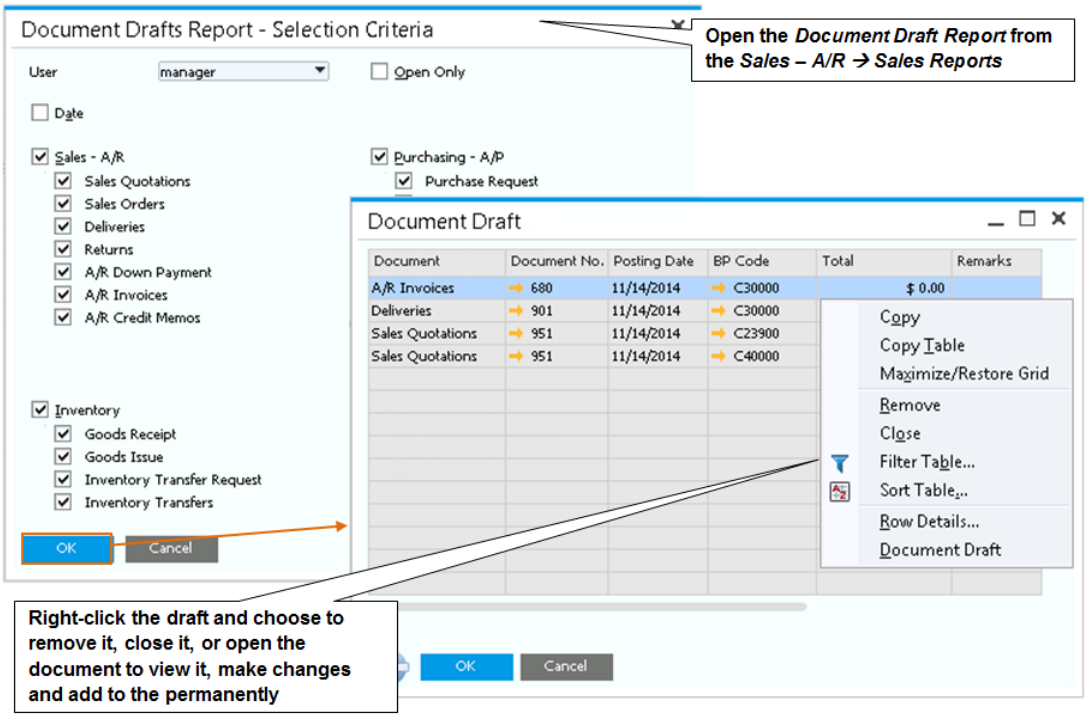


Figure 10-9: Finding document drafts

After you open the document draft, you can adjust the information and save it again, either as a draft or as a regular document.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Document drafts can be deleted from the Document Draft report (see Figure 10-9) by right-clicking on a draft and selecting Remove from the context menu. If you add a document using a draft, the draft is not deleted automatically - it is simply closed. You delete it once you no longer need it. Users can save their own drafts and can use drafts created by other users.

10.3 Accelerating Document Creation through Wizards

SAP Business One offers wizards to automate the creation of documents. The draw document wizard guides you through the process of creating a new document by using information from one or more other documents as a starting point. This automated copying to and from documents to new documents saves time and reduces errors.

The document generation wizard automatically creates multiple new sales documents using other sales documents as a starting point. In this way, for example, all of the orders collected by a call center can be turned into deliveries at the same time so those products can be recorded as shipped from the warehouse. Or if a sales order contains items to be shipped to two locations, then two deliveries could be created for one sales order.

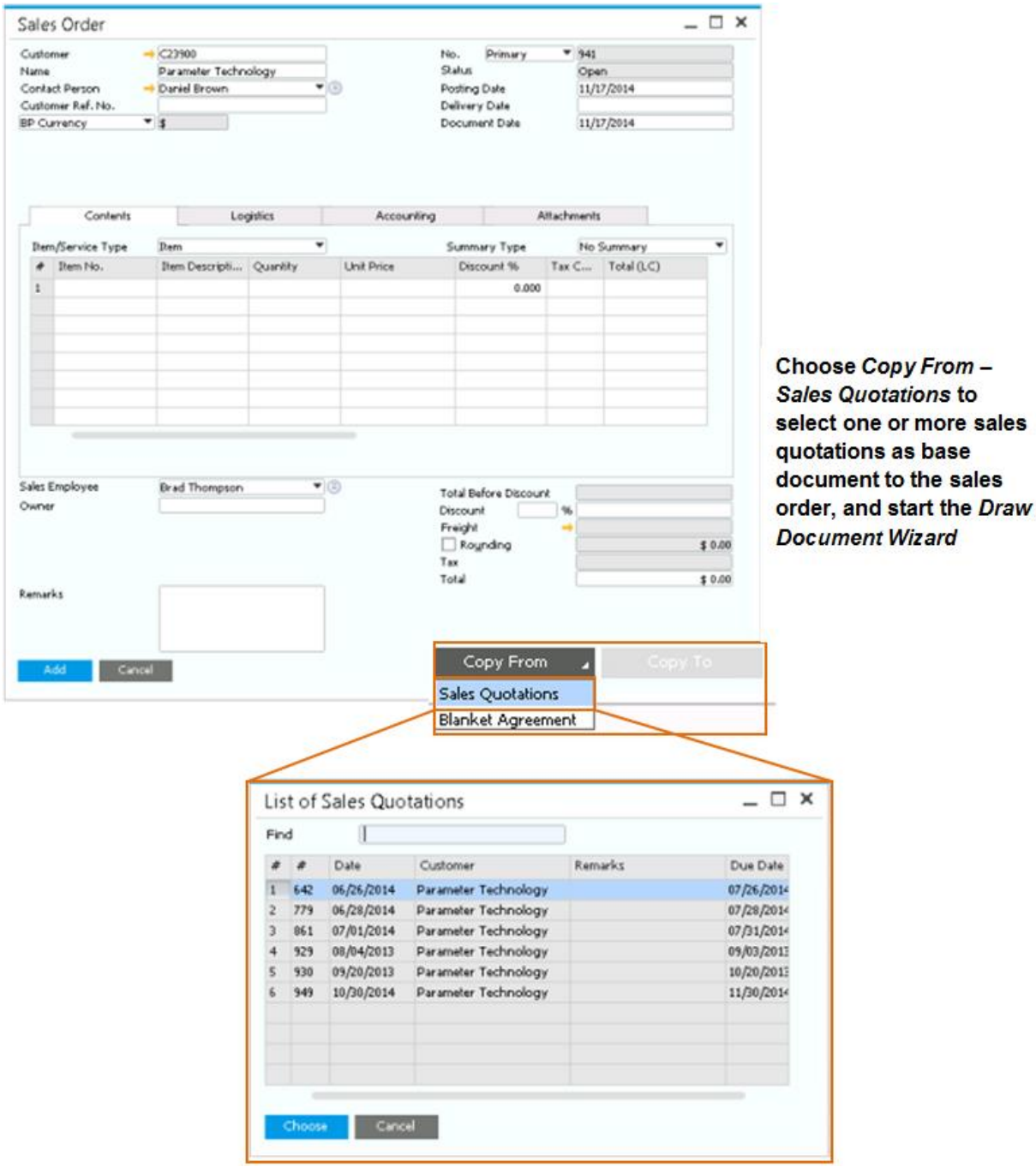
10.3.1 Draw Document Wizard

The draw document wizard helps you create a new document from an existing one by guiding you step-by-step through the process and giving you advice along the way. The wizard is available for most documents in the sales and purchasing modules. To get the process started, you create a blank version of the document. For example, after opening a blank sales order and specifying the relevant customer, you start the wizard by clicking on the Copy From button in the bottom right corner of the window (see Figure 10-10).

You choose the document you want to use to create a new document from the list of eligible sales quotations shown. Multiple sales quotations can be used in creating a new sales order.

Choosing a document starts the draw document wizard, which provides different choices for customization and altering data based on the document that is being created and the source documents used to create it. For example, you can choose whether to use the exchange rate as it was when the sales quotation was created or the current exchange rate as it is updated today in the exchange rate table.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.



Choose *Copy From – Sales Quotations* to select one or more sales quotations as base document to the sales order, and start the *Draw Document Wizard*

Figure 10-10: Starting the draw document wizard

As Figure 10-11 shows, you can choose to customize item-level data—and here you can change almost everything. You can delete rows, change quantities, change prices, provide discounts, and so on.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

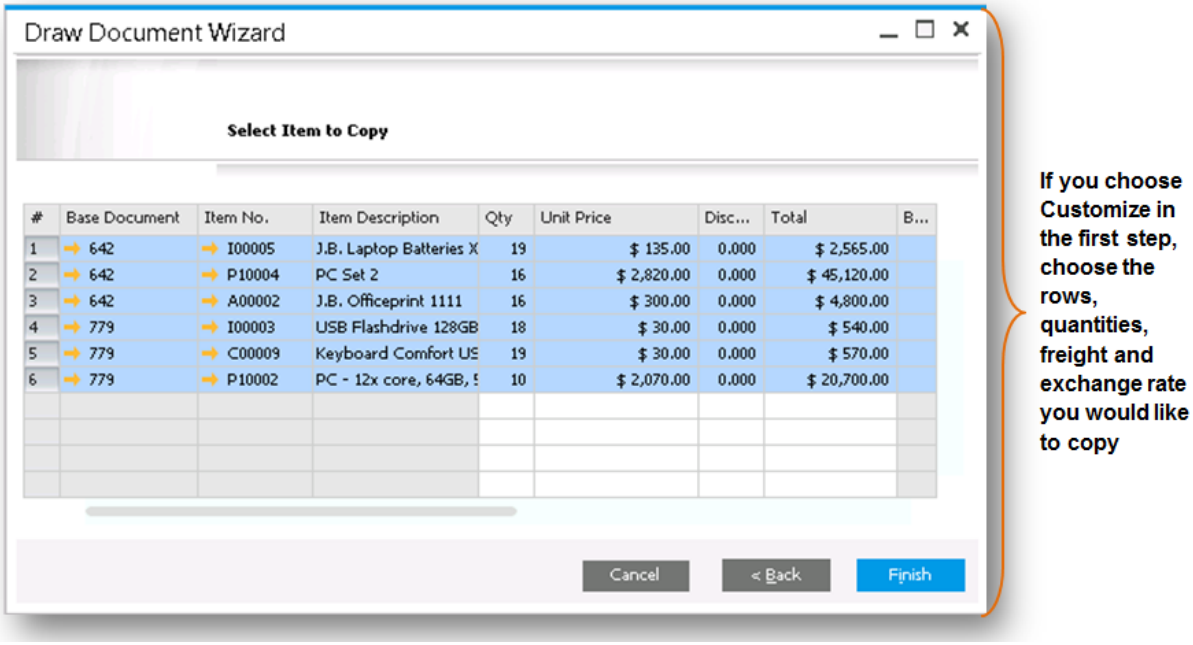


Figure 10-11: Using the wizard to create a sales order

If the base documents include freight amounts, an extra step is added to the wizard. In this step you can choose the freight amount you wish to draw, as well as the drawing method.

The newly created sales order has an automatically created note in the Remarks field indicating which sales quotation or quotations were used to create it. It is also possible to determine the base document from which a document was created or the target document created from a base document using two icons in the toolbar. When a document is open, clicking the (Base Document) icon opens the first document used as the base for the current document. Clicking the (Target Document) icon opens the first target document created using the currently open document as a base. This way of looking up base and target documents also works on the row level for specific items. If you mark a specific row and then click the base or target document icons, you can see the document that was base or target for that row. Alternately open the Relationship map from the context menu.

10.3.2 Document Generation Wizard

The document generation wizard automates the process of creating documents used in the sales and fulfillment process of SAP Business One. Using the wizard, you can create sales orders, deliveries, returns or A/R invoices, with reference to base documents. You can also choose to save the documents created as drafts, giving you a chance to review them before they are permanently saved.

Note

Backup reminder. The document generation wizard may create tens or hundreds of documents at a time, many of which have significant accounting impact and are difficult to roll back. For this reason, you should use this wizard carefully and usually only after creating a full backup of the database. This makes recovering from a misstep a matter of restoring a database rather than manually rolling back hundreds of journal entries.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Because of its power, the document generation wizard is usually something that your implementation partner will train you to use. This section provides an overview of the main steps involved in using the document generation wizard.

The wizard, started from the sales – A/R module, presents a welcome screen followed by a screen for step 1, which allows you to retrieve a named set of saved parameters for a document generation run. The screen for step 2 of the wizard is shown in Figure 10-12.

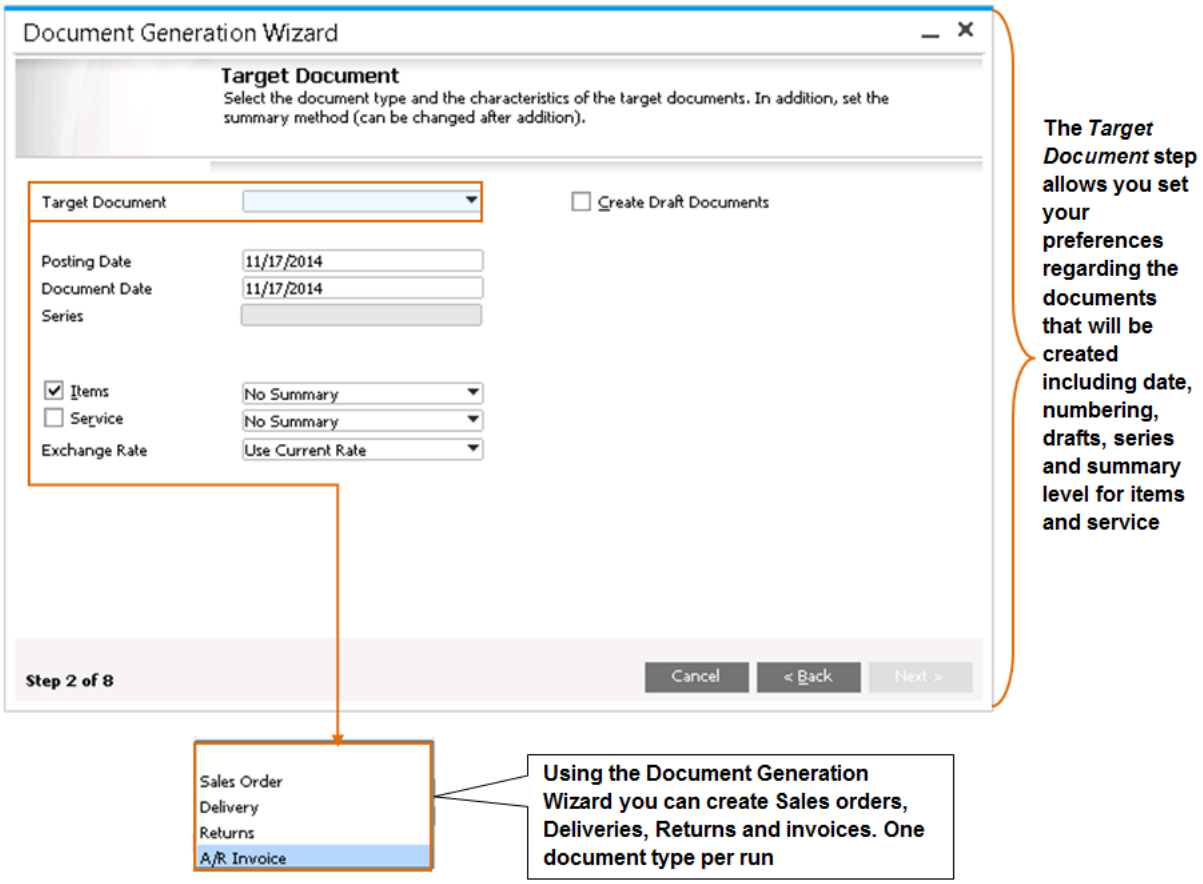


Figure 10-12: Target document settings

Target document settings shown in this figure let you control the type of document you are creating (sales orders, deliveries, returns, or invoices) and customize other parts of the document. Here you can choose to save as draft, and determine which type of documents will be created: items, service, or both.

In step 3 of the wizard, you specify which documents to use as the base documents for document generation. Just as with the draw document wizard, the document generation wizard allows you to select documents to draw from to create new documents. Figure 10-13 shows the screen used to select base documents.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

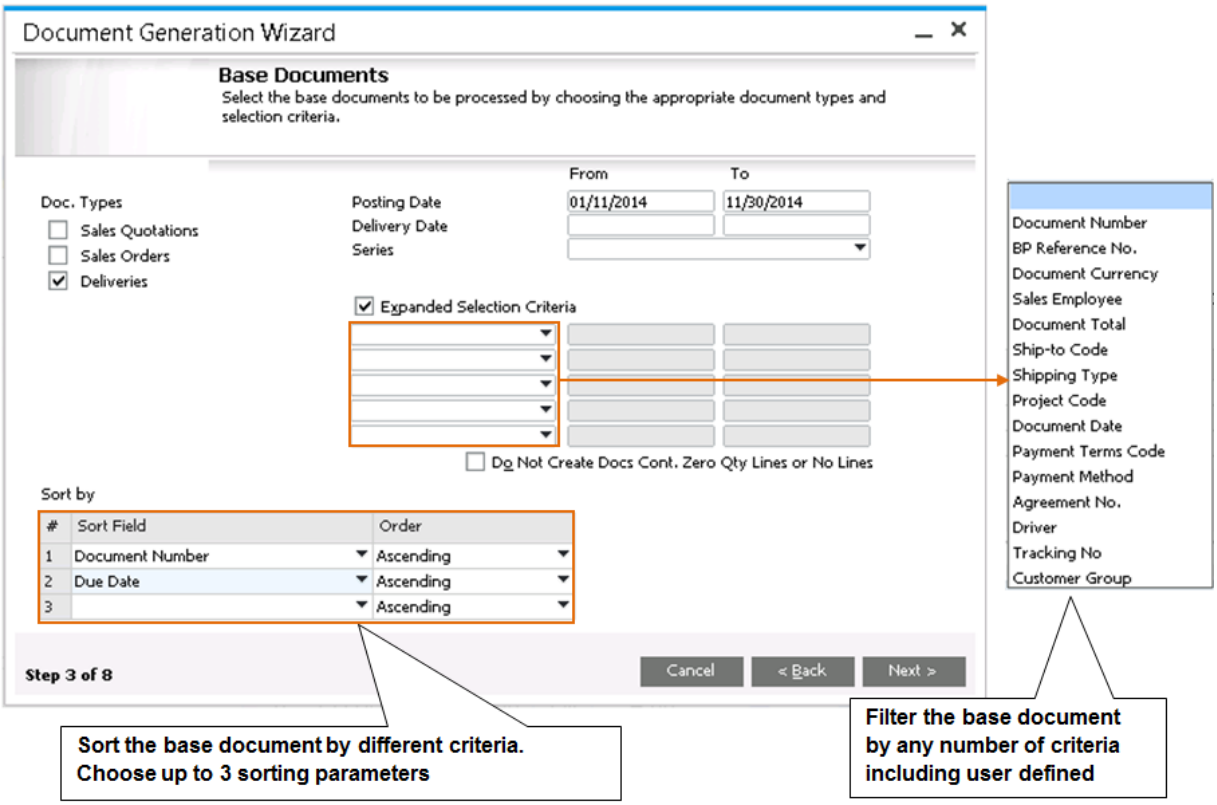


Figure 10-13: Selecting base documents

In step 4 of the wizard you select how (and whether) you want to consolidate documents. If you just keep the default, the basic rules for consolidation are implemented: documents are consolidated if the base and target document are for the same customer, and same type. You can define additional criteria for consolidation, such as ship-to name, payment terms, payment method, or custom criteria based on user defined fields. In step 5 you choose specific customers for which documents should be created in the run. Step 6 specifies what should happen if there is missing data or bookkeeping or inventory errors when creating documents. The choices are either to skip to the next document, to the next customer, or to obtain confirmation interactively.

In step 7 you can save the settings for the run using name and description, execute the run, or both. Before executing the run, the application reminds you that you should have a current backup. Step 8 of the wizard is a listing of the documents that were created, along with any error messages that may have been generated.

While this overview provides a good idea of what the document generation wizard can do, it is prudent to seek help from an implementation partner or do a lot of experimentation in a test environment before using this feature in production. With great power comes great responsibility.

10.3.3 Procurement Confirmation Wizard

The procurement confirmation wizard allows you to create purchasing documents, such as purchase orders, purchase quotations and purchase requests based on sales quotations or sales orders. In addition, you can create production orders based on quotations and sales orders including a production bill of material.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

The wizard can be started from the Purchasing or the Production main menu or by selecting the Procurement Document check box on the Logistics tab in a sales quotation or sales order document. In the second scenario, the base document and customer are preselected based on the document you started from.

The first step in the wizard, after the welcome window, is to choose the base document type and customer range. The base can be a sales order or a quotation. You can check the Include All Open Base Documents to include all open base documents regardless of whether the Procurement Document check box is selected in the document itself. If you are using the Advanced Available-To-Promise function, you can also filter orders to include only unconfirmed and delayed quantities, or just unconfirmed quantities. This way you can have the wizard create PO's for just the orders with a delayed delivery schedule or for those that you know have insufficient quantity in the warehouse.

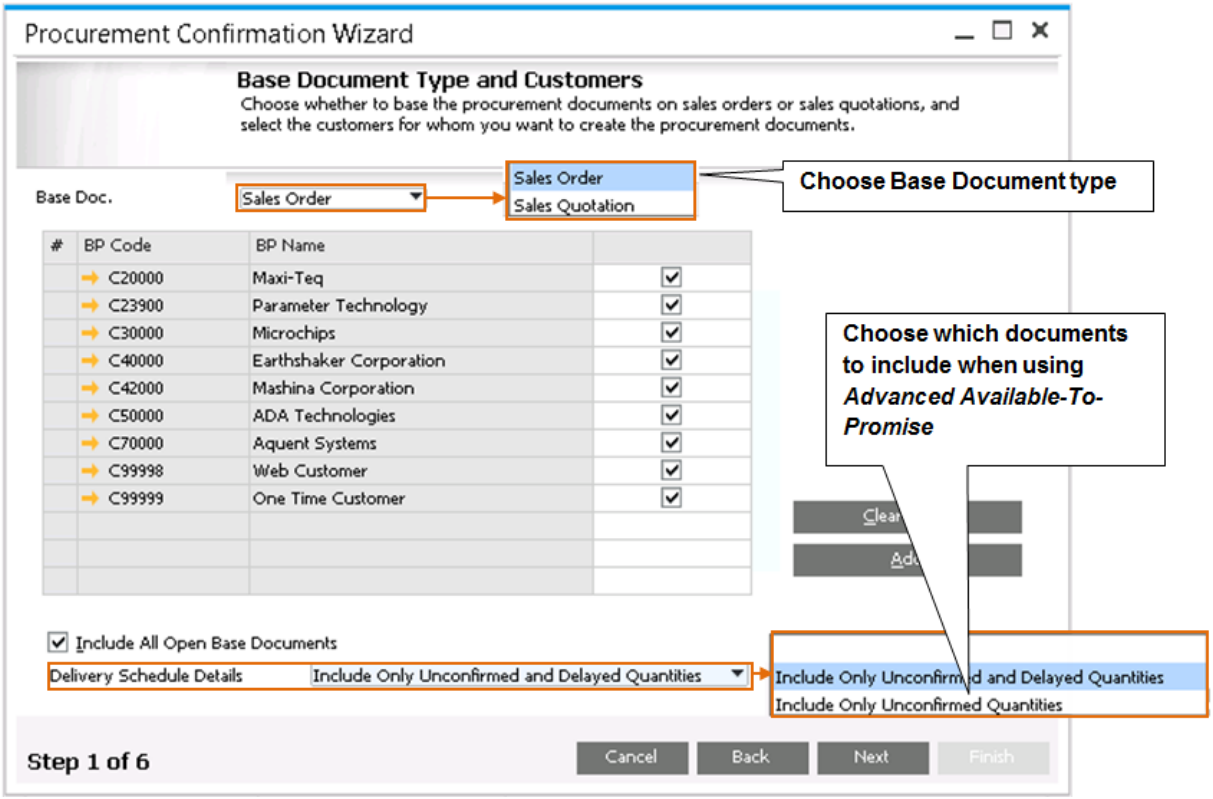


Figure 10-14: Base Document Type and Customers

In the next step, highlight the sales documents for which you wish to create a purchasing document. In the Base Document Line Items step, the rows from the base documents appear with the total quantities required, assigned to the item's main vendor as it is defined in the item master data. Note that the wizard may recommend multiple POs for a sales document with multiple items if there are different vendors assigned to the items in the sales document. At this stage you can choose which line items to include. You can also replace the vendor with another, update the delivery date, and choose to create drafts.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

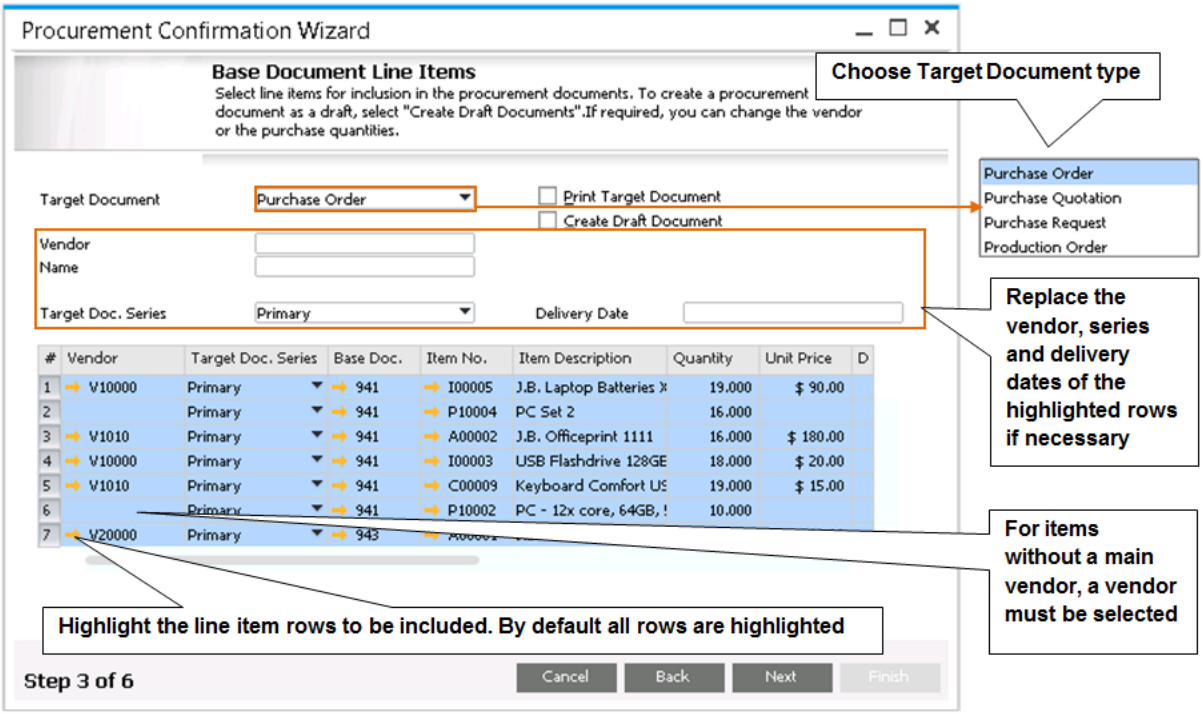


Figure 10-15: Base Document Line Items

In the next step you decide how to consolidate the base documents. For example, you can create one PO for 5 different sales orders of the same item, or you can choose to consolidate by different criteria, such as warehouse, shipping address, currency and more. The next step is providing a review of the purchase documents that are about to be created, and finally you can see a list of target documents with a drill down arrow to the actual document.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

11 Printing Documents and Reports

In This Chapter

- Overview of printing capabilities
- Initial setup
- Print layout designer
- SAP Crystal reports

Printing documents and reports to a hard copy or to a file, is an essential part of your day to day work. With SAP Business One you can print immediately after you created your company database or alternatively choose to send the document via E-mail. Each document or report comes with a predefined print layout template created based on industry standards, that can be used as is, but can also be modified based on your company's unique needs.

11.1 Document Layouts and Reports

We distinguish between document layouts and reports:

- Document Layout: Each document type, such as invoice and delivery, has a print layout template that allows you to print the individual documents.
- Report: A set of data arranged in a report, based on your selection criteria. Each report also has a print layout template. Reports also refer to independent Crystal Reports located on the main menu.

> **Note**
>
> Screen layout versus print layout. What you see on the screen is not how the document or report will look like when you print. For example, if you add a column to the document table on the screen, it will not affect your print layout unless you also add this to the layout. Print layouts can be maintained using the Print Layout Designer (PLD) or the SAP Crystal Reports tool.

Any document or report can be print previewed on the screen by clicking the (Print Preview) icon. If the default template is a PLD report, the PLD preview screen opens. If the default template is a Crystal Report, the Crystal Report viewer opens.

You can choose to export your print layout to a PDF, text, MS Excel, MS Word or an image file by opening the desired document, and choosing File → Export → Layout to. While sending an external email from a certain document, the system asks the user whether to attach the edited report. This will create a PDF file and attach it to the email message. SAP Business One tracks the printing status of sales and purchasing documents. Once a document has been printed, its status updates. This allows you better control over what is printed, and what is yet to be printed.

You can choose to print documents automatically after they are added or print them in a batch using the Document Printing window by choosing the Document Printing transaction in each module's menu. In the Document Printing window, choose the document type to be printed, and filter by date, series, and printing status. Using the Document Printing window, you can also send multiple documents by email to the contacts of the respective business partners in the documents.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Instead of printing each document at a time use *Document Printing*. Choose what to print and how many copies

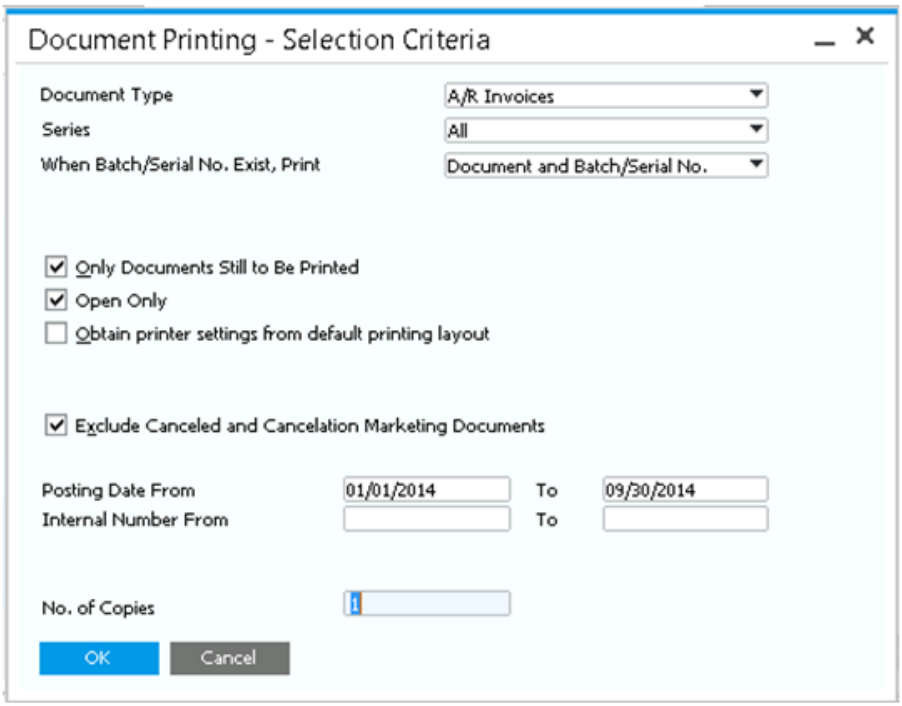


Figure 11-1: Print documents in a batch

After the list of documents is displayed, highlight the rows, and click the print, or email icon on the upper tool bar. When emailing the document, a separate email is generated for each customer, and the email address is the one defined for the document's contact person.

11.2 Initial Setup

You can choose if, when and which documents to print. You can set defaults for how each document type will print, as well as how many copies will be printed. Go to main menu Administration → System Initialization → Print Preferences. See Figure 11-2 for company level printing settings.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

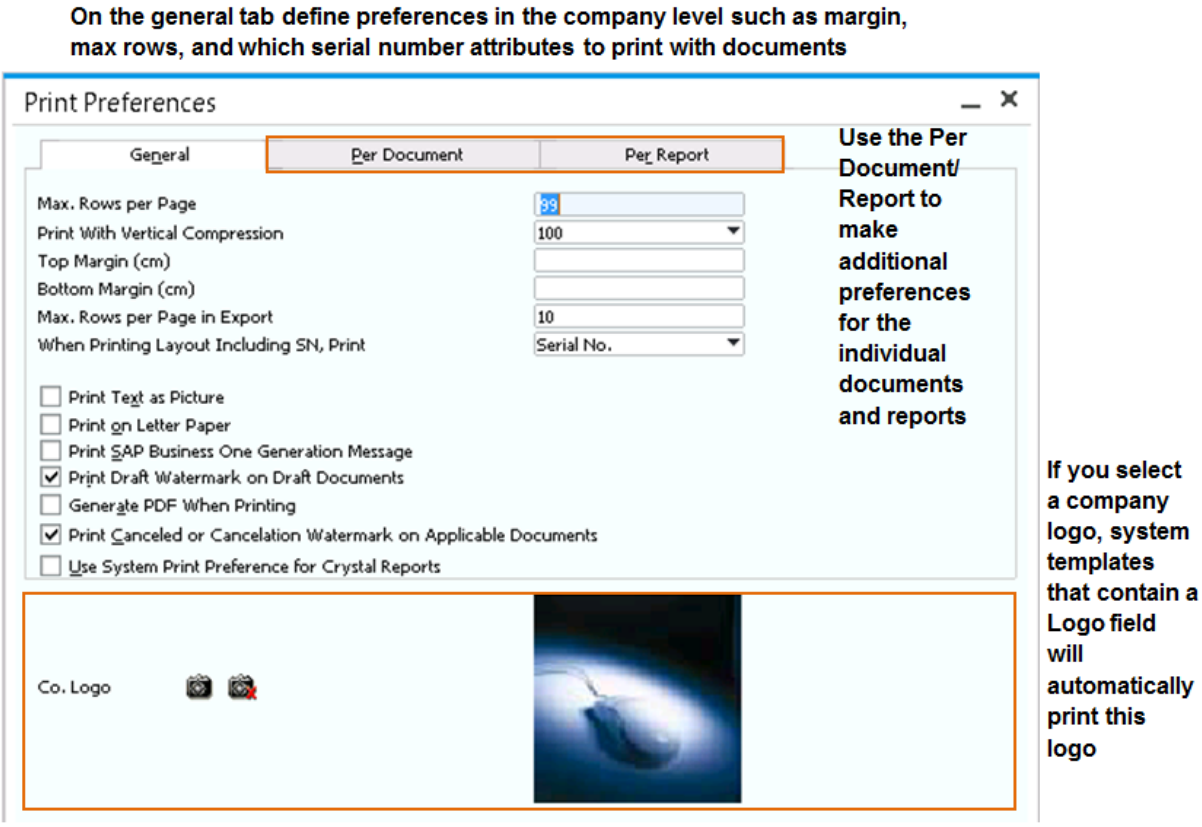


Figure 11-2: General Print Preferences

Select the Use System Print Preference for Crystal Reports checkbox to enforce the preferred settings of your system printer when selected Crystal reports or layouts have conflicting printing settings. For example, the default paper size of a Crystal Reports layout is A4, while the preferred paper size of your system printer is A5. If you do not select this checkbox, the print settings of Crystal Reports override those of the system printer.

On the Per Document tab, select the document type and make your printing preferences:

- When Adding Document: choose one or more of these options - Export to MS Word, Print Document, E-Mail Document or Export to PDF. The action occurs right after you add the document.
- Print Discount Data checkbox. For sales and purchasing documents, choose whether to print the header discount information
- Print Amounts checkbox. For certain document types, such as Purchase Order you choose whether to print the document prices and totals
- Permanent Remarks for Printing. Enter remarks that are always relevant for this type of document. You must add the Permanent Remarks field to the print template.
- E-Mail Subject and E-Mail Body. Enter text to be included automatically in the email subject and body message, when the document is sent via email.

These preferences only affect PLD templates. If you need to implement these changes on Crystal Reports layouts, you must create additional templates to match your needs.

On the Per Report tab, enter the E-Mail Subject and Body for sending the Aging Report via email. When you choose to send this report by email, highlight the rows of customers, and the system generates an email for each customer attaching the detailed aging report to the message.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Note

Setup options. You can override some of the print settings by user. Identify User Defaults, when you setup your users to make this determination. Go to Administration →Setup → General → Users. On the Default field, press TAB, and choose New to create a new user default.

11.2.1 Report and Layout Manager

All templates, both document layouts and reports, are managed in a single location in the application. This is the Report and Layout Manager, located under the menu Administration →Setup → General.

Here you can view which templates you have for each document and report. You can delete templates and make certain changes such as defining the default printer and number of copies. The report and layout manager also allows you to export and import Crystal reports, and to define print sequences. We will now explain how to work with the report and layout manager.

11.2.1.1 Document Layout Management

To locate a layout, navigate through the tree structure, which is identical to the application main menu structure. When you select the document type, all the assigned templates are displayed on the right. See figure 11-3 for an example for A/R invoice templates.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

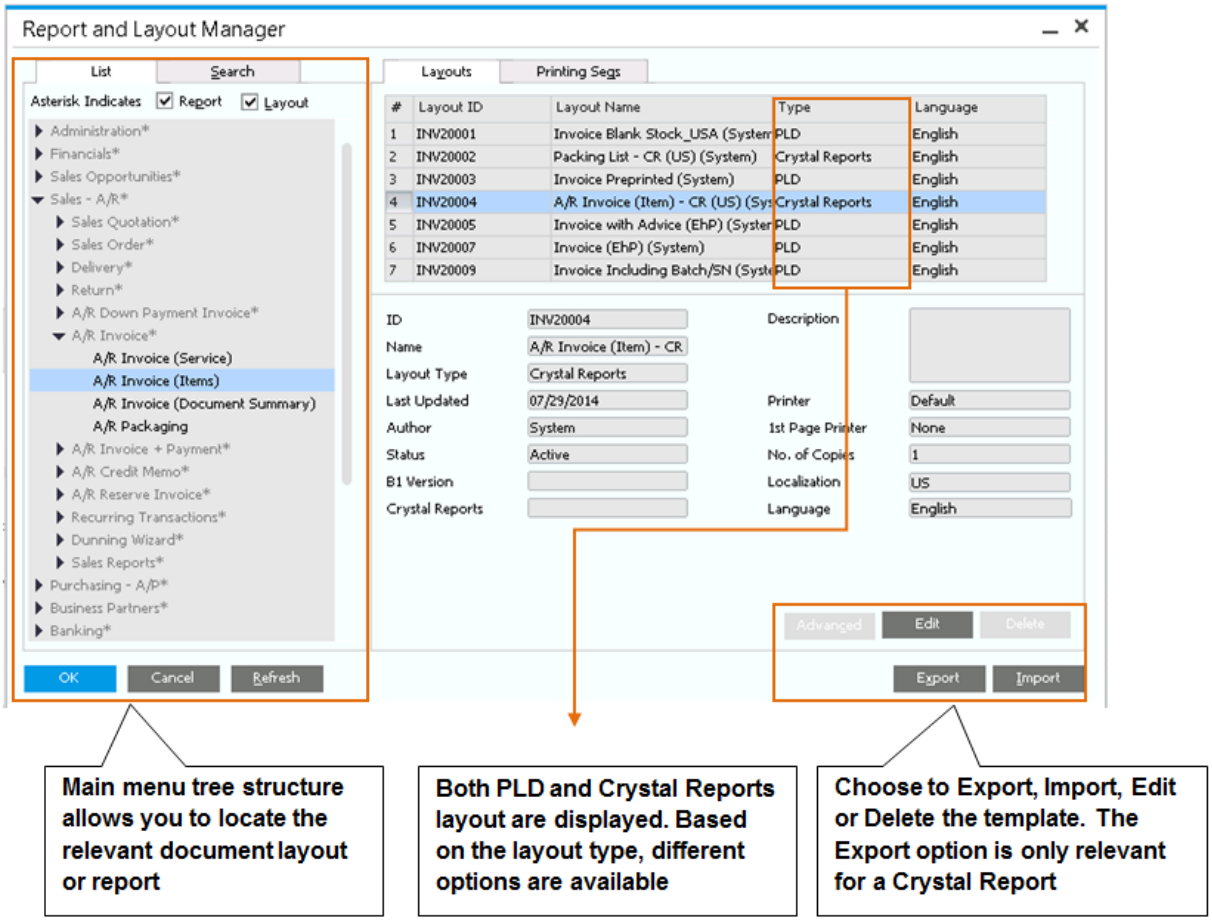


Figure 11-3: Manage document layouts

An even easier way to locate your layout is to open the actual document and choose the Layout Designer icon on the upper tool bar as explained later in this chapter.

11.2.1.2 Export and Import Document Layouts

During the course of a SAP Business One implementation, you may have situations where you would like to move templates from one company to another, or to apply a layout to different types of documents. If your layouts are created in Crystal Reports, you can use the export and import options to fulfill this need and save you time and redundant work.

To export a template, or multiple templates, locate the layout you need, and click the Export option. The Report and Layout Export Wizard opens. The wizard shows the module your template is in, and you can select this and other layout templates from the same module. For example, if you are exporting an A/R invoice template, you can now choose different layout templates from the A/R sales module. The next step is to provide a name and a location for the file. The export process creates a B1P file (Business One Package) which can be imported to another company.

Now, click Import. You can import either B1P (packages) or RPT files (Crystal Reports files). Select the file and press Next. If this is a package that was previously exported from SAP Business One, the wizard knows where to place the imported template. In our example, the templates are displayed under the A/R sales module, A/R invoice. In this step you can specify if the template is a Master Layout. This option allows you duplicate the master layout to other document types. For example, if your quotation

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

and order layouts look the same as the invoice layout, then instead of redesigning these two layouts, simply define the invoice as a master, and duplicate it to the quotation and order. See figure 11-4 for duplicating layouts.

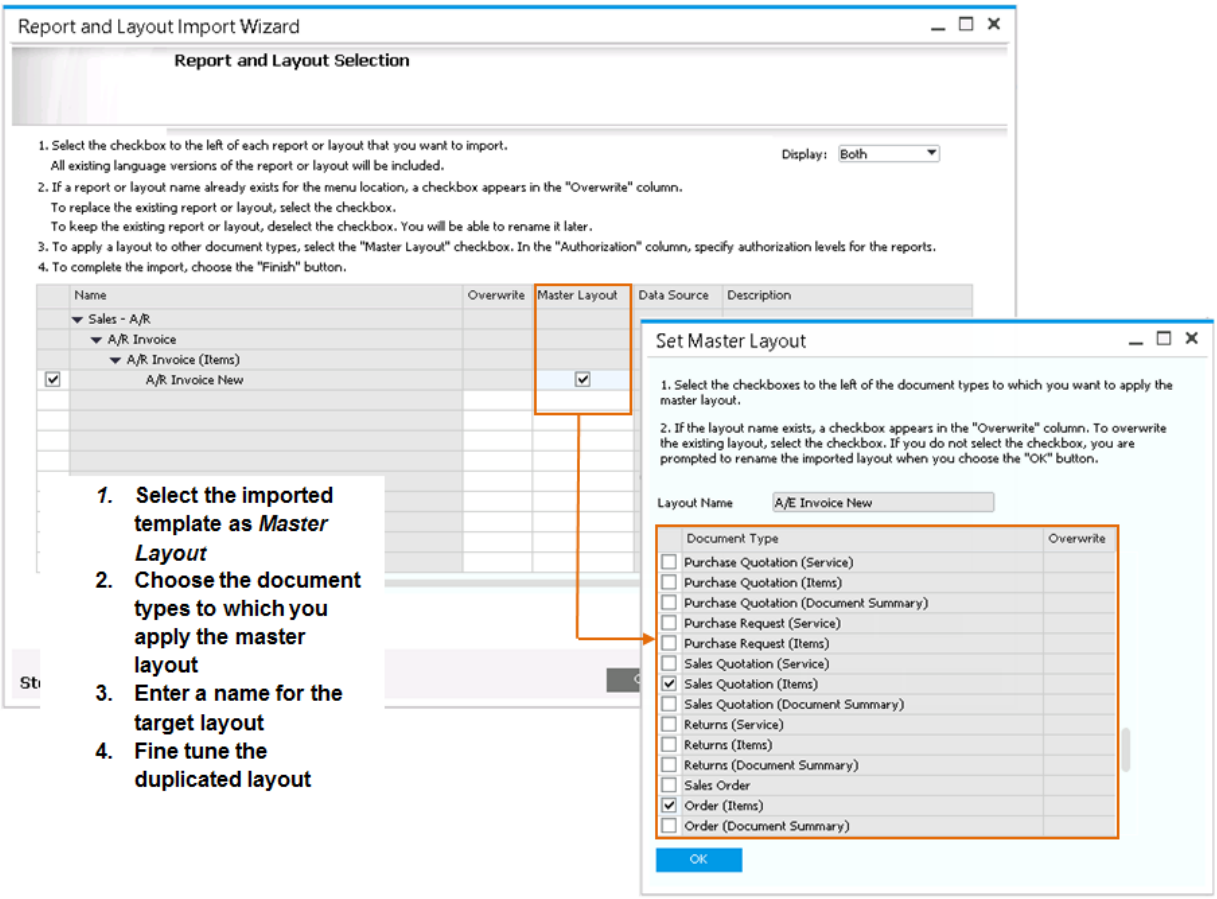


Figure 11-4: importing and duplicating layouts

Once the import is complete, you can view the newly imported templates for the respective document type in the Report and Layout Manager. For layouts that were duplicated from a master layout, it is recommended that you fine tune these layouts - update text fields that refer to the document type and delete or add fields based on your needs.

Note

Import standalone Crystal Report. Use the import, to add new independent reports to the main menu. For example, a new custom sales report, or a commission report can be imported and placed under the Sales Reports menu. In this case, on the import process you choose the Report option, rather than the Layout, and determine where in the main menu the report will be located.

11.2.1.3 Printing Sequence

Different companies have different printing needs and procedures. With the printing sequence you can customize how documents are printed to match these procedures. Figure 11-5 presents an example of printing an invoice with two different templates and with other related documents in a set sequence.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

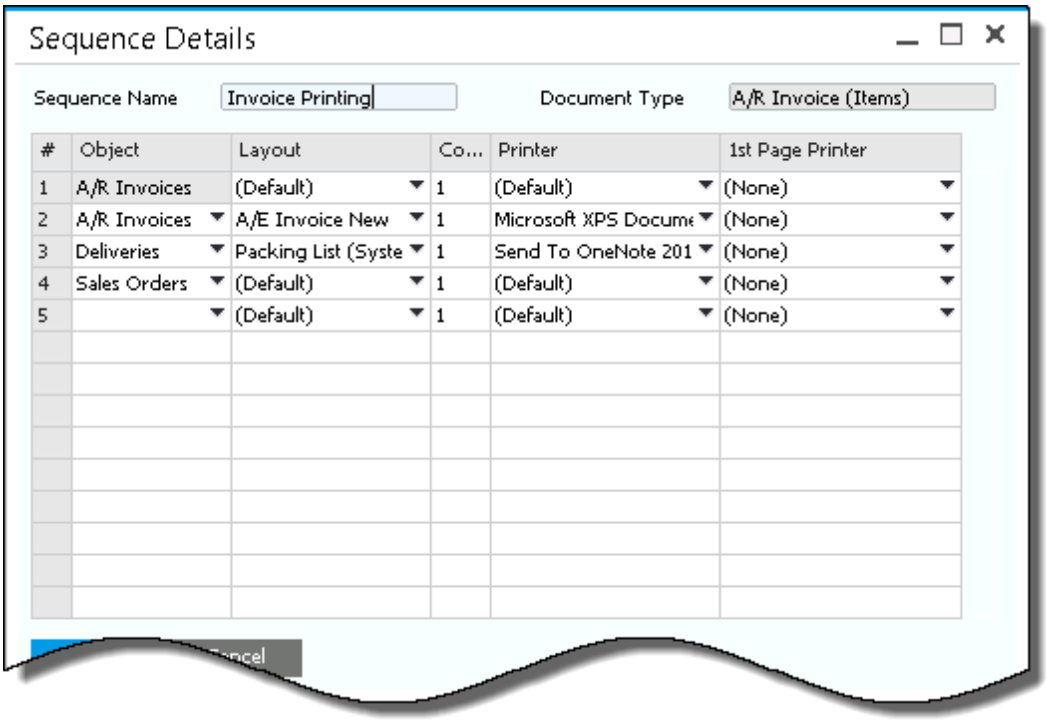


Figure 11-5: Printing Sequence

This printing sequence reflects the following: the first copy of the invoice is printed using the default template, the second copy includes batches and serial numbers and is printed to the warehouse printer, then two copies of the related deliveries are printed as a packing list to the loading area printer, and one copy of the original order is printed for the customer's reference.

This means that once you print this invoice, 5 different documents and templates are printed. Once you save the printing sequence, you must set it as a default printing layout. Note that you can combine PLD reports and Crystal Reports in the same sequence.

11.3 Print Layout Designer

The Print Layout Designer is one of the two tools for producing all your document and report print layouts. When you choose to print, or print preview, the system accesses the print layout designer tool, and use the default template for the printing process.

When you create a new company, every document and report in the system has a default print template called the System template. You can identify these templates by the (system) indicator next to the template name. Sometimes there are multiple system templates for the same document type. The best way to start is by printing your documents using each of the system templates, and choose the one that most matches your needs. Note that it is not possible to delete system templates.

Using the Print Layout Designer tool, you can access the system template and modify it. For example, you can add your company logo, add the customer's fax number to the invoice form, or add a user- defined field to the sales order printout.

To make changes to the template:

1. Open the document or report.
2. Click the (Print Layout Designer) icon from the icon toolbar.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

3. Select the desired PLD layout (the default layout is automatically highlighted).
4. Choose the Manage Layout button.
5. In the Report and Layout Manager window, choose Edit.

If the template you chose is a PLD type, the Print Layout Designer tool is automatically opened for you. The first thing you should do is save the template under a different name, in case you are starting from a System template. The Print Layout Designer contains the following components:

- The Print Layout Designer Tool Bar and Menu Bar. Use these to create new fields, expose field's dependencies, and define document properties.
- Document area. Represents the template itself. Here you will create new fields and adjust field's location and measurements.
- Field index. Lists all the fields in the template, by areas. You can use the field index to search fields by their unique ID and view their properties.
- Area and field properties. Once you click an area or a field, its properties appear. Here you can identify the field's content, format, links and more.

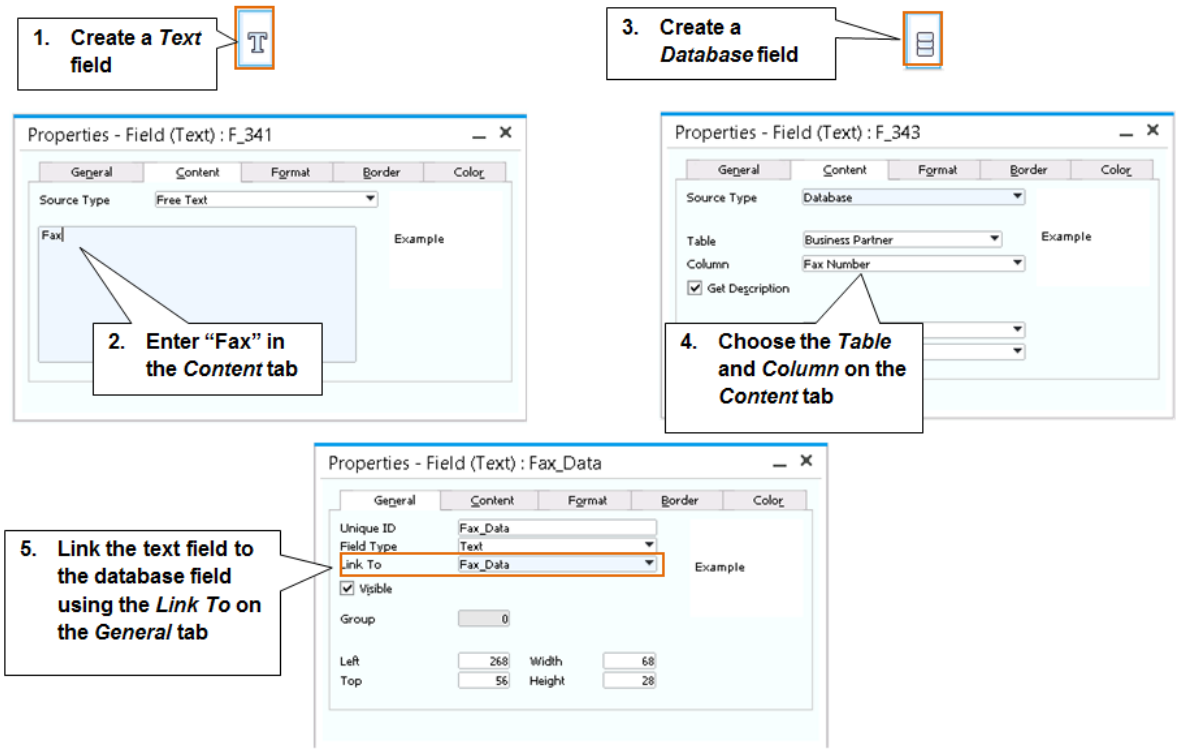


Figure 11-6: Creating Fields

Let's assume you would like to add the fax number of your customer in a sales order form. Follow Figure 11-6 for the steps to add a text field, a database field and link them together. This way, if the customer doesn't have a fax number, the text field that serves as a label is not printed.

The field's unique ID can be changed by you. Providing significant names to the fields can help you find fields more quickly in the field index, in formulas, and when linking fields to one another.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

> **Note**
>
> Save copies of your templates. If you have a good working template, make sure you save it under a different name before you make additional changes. Use the Print Layout Designer → Save As. Later you can delete unnecessary templates using the Print Layout Designer → Delete Layout.

To go deeper into the Print Layout Designer tool, go to the SAP Business One Customer Portal at http://service.sap.com/smb/sbocustomer. There you will find information such as:

- Additional field types that can be added – picture, barcode and system variables
- How to create formulas
- How to add subtotals and sorting to a template
- How to attach a template to a user defined query using the Query Print Layout tool

> **Note**
>
> Duplicate Layout Template Utility. You can duplicate a Print Layout Designer template from one document type to another, similar to the Master Layout functionality when you work with Crystal Reports templates. Go to Administration → Utilities → Duplicate Layout Template. Select the base and target template and choose Add.

11.4 SAP Crystal Reports

SAP Crystal Reports is a completely integrated reporting tool that gives you additional flexibility and robust capabilities for easy creation of report and document layouts. As an SAP Business One customer with a current maintenance agreement, you are entitled to receive one free designer license for the Crystal Reports designer tool, allowing you to create new reports and layouts and modify existing ones. When you create a new company database, default templates and reports are created. Using SAP Crystal Reports designer, you can create new layouts and reports, and import them in the Report and Layout Manager, as explained earlier.

To edit an existing report, select the template in the Report and Layout Manager, and click Edit. If you want to create a new SAP Crystal Report, open the SAP Crystal Reports for SAP Business One independently.

11.4.1 Creating a Basic Report using SAP Crystal Reports

In this section we will describe the creation of a basic sales report, based on A/R invoices, grouped by sales employee. The report will be imported to the main menu, under sales reports.

Start by selecting the Report Wizard as you open the SAP Crystal Reports tool.

In the first step choose the data source for the report. Click the Create New Connection and choose the SAP Business One options. Figure 11-7 shows the credentials that need to be entered in order to create the connection when using MS SQL as the database platform.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

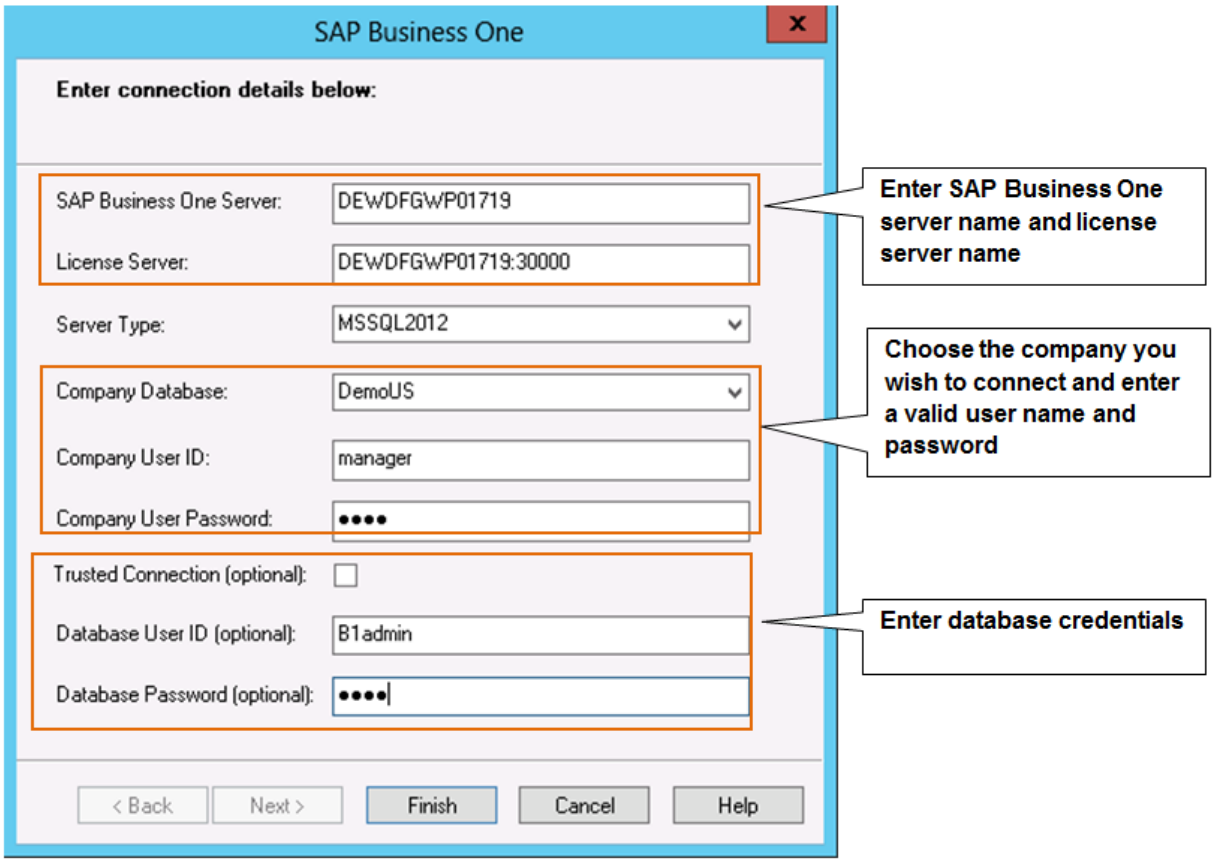


Figure 11-7: Creating a new connection

When using SAP Business One HANA version, select server type as SAP HANA, SAP Business One server "servername:30015" and license server "servername:40000". You need a database user that has authorizations to the your schema.

Now expand the new connection, select the database name and the `B1 Tables`. A list of all the tables in the database is presented by module. In our example we need the A/R invoice table (`OINV`) from the sales module and the sales employee table (`OSLP`) from the menu Administration → Setup → General.

The next step presents the relationship links between the two selected tables. Usually the links are automatically created based on the SAP Business One database schema and are correct; however, when multiple tables are selected, occasionally you will need to fix and create the links yourself. You can use the Query Generator tool, select the same tables, and view which links are suggested by the system.

when using the SAP Business One HANA version, it is recommended to connect the semantic layer models (see Analytics chapter for more information). Instead of selecting the individual tables, connect to pre-defined, user intuitive views, that gather data from different modules in the application. Use the Add Command in Crystal Report to call the view or procedure. See figure 11-8 as an example for calling the sales analysis view, using a parameter for the schema name. this way, when running the report, you can select which company to use.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

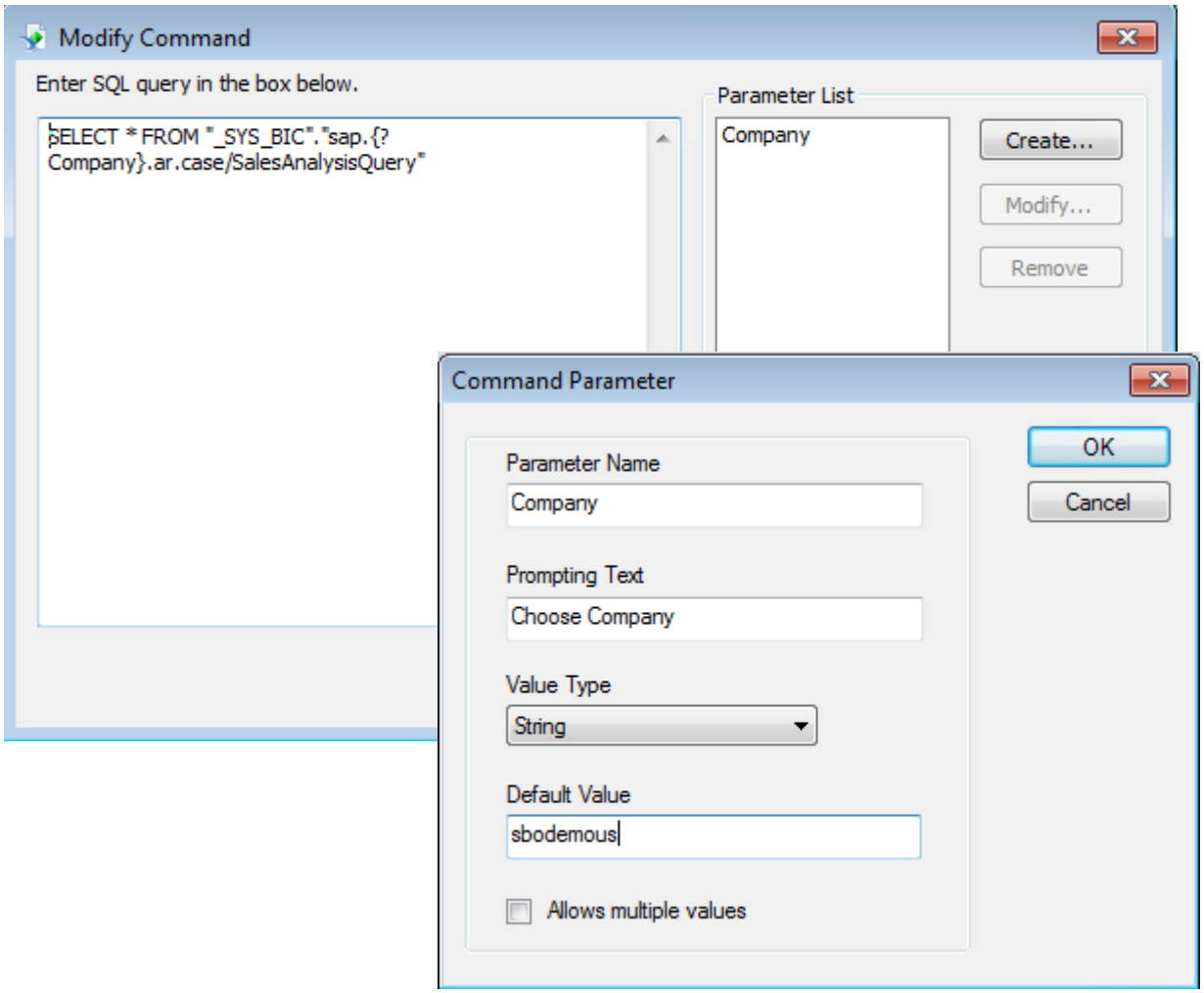
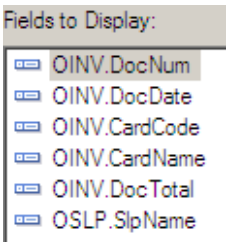


Figure 11-8: Calling the Sales Analysis view

In the next step you select the fields from each table to appear in the report. In our report the following fields are selected:



The Grouping step is optional. Here we select the fields to group by, either from the fields already selected in the report, or from the fields available in selected tables. In our report, we select the sales employee name and click Next. In the Summaries step, the system suggests to summarize each group by document number and document total. We remove the document number and click Finish.

Figure 11-8 shows the report results as they are displayed in preview mode for our report. The Crystal Reports designer tool has two modes: Preview and Design. Here we can add new fields, change their formats, add formulas, filter the report using parameters, add charts and much more.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

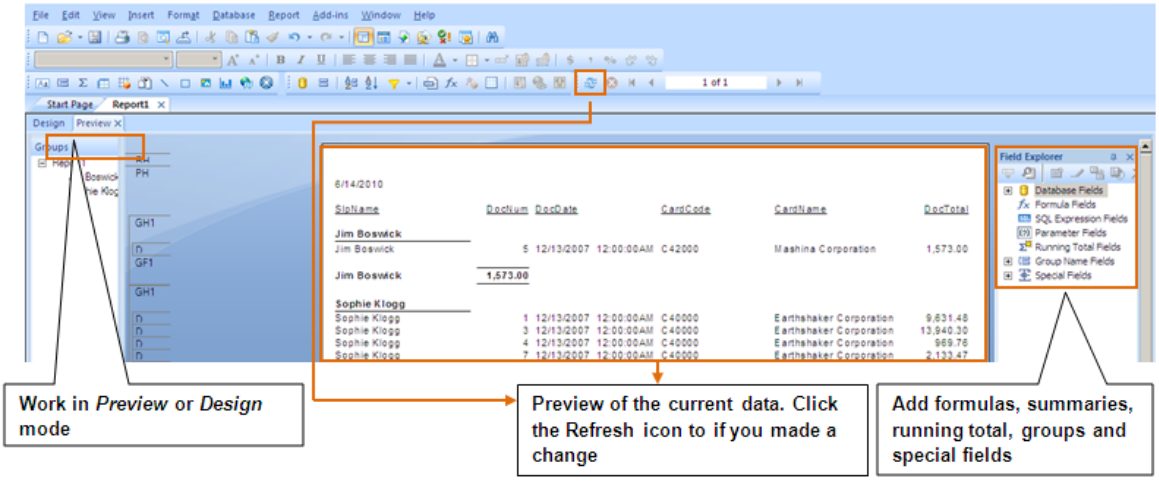


Figure 11-9: SAP Crystal Reports Designer

When the report is ready, choose Add-ins → SAP Business One → Save As to save the report. To see how the report looks in SAP Business One, choose Add-ins → SAP Business One → Preview in SAP Business One.

> **Note**
>
> Special Fields in a Crystal Report. The integration of SAP Business One with Crystal Reports provides additional features. You can create search criteria parameters that look like the built in selection criteria of other reports in the application. In addition, you can add the drill down orange arrow to Crystal Reports, so users can open the related master data screen.

11.5 Setting Default Layout Templates

You can maintain multiple layout templates for each document and report. You can have, for example, an invoice layout for each of your customers' languages, or set a different invoice layout for certain types of customers or users.

SAP Business One allows you to choose different templates as default for different business partners and for users. So you can assign your large account invoice form to your customers that are assigned to the large accounts group. Or use different purchase order templates for users in the different departments of your company. Figure 11-10 shows how to set the default templates for business partners and users.

> **Note**
>
> Authorization Alert. Non super users can only set a default template for themselves and specified business partners. You can further control a user's accessibility by choosing if the user can change the default template using the General Authorizations.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

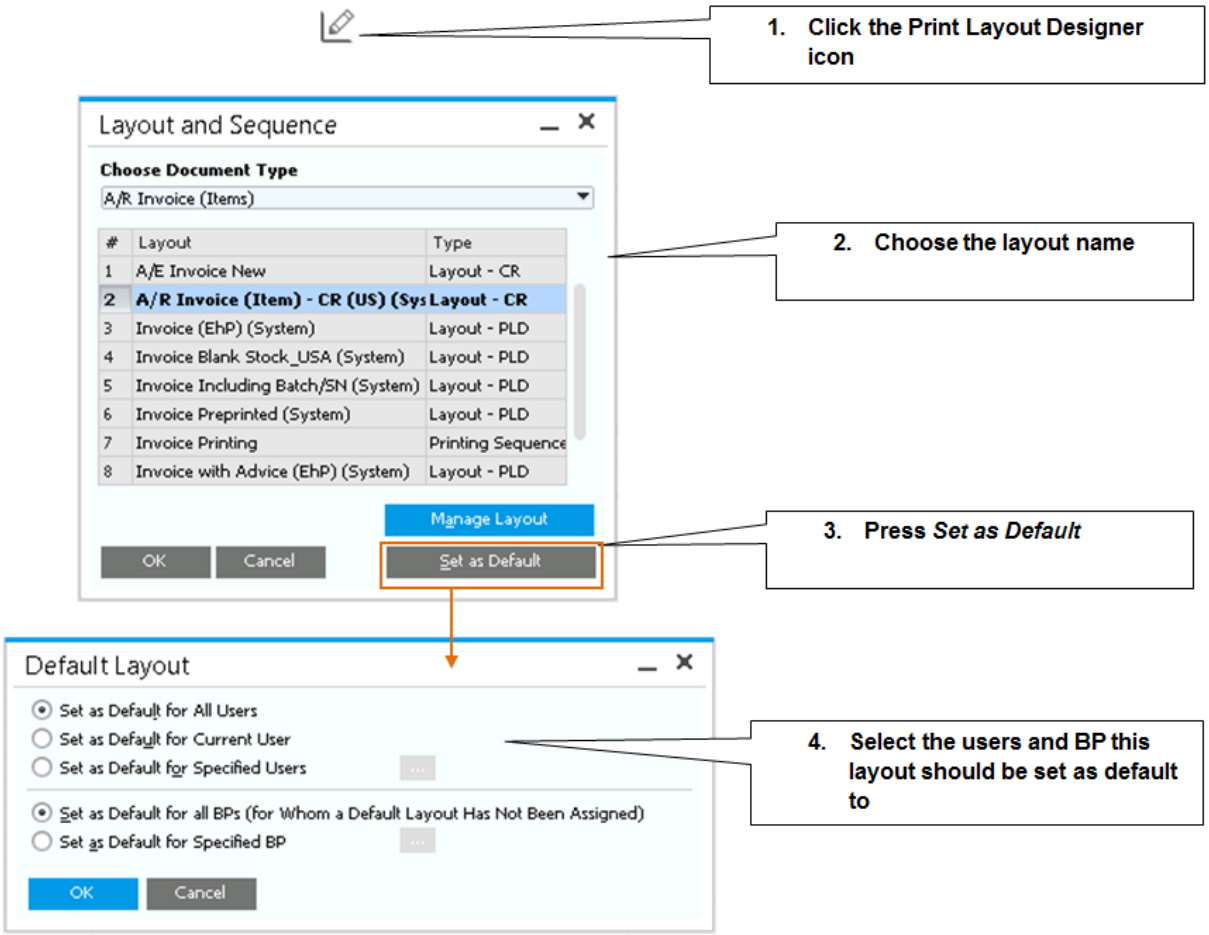


Figure 11-10: setting print template as default

If you selected the option of specified users or business partners, click the browse icon to make your selection.

11.6 Emailing Documents and Reports

In today's digital economy, customers prefer to receive their invoices and any other correspondence by email. Use SAP Business One to directly email your customers, vendors and leads, documents, reports, campaigns, request for quotations and more. You can choose between using outlook and SAP Business One mailer. Select your preferred method in the Administration → System Initialization → General Settings → Services tab.

If you maintain multiple companies and you use the SAP Business One mailer service, you may Enable Company Specific Mailer Configuration in the same window.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

11.6.1 E-Mail Settings

Customize the message text that is automatically attached to the email message. You can enter different signatures for the whole installation, for the individual company or users. This can be found in the Administration → System Initialization→ E-Mail Settings.

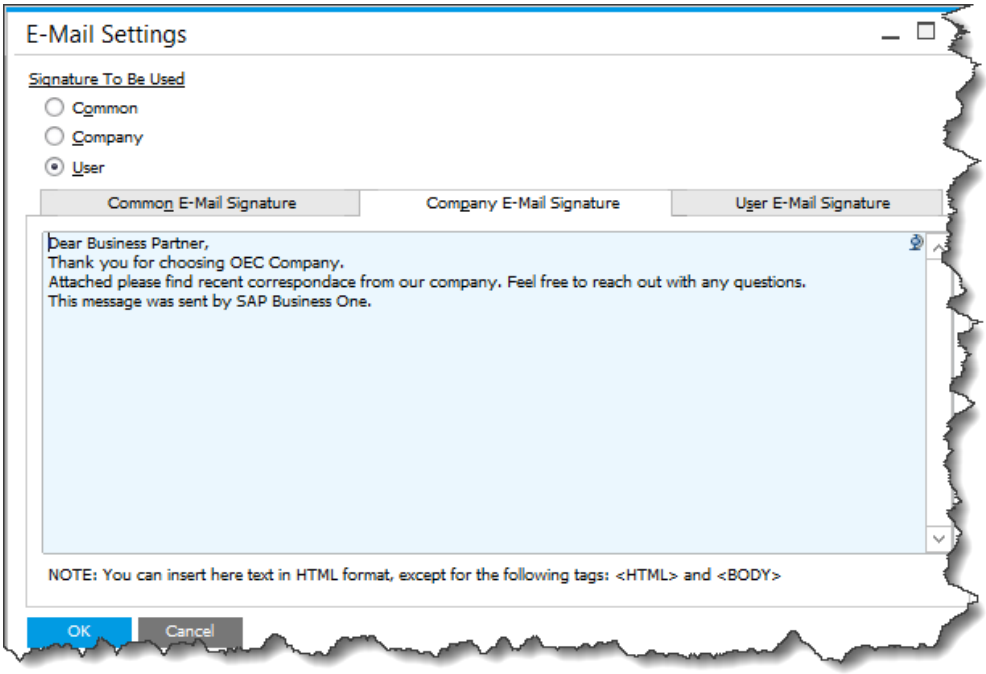


Figure 11-11: E-Mail Settings

11.6.2 E-Mail Groups

Occasionally you may wish to send some news about the company or a promotion in a form of a quotation to a group of your contacts. Another example would be when working with a large account with many different contacts, and you wish to inform a group of them at of their open debt. You can define email groups in the Administration → Setup→ Business Partners, assign business partner contacts to a group, and send out the email to the entire group.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

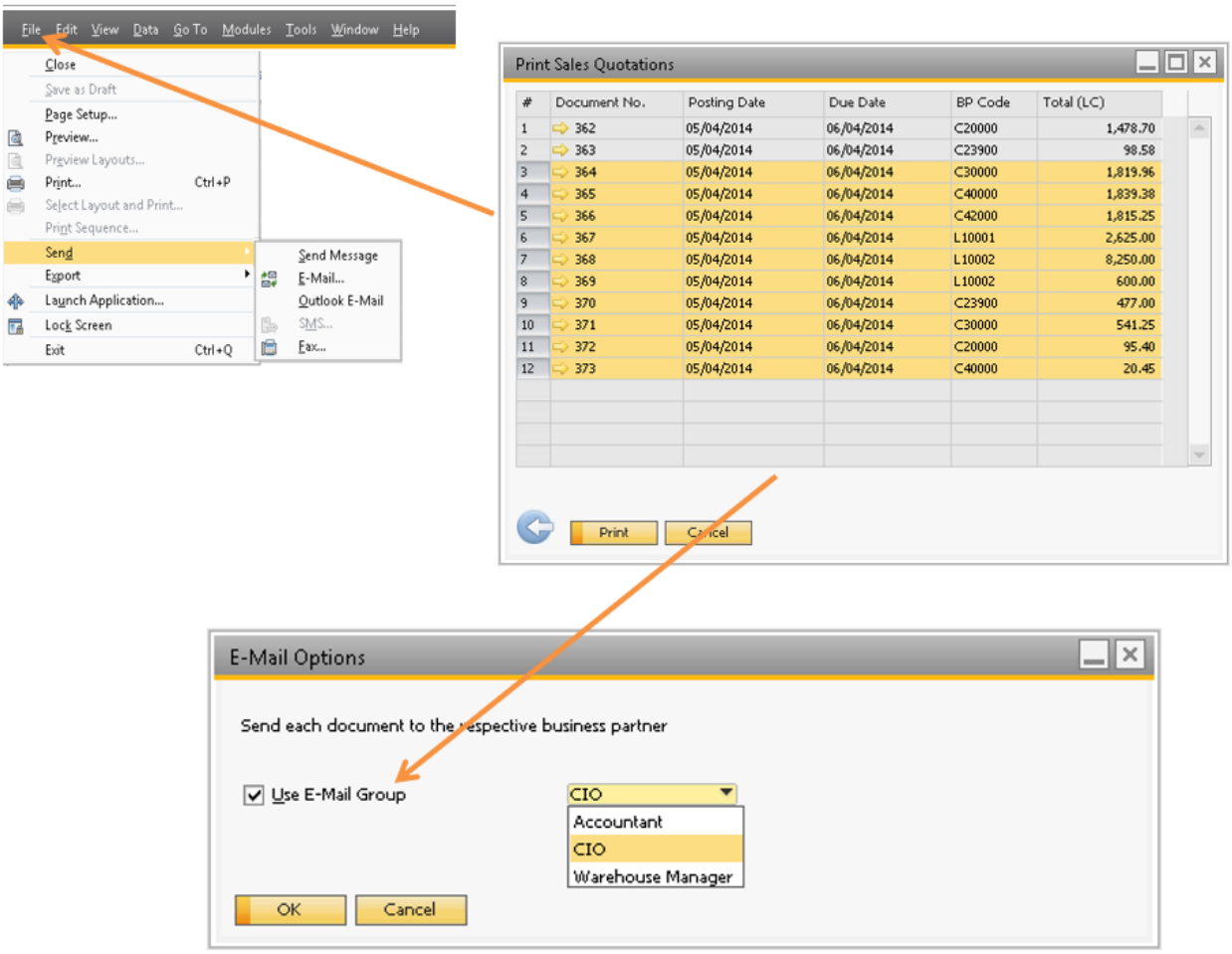


Figure 11-12: Sending email to a group using document printing

You can use the same method to send Customer Aging report via email either to individual contacts, or to an email group.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

12 Inventory

In This Chapter

- Inventory Valuation Methods
- Warehouse Setup
- Cycle Count and Inventory Tracking
- Pick and Pack
- Pricing

Using SAP Business One, you can track your inventory in the warehouse in real time. Every transaction that you add, will update your inventory quantity levels, and if you are using perpetual inventory, the monetary value as well. Most companies require the ability to report their inventory situation at any time; while some companies such as services providers, do not have the need to track inventory information at all. In SAP Business One, you can choose between activating “Perpetual Inventory” which will track the monetary value as you add or remove inventory or you can run your accounting without this function.

To activate Perpetual Inventory, follow these steps:

1. Select the Use Perpetual Inventory checkbox on the Administration → System Initialization → Company Details → Basic Initialization tab.
2. Choose the default valuation method: Moving Average, Standard or FIFO.
3. Choose whether to Manage Item Cost per Warehouse.
4. Set the default valuation method for serial and batch-numbered items to by item group or by serial/batch valuation method.
5. Define the primary inventory accounts to accommodate automatic postings to the G/L. Go to Administration → Setup → Financials → G/L Account Determination → Inventory tab.

   Note

   Setup Tip. You can choose how the system behaves when inventory goes below minimum quantity levels, or to negative values. Go to Administration → System Initialization → Document Settings → General tab. If you choose the Warning Only option, you can identify which users can confirm this warning and add the document using the General Authorizations.

12.1 Valuation Methods

Let’s first try to understand how your choice of valuation method affects your accounting system. At the end of the year, you need to know the monetary value of your inventory in the warehouse. You may say - that is easy, it’s the summary of all my purchases. That is almost correct, except this does not really give us the cost of the units remaining in the warehouse. Commonly, a particular item may be purchased throughout the year at different prices. The valuation method you choose will help the system to determine how much the item sold actually costs. This is also called Cost of Goods Sold. Based on the company line of business, an appropriate valuation is determined. We will now look at the four options available in SAP Business One.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

12.1.1 Moving Average

The item cost is calculated by dividing the total inventory value by the on hand quantity.

Figure 12-1: Moving Average

12.1.2 FIFO

The item cost is calculated as the cost of the oldest unit on hand.

Figure 12-2: FIFO

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

12.1.3 Standard Cost

After you setup the item master data, create Inventory Revaluation to define the item's cost. Variances that occur due to a different purchase price are recorded to a variance account, and the unit cost is not affected.

Figure 12-3: Standard Cost

12.1.4 Serial/Batch Valuation Method Cost

The item cost is assigned to the individual serial or batch number unit and is used when the unit is selected in a sales document.

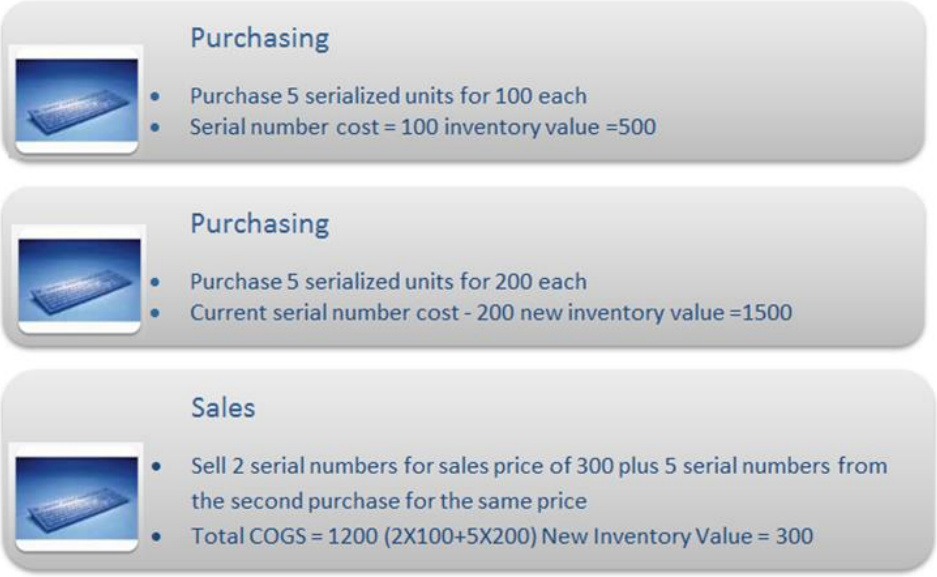


Figure 12-4: Serial/Batch Valuation Method

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Note

Setup Tip. The valuation method you choose in the System Initialization will serve as default for new item groups. You can set a different method as a default for the item group if desired. Based on the item group assigned to the item, the valuation method is determined automatically. You can override it manually in the item master. For serial/batch items, you can choose to use the item group valuation method or serial/batch valuation method as explained in the beginning of this chapter.

Valuation methods can be changed for existing items as long as there is no quantity on hand, and no open documents exist for the item. Go to Inventory → Item Management → Inventory Valuation Method. Select the range of items, and the new valuation method you wish to set. You will be presented with a qualifying list of items where you can approve and update to save the new valuation method.

Inventory Revaluation allows you to re-evaluate your item costs and inventory value without changing quantity levels. Typically, revaluation is done during the year- end closing process. Go to Inventory → Inventory Transactions → Inventory Revaluation.

12.2 Warehouse Setup

Warehouses are key building blocks of your company database. If you keep inventory in stock, you have a constant need to know which items you have, how many, and where they are located. Knowing this helps you make better decisions in terms of fulfilling customers' orders and planning your future purchases.

The warehouse in SAP Business One represents a physical location, but can also be a virtual one. For example, some companies create warehouses to represent major vendors that use consignment, or a warehouse can represent items that are in transport.

To create warehouses, go to Administration → Setup → Inventory → Warehouses. The system creates warehouse 01 by default, but you can add additional warehouses. The warehouse setup contains a code and name, a location, a checkbox to identify whether it is used for drop ship, and the Nettable checkbox to identify whether to automatically include this warehouse in the MRP run.

You can define a default warehouse for the company in the Administration → System Initialization → General Settings → Inventory tab. Here you can also specify whether or not to mark the Auto. Add All Warehouses To New And Existing Items checkbox. If you deselect this box, no warehouses will be displayed on the Inventory Data tab of the items' master data, and you will need to add or import this information. Deselecting this checkbox is useful when a company has a large number of warehouses, but not all items are maintained in all warehouses.

12.2.1 Multi-Bin Functionality

Within the warehouse you can define up to 4 sublevels which can be used to identify a bin location. A sublevel can be an aisle in the warehouse, a zone, an area or even a shelf. Bin location codes consist of the warehouse code plus the code for each sublevel.

For example, you might have a warehouse (warehouse 05) that has 4 aisles and each aisle has 4 shelves divided into 3 bin locations. We could set this up as in the following diagram (Figure 12-5).

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

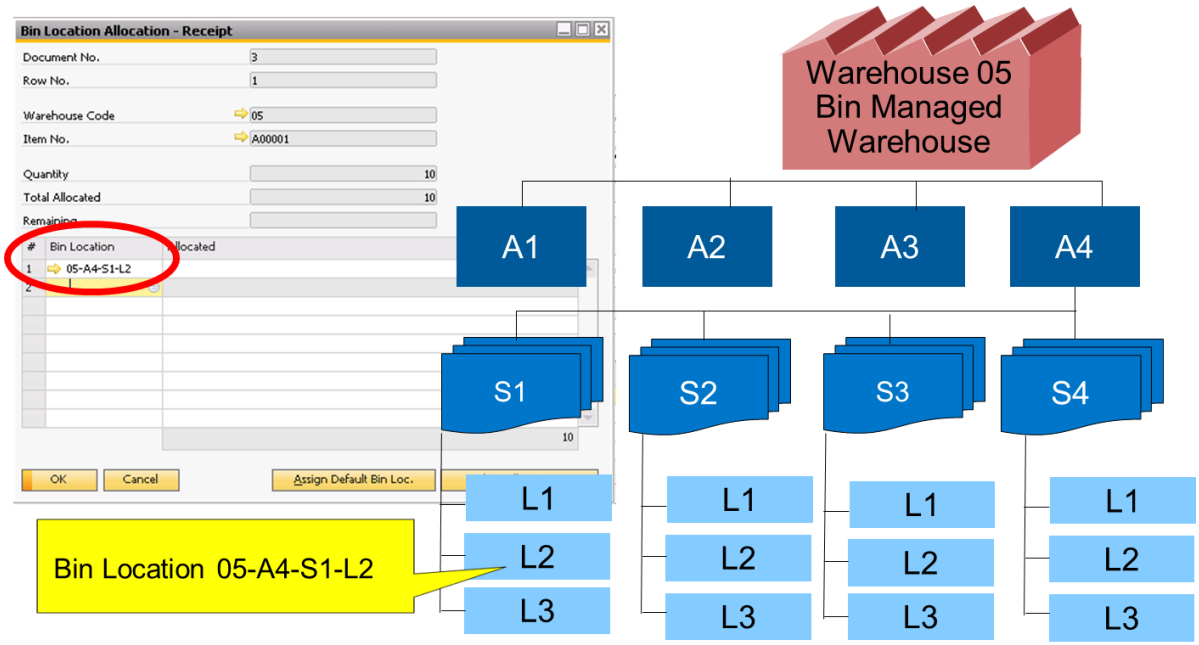


Figure 12-5 Bin Location Code Determination

Here are the steps to set up bin locations for a warehouse:

- Activate bin locations by marking the checkbox in the Warehouse Setup window.
- Activate up to 4 sublevels depending on your needs in the Bin Location Field Activation window, located under Administration → Setup → Inventory → Bin Locations.
- Optionally in the same window, you can activate and define up to 10 attributes for your bin locations. Attributes are characteristics of the bin, such as size, and the type of items that can be kept in this bin. For example, you may wish to set up bins that contain freezers for frozen items.
- If you utilize the attributes, you need to define Bin Location Attributes Codes. So, if you have defined an attribute called Frozen Items, the codes can be Yes, and No to denote whether those bins are the ones that contain freezers. This is done in the Bin Location Attributes Codes window.
- Next you need to define any Warehouse Sublevels Codes to name the sublevels that you've chosen to use and set up how you want to organize your bins. For each sublevel you activated you need to identify the details that match your warehouse. For example, if you define Area as a sublevel, define the different areas in your warehouse, such as area 1, area 2 etc. as shown in figure 12-6.
- To support the previous step, use the Warehouse Sublevel Code Management. This tool allows you to generate, update or delete warehouse sublevel codes. You can also open this window from the previous one by clicking the Manage Sublevel Codes.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

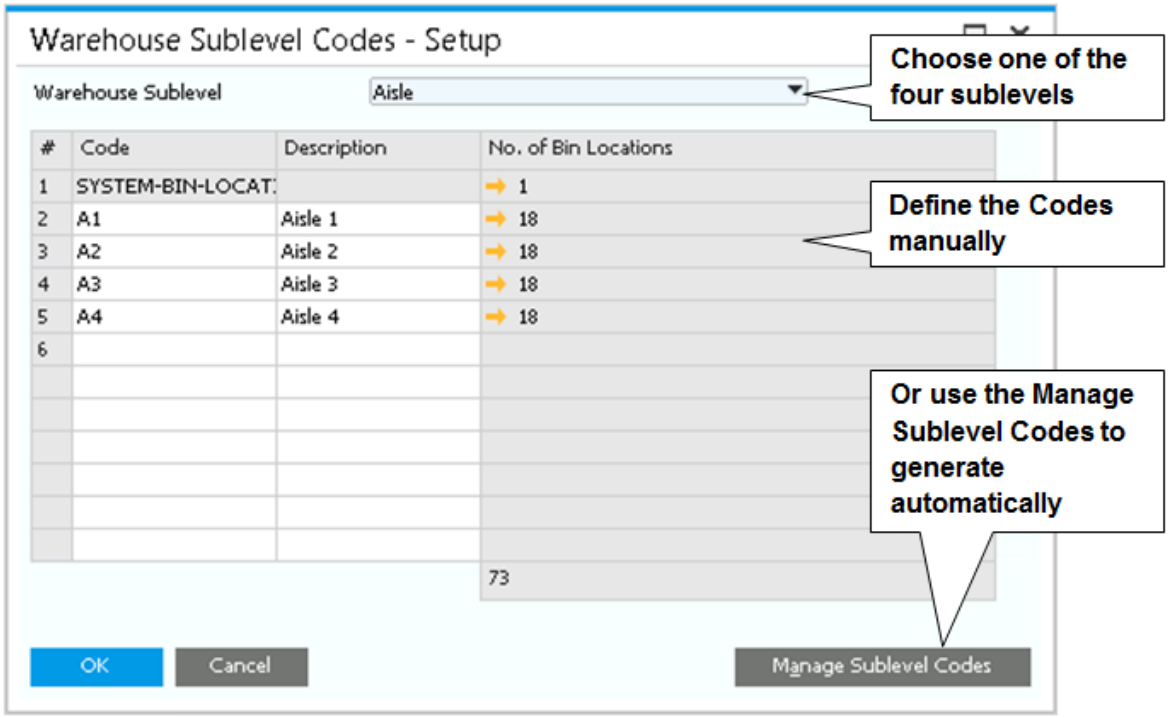


Figure 12-6: Warehouse Sublevel Codes

Now that you have set up primary codes, you are ready to create the actual bin master data. Go to Inventory → Bin Locations → Bin Location Management to generate bin locations automatically based on different parameters as shown in figure 12-7. You can also delete or update bin locations using the same window.

Once you fill in the details and click OK, a list of suggested bin locations is displayed, and you can choose to generate these locations. You can update the bin location codes after they have been created using the Bin Location Code Modification window.

Alternatively, you create and manage bin locations using the Bin Location Master Data window under the Inventory → Bin Locations menu path.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

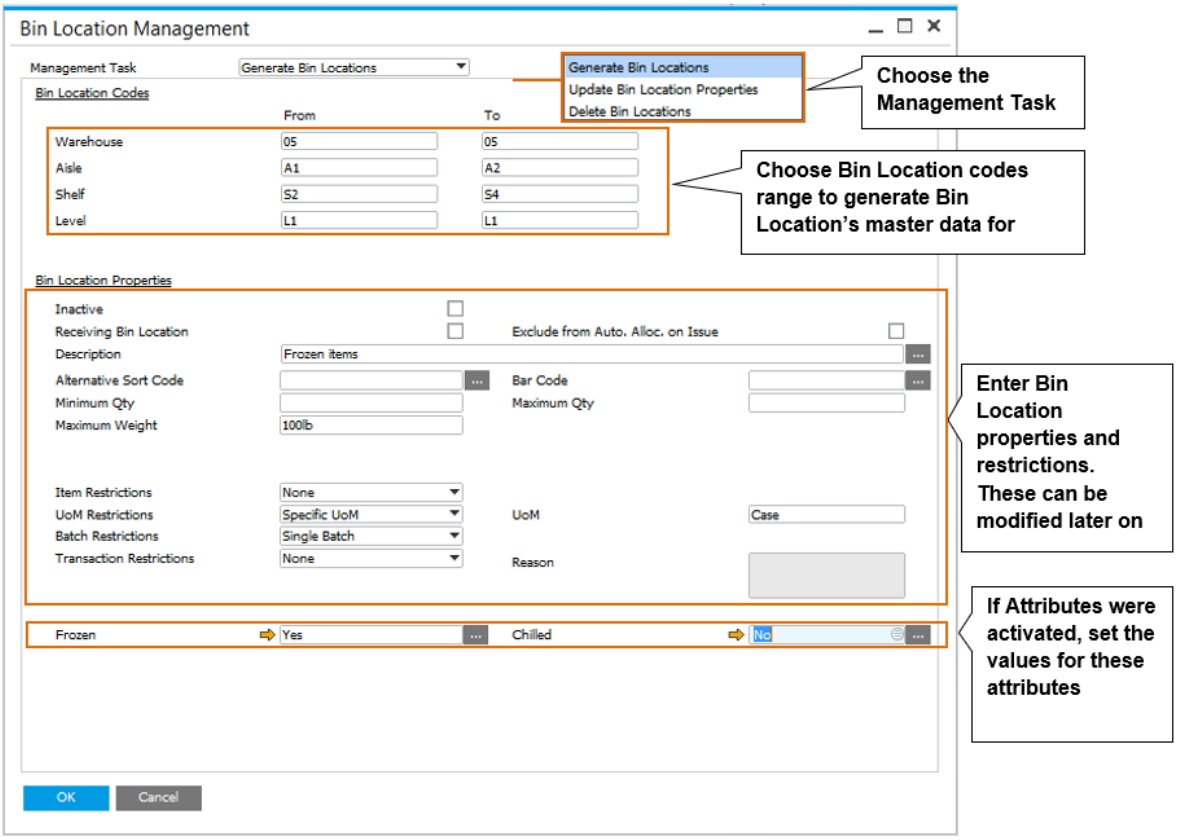


Figure 12-7: Bin Location Management

Using bin locations on a day to day basis is easy since you can specify a default bin location for both the warehouse and for the item in each warehouse. You can also decide how to automatically allocate quantities to bin locations when receiving and releasing goods. In the warehouse setup you can specify criteria for default locations, as shown in figure 12-8. You can define the default bin location on the Inventory Data tab of each item master record. This tab also displays the first bin location used for this item. Alternatively you can assign default bins on the item group. The item will inherit the bin from its assigned group. Using the Bin Location Content report you can get a list of your bin locations with details about the items, quantities and serial/batch numbers that are in each bin.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

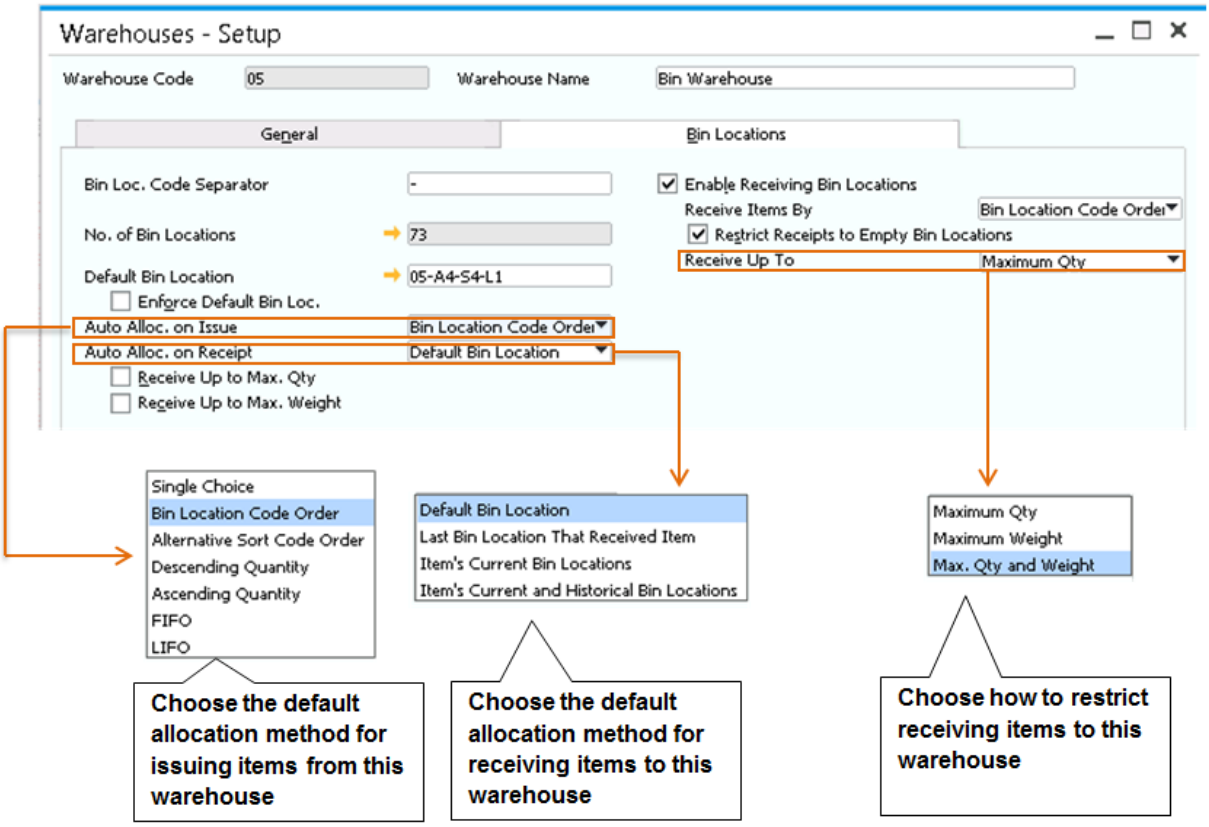


Figure 12-8: warehouse setup – bin locations

See the SAP Business One Online Help for a detailed explanation about the different methods of allocations and restrictions on bin locations.

12.3 Cycle Count and Inventory Tracking

Periodically, you are required to conduct a cycle count to verify that the on hand quantities as they appear in SAP Business One match the physical count in the warehouse. Go to Administration → Setup → Inventory → Inventory Cycles to create cycle codes that are common in your company. setup the cycle codes with recurrence to receive an alert from the system based on your preferences. See Figure 12-9 for information on setting up cycle count alerts.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

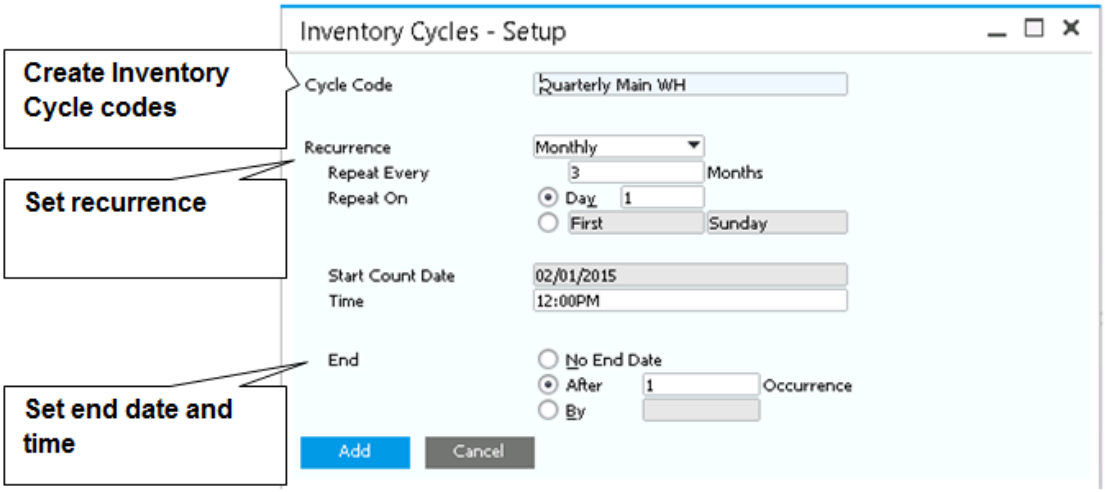


Figure 12-9: Setting up Cycle Count Codes

Next select the cycle code source for each of your warehouse using the Cycle Code Determination. The default is by item group. If you double click the row number, you can assign cycle codes for each item group. For bin enabled warehouses, you can have an option to determine cycle codes by the bin sublevels. See figure 12-10.

You can also cycle codes to the item master data on the Inventory Data tab for each warehouse. Drop ship warehouses do not appear in the list.

Once you have set up the timing of the cycle count, new and existing items are updated with the appropriate cycle count code, alert, and the user assigned to the count. You can modify these settings for each item and warehouse in the item master data.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

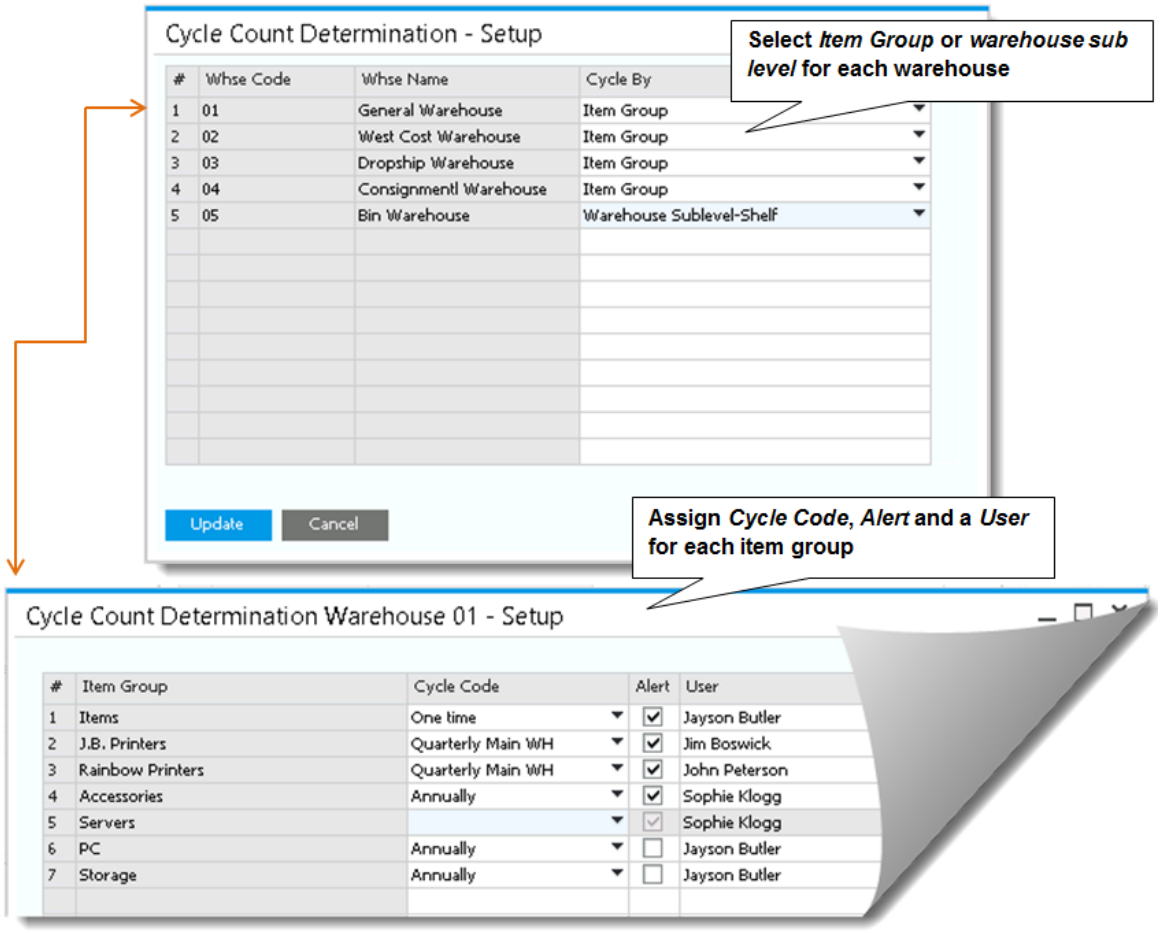


Figure 12-10: Cycle Count Determination

When you receive an alert, open the Cycle Count Recommendations report to view all items that are due to be counted. Select the items you wish to count and choose the Inventory Counting button to open the counting documents. There are two document types: Inventory Counting and Inventory Posting.

The Inventory Counting document lists the items to be counted and identifies the users performing the count. You have the option to freeze the items so they cannot be issued during the count. From the Inventory Counting document, you can also print out a count sheet (without current stock quantities) for the counters to fill in as they perform the count.

The counting documents consist of two document types: Inventory counting, where you identify the counters, the quantity counted by each of them and the option to freeze items, so they cannot be used while being counted. You can assign multiple users to do the count and you can either have them count the same area of the warehouse or divide the items and locations to be counting between them.

After the count, you enter the quantities into the Inventory Counting document either manually or by importing from MS Excel. You also have the option to preview the Inventory Counting or print it before adding the documents to the system, which gives you greater flexibility to manage the stock counting process.

If you have a difference between the counted quantities and the stock quantities currently in the system, you then copy the inventory count to the Inventory Posting document. Here you simply identify the item cost and post any differences to adjust your inventory levels and value. See Figure 12-11 for the inventory counting document.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

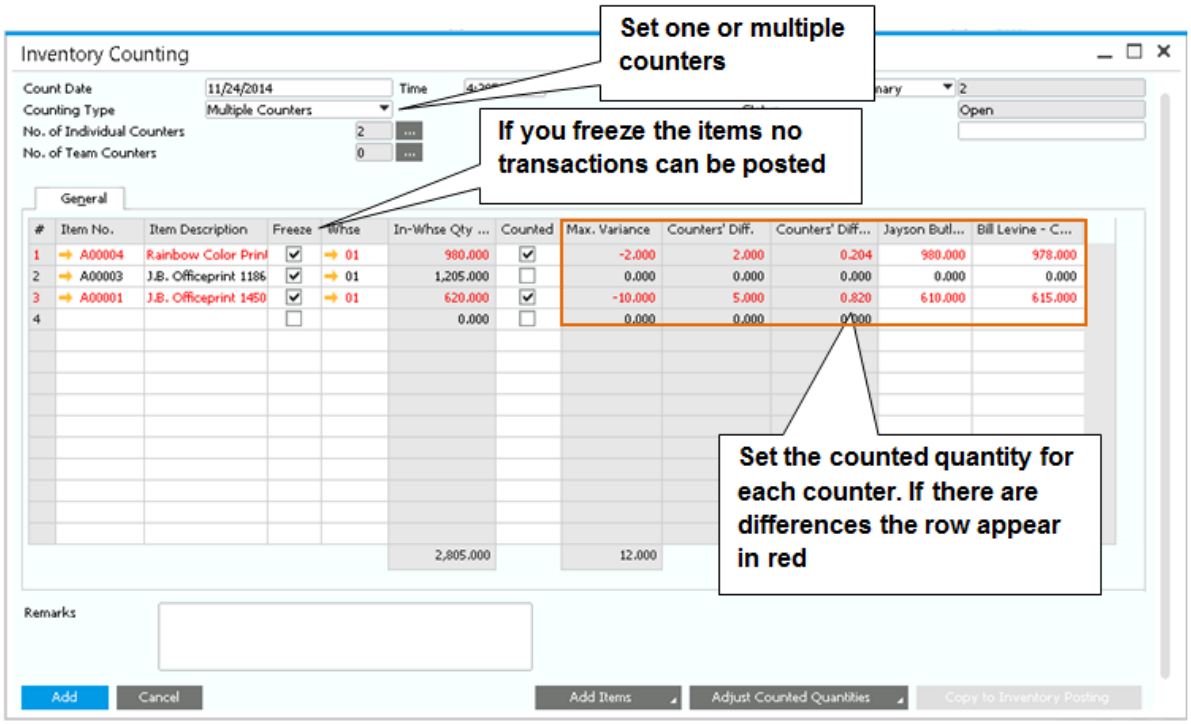


Figure 12-11: Inventory Counting

Once you save the inventory posting, the item is no longer frozen and the next inventory count date is determined based on the item cycle count code.

> **Note**
>
> Backdating inventory count. If you conduct the count at the end of year, but you enter it into the system at a later date, make sure you enter the actual count date in the inventory counting document. This will backdate your inventory level and post the correct differences.

12.4 Pick and Pack

The pick and pack process is an optional step in your sales and production cycle. If you manage a large warehouse, and have dedicated personnel to collect the items, pack and ship them, then the pick and pack manager can be helpful. The pick and pack and production manager scans your open sales orders, production orders, inventory transfer requests, and reserve invoices by requested delivery date and priority. It also presents the accumulative available quantities ready to be picked and shipped. If there is not enough available quantity, the column To Release will be blank. If your configuration allows you, you can choose to release for pick list quantities that are not available.

The pick and pack manager supports three steps. Go to Inventory → Pick and Pack → Pick and Pack and Production Manager.

- Release to Pick List. From the Open drawer, choose the documents you wish to pick and press Release to Pick List. This creates a pick list of the selected items. You can print this document and give to the warehouse manager
- Update picked quantity. Click the Released drawer then drill down to the pick list to update the quantities that were picked. You can choose to delete item rows from the Released list, if those were selected by mistake. The items will reappear in the Open drawer.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

- Create follow up documents. From the Picked drawer, select the items and click the Create button. You can create a delivery document, an A/R invoice, an Inventory Transfer, or a Receipt/Issue for Production if the items are assigned to a production order. You can deselect picked items by opening the pick list and choose to Clear All, or simply by updating the picked quantity individually. Items that were cleared reappear in the Released drawer.

If you prefer, you can skip the first and second step and immediately delivery the items. To do so, select the items in the first or second drawer and press the Create button.

Alternatively, you can generate a pick list directly from the sales order, production order, reserve invoice, or inventory transfer request by choosing Generate Pick List from the context menu.

When you generate a pick list of a production order, you can filter the routing stage sequence and stage, as well you can choose to include items and resources master data.

Once the pick list is generated, right click to View Pick Lists, set the picked quantity, and create the follow up document all from the pick list itself. Figure 12-12 shows the pick pack and production manager with an open order and production order to be picked.

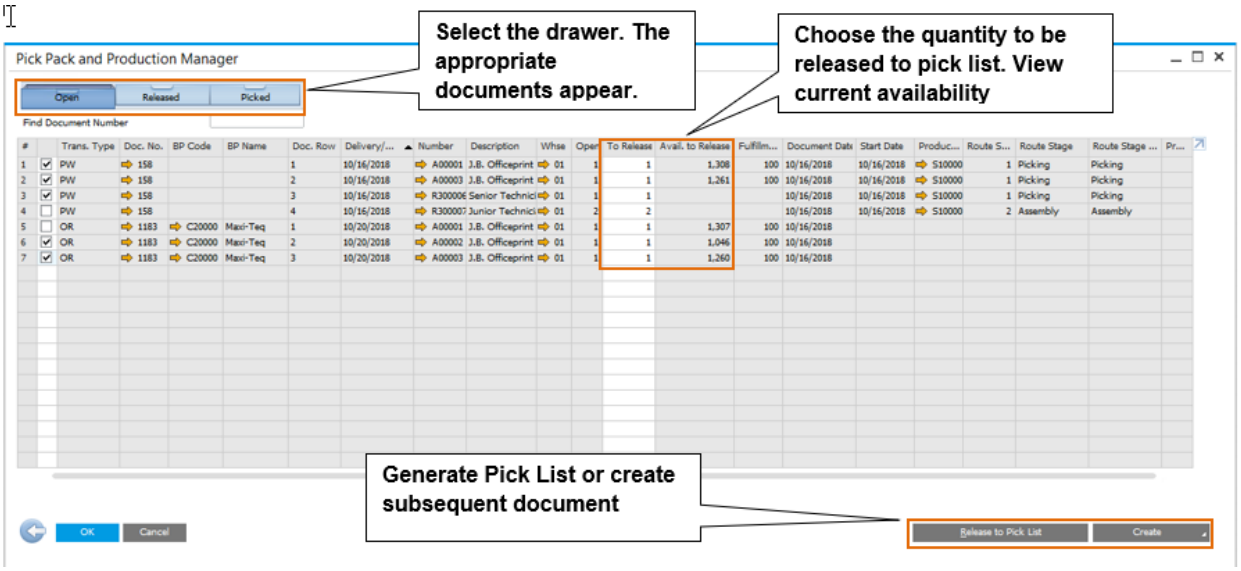


Figure 12-12: Pick Pack and Production Manager

Note

Pick list with Bin Locations. If your order contain a warehouse managed by bin, in most cases, when the pick list is generated, the bin are automatically assigned, based on the allocation method defined for the warehouse. If more than one options for bin allocation is available, the system will require user intervention in selecting the bins.

12.5 Pricing

Using the different pricing options in SAP Business One, you can set predefined prices for selling and buying items. Prices are assigned to price lists and to specific business partners. For example, if all your large accounts have discounted prices since they purchase in larger volumes you can create a relationship between pricing levels that updates automatically. On top of the basic price list functionality, you can add discounts based on percentage, dates and quantities.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Every company is created with 10 default price list which you can rename or remove. Here is how you setup and maintain price lists:

You can add or remove price lists Inventory → Price Lists → Price Lists.

- You can base a price list on another price list by using a factor. For example, if your margin is 20%, you can set your sales price list to be based on the purchasing price list with a factor of 1.2. When a base price list is updated, the target price updates automatically.
- You can specify a currency as the primary currency for each price list.
- You set an indicator for the price list that all prices entered will be considered gross prices (meaning that they include tax).
- You can set a validity date range for a price list. This allows you to implement seasonal price lists or set a price list to expire on a set date.
- You can open a price list by double-clicking on the row number. Here you can enter prices or view prices that are calculated by using a factor related to another price list.
- All the items appear on all price lists however you can set an indicator in general settings to remove items without prices.
- You can set a price to be manual. For example, you can lock down a price in your sales price list rather than letting it be updated automatically when a related price list is updated. This means the price will not change unless you specify otherwise.
- You can enter prices in the primary currency, and two additional currencies for exact pricing in different currencies.
- You can set prices by units of measure for items with a defined UoM group. Double-click the item row in the price list to open the UoM Prices window. If you do not indicate the price by each unit, the system will automatically multiply or divide the price of the base unit based on the ratio to the other units in the UoM group.

Once you have managed your price lists, assign the appropriate price lists to your business partners. There are two ways to assign price lists, either by the business partner group or by assigning the price list to payment terms (that are associated later with business partners). If needed, you can override this price list in the business partner master.

See figure 12-13 for entering prices in a price list that is based on another with a factor of 0.5. Remember you can also import prices lists easily using the Import From Excel located in the Administration → Data Import/Export.

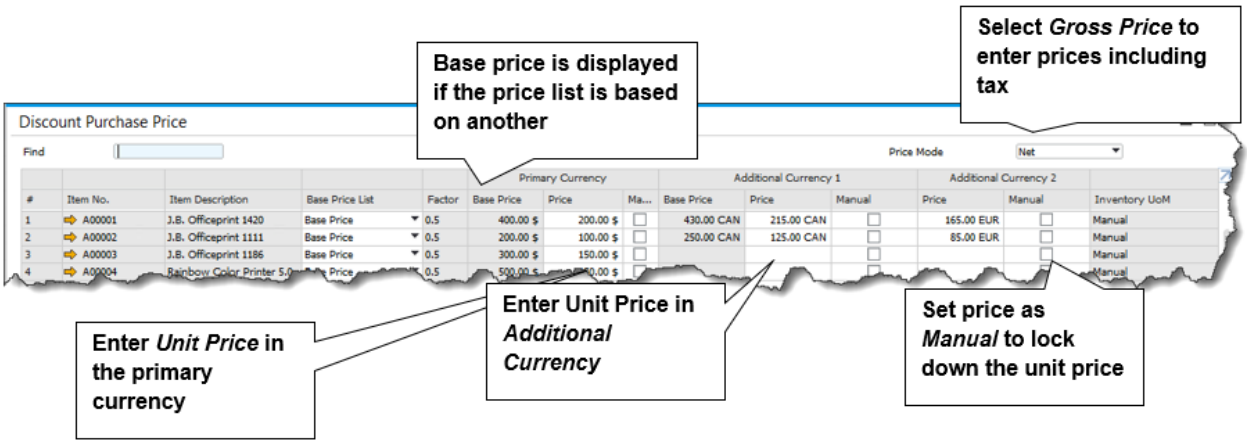


Figure 12-13: Price Lists

Note

Authorization. Assign each price list to an authorization group. Use the General Authorization to define which users can access which group. You can also prevent some users from modifying the price that appears by default in your sales and purchasing document. Set the Change Row Amount to No Authorization, in the sales module.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Additional pricing options are available. You can use special prices to define detailed pricing and discount structures for a business partner. You can base your discounts on any price list, or simply enter them manually. Double-click the row to enter validity dates, double-click again to determine quantity level discounts. Go to Inventory → Price Lists → Special Prices. See Figure 12-14 for a list of all the pricing options available in SAP Business One and which levels take priority. This is applicable when a business partner has more than one pricing level assigned.

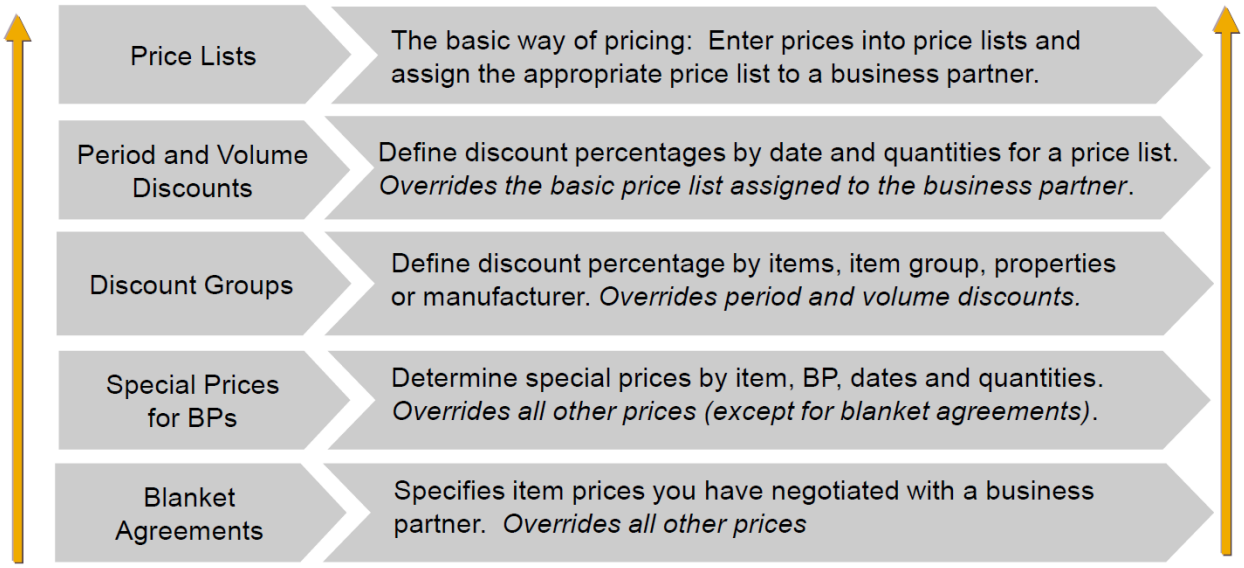


Figure 12-14: Pricing Options

With that said, you can decide on the business partner level, which discount will take effect. Go to the Payment Terms tab on the business partner master data, and select one of the three options in the Effective Price field:

Default priority - keep the standard hierarchy of pricing and special pricing as describe above

Lowest price - the system picks the lowest price available from all the pricing options, regardless of the SAP Business One hierarchy

Highest price - the system picks the highest price available from all the pricing options, regardless of the SAP Business One hierarchy

For more information on the types of pricing available, see the online help.

Note

Copy Discounts. You can copy Special Prices and Discount Groups from one business partner to multiple business partners. After you define your discounts for the first business partner, press the Copy Discounts or Copy to Select Criteria to define the target business partners you wish to copy the discounts to.

12.6 Gross Price Mode

We mentioned earlier that a price list can be identified as gross price list, meaning the prices in it include tax. If you often work with gross prices, you can have more robust functionality revolving the gross price mode by Enabling Separate Net and Gross

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Price Mode in the Administration → System Initialization→ Company Details → Basic Initialization tab. Note this setting is irreversible.

Once enabled, you will find additional fields to support this functionality:

On the business partner master data, you can choose if this customer or vendor is using net or gross prices on the payment terms tab. At the same time, you need to assign a price list that is set to gross price mode, as explained before

once the business partner is selected, the unit price field is disabled. Item's prices should be entered in the Gross Price column. See figure 12-15, where we create an invoice for a customer set to gross price mode,

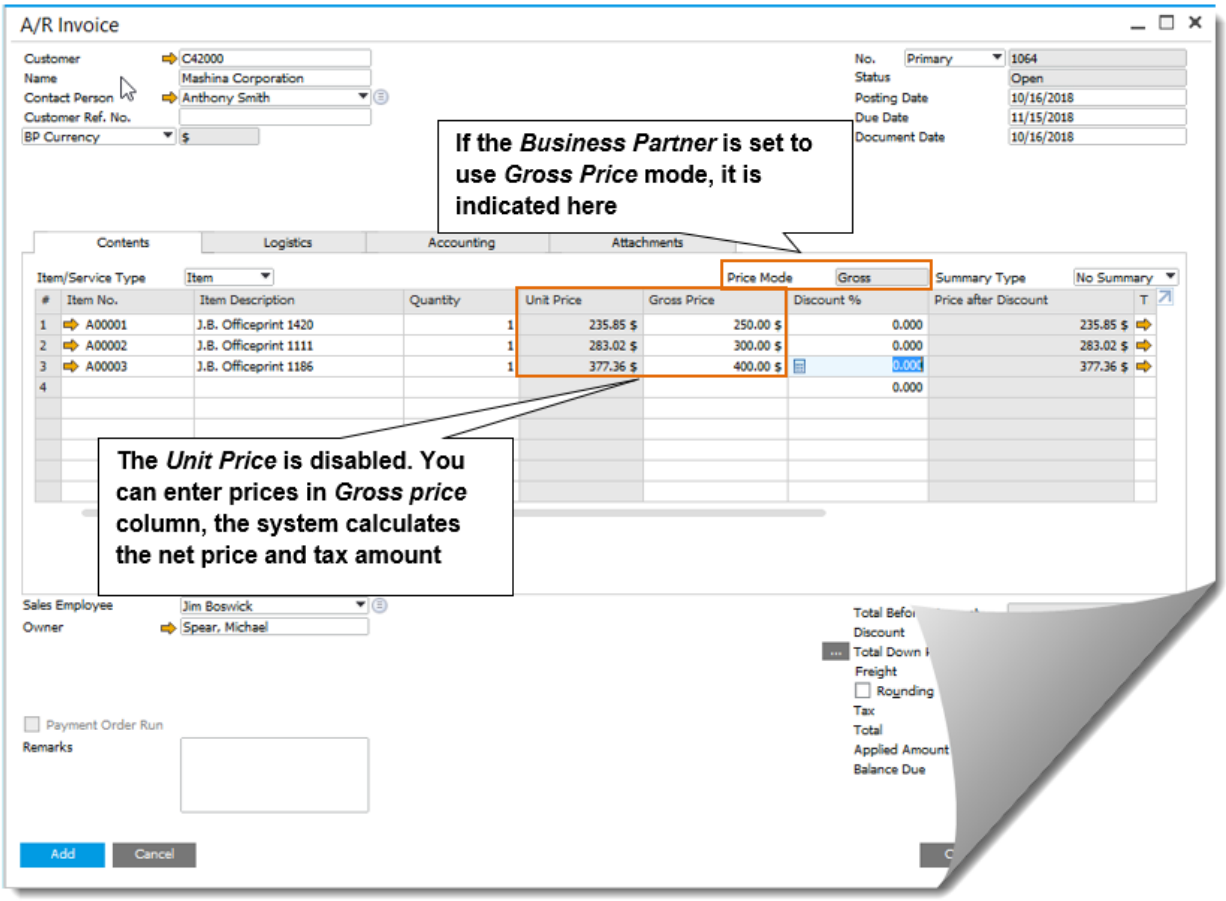


Figure 12-15: Invoice with Gross Price

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

13 Production

In This Chapter

- Bill of Materials
- Resources
- Production Orders

The production module in SAP Business One is useful for companies that do assembly, or sell items in bundles. In a bill of material, you identify a top level item, also called finished material or parent, and its components that also called child items. With the production order, you bring everything together to produce the parent from its components.

13.1 Bill of Material Types

- Sales: This BOM is used in sales documents. The parent item must be a sales item only. For example, if you sell a gift package that contains multiple products, this could be set up as a sales bill of materials. The parent item will be the package name, and the children will be the inventory items inside the package. Once you selected the parent in a sales document, all its children appear as sub-items. You can update the quantities of the parent or the children; however, you cannot delete children or add new sub-items to the package in the sales document. When you set up the BOM, you can select the Hide BOM Components in Printout option, so that when you print the document, only the parent appears. The gross profit, for sales BOM is calculated for the child items only.
- Assembly: This BOM is similar to the sales BOM with one difference - the child items do not appear in the sales document, but only the parent item. When you add the document, the inventory level of the child items is updated. The base price for the gross profit calculation is taken from the sum of base prices of the child items and is displayed in the parent item's row.
- Template: This BOM has no restrictions. Both the parent and the children can be any type of items. It can be used in sales and purchasing documents. Once you select the parent item, all its children appear. You can delete, add or duplicate rows and make any modification as necessary.
- Production: This BOM is used in the production order document. The parent item is the finished goods, and the children are the components. labor can be added either as a Labor type item or a resource as explained later.

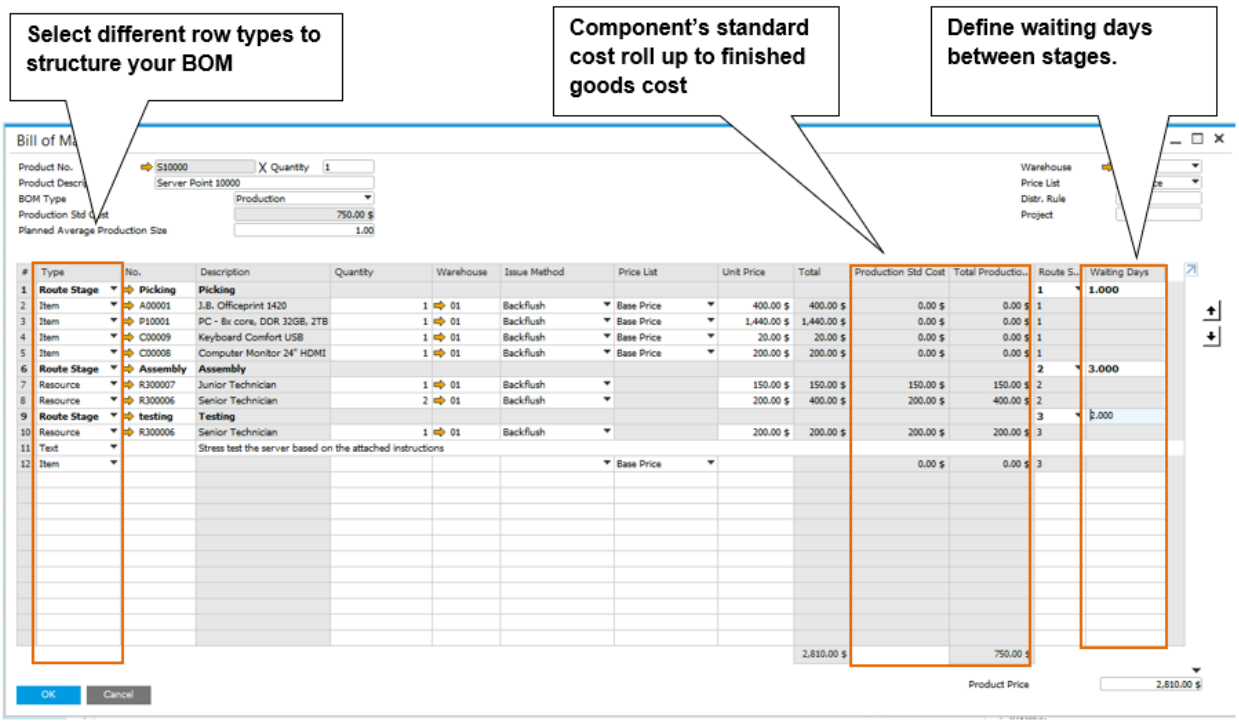
  Note

  Sales BOM Prices. When working with a Sales BOM you need to decide if the sales prices will come from the parent or the children. Based on your preference the price fields are enabled or disabled. To make this determination go to Administration → System Initialization → Document Settings → General tab.

13.2 Production BOM

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

When you build your production BOM, make sure you include all the stages of production, as well as components and resources requirements. Figure 13-1 shows a production BOM, with 3 routing stages, including instructions, as well as



resources. In the BOM, enter components quantities, warehouse and waiting days.

Figure 13-1: Production BOM

13.2.1 Production Standard Cost

In the item master data, production tab, you will find a field for estimated production standard cost, and a check box to Include in Production Std Cost Rollup. If the box is checked, you can run two utilities, located on the production menu, production standard cost management.

Running the Production Standard Cost Rollup Use updates a parent item's production standard cost with the sum of total production standard costs of its BOM components. The system rolls up total production standard costs for all sublevel BOMs all the way until the last sublevel.

Running the Production Standard Cost Update utility updates an item's estimated standard production cost with its own item cost.

Updating product standard cost as a routine is a good best practice, as it gives you an idea of the estimated cost to produce an item, and it is also displayed in the BOM screen, as shown in figure 13-1

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

13.3 Update Parent Prices Globally.

Located in the production module, occasionally you might need to use this utility to refresh and update the parent item's price based on new prices for its components. The system identifies components with new prices in the price list and recalculates a new price for the finished good.

13.4 Bill of Materials – Component Management.

Use this transaction to change, delete or add BOM line items to existing BOMs. For example, when you are no longer working with a certain component and would like to replace it in all the BOMs in which it appears.

13.5 Resources

Although Resources is in a separate menu, this type of master data is used to support the production process. The resource master data represents resources used in production such as an employee's labor hours, machine capacity or any other means that are needed during production.

First you need to create the resource master data and then link it to the BOM or to the production order, using the row type Resource.

When defining resource master data, a key piece of information is the capacity. The capacity shows me the availability of my resource by date. For example, how many hours of labor do I have available on a certain day? When I create a production order and enter a due date, SAP Business One knows the available capacity for the day.

Figure 13-2 shows the Resource Master Data, Capacity and Planning tabs. In the resource master record capacity tab, you can see the availability of the resource by warehouse. on the planning tab, you can determine the estimated capacity, using 4 factors. A factor can represent number of employees, or machines, and their daily capacity in hours.

When you created your resources, you need to decide if you create a separate master data for each individual employee or machine, or one to represent a group of resources that share the same properties.

If you go with the latter, you want to identify the single run capacity factors, assuming a production order can only be produced on one resource unit at a time. See example in figure 13-2 to show one resource, representing two technicians, where the number of technicians is represented in factor 2.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

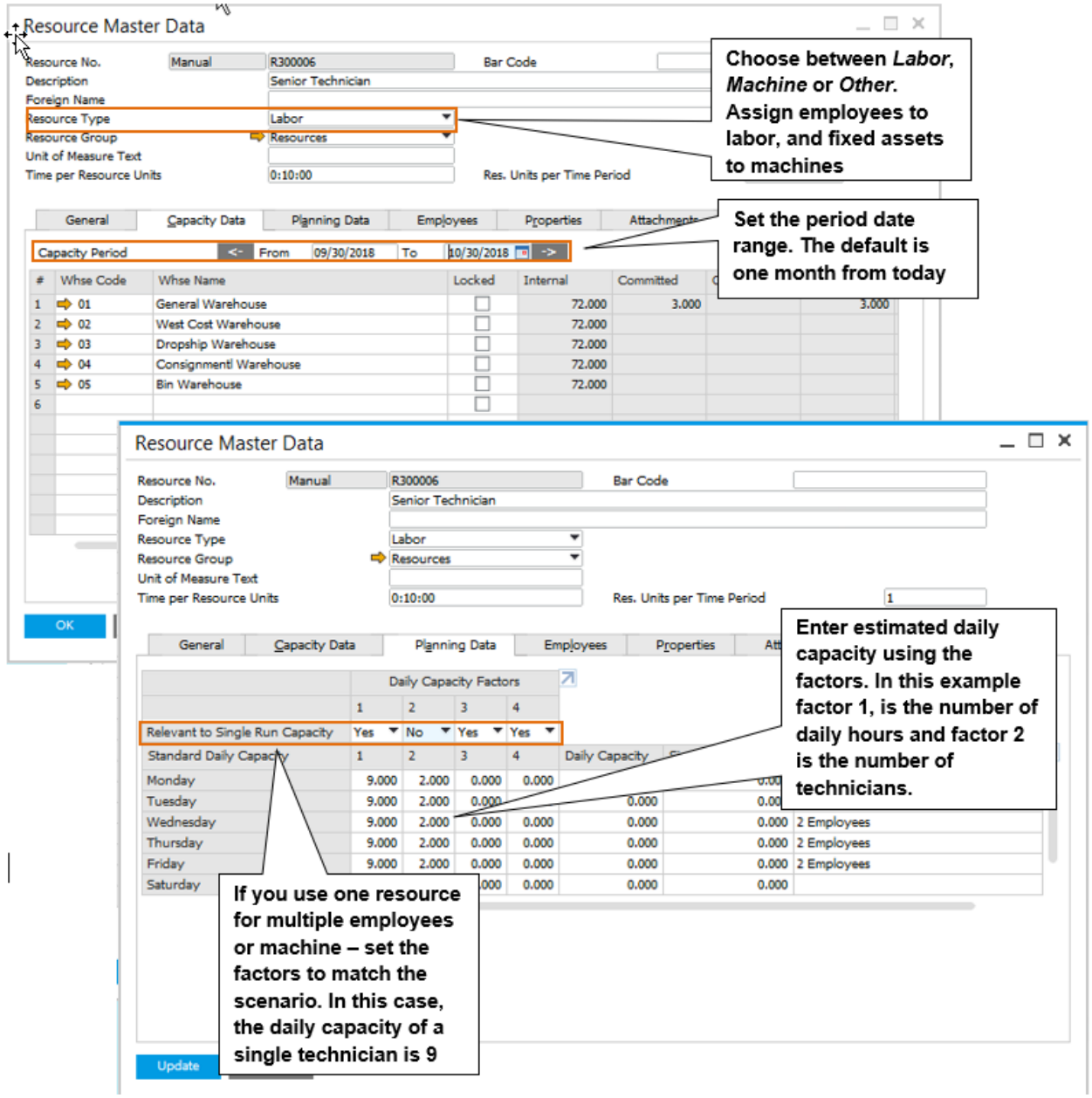


Figure 13-2: Resource master data, and Capacity Resource

13.5.1 Setting Daily capacity

Now you need to define the daily available capacity of your resource, in order to know, while you run your production, if you have technicians and machines available to complete the process.

Right click the resource master data and select Internal Resource Capacity.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

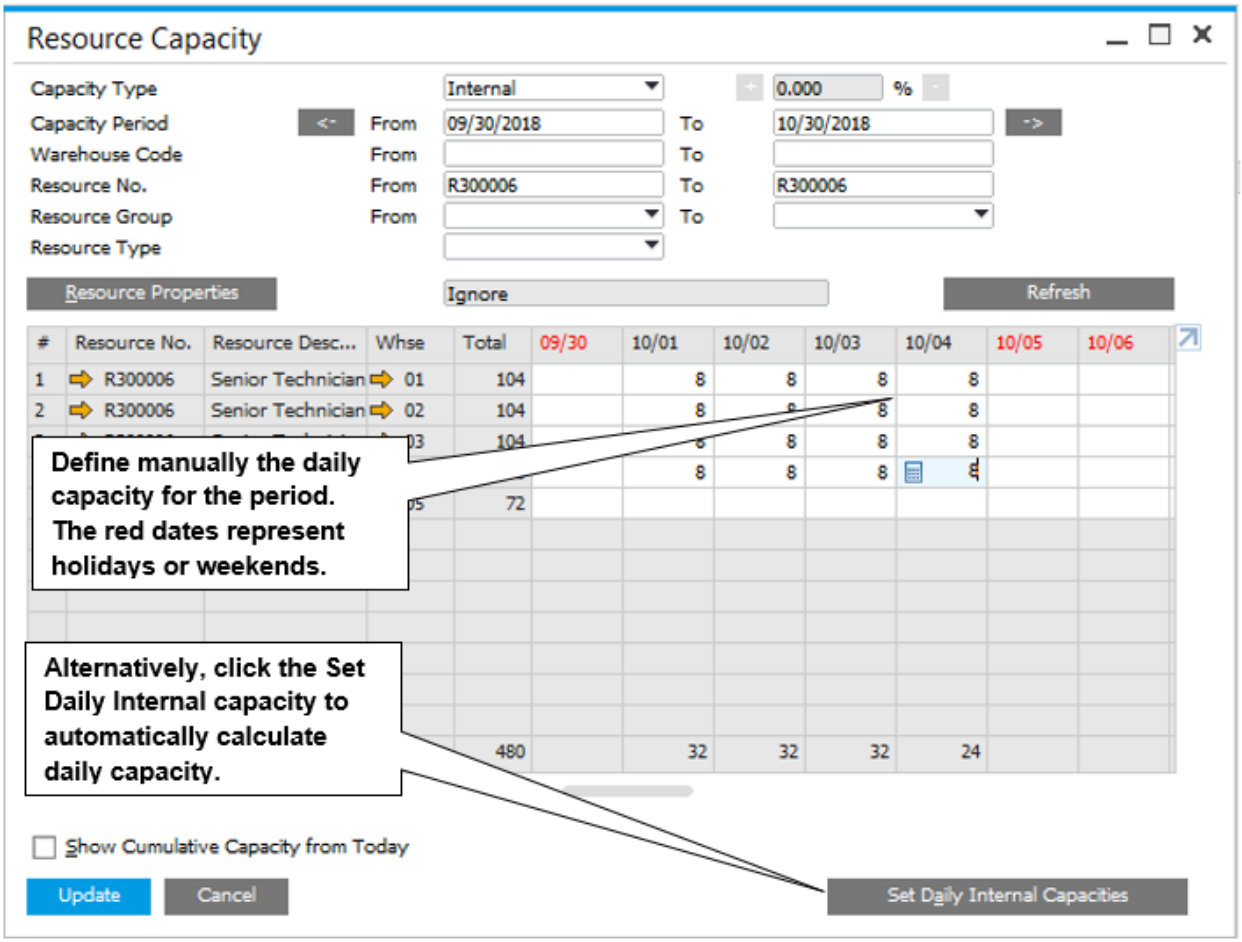


Figure 13-2: Resource Capacity

The Set Daily Internal Capacity is a utility that helps you to determine the resource capacity. You can have the system insert daily capacity based on the planning data for the selected period, or manually for each day of the week.

If you select to use the planning data to determine capacity, you may increase of decrease the number by a fixed amount, or percentage, and the system automatically calculates the daily capacity and insert it into the resource master data. Figure 13-3 shows the different methods for calculating daily capacity.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

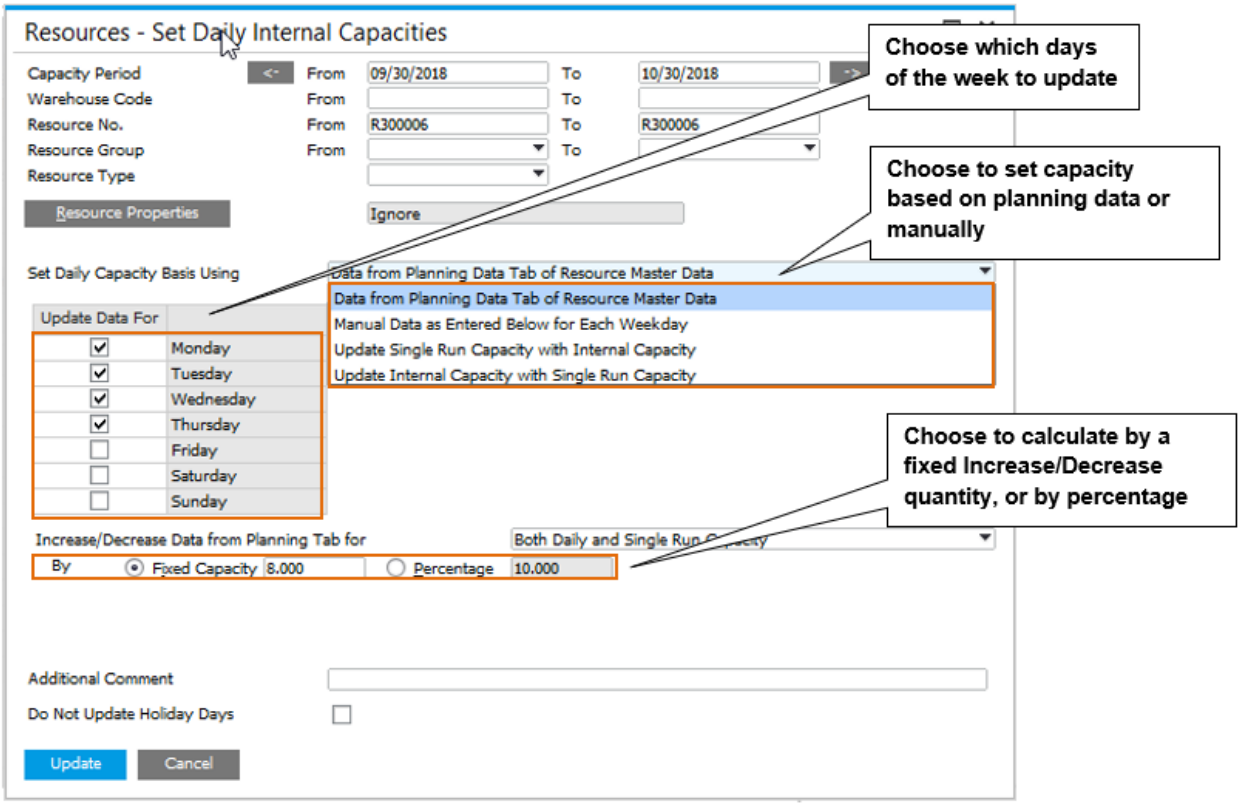


Figure 13-3: Set Daily Capacity based on Planning Data

Note

Resource Cost. On the General tab of the resource master data set up to 10 different costs that compose the total cost of the resource. The total cost is used in the production order to calculate and post component cost. Make sure you define primary accounts for resource expenses and WIP in the G/L account determination.

13.6 Production Order

The production order document records the finished material to be produced, its components and their issue method. Production orders can be created manually, as explained in this chapter and also automatically using the Procurement Confirmation Wizard or by MRP as explained in previous chapters. There are three types of production orders. See Figure 13-4 for the production order types and how the items in the bill of materials are handled in inventory.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

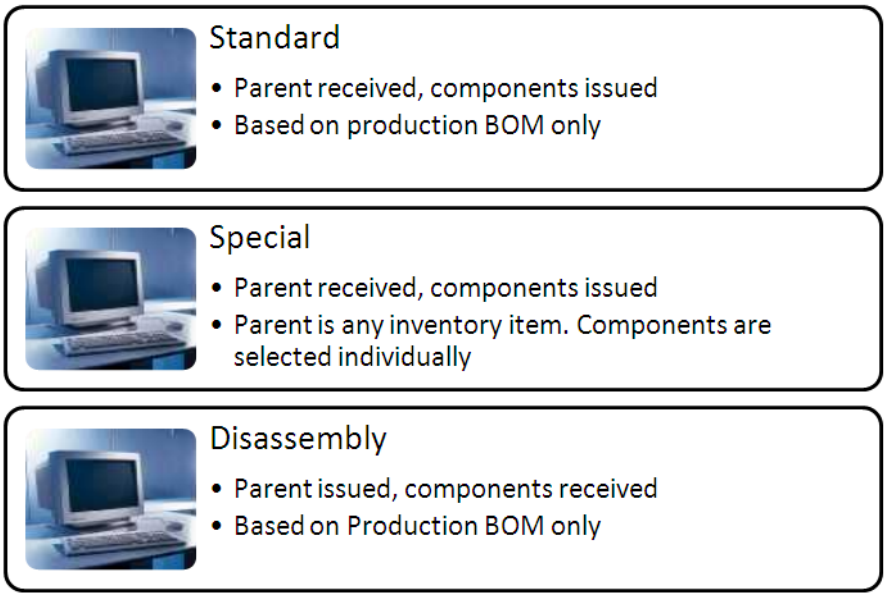


Figure 13-4: Production Order Types

Take the following steps to enter a production order:

1. Select the production order type and the parent item.
2. Enter the quantity of the parent item.
3. Enter the production order due date which represents the production completion date.
4. Optionally you can assign a sales order to the production order.
5. Components appear based on the BOM setup. You can add/delete components, modify the base quantities, warehouse and issue method.
6. Add the production order.

Once the production process begins, open the production order and change its status to Released. You need to issue any manual components. Right-click on the mouse to bring up the context menu and choose Issue Components. You can filter by routing stage, items and resources as well as warehouse. At the end of the process, you report completion of production. This will receive the finished item into stock and calculate the cost of producing the item. Use the context menu to choose Report Completion. Optionally, prior to completing the production, you can generate a pick list as explained in chapter 12.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

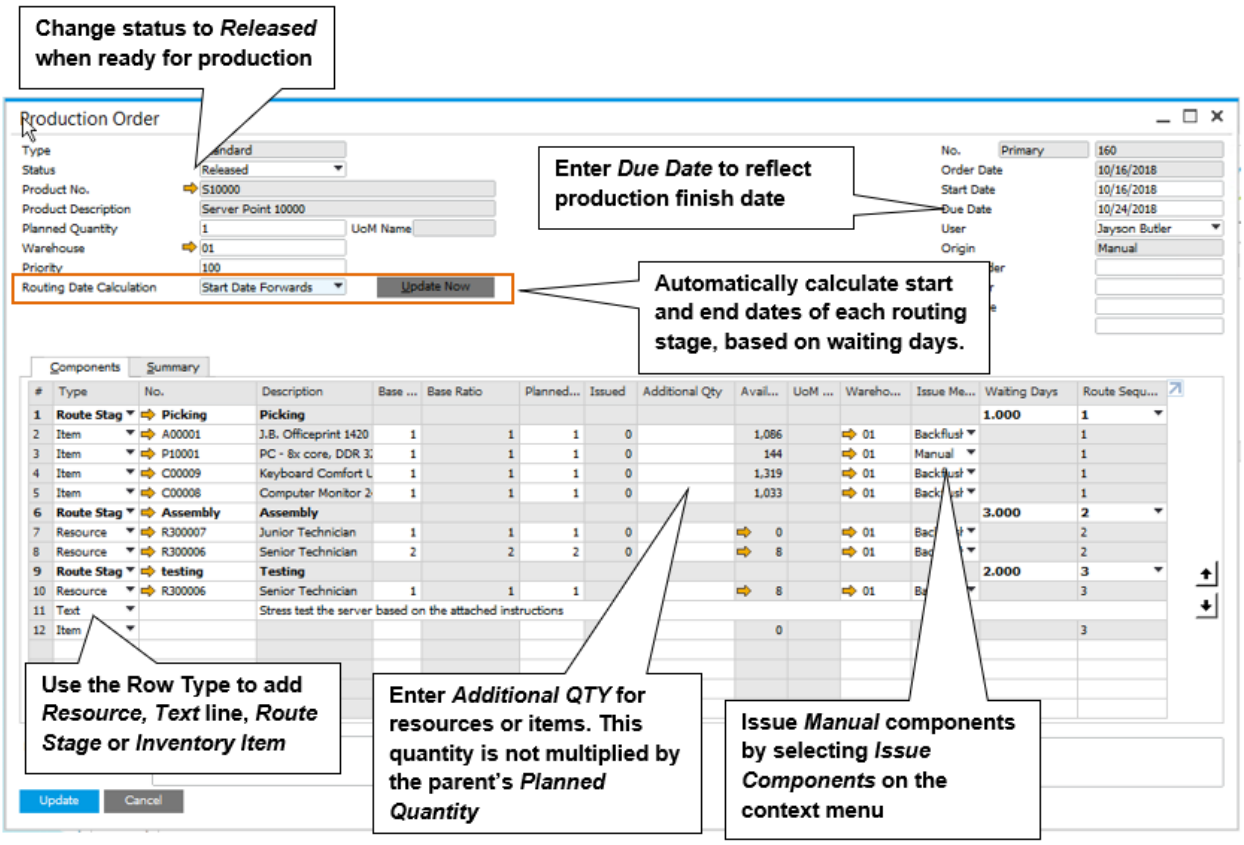


Figure 13-5: Production Order window

Items that are set to backflush are issued automatically when you choose Report Completion. An Issue for Production document is created automatically for those components. Items that are managed with serial numbers or batch numbers cannot be backflushed; therefore, they are automatically set to a manual issue method. When you issue these components, you identify the serial numbers or batches to release them from inventory.

Note

The Summary tab. On the Summary tab, you can see the components total cost, the finished goods cost, and whether there is any variance between them when you use standard costing method. Click on Total Variance to view the variance reports, listing each component and its cost. Once you change the production order status to Closed, the variance is posted to the WIP variance account. If you use Moving Average, FIFO or Serial/Batch valuation method, the parent cost is updated based on the component's total cost.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

14 Project Management Module

In This Chapter

- Project Hierarchy
- Project Management in SAP Business One
- Project Billing
- Reports

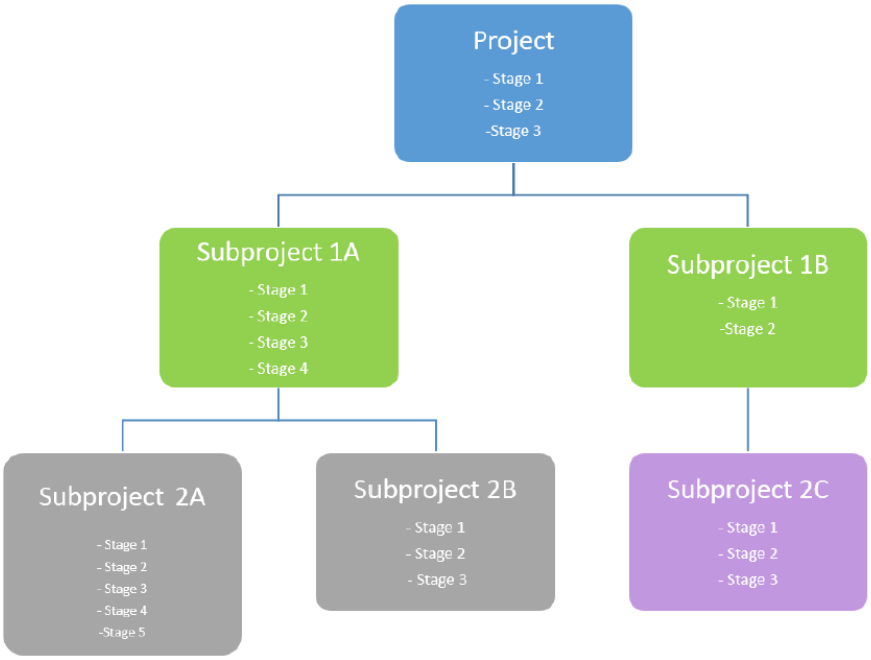
The Project Management module allows companies to centrally manage all projects and all its related activities in the company. Whether you are working with projects that are happening inside of your company (internal) or related to external stakeholders (Business Partners), this module will surely help you maintain and register all steps and transactions related to your projects.

14.1 Project Hierarchy

SAP Business One allows you to manage simple, or more complex projects, If you are working with a more complex project that requires several stages to be managed, you can have a multi level project to help you simplify its maintenance.

Subprojects can also contain further subprojects, and so on, forming a project hierarchy tree of subprojects, with the main project at the top level of the hierarchy. Figure 14-1 demonstrates a project with subprojects.

If a project contains subprojects, you can access it from the Project window. The information about the subprojects is displayed in the Subproject window, which is almost identical to the top-level Project window.



© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Figure 14-1: Project with 5 subprojects

14.2 Project Management in SAP Business One

The first step that needs to be considered when thinking about the Project Management module is to enable the feature inside of SAP Business One. By default, this module will not be available in your Main Menu until it's enabled. In order to do that, you need to navigate to Administration → System Initialization → Company Details → Basic Initialization tab. The Enable Project Management checkbox can be found at the bottom of this screen. See figure 14-2.

After performing this initial step, a new module will be visible, and it is called Project Management. It is important to highlight that only users with a Professional type of license allocated to their name will be able to actively use this new feature inside or SAP Business One.

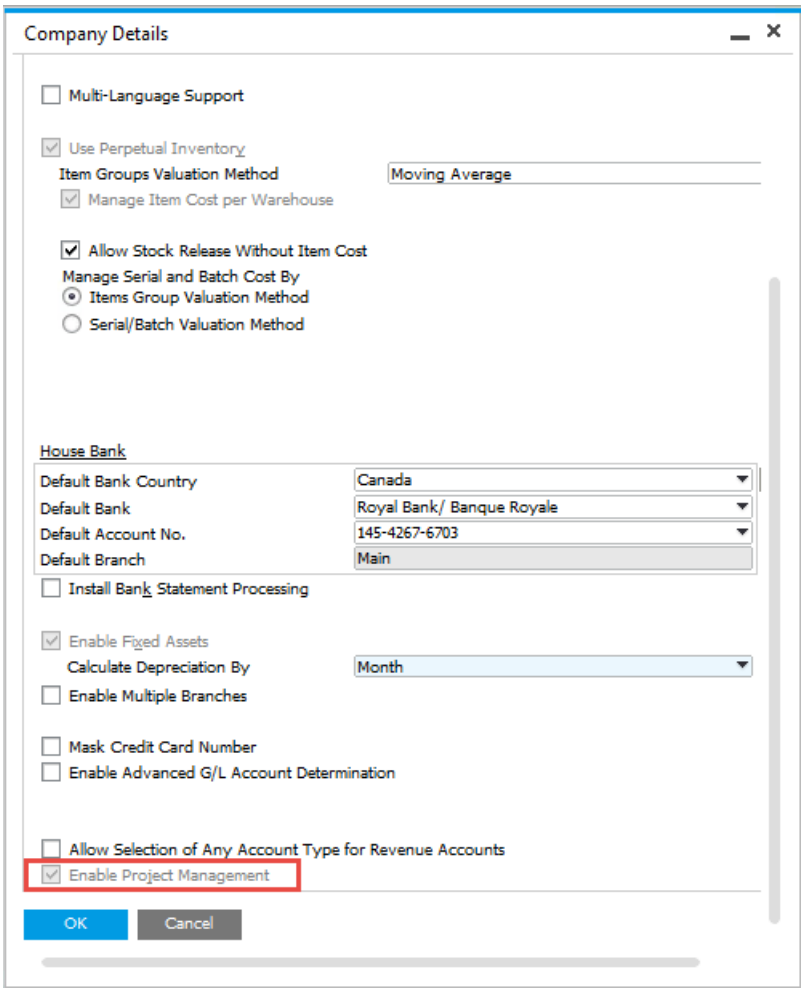


Figure 14-2: Enabling Project Management inside of Company details

when you create a new project, optionally you can link it to a financial projects that you create in the Administration → Setup → Financials. This way, every transaction you create that is associated with the financial project, will be linked to the project master data..

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Note

Project Management. Additional options will be available inside Administration → Setup → Project Management. The options are: Stages and Activity Type. Stages can be used inside the Project screen; and Activity Type will be used by the Human Resources screen (Time sheet).

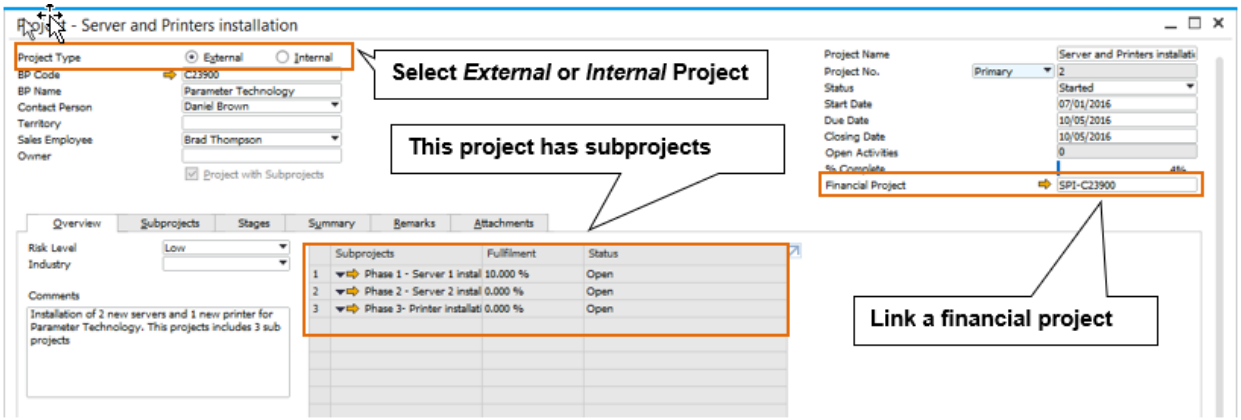


Figure 14-3: Project screen allows you to create and centrally manage projects

The header keeps the main information in regards to the project you are working on. Project Type indicates whether a project is linked to a business partner or not. By checking External, you will be required to select either a customer or vendor; on the other hand, if Internal is selected, the BP Code and BP Name will be grey out by the system. The Project Name is mandatory and allows you to name your project inside of the Project screen. A project can present 4 types of status: Started, Paused, Stopped and Finished. Whenever the status Stopped or Finished are selected, the current date will be automatically entered as the closing date for the project. If the Project with Subprojects checkbox is selected, a new tab will be visible (Subprojects) and can be used to link to other subprojects in SAP Business One.

Further information is maintained on the following 6 tabs: Overview, Subprojects, Stages, Summary, Remarks and Attachments.

- Overview: In this tab, you can define the Risk Level identified inside of your organization (Low, Medium or High), the Industry that the project is related to, Comments field where additional information can be included to describe the main purpose of the project and a Summary presenting information related to Subprojects.
- Subproject: This tab is only visible if the Project with Subprojects checkbox is selected. In this tab you will have a summary of all Subprojects that are linked to the main project. The information available here cannot be edited, just visualized. A direct link to the subproject will be available in the Subproject No. column. You can also see the “Subproject description”, start and end dates, planned and actual costs related to your subproject, percentage of completeness, the owner of the subproject and if the subproject is Closed or not.
- Stages: This tab can be considered the most important tab for the Project screen. SAP Business One pre-delivers 5 stages (Conception/Initiation, Definition/Planning, Launch/Execution, Performance and control, Finish Stage).Tasks related to stages can also be allocated in order to identify what needs to be done in order to finish a stage in a project. As projects incurred cost, a column called Planned Cost is available and allows you to manually include what is the cost planned for that specific stage. Financial information that comes from marketing documents, entered in the Documents area, will be visible in the columns Invoice Amount (A/R), Open Amount (A/R), Invoice Amount (A/P) and Open Amount (A/P). The column % indicated the percentage of completeness of a specific stage. When the checkbox Finish is selected, the field % Compete in the Header area will be affected. You can also link different stages from the same project or other sub projects, by using the Stage Dependence columns. Figure 14-4 shows this tab in more details.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

- Summary: The Summary tab shows financial figure that comes from planned costs as well as actual costs incurred by a project. If your project contain subprojects, costs related to these subprojects will be reflected in the main project as well. In that sense, you will have a global understanding of the financial situation of your project.
- Remarks: The Remarks tab allows you to include text to a project. If you want to include additional details about a project, use this tab to have extensive area for a detailed description on the project.
- Attachments: Any attachment linked to a project will be saved inside the “Attachment” folder defined in the General Settings screen (tab Path).

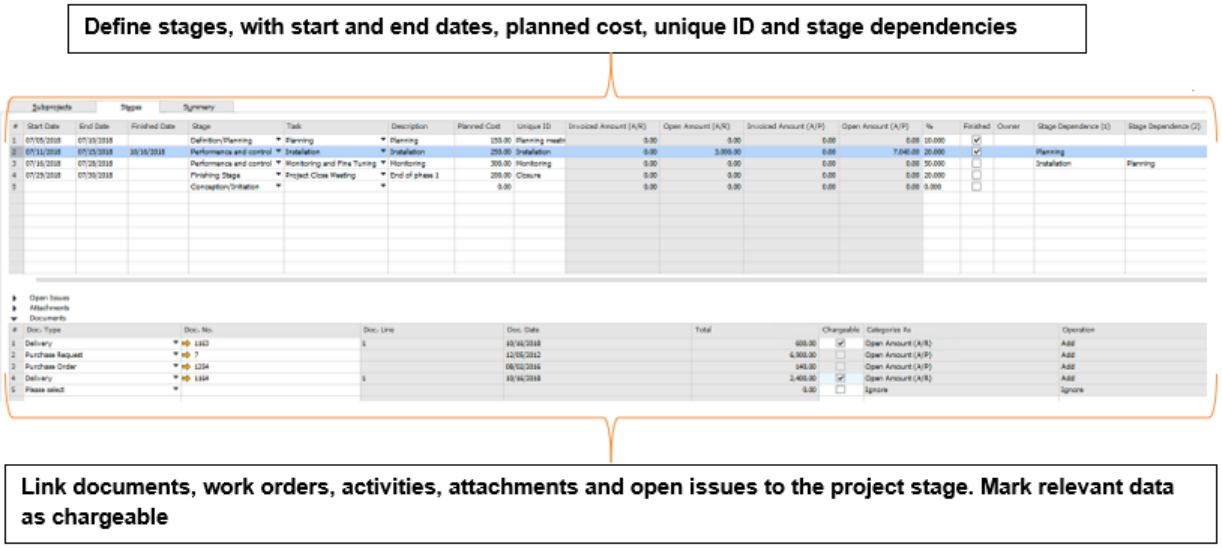


Figure 14-4 shows this tab in more details

14.3 Billing Wizard

SAP Business One allows you to automate the billing process directly from the project. You can bill sales and purchasing documents, activities, work orders and time sheet.

In order to bill activities and time sheets, you need to define Activity Type, linked to a labor item with a price. See figure 14-5, an activity screen, Other Details tab.

To enter time sheet information, go to the Human Resources menu. Here you select the employee, dates, billable time, project and activity type.

Now you are ready to bill. You can access the Billing Document Generation Wizard from the Project Management menu, or by right clicking the project window.

The wizard takes you step by step where you can select whether the target document is a delivery or an A/R invoice. Select the sources to include in the final billing. If you started the wizard from the project window, the project information and stage is already filled. Next you are presented with a list of available documents. The confirmed documents are included in the final billing document. All you need to do now is make any needed changes and add the document. Sources you already billed for, will not show up in the next billing wizard, therefore you can bill the same project as many times as needed.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

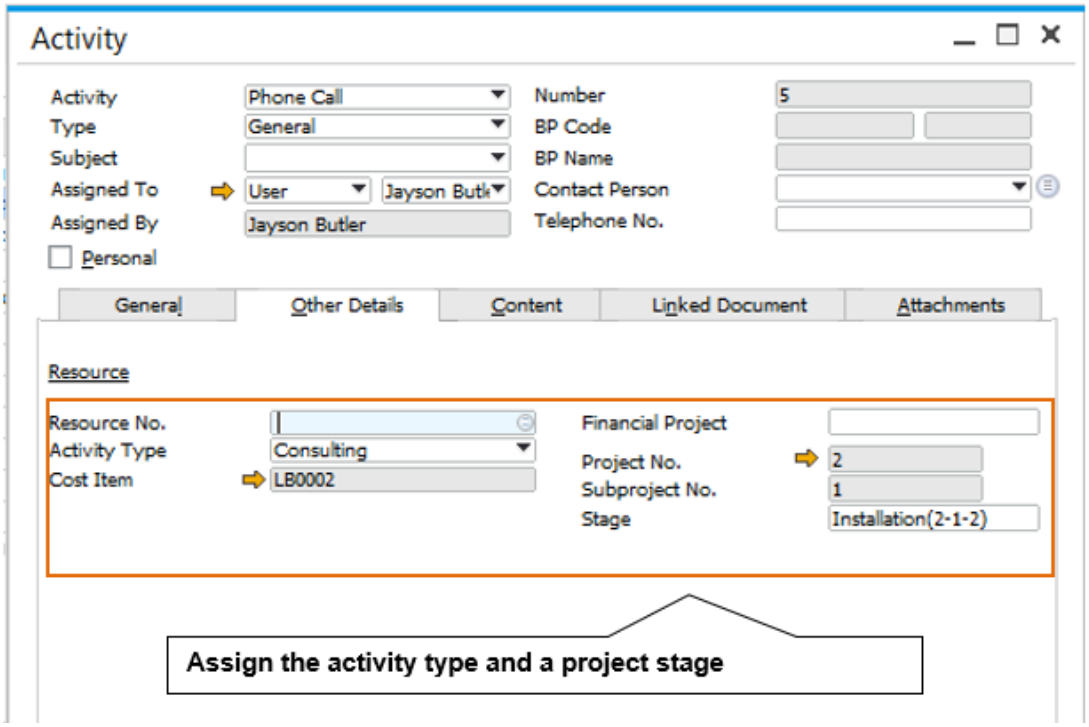


Figure 14-5 Activity Linked to a Project Stage

14.4 Project Overview

By right clicking the project window, and selecting Project Overview, you can see a quick overview of the project. It lists all stages and subprojects with their dates, and whether the stage is completed or not. In addition, you can see all the documents and activities assigned to each stage of the project. Drill down to view more information.

14.5 Gantt Chart

Nothing like a colorful chart to show me my project status. Right click the project and select the Gantt Chart option. Here you can see in a graphical way, the stages of your project, dependencies, and completion percentage.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

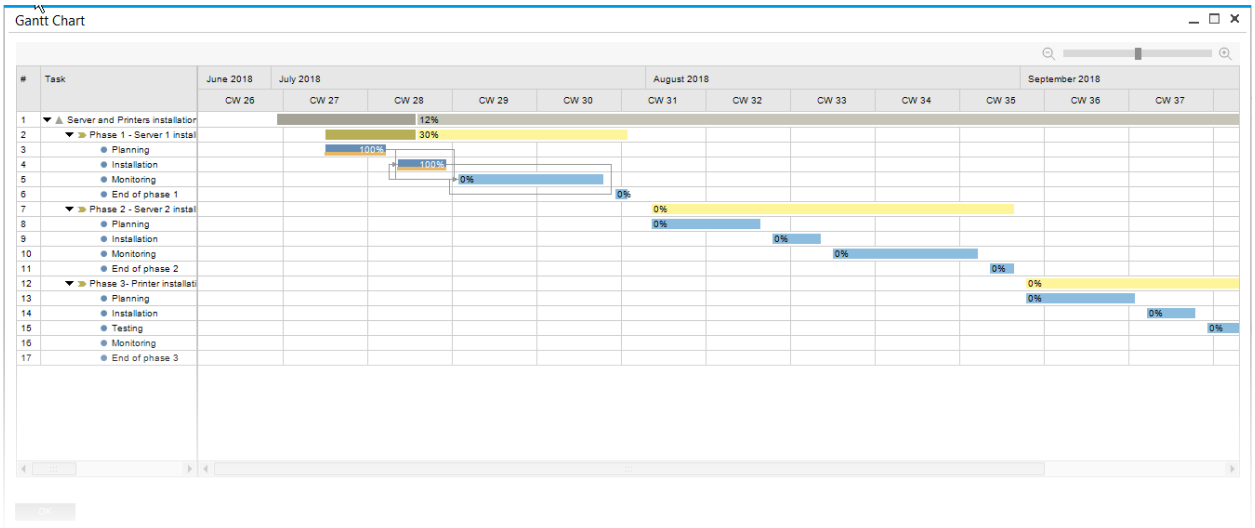


Figure 14-6 Gantt Chart

14.6 Reports

Within the Project Management feature, there are four reports that can be created. These reports will be located under Project Management → Reports, and are listed below (Figure 14-7):

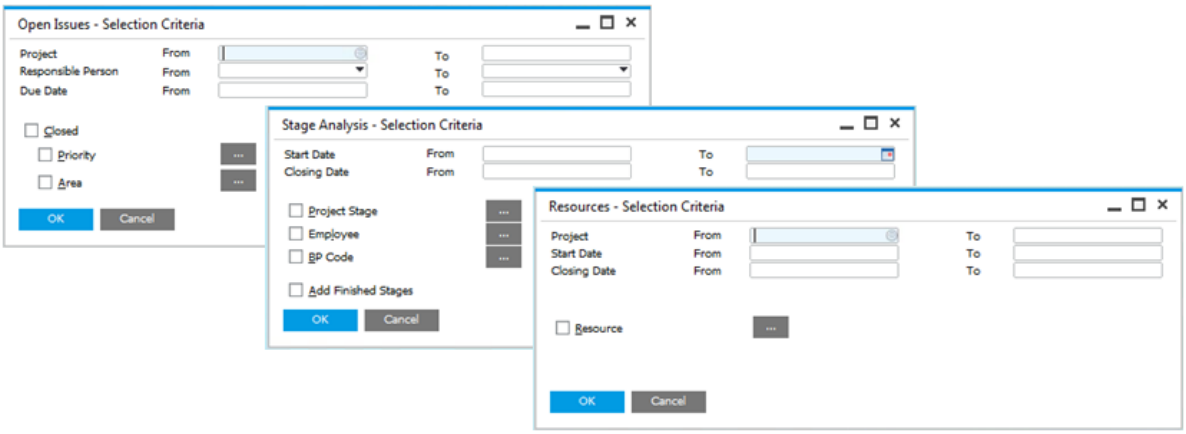


Figure 14-7 shows all three reports available for Project Management

- Stage Analysis: This report lists stages of a project or subproject according to the selection criteria defined by you when running the report.
- Open Issues: This report lists open or closed issues recorded in a project or a subproject according to the selection criteria defined by you when running the report.
- Resources: This report lists resources that are connected to a project or a subproject within a work order according to the selection criteria defined by you when running the report.
- You can also find the time sheet report on the reporting menu; however you can access it from the project window itself by choosing the right click option. This report shows all time sheet entries for a project stage.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

15 Analytics

In This Chapter

- Overview of SAP HANA Analytics
- Using the Pervasive Analytics Designer
- Interactive Analysis
- Excel Reports
- Analytics Portal
- SAP Analytics Cloud

Rather than having to review 10 separate reports, a sales manager might prefer a cockpit with dashboards showing the value of the sales pipeline, the top 10 leads by the size of the deal, and a competitive analysis. A CEO might want summary information from reports from multiple modules (overall receivables, summary sales data, inventory reports, and, of course, the bottom line: a profit and loss summary) - or perhaps a cockpit with a series of key performance indicators on the health of the company.

We've discussed a wide range of standard reports and highlighted many reporting tools in this book, including SAP Crystal Reports, Print Layout Designer and the Query generator. HANA Analytics tools inside SAP Business One allow you to easily and quickly create additional reports that meet the unique needs of your enterprise and its mission.

15.1 Overview of SAP HANA Analytics

In this chapter, we will look at some of the options available using SAP Business One Analytics powered by SAP HANA. First, let's look at what makes SAP HANA so great for analytics.

15.1.1 What's Behind SAP HANA's Analytic Power?

The SAP HANA database underlying SAP Business One is built for analytics. The database is structured in a way that makes reporting quicker. Because the data is stored in memory, analysis is no longer slowed by the speed of the disk. SAP HANA utilizes both the traditional row-oriented data storage as well as a column-oriented data schema. Columns are particularly suited to analytics because of the way they summarize transactions. The combination of traditional and innovative technologies allows the solution to use the most efficient methods for business purposes.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

15.1.1.1 Semantic Layers

SAP provides built-in semantic layers that provide a common definition of business objects for reporting and analytics. All SAP Business One reporting tools can leverage the increased performance of the SAP HANA database: Microsoft Excel Pivot tables, the dashboards and KPIs of Pervasive Analytics, Excel Reports, SAP Analytics Cloud (SAC), and Crystal Reports.

Semantic layers in SAP Business One contain business models used in analytics. These layers sit on top of the data itself and provide views that facilitate reporting.

You use these views to manipulate the data when you create interactive reports to display in MS Excel or when creating dashboards and KPIs. A number of views are delivered with SAP Business One, and someone in your company can build additional views as needed. However, it's not necessary to understand how to build or manage the views in order to use them in reporting. Because they use normal business terminology, a user can easily select the right view to create a dashboard, a KPI or a report.

15.2 Using the Pervasive Analytics Designer

One of the most powerful analytic tools is one of the easiest to use. The Pervasive Analytics Designer is where you can create and edit key performance indicators (KPIs) and two types of dashboards (pervasive dashboards and advanced dashboards) for your cockpits.

To open the Pervasive Analytics Designer, click on the icon on the toolbar. Once you open the designer, you will see the buttons to create new KPIs or dashboards on the left. To the right of the buttons are three columns, which display existing KPIs, pervasive dashboards and advanced dashboards. You can open any of the existing objects to view its definition or to make changes to it by clicking on the object's name. if you modify SAP Business One delivered content, you must save it under a new name. You also have the option in this window to delete any object in a list.

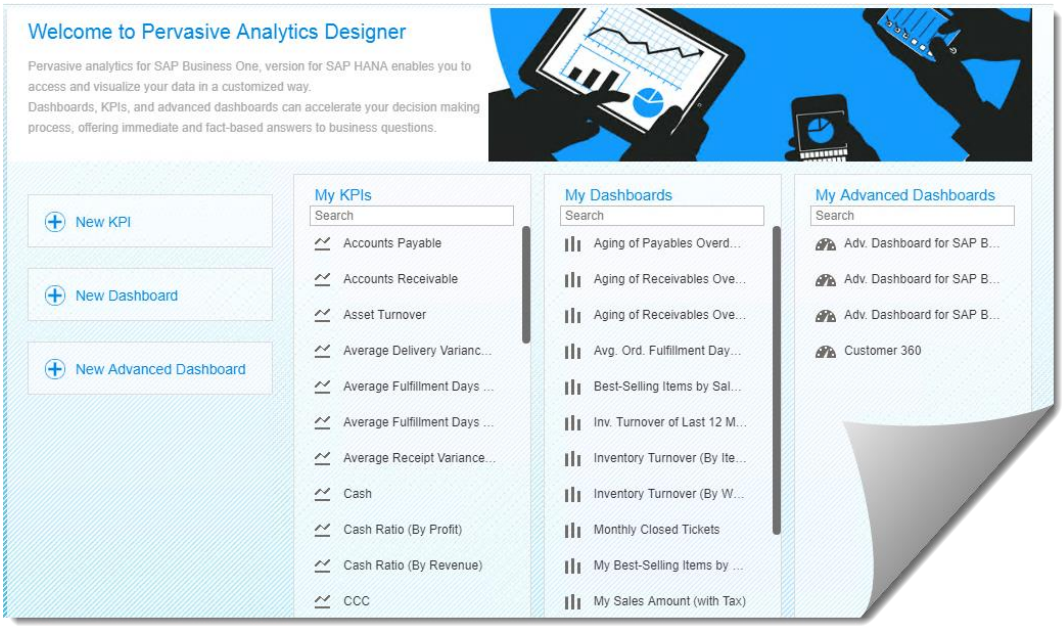


Figure 15-1: Pervasive Analytics Designer

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

15.2.1 Creating a Pervasive Dashboard

In this section, we will discuss how to create a pervasive dashboard. We will use the example of a dashboard that displays the potential value and the business partner associated with the top sales opportunities in the pipeline.

After opening the Pervasive Analytics Designer and choosing the option to create a dashboard, you would perform the following steps.

15.2.1.1 Choosing a Data Source

The first step is to choose a data source for the dashboard by clicking on the icon. Data sources can be user-defined queries, calculation views or analytic views. When you click on a data source in the list, the definition of the data source appears with its results as shown in Figure 15-2.

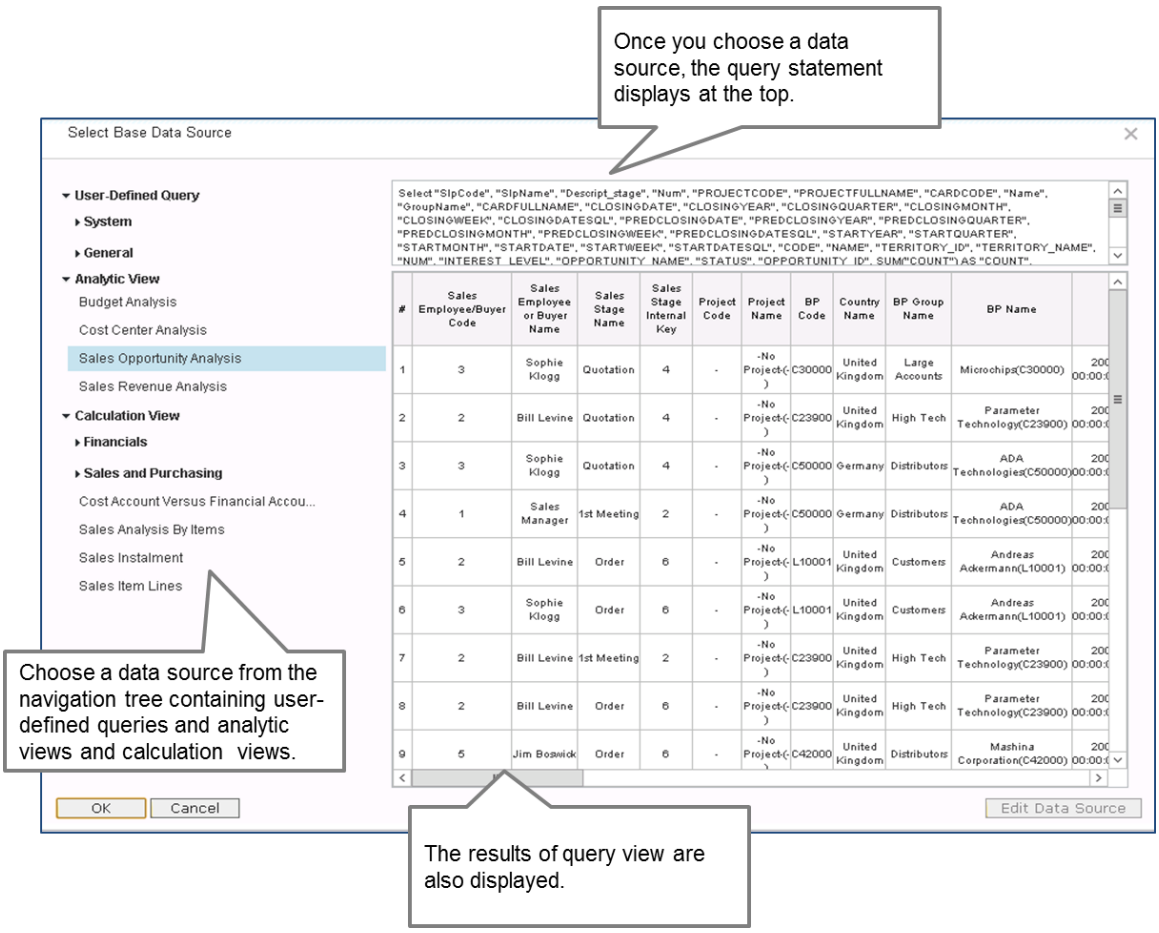


Figure 15-2: Selecting a Data Source for a Pervasive Dashboard

In this example, we have chosen an analytic view for sales opportunities. At the top, you can see the select statement for the view. In the table, you can see the results.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

15.2.1.2 Basic Settings for the Dashboard

After choosing the data source, you define the basic settings behind the dashboard as shown in Figure 15-3.

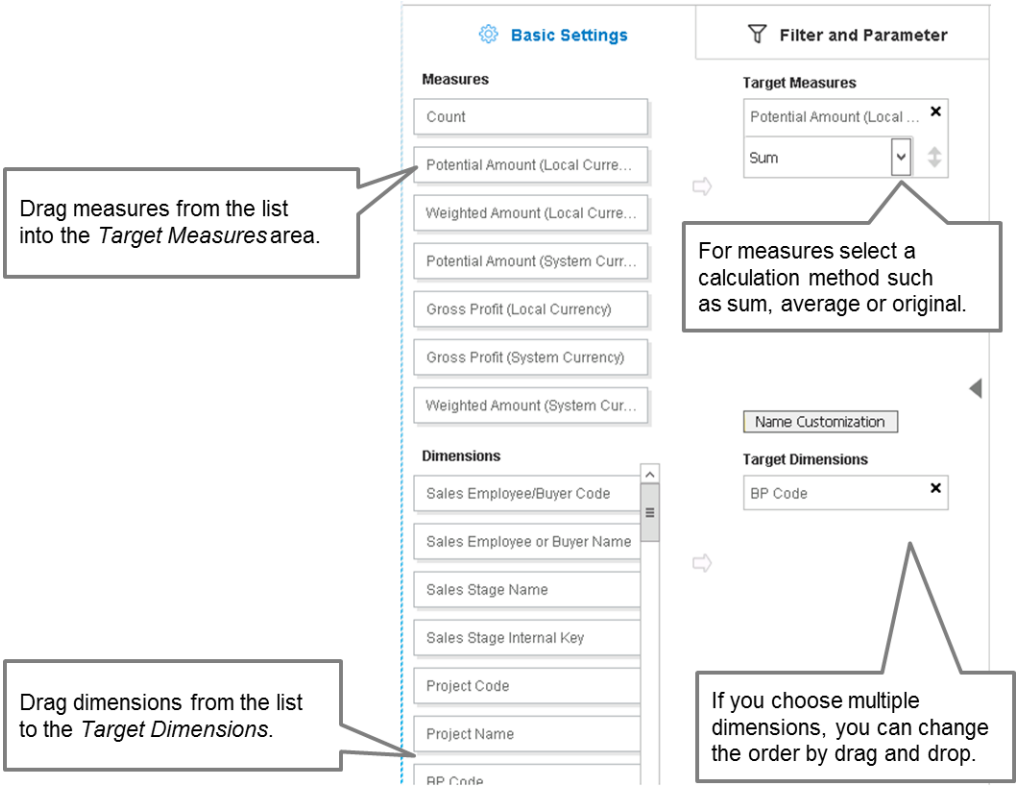


Figure 15-3: Defining Basic Settings

As you choose the measures and dimensions, a chart is created automatically in the window to the right of the Basic Settings tab. You can change the chart type.

Note

Dimensions and Measures. Dimensions and measures are common terms used in analytics.

Dimensions are data elements with attributes. Business partner is a dimension and it has many attributes including account balance, name, and country. A few measures are numbers such as quantities, amounts and prices.

Additional options exist for adding filters or parameters and for setting a strategy type for predictive analysis. These options are discussed in the How to Guide for Pervasive Analytics.

15.2.1.3 Setting up Actions for Dashboards

One very useful feature of pervasive dashboards is the possibility of adding actions to the dashboard. You can set up a dashboard to launch an Enterprise Search, open master data or document windows, or open an advanced dashboard (with additional analytics). For example, if you have a chart showing customers with opportunities, you could launch an Enterprise Search or open the business partner master for any business partner shown in the chart.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

In Figure 15-4, we see a pervasive dashboard created to track customer opportunity potential values. This dashboard was set up with three actions that appear in the context menu. The section of the chart from which the context menu is launched provides data which is passed into the action. In this case, the customer number is passed into an action to launch an Enterprise Search.

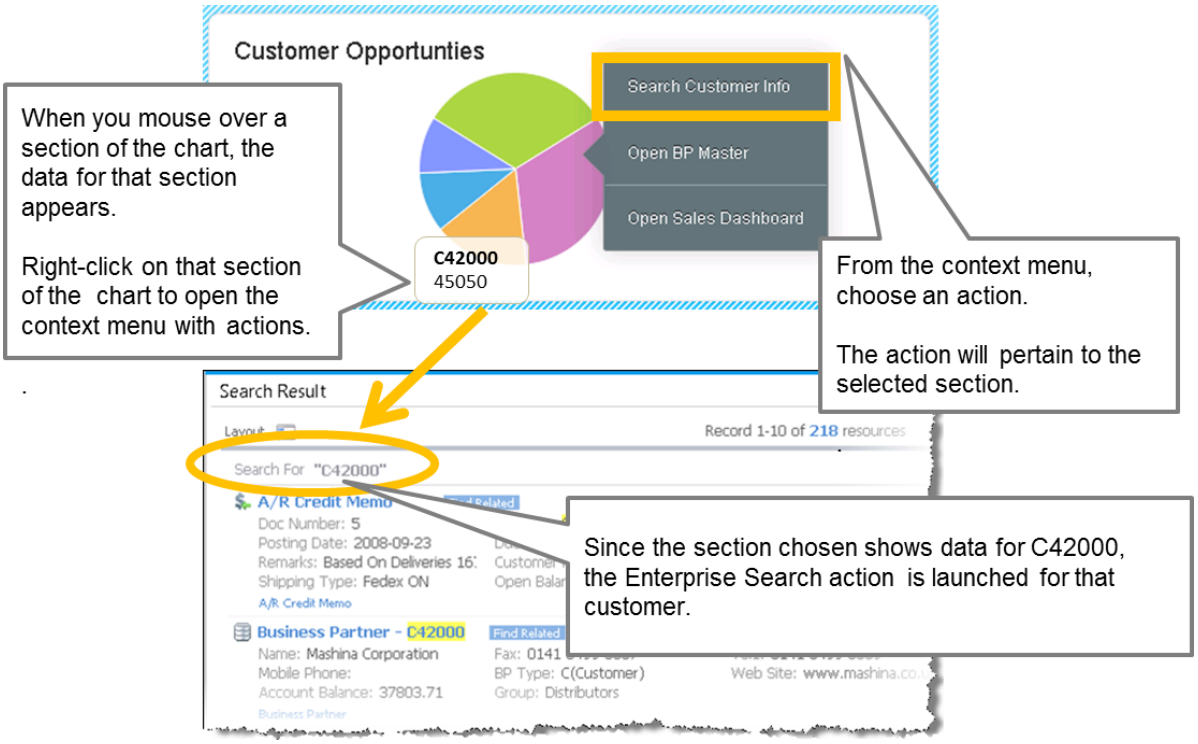


Figure 15-4: Launching an action from a dashboard

To set up actions for a pervasive dashboard, you can choose a link to add actions from within the dashboard definition. Click on Actions to be Triggered, and you are at a window that allows you to choose from three types of actions:

- Open SAP Business One window - this action allows a user to open a master data or document window from the dashboard.
- Trigger Enterprise Search - this action launches the Enterprise Search for a master data value that is passed into the search.
- Open an advanced dashboard - this action allows a user to open a dashboard that acts like a supplementary cockpit of pervasive dashboards and KPIs.

The forth option, Display Dashboard in Sidebars allows you to link a dashboard to SAP Business One window - this is the only action that does not appear in the context menu. Instead this action allows you to embed this dashboard as a permanent link to a master data or transaction window. When you display an existing master data or document window, the chart will be displayed on the right.

In Figure 15-5 you can see an example of how the action Link to SAP Business One window creates an embedded dashboard for the Business Partner Master Data window.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

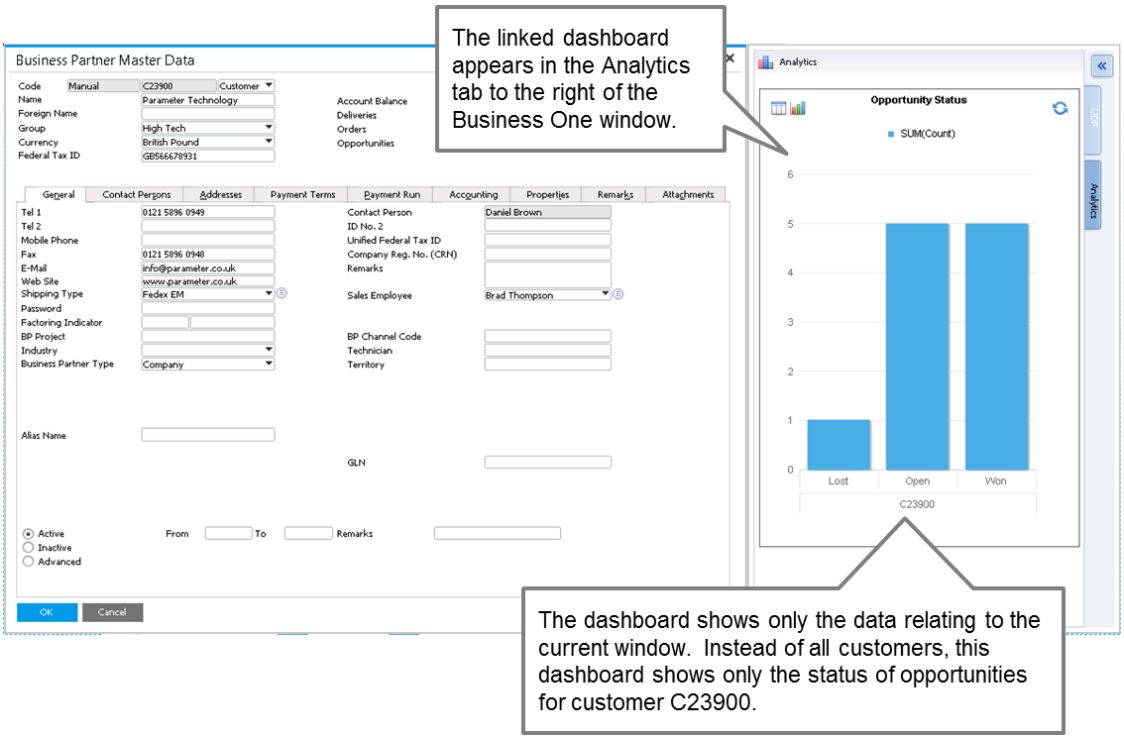


Figure 15-5: Embedded Dashboard (Action: Link to B1 window)

Let us look at the example of how to set up an action to launch an Enterprise Search:

1. In the window where you define the dashboard settings, click on the + sign, next to Actions to be Triggered. The system shows you a list of any existing actions and displays a button to create a new action.
2. Choose the type of action you wish to create.
3. Give the action a descriptive name. This is the name users will see when they open the context menu of the dashboard in the cockpit.
4. The last step is to set up data binding or the selection of the dimension to search by.This step passes values from the dashboard into the action you are launching. For example, since we are creating a dashboard for potential sales values in opportunities, the system allows us to choose the Customer Code (Business Partner) field to pass into the enterprise search.
5. When choosing the action Open SAP Business One Window, you select the window and the data binding, which in this case, you want to match customer code from the dashboard with BP code with the Business Partner master data window.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

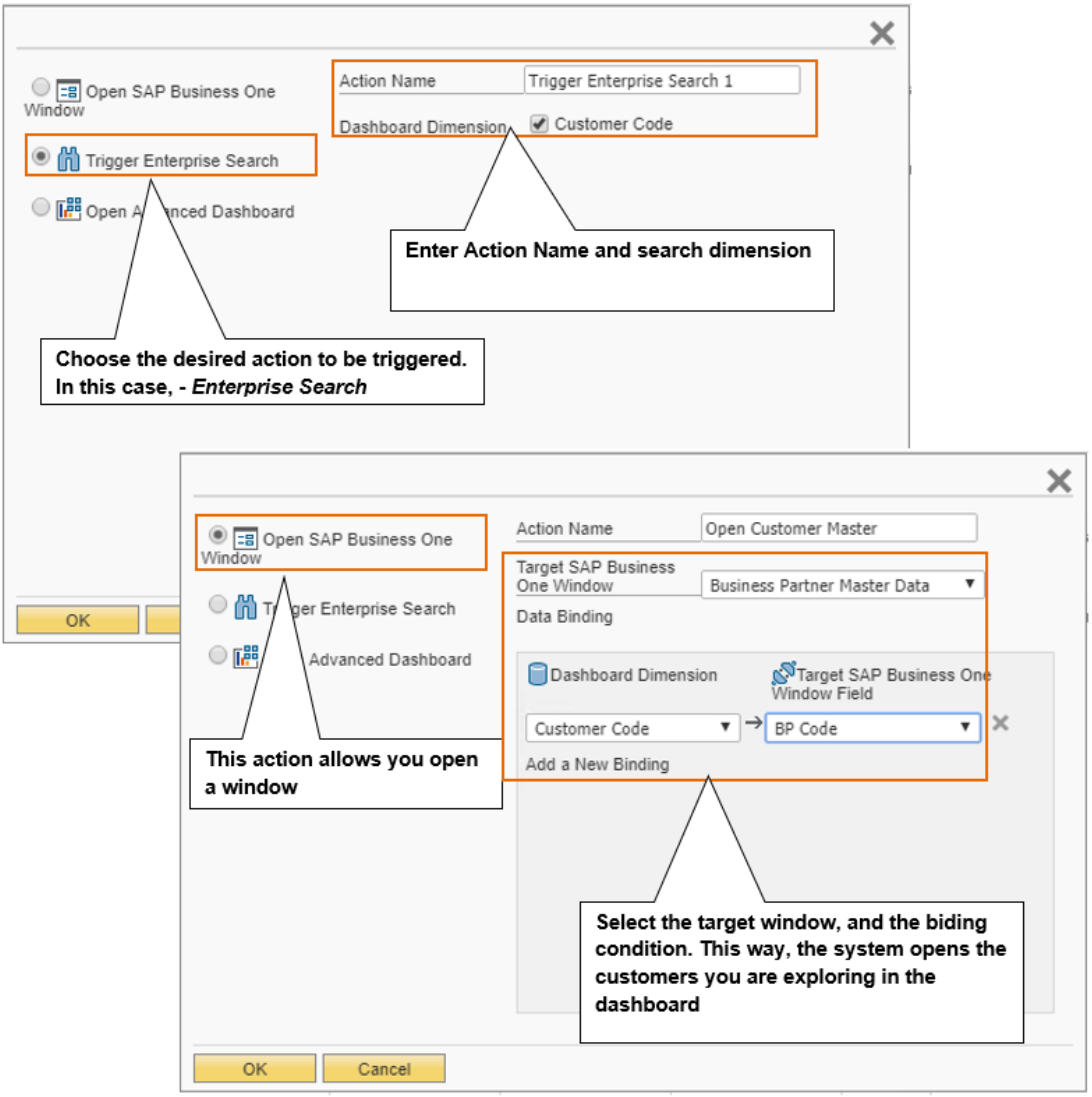


Figure 15-6: Setting up the Trigger Enterprise Search action

if you assign an action to Open and Advanced Dashboard, the window is similar. You provide a name, select the dashboard, and set binding condition between your original dashboard and the advanced dashboard. See more info on advanced dashboards below.

> **Note**
>
> Authorizations. To create dashboards and KPI's a user must have authorizations to the Pervasive Analytics Designer, and to the semantic layer, the dashboard or KPI is using as data source.

15.2.2 Creating a Key Performance Indicator (KPI)

KPIs are quantifiable measurements that reflect critical success factors in a company, such as targets for revenue or profit margin. SAP provides you with a number of predefined KPI cockpit widgets. There are two main benefits to using KPIs. KPIs

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

allow you to easily and quickly check progress towards achieving your company's strategic goals and objectives. The ability to create your own KPIs gives you the option to design financial and operational KPIs that reflect your own unique business. You can edit the existing KPIs or create your own in the Pervasive Analytics Designer.

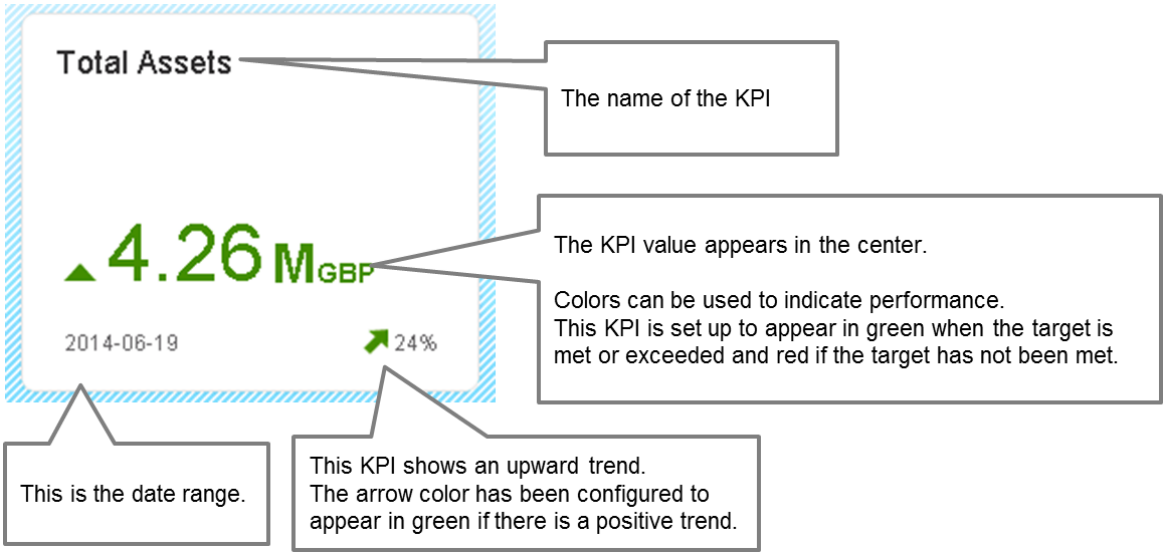


Figure 15-7: Key Performance Indicator Widget

Let's look at the example of creating a custom KPI for measuring overdue deliveries each month. The KPI target will be to reduce overdue deliveries to 1 or 0 per month. Since the numbers have typically been much higher, the KPI should also visually alert us if we are approaching the target with a range of 2-5 per month.

After determining what you wish to measure and which query or view you will use as the data source, the general steps to create the KPI are as follows:

1. In the Pervasive Analytics Designer create the KPI and give it a name and description.
2. Choose the base measure for your KPI.
3. Choose the base dimension for your KPI.
4. Specify how you will know when the target is met and how to know if you are trending in the correct direction.
5. Set colors to reflect progress.
6. There are additional options to add filters or parameters that we will not cover in our example.

Let's run through these first 5 steps with an example.

15.2.2.1 Creating and Naming the KPI

Open the Pervasive Analytics Designer and choose the option to create a KPI. Enter a name for the KPI and a description on the Settings tab. Give the new KPI a descriptive name because this name will appear in the KPI widget.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

15.2.2.2 Choosing the Base Measure for your KPI

The KPI Definition shows all existing user-defined queries, analytic views and calculation views for you to choose as the basis of your KPI.

Open the query or view to see the measures and dimensions. Drag a measure from the data source definition to the first box in the Set KPI Value area. Then use the dropdown box to choose the appropriate unit.

In our example we use a query that compares actual delivery dates to the expected delivery dates as the data source. We choose the measure Count. This measure will give us a count of deliveries where the actual date was later than the expected delivery date. In our case, we do not need a unit, but some measures may use a date. For example, if you were counting the number of days late, then Day would be the unit. Figure 15-8 shows these steps.

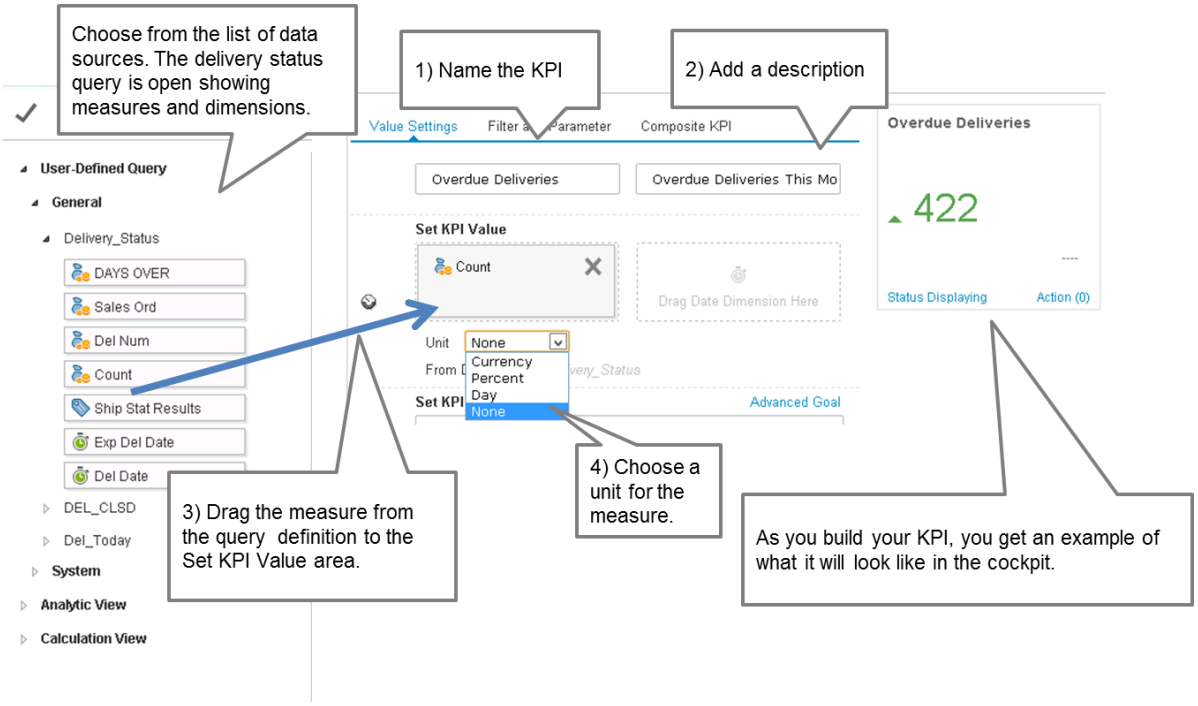


Figure 15-8: Name the KPI and choose the Base Measure

15.2.2.3 Choosing a Base Dimension for your KPI

Next you choose a dimension from the same query and drag the dimension to the Set KPI Value area. Use the dropdown box to choose granularity of the dimension.

In our example, we want to measure whether we have met the all expected delivery dates for sales orders within a month. Therefore, we choose the dimension Expected Delivery Date and use the dropdown to choose Month.

Figure 15-9 shows these steps. Notice that as you fine-tune the definition, the example of how it will look changes with your definition. Adding a time dimension allows the KPI to display a trend.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

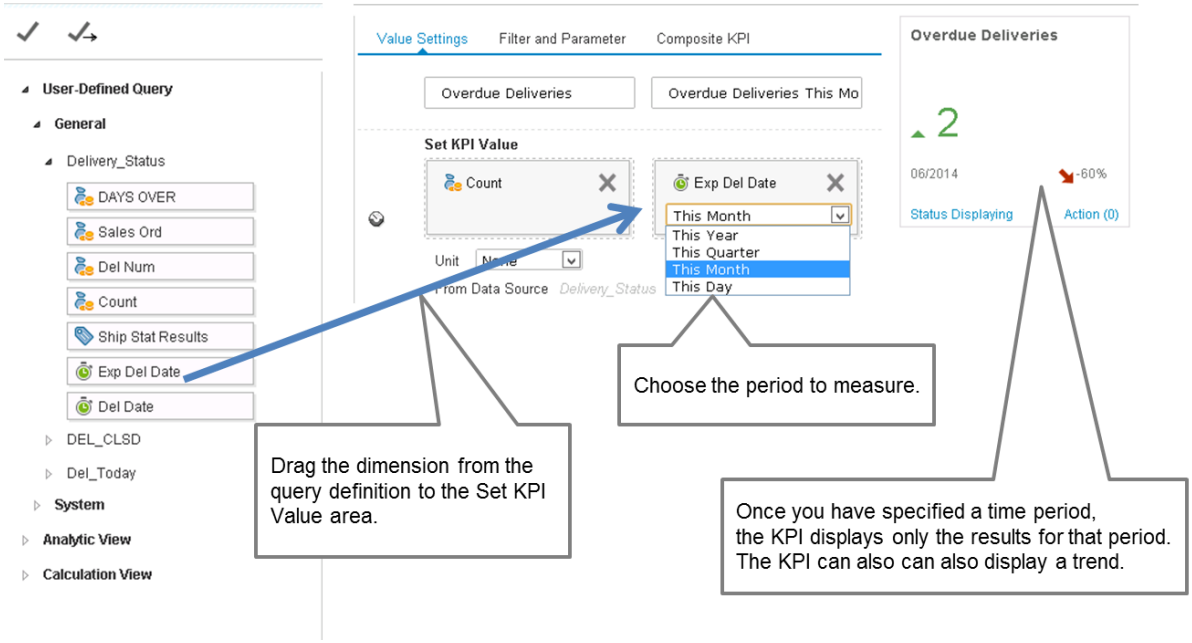


Figure 15-8: Choosing a Time Dimension for the KPI

15.2.2.4 Specifying Goals and Trends

Once you have the base measure and dimension, you can begin to specify how to know when you have reached your goal and how to measure the trends. Some KPIs, like those that measure revenue are considered to be improving as the number rises. However, others like overdue deliveries are improving as the number falls. You also choose which period you compare the current results to. For example, you may want to measure overdue deliveries this month to last month, whereas you may wish to measure revenue this month compared to the same month in the prior year. All these settings are possible for KPIs. You make the following settings in the Value Settings tab, the same tab where you defined the base measure and dimension.

- KPI Goal Description - enter a description that makes it easy for viewers to understand your goal.
- Target - enter a numerical value for the unit of the measure you have chosen.
- Trend - compare to the prior period (for example Month-on-Month) or compare to the same period in the prior year (Month over Month).
- Smaller is Better - select this checkbox if the goal is a smaller number rather than a larger one. For example, with overdue deliveries: fewer are better.

You can add more complexity in setting goals and trends by using the advanced goals and trends area. You can even build KPIs based on other KPIs. In that case, you use the Interim checkbox to hide a KPI whose only purpose is to be the basis of another KPI.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

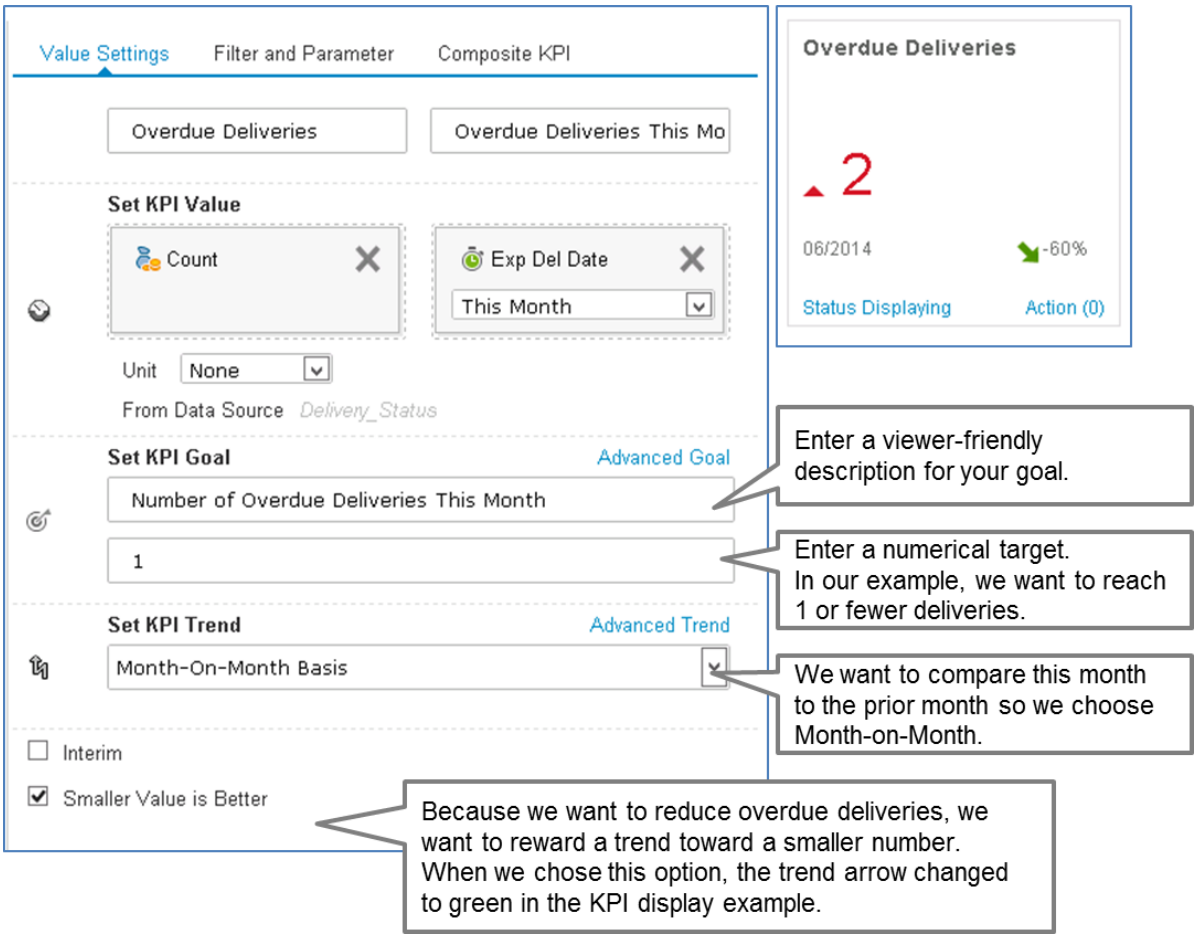


Figure 15-9: Setting KPI goals and trends

15.2.2.5 Setting Colors to Reflect Progress

You saw how the choices we made in the KPI definition changed the color of the KPI in the examples in the previous figures. You can choose which colors you wish to use for the display and set ranges for when the colors are used.

You can see how this is done in Figure 15-10.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

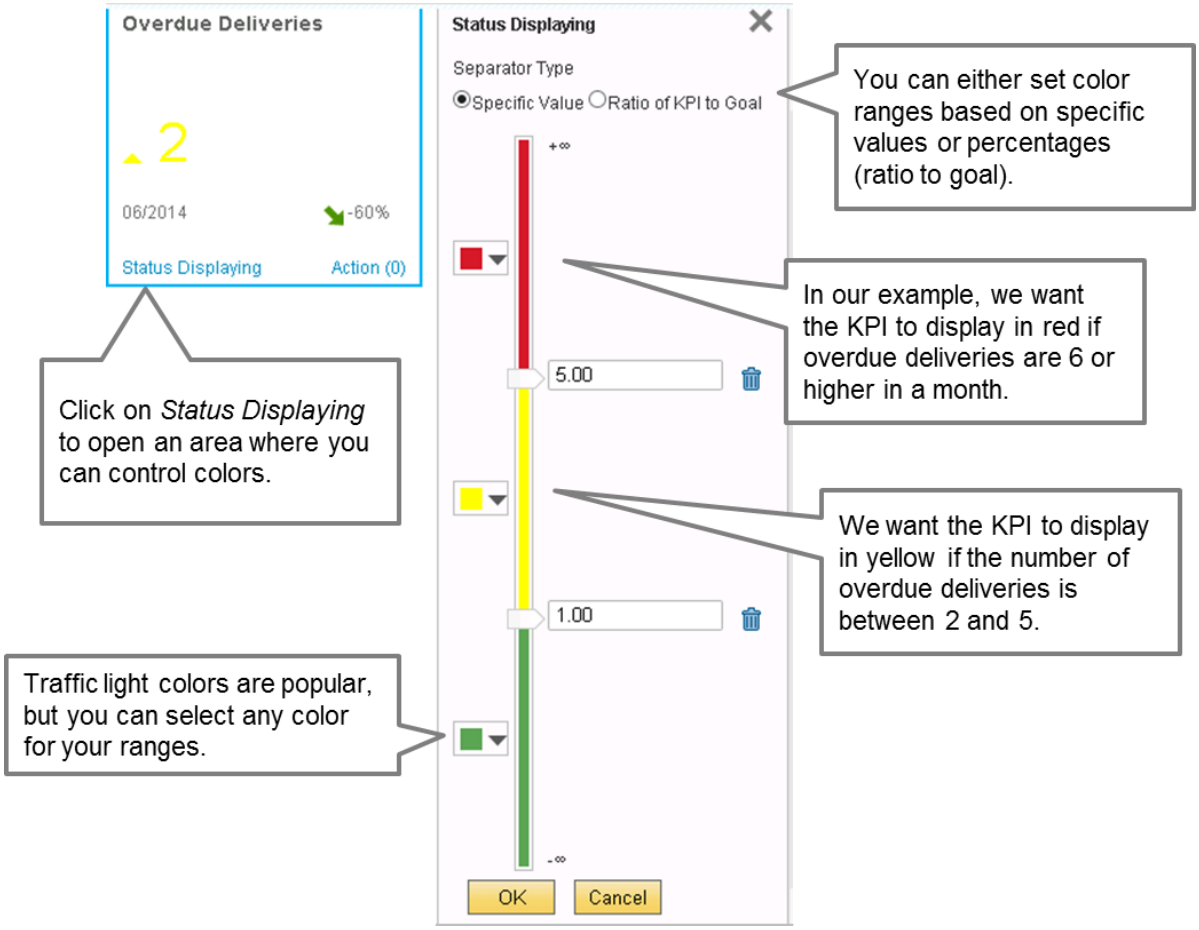


Figure 15-10: Setting Colors for the KPI Status Display

We have only covered the basics of how to create and manage a KPI. There are many other options possible for setting up a KPI that uniquely manages your business goals. A large number of KPIs are delivered as part of SAP Business One, including financial KPIs that pull data from the general ledger.

For more information on using, creating and editing existing KPIs, see the how to guide on how to work with Pervasive Analytics.

15.2.3 Creating Advanced Dashboards

Earlier we talked about pervasive dashboards. There's also another type of dashboard that is called an Advanced Dashboard. An Advanced Dashboard is a dashboard which behaves like a supplementary cockpit with a number of pervasive dashboards and KPIs on one or more pages. When a user launches an advanced dashboard from a pervasive dashboard or a KPI widget in their cockpit, they gain quick access to extended business analytics in multiple related charts and KPIs. In this way, advanced dashboards provide additional insight to the analytics associated with dashboards and KPIs.

Creating advanced dashboards is extremely easy. You choose the option to create an advanced dashboard in the Pervasive Analytics Designer and give it a good name. It's important to have a descriptive name, since this name will be visible in the heading of the advanced dashboard.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

The designer opens an empty page that is just waiting for you to add pervasive dashboards and KPI widgets. You give the page a name then begin adding widgets.

If you want more pages, you can choose an option to create another page. Figure 15-11 shows where this is done in the top left corner of the advanced dashboard design area.

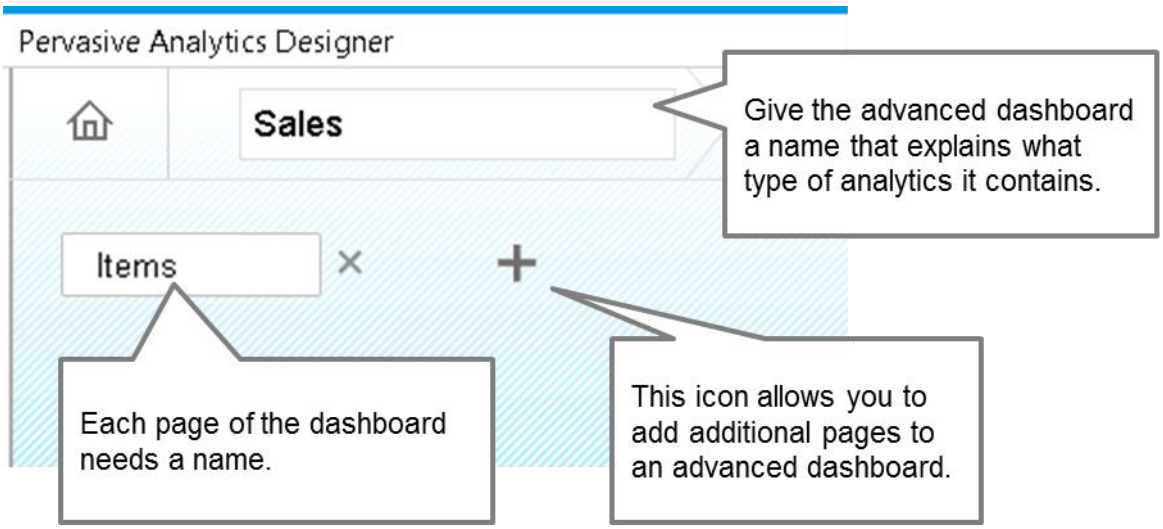


Figure 15-11: Naming and adding pages to an advanced dashboard

The icons in the top right corner of the advanced dashboard (shown in Figure 15-12) are for saving the dashboard, opening the Widgets Gallery and optionally adding filters.

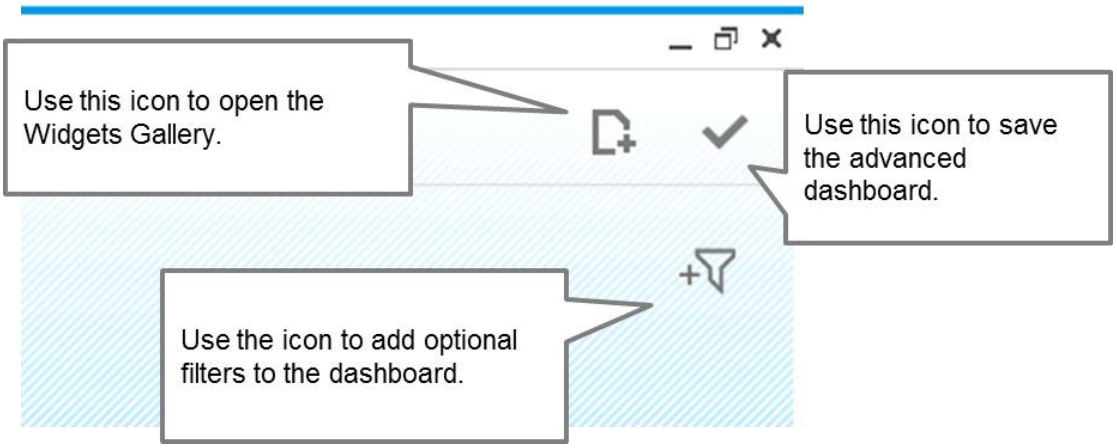


Figure 15-12: Icons in the Advanced Dashboard Designer

Adding widgets from the gallery works the same here as it does for a user who wants to add widgets to a cockpit. The only difference is that you can only add two types of widgets to an advanced dashboard: pervasive dashboards and KPIs.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

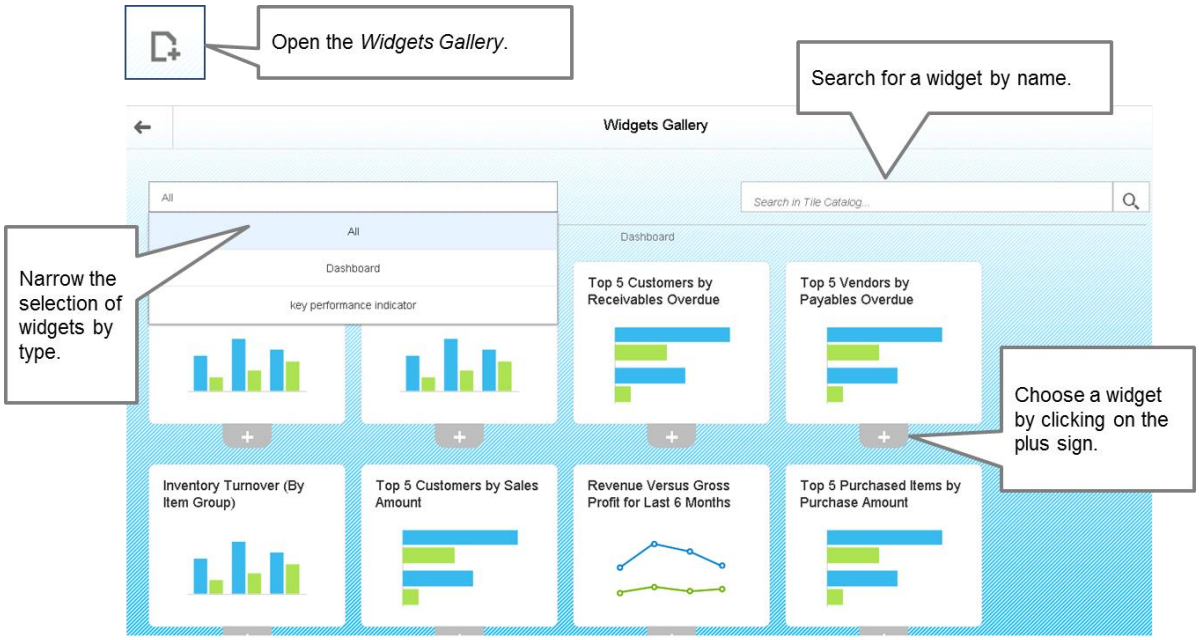


Figure 15-13 Widgets Gallery

Once you've added widgets, you have the option to define filters which will filter all the pervasive dashboards inside the advanced dashboard based on a value in the source widget.

After saving the advanced dashboard, you only need to set up an action in a pervasive dashboard or KPI to launch your new advanced dashboard.

SAP Business One comes with a pre-delivered advanced dashboard called Customer 360. You can link this advanced dashboard to dashboard that contain the business partner code, in order to be able to do data binding. The Customer 360 is also accessible from the customer master data window, through the You can Also drop down at the bottom on the screen.

15.3 Interactive Analysis

If you are using SAP Business One, version for SAP HANA, you get to enjoy the Excel-based, easy-to-use Interactive Analysis. This reporting tool reads live data directly from the SAP HANA database, using predefined semantic layers designed to create a set of reports that combine different types of data together. Interactive Analysis is fully integrated with Microsoft Excel, giving you a familiar interface and allowing you to leverage existing skills when creating custom reports.

For example, you can use the Sales Revenue Analysis to get information about all your sales numbers, including sales employee info, customers, customer's groups, posting periods and more. The tool uses a MS Excel pivot table where you can pick and choose which fields to include, how to filter the report, group it, and even present it as a graph. If you are familiar with using pivot tables, all you need to do is choose Interactive Analysis from the SAP Business One main menu, and then select the area you wish to examine. See figure 15-14 for some pointers for using pivot table and interactive analysis.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

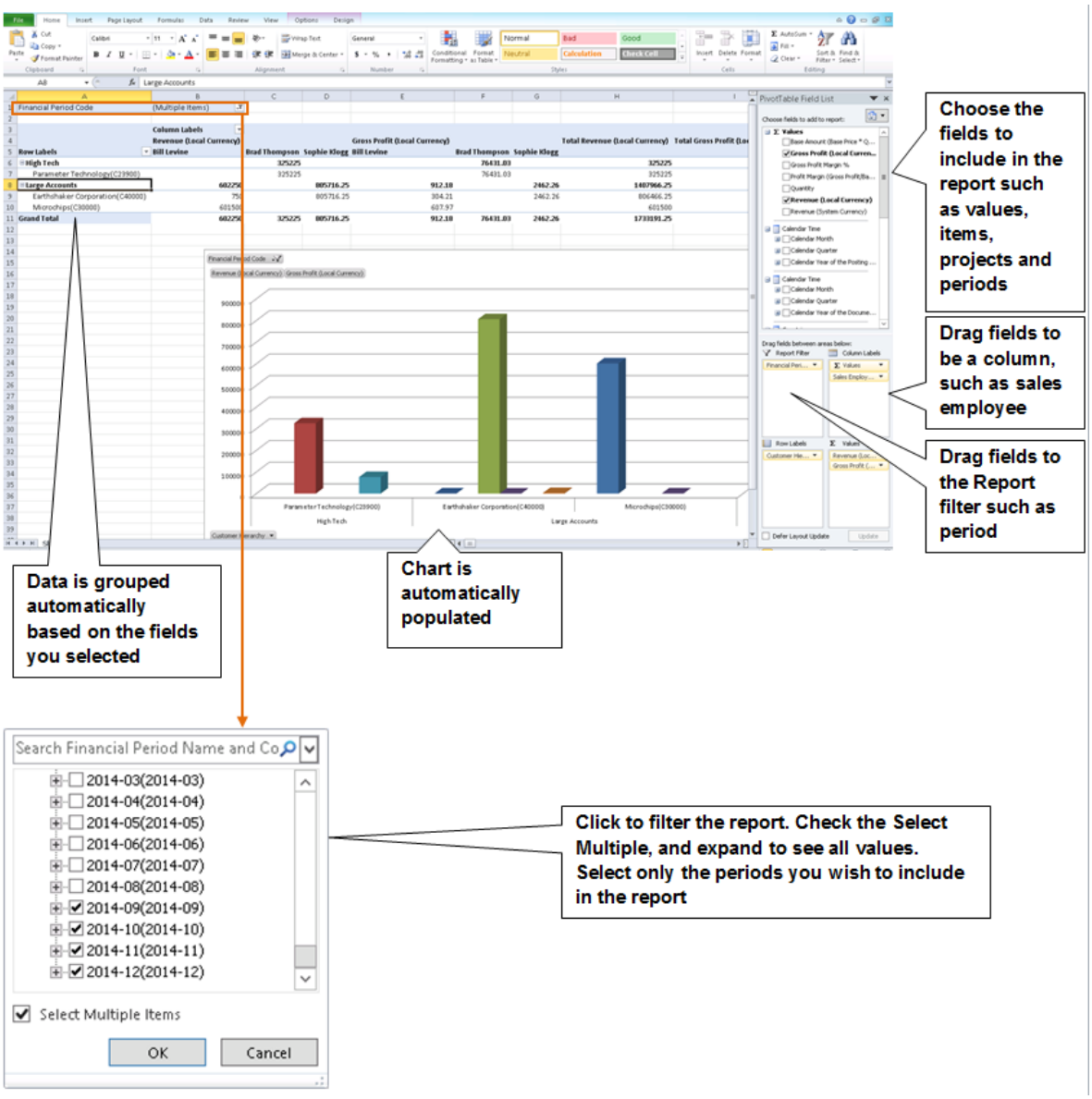


Figure 15-14: Interactive Analysis

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

If you like to save your interactive analysis reports, launch the Excel Reports and Interactive Analysis option from the tools menu. This opens a blank excel sheet. Click the Interactive Analysis menu and start the report. See figure 15-15 that shows the Excel tool bar for interactive analysis reports.

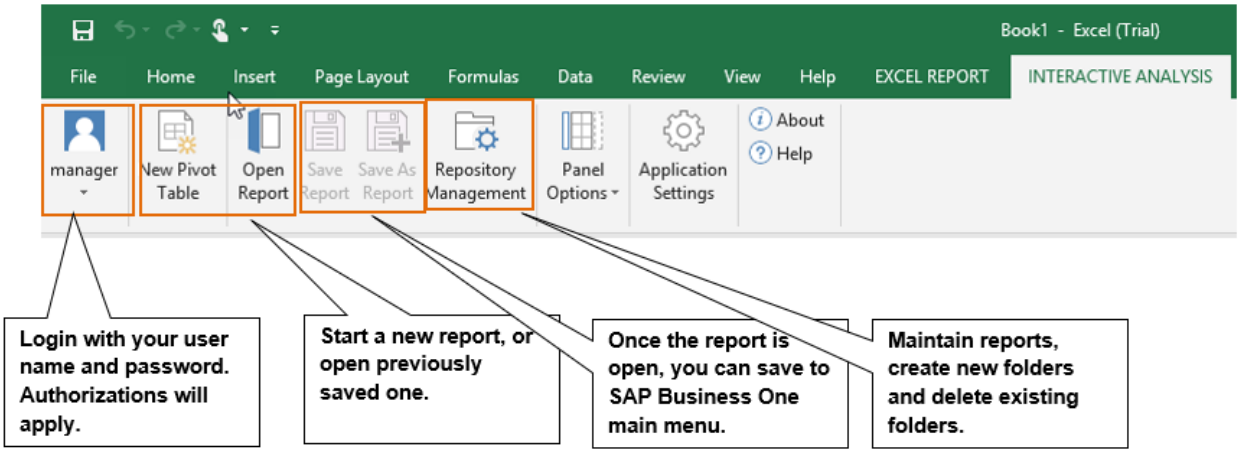


Figure 15-15 Excel Add-in

15.4 Excel Reports

Using SAP Business One, version for SAP HANA, you can also build reports using Excel Reports. This reporting tool reads live data directly from the SAP HANA database, similar to the Interactive Analysis option described above, that also uses predefined semantic layers designed to create a set of reports that combine different types of data together. It is more sophisticated and provide more options for building reports than Interactive Analysis.

Excel Reports is fully integrated with Microsoft Excel, giving you a familiar interface and allowing you to leverage existing skills when creating custom reports.

start the tool by going to Tools → Excel Reports and Interactive Analysis Designer. Reports can be saved in SAP Business One and access them from the Main Menu, under the Excel Reports and Interactive Analysis module.

As shown in figure 15-15 above, a similar excel add-in tools bar is available for Excel Reports.

Figure 15-16 shows the report designer canvas. After you select data source, start dragging and dropping fields into the report area. You can group the report on the row and column level, in this example the report is grouped by row, by customer group name. you can add sorting and filtering to the report, as well as dynamic time functions and calculations.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

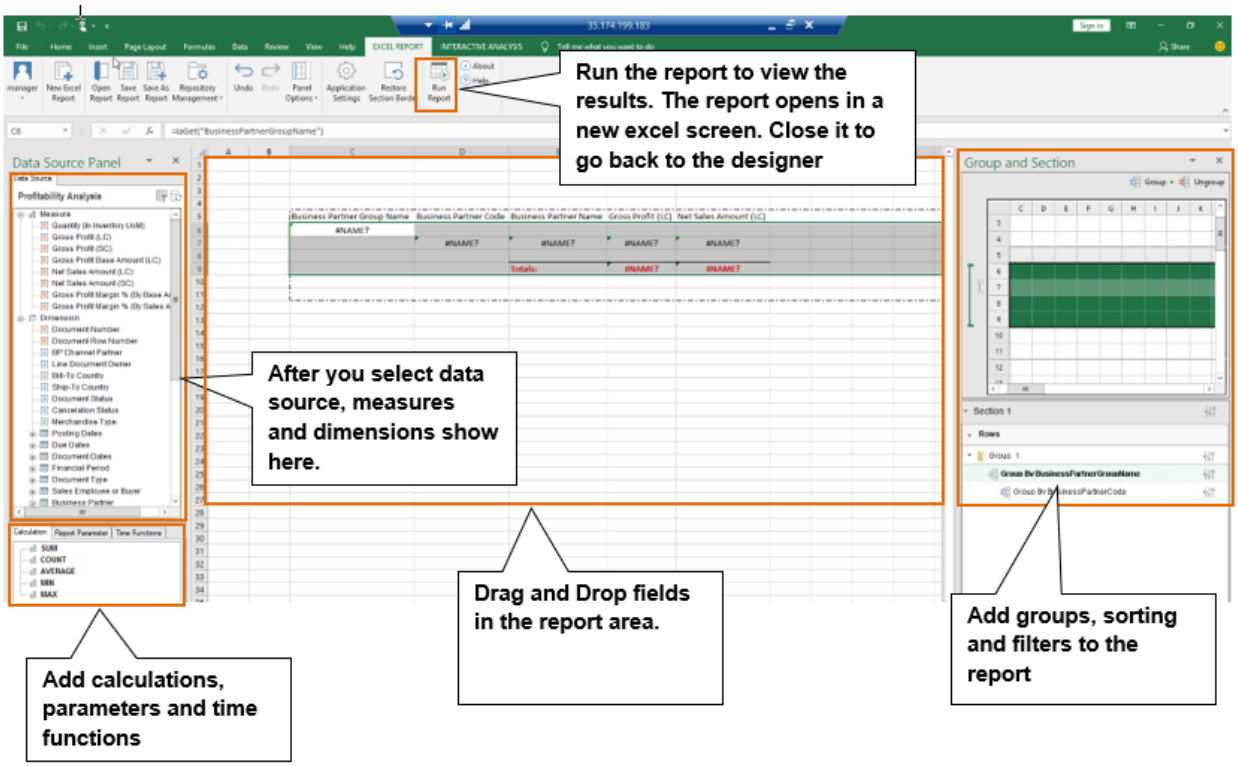


Figure 15-16: Excel Reports

15.5 Analytics Portal

The analytics portal gives you the ability to publish and share documents via a portal for Crystal Reports and Excel reports.

You can access the Analytical Portal via this URL: https://<hana-server>:<Port>/Portal

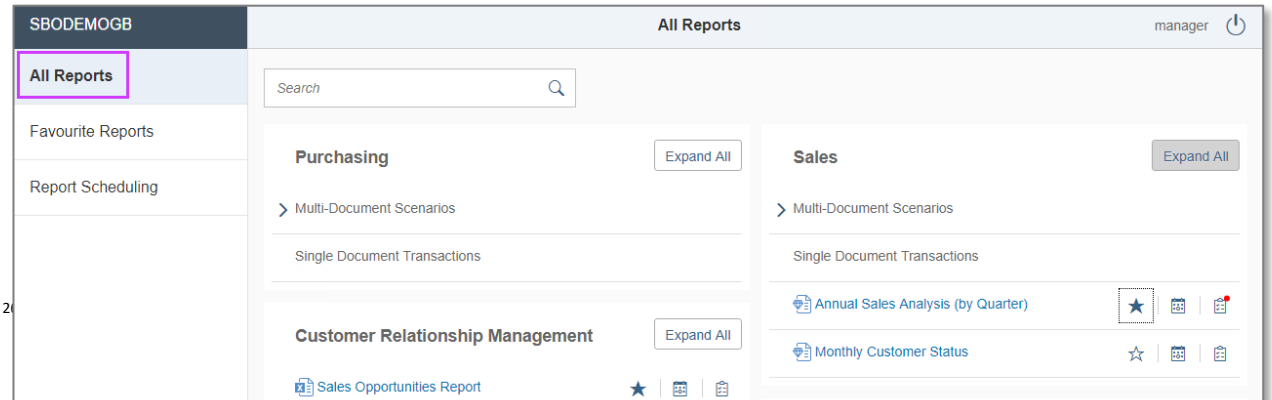
Ability to access the Analytical Portal for every user but only authorized reports are being displayed

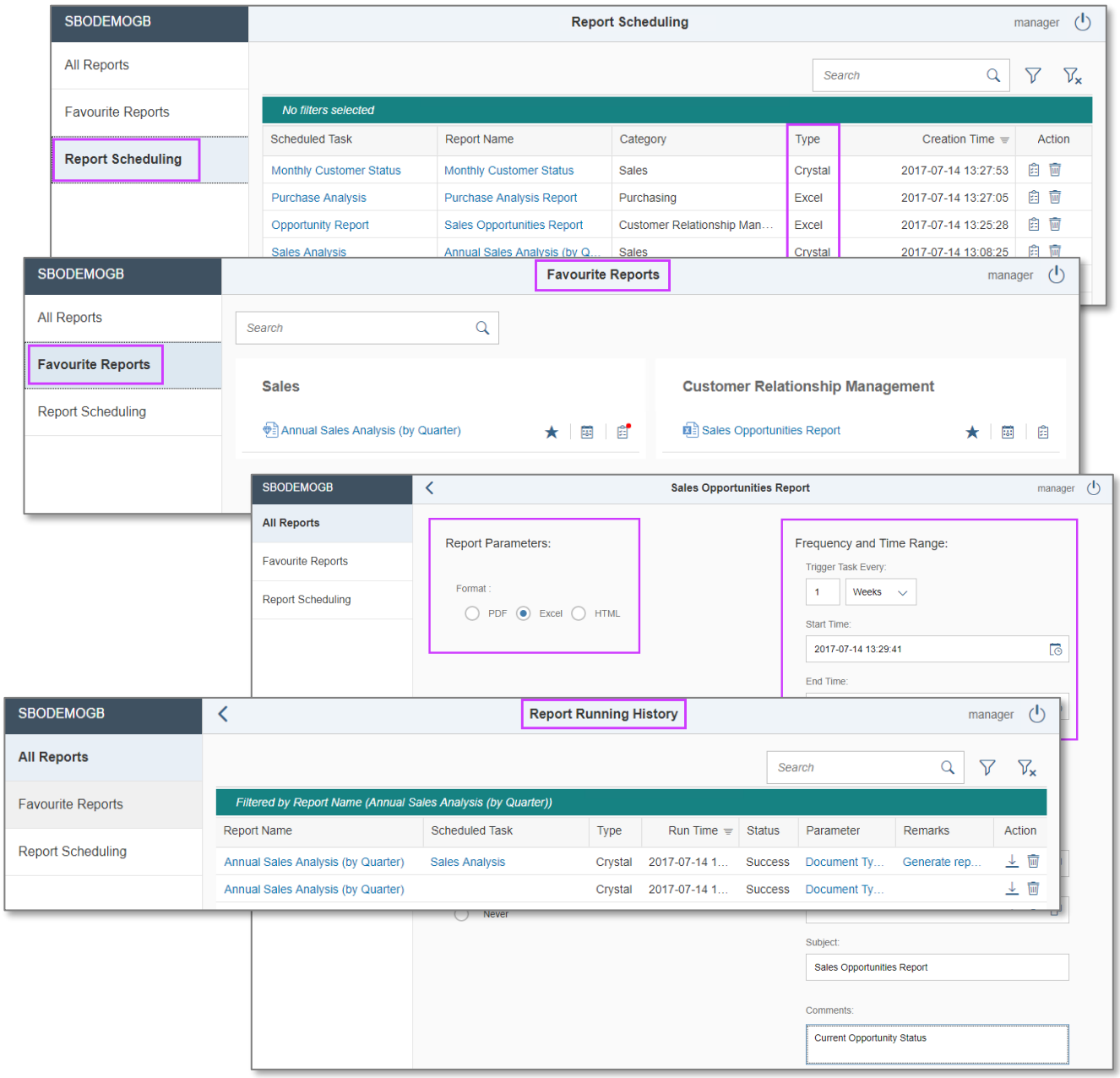
The authorized documents can be downloaded or run in different formats, MS Excel – PDF, Excel or HTML

Crystal Reports – PDF

It is not necessary to have an SAP Business One Client or MS Excel installed on client side.

The documents can be run on different devices such as a web client or mobile device. On Premise and On Demand users are supported. Figure 15-17 shows the analytics portal, how you can save reports as favorite, schedule them to run and view historic instances of reports you already ran. Users require authorizations to both the report and the semantic layer its based on.





© 2018 SAP SE or an SAP affiliate company. All rights reserved.

15.6 SAP Analytics Cloud

Want to take your reports and analytics to the next level? The SAP Analytics Cloud is the way to go.

SAP Analytics Cloud is a single experience for decision making that allows users to discover, visualize, plan and predict, all in one place. Giving everyone, whether in front of the customer or in the boardroom, the power to find new insights and take action.

Using this tool, you can connect to your SAP Business One system, prepare the data, fine tune it, aggregate it, and then create visualizations, dashboards and stories to share with others. You can analyze, plan and visualize in the same application, personalize your KPIs, dashboard, processes and stories, and collaborate in-context of your plan and make faster decisions.

You can access your business intelligence stories across iPhone, iPad, and iPad Pro in addition to your personal computer.

Connection to SAP Business One HANA version is a direct live connection, that provides you access with the semantic layers. Connection to the SAP Business One SQL version, requires uploading the data to the cloud prior to building the analytics.

The SAP analytics cloud, requires additional license purchase. It is a monthly subscription per user type license, therefore you can start at any time, and stop when you decide to. Contact your partner for more information.

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

16 Appendix: Selected Keyboard Shortcuts

This appendix lists useful keyboard shortcuts that can help accelerate your efficiency in using SAP Business One. You might want to keep a copy of this appendix near your keyboard for easy reference.

16.1 General Shortcuts

Task	Shortcut
Display the SAP Business One main menu	Ctrl + 0 (zero, not the letter O)
Print the current document or record	Ctrl + P
Display transaction journal	Ctrl + J
Exit SAP Business One	Ctrl + Q
Undo	Ctrl + Z
Redo	Ctrl + Shift + Z
Cut	Ctrl + X
Copy	Ctrl + C
Paste	Ctrl + V
Find customers or items that start with a certain letter in a document	Type letters in name or description field * Tab
Select multiple items	Hold down Ctrl or Shift and click all desired items
View user-defined fields	Ctrl + Shift + U
View the next record or document	Ctrl + right arrow
View the previous document or record	Ctrl + left arrow
Change to add mode (if displaying document or master data, opens a blank document or master data window)	Ctrl + A
Change to find mode	Ctrl + F
Change a field name	Ctrl and double-click field name
Enter today's date in a date field	any key but a number and Tab
Enter a date in the current month	Day of month and Tab
Enter a date in the current year	Day and month and Tab
Increase/decrease current date	Up and down arrows

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Task	Shortcut
add/subtract N days	+/-N (example +2 adds 2 days to current date)
add/subtract N days	+/-ND (example +2D adds 2 days to current date)
add/subtract N months	+/-NM (example +2M adds 2 months to current date)
add/subtract N years	+/-NY (example +2Y adds 2 years to current date)
Close all windows except the SAP Business One main menu	Shift and click X in window's upper right corner
Open a window from the main menu	Enter
Close the current window	Esc

16.2 Table Shortcuts

Task	Shortcut
Add a row	Ctrl + I
Duplicate a row	Ctrl + M
Delete a row	Ctrl + K
Sort table by column in ascending order	Double-click column header
Sort table by column in descending order	Alt + double-click column header
Display detailed information about a row	Ctrl + L
Go to the first row	Ctrl + H
Go to the last row	Ctrl + E
Copy from cell above	Ctrl + ↑

16.3 Shortcuts in Sales and Purchasing Documents

Task	Shortcut
Calculate gross profit	Ctrl + G
Specify a payment means	Ctrl + Y
Calculate volume and weight	Ctrl + W
Open base document	Ctrl + N
Open target document	Ctrl + T

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

Task	Shortcut
Go to business partner code field	Ctrl + U
Go to the Remarks field	Ctrl + R
Choose a serial number for an item	Ctrl + Tab in Item Quantity field
Check the latest prices	Ctrl + Tab in Item Price field
Display alternate items	Ctrl + Tab in Item No. field
Copy an amount when entering a payment	After clicking the moneybag icon to specify an incoming payment, press Ctrl + B to copy the amount into the document
Open Item By Warehouse report	Ctrl + Tab in Whse field

© 2018 SAP SE or an SAP affiliate company. All rights reserved.

https://www.sap.com/products/business-one.html

© 2018 SAP SE or an SAP affiliate company. All rights reserved.
No part of this publication may be reproduced or transmitted in any form or for any purpose without the express permission of SAP SE or an SAP affiliate company. The information contained herein may be changed without prior notice.
Some software products marketed by SAP SE and its distributors contain proprietary software components of other software vendors. National product specifications may vary.
These materials are provided by SAP SE or an SAP affiliate company for informational purposes only, without representation or warranty of any kind, and SAP or its affiliated companies shall not be liable for errors or omissions with respect to the materials. The only warranties for SAP or SAP affiliate company products and services are those that are set forth in the express warranty statements accompanying such products and services, if any. Nothing herein should be construed as constituting an additional warranty.
SAP and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP SE (or an SAP affiliate company) in Germany and other countries. All other product and service names mentioned are the trademarks of their respective companies.
Please see http://www.sap.com/corporate-en/legal/copyright/index.epx for additional trademark information and notices.